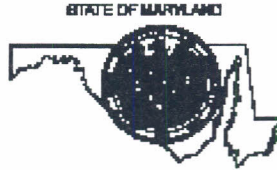


Gail R. Wilensky, Ph.D.
VICE CHAIR



Rex W. Cowdry, M.D.
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE – BALTIMORE, MARYLAND 21215
TELEPHONE: 410-764-3460 FAX: 410-358-1236

September 24, 2007

The Honorable Ulysses Currie
Chairman, Senate Budget and Taxation Committee
Miller Senate Office Building, 3 West Wing
11 Bladen Street
Annapolis, Maryland 21401-1991

The Honorable Norman H. Conway
Chairman, House Appropriations Committee
House Office Building, Room 121
12 Bladen Street
Annapolis, Maryland 21401-1991

Dear Chairmen Currie and Conway:

I am writing to request an extension in the due date of a report. The Joint Chairmen's Report for the 2007 Session of the General Assembly requires the Maryland Health Care Commission to develop a plan to guide the future mental health service continuum needed in Maryland. The request appeared in the Joint Chairmen's Report- State Operating Budget (HB 50) and the State Capital Budget (HB 51) and Related Recommendations, 2007 Session (2007_p97-98_ Office of the Secretary_ M00A01.01 Executive Direction), with a due date of November 1, 2007. The Commission respectfully requests that the due date be extended to December 31, 2008.

The Joint Chairmen's Report requires that the mental health continuum plan be developed with the guidance of a large Task Force with specified representation and, by its nature, requires a collaborative effort of a number of different state agencies. An extended report date of December 31, 2008 will permit the Commission to develop a statewide plan for mental health services that provides a comprehensive description of the current mental health care system, describes a model mental health care system, identifies priority short and long-term needs for improving the current system, and maps an implementation strategy for addressing identified needs.

Thank you for considering this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Rex W. Cowdry".

Rex W. Cowdry, M.D.
Executive Director

cc: Secretary John M. Colmers, Department of Health and Mental Hygiene
Brian Hepburn, M.D., Director, Mental Hygiene Administration, DHMH
Simon G. Powell, Department of Legislative Services
Andrew Brecher, Department of Budget and Management
Cathy Kramer, Department of Legislative Services

2008-83-1
Rev



THE MARYLAND GENERAL ASSEMBLY
ANNAPOLIS, MARYLAND 21401-1991

November 19, 2007

Dr. Rex W. Cowdry
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: Item 2008-83-1

Dear Dr. Cowdry:

We are in receipt of your letter requesting an extension on the reporting deadline for the development of a plan for the continuum of mental health services in Maryland. We concur with your request to extend the deadline beyond the current November 1, 2007. However, in order to allow for adequate review, we would request that the report be submitted by December 1, 2008, rather than December 31, 2008, as you suggested.

In approving the extension request, the budget committees also authorize the release of funds, effective October 30, 2007, to the Department of Health and Mental Hygiene, Office of the Secretary under Item 2008-83-1 in the amount of \$100,000 in general funds. However, given the importance of this matter to the State's health infrastructure, the committees may adopt language in the fiscal 2009 budget bill withholding a similar amount until the plan is submitted.

Sincerely,

Ulysses Currie, Chairman
Senate Budget and Taxation Committee

Norman H. Conway, Chairman
House Committee on Appropriations

UC:NHC/SGP/kjl

cc: Senator Edward J. Kasemeyer
Senator Rona E. Kramer
Delegate James E. Proctor, Jr.
Delegate Mary-Dulany James
Secretary T. Eloise Foster
Secretary John M. Colmers
Dr. Brian Hepburn

Mr. Karl S. Aro
Mr. Warren G. Deschenaux

LESE H. DESCHENAUX

Marilyn Moon, Ph.D.
CHAIR



Rex W. Cowdry, M.D.
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE, BALTIMORE, MARYLAND 21215
410-764-3460 Toll-free: 877-245-1762
Fax: 410-358-1236 TTY: Call via Maryland Relay

April 11, 2011

Honorable Edward Kasemeyer
Chairman, Senate Budget and Taxation Committee
Miller Senate Office Building, 3 West Wing
11 Bladen Street
Annapolis, Maryland 21401-1991

Honorable Norman H. Conway
Chairman, House Appropriations Committee
House Office Building, Room 121
12 Bladen Street
Annapolis, Maryland 21401-1991

RE: 2007 Joint Chairmen's Report, Page 97-98, M00A01.01 – Executive Direction

Dear Senator Kasemeyer and Delegate Conway:

The 2007 Joint Chairmen's Report required that the Maryland Health Care Commission convene a task force to address the demand for inpatient hospital psychiatric services and for community based services and programs that reduce the need for inpatient hospitalization (see Attachment A). The Commission established the Task Force on the Development of a Plan to Guide the Future Mental Health Service Continuum, a task force staffed by the Maryland Health Care Commission and composed of the 29 members listed on Attachment B. The call for the Task Force arose in part because of a perceived lack of clarity about the respective roles of acute care psychiatric units in general hospitals, private psychiatric hospitals, and state mental hospitals.

In carrying out the requirements set forth in the JCR, the Commission established a memorandum of understanding with the University of Maryland to perform analytic work and to draft a series of white papers that were then edited by the Commission and presented to the Task Force for discussion. Those white papers are included as Attachments C through G.

The Task Force held meetings over a period of a year, reaching near agreement on key recommendations from the Task Force. A Draft Interim Report (Attachment H) was presented to the Task Force in December 2008, but the members of the Task Force were unable to reach agreement regarding the appropriate length of acute inpatient hospitalization that should be the responsibility of the acute general hospital or private psychiatric hospital nearest to the patient's community. The acute general and private psychiatric hospitals

The Maryland Health Care Commission, established by Chapter 702 of the Acts of 1999, is an independent agency composed of 15 Commissioners. Our mission is to plan for health system needs, promote informed decision-making, increase accountability, and improve access in a rapidly changing health care environment and to provide timely and accurate information and policy analysis to policy makers, purchasers, providers and the public.

The opinions of the Commission expressed in this letter do not necessarily reflect those of the Department of Health and Mental Hygiene or the Administration.

argued that these facilities should only be responsible for stays up to the average length of acute inpatient stay in that setting, and that the state should assume responsibility thereafter.

Shortly before this impasse developed, a new Deputy Secretary position was established at DHMH, responsible for mental health and substance abuse services, and Dr. Renata Henry appointed as its first incumbent. A strategic decision was reached to focus on establishing a working relationship between the new Deputy Secretary and the private sector hospitals rather than attempting to force a policy decisions through a Task Force vote. The Task Force was dissolved without issuing a report.

At that point – and indeed, throughout the subsequent 28 months – little purpose would have been served by reconvening the Task Force in an attempt to finalize a set of recommendations. Therefore, as one of my last acts as Executive Director of the Commission, following consultation with DLS staff, I am forwarding the Draft Interim Report and the associated White Papers in fulfillment of our reporting responsibilities.

Sincerely,

A handwritten signature in black ink, appearing to read "Rex W. Cowdry". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Rex W. Cowdry, M.D.
Executive Director

M00A
Department of Health and Mental Hygiene

Budget Amendments

Add the following language:

Provided that no funds in this budget may be expended to close the Walter P. Carter Community Mental Health Center.

Explanation: The language prohibits the expenditure of funds in any way that relates to the closure of the Walter P. Carter Community Mental Health Center. There continues to be concern at the Carter Center and in the surrounding community about the potential closure of the facility. Despite the Department of Health and Mental Hygiene averring that it has no plans to close the center, this concern is impacting the ability to operate programming. For example, the University of Maryland, Baltimore, which provides contract psychiatrists for the facility, has struggled to attract and retain psychiatrists because of the persistent rumors of the center's closure.

OFFICE OF THE SECRETARY

M00A01.01 Executive Direction

Add the following language to the general fund appropriation:

, provided that \$100,000 of this appropriation may not be expended until the Maryland Health Care Commission develops a plan to guide the future mental health service continuum needed in Maryland. The plan shall be developed by a task force that includes representatives from the following:

- (1) Mental Hygiene Administration;
- (2) Health Services Cost Review Commission;
- (3) Maryland Insurance Administration;
- (4) private psychiatric hospitals;
- (5) acute care hospitals with and without inpatient psychiatric units;
- (6) Maryland Psychiatric Society;
- (7) Mental Health Association;
- (8) American College of Emergency Physicians – Maryland Chapter;

M00A

- (9) commercial insurers;
- (10) On Our Own of Maryland, Inc.;
- (11) National Alliance of Mental Illness;
- (12) the Community Behavioral Health Association of Maryland;
- (13) the Maryland Association of Core Service Agencies;
- (14) the Maryland Disability Law Center; and
- (15) any other representative the Secretary considers necessary to carry out the purpose of the task force.

The plan shall include a statewide mental health needs assessment of the demand for:

- (1) inpatient hospital psychiatric services (in State-run psychiatric, private psychiatric and acute general hospitals); and
- (2) community-based services and programs needed to prevent or divert patients from requiring inpatient mental health services, including services provided in hospital emergency departments.

The task force shall, to the extent feasible and desirable, coordinate with the work of the Transformation Grant project in the Mental Hygiene Administration. To the maximum extent possible, expenditures incurred in the development of the task force's plan shall be funded by the federal Transformation Grant.

The commission and task force shall report their findings and recommendations to the General Assembly by November 1, 2007. The budget committees shall have 45 days to review and comment on the plan.

Explanation: A recent report from the Maryland Health Care Commission (MHCC) concerning emergency department overcrowding recommended that the Mental Hygiene Administration develop a plan to guide the future role and capacity of State-run psychiatric hospitals. The development of that plan requires an assessment not only of inpatient psychiatric capacity that is State-run but also that of the private psychiatric hospitals and acute general hospitals. Certainly, this plan is warranted given the many demands on the State-run psychiatric hospitals. The language withholds funds until MHCC convene a task force of interested parties to develop a plan for the continuum of mental health services.

Information Request	Author	Due Date
Inpatient psychiatric hospital and community capacity in the mental health continuum	MHCC	November 1, 2007

Task Force on the Development of a Plan to Guide the Future Mental Health Service Continuum

Chairman

Rex W. Cowdry, M.D.
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215
Phone: 410-764-3566
Fax: 410-358-1311
Email: rcowdry@mhcc.state.md.us

Tracee E. Bryant
Executive Director
Black Mental Health Alliance
733 West 40th Street
Suite 10
Baltimore, MD 21211
Phone: (410) 338-2642/(443) 324-2167
Fax : (410) 338-1771
Email: traceebryant@aol.com

Members

Lynn Albizo, Executive Director
National Alliance of Mental Illness-
Maryland
804 Landmark Drive, Suite 122
Glen Burnie, MD 21061-4486
Phone: 410-863-0470
Fax: 410-863-0474
Toll Free: 800-467-0075
Email: lalbizo@nami.org
Website: www.md.nami.org

Harry A. Brandt, MD
Maryland Psychiatric Society, Inc
Director, Department of Psychiatry
St. Josephs Hospital
Center for Eating Disorders, P.A.
6535 North Charles Street, Suite 300
Baltimore, MD 21204
Phone: 410-938-5252
Fax: 410-938-5250
Email: harry@brandtmd.com

Laura Cain, Managing Attorney
Maryland Disability Law Center
1800 N. Charles St., Suite 400
Baltimore, MD 21043
Phone: 410 727-6352 x225
Fax: 410 727-6389
Email: Laurac@mdlcbalto.org

Herbert S. Cromwell, Executive Director
Community Behavioral Health Association
of Maryland
18 Egges Lane
Catonsville, MD 21228-4511
Phone: 410-788-1865
Fax: 410-788-1768
Email: mdcbh@verizon.net

Thomas J. Crowley
Executive Vice President
Doctors Community Hospital
8118 Good Luck Road
Lanham, MD 20706
Phone: 301-552-8085
Fax: 301-552-9306
Email: tcrowley@dchweb.org

Diane DePanfilis, Ph.D., MSW
Associate Professor, Associate Dean for
Research
Director, Ruth H. Young Center for Families
and Children
University of Maryland School of Social
Work
525 W. Redwood Street
Baltimore, MD 21201
Phone: 410-706-3609
Fax: 410-706-1346
Email: ddepanfilis@ssw.umaryland.edu

Suzanne Harrison, Director of Psychiatry
Sinai Hospital of Baltimore – LifeBridge
Health
2401 W. Belvedere Avenue
Baltimore, MD 21215
Phone: 410-601-5461
Fax: 410-601-4458
Email: sharriso@lifebridgehealth.org

Brian Hepburn, M.D.
Executive Director
Mental Hygiene Administration
Spring Grove Hospital Center
55 Wade Avenue, Dix Building
Catonsville, MD 21228
Phone: 410-402-8452
Fax: 410-402-8441
Email: bhepburn@dhhm.state.md.us

David T. Jones, M.S., Chief
Behavioral Health and Crisis Services
Montgomery County Department of Health
and Human Services
401 Hungerford Drive, 5th Floor
Rockville, MD 20850
Phone: 240-777-1488
Mobile: 240-832-3976
Fax: 301-279-1692
Email:
davidt.jones@montgomerycountymd.gov

Bonnie Katz, Vice President
Corporate Business Development
Sheppard Pratt Health System
6501 North Charles Street
Towson, MD 21204
Phone: 410-938-3154
Fax: 410-938-3159
Email: bkatz@sheppardpratt.org
katzbonnieb@aol.com

Pamela King, Executive Director
On Our Own of Montgomery County
434 East Diamond Avenue
Gaithersburg, MD 20877
Phone: 240-683-5555
Fax: 240-683-5378
Email: executivedirectoroomc@covad.net

Joseph Liberto, M.D.
Acting Chief, Mental Health
VA Maryland Health Care System
10 N. Greene Street
Baltimore, MD 21201
Phone: 410-605-7386
Fax: 410-605-7771
Email: joseph.liberto@va.gov
Kathy.graf@va.gov

Peter F. Luongo, Ph.D.
Director
Alcohol and Drug Abuse Administration
55 Wade Avenue
Catonsville, MD 21228
Phone: 410-402-8610
Fax: 410-402-8601
Email: pluongo@dhhm.state.md.us

James Macgill, Jr.
Consultant
Management and Planning for Health and
Human Service Organizations
604 East Broadway
Bel Air, MD 21014
Phone: 443-910-1162 (Mobile)
Fax: 443-787-0202
Email: jamesmacgill@comcast.net

Sako Maki, MSW, MPH
President
Potomac Ridge Behavioral Health Services
14901 Broschart Road
Rockville, MD 20850
Phone: 301-251-4644-business
Fax: 301-251-4693
Email: Smaki@adventisthealthcare.com

Robert Murray
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215
Phone: 410-764-2514
Fax: 410-358-6217
Email: rmurray@hsrc.state.md.us

Stephen M. Niemi
Regional Vice President
Atlanta Care Advocacy Center
United Behavioral Health
4170 Ashbord Dunwoody Road, Suite 100
Atlanta, GA 30319
Phone: 404-846-7554
Fax:
Email: stephen_niemi@uhc.com

Jill Rachbeisel, MD
Director/Community Psychiatry Division
University of Maryland Medical System
701 W. Pratt Street, Room 354
Baltimore, MD 21201
Phone: 410-328-5161
Fax: 410-328-3311
Email: jrachbei@psych.umaryland.edu

Linda J. Raines, Executive Director
Mental Health Association of Maryland
The Rotunda
711 West 40th Street, Suite 460
Baltimore, MD 21211
Phone: 410.235.1178 ext. 204
Fax: 410.235.1180
Toll-free: 800.572.MHAM (6426)
Email: lraines@mhamd.org

Gayle Jordan-Randolph, M.D.
Clinical Director, Mental Hygiene
Administration
55 Wade Avenue
Catonsville, MD 21228
Phone: 410-402-8446
Fax: 410-402-8486.
Email: gjordanrandolph@dhhm.state.md.us

Mark A. Riddle, MD
Professor, Department of Psychiatry and
Behavioral Sciences
Johns Hopkins Medical Institutions
600 North Wolfe Street, CMSC 346
Baltimore, MD 21287-3325
Phone: 410-955-2320
Fax: 410-955-8691
Email: mriddle@jhmi.edu

Arleen Rogan, Ph.D., L.C.S.W.-C.
Director, Behavioral Health
Department of Juvenile Services
120 West Fayette Street
Baltimore, MD 21201
Phone: 410-230-3122; Mobile: 443-802-
1117
Fax: 410-333-4197
Email: rogana@djs.state.md.us

Robert Rothstein, MD Maryland Chapter,
American College of Emergency Physicians
Chair, Emergency Medicine
Suburban Hospital
8600 Old Georgetown Road
Bethesda, MD 20814
Phone: 301-896-3880
Fax: 301-897-1358
Email: rrothstein@suburbanhospital.org

Ms. Sally Tyler
Health Policy Analyst
AFSCME
1625 L Street, NW
Washington, D.C. 20036
Phone: 202-429-1158
Fax: 202-223-3255
Email: styler@afscme.org

Jane Walker, LCSW
Executive Director
Maryland Coalition of Families for
Children's Mental Health
10632 Little Patuxent Pkwy, Suite 119
Columbia, MD 21044
Phone: 410-730-8267 or 1-888-607-3637
Fax: 410-730-8331
Email: jwalker@mdcoalition.org

Donna Wells, LCSW-C, President
Maryland Association of Core Service
Agencies
Howard County Mental Health Authority
9151 Rumsey Road, Suite 150
Columbia, MD 21045
Phone: 410-313-7373
Fax: 410-313-7374
Email: wells@hcmha.org

Brenda Wilson
Chief, Health Insurance & Managed Care
Maryland Insurance Administration
525 St. Paul Place
Baltimore, MD 21202
Phone: 410-468-2212
Fax: 410-468-2204
Email: bwilson@mdinsurance.state.md.us

February 27, 2008

Draft Interim Report of the Task Force on the Development of a Plan to Guide the Future Mental Health Service Continuum

Recommendations

PRINCIPLES GUIDING INPATIENT BED USE

The future development of the mental health service delivery system requires a clearer delineation of the roles of the public and private sectors to facilitate a productive private-public partnership for effective service delivery and to assure that all parties share similar assumptions and expectations. The Task Force recommends that the service system adopt the following principles for inpatient bed use to guide system changes over the next five years:

- **Acute inpatient admissions of up to 30 days for the diagnosis and treatment of mental illness should take place in acute care general hospitals or in private psychiatric hospitals nearest the patient's community.**
- **State hospitals should assume responsibility for:**
 - hospitalizations beyond the first 30 days, whether due to continuing symptoms or the unavailability of an appropriate community setting, provided DMH is notified of the request to transfer 10 days in advance of the transfer
 - readmissions of individuals discharged from a state hospital within the preceding 30 days
 - evaluation and treatment of forensic patients
- The efforts of private psychiatric hospitals to develop **units specializing in specific disorders and specific co-morbid conditions** should be supported through purchase of care and other funding arrangements

The Task Force recognizes that there are many barriers to full implementation of this plan. Both public and private hospitals will need to either reduce demand for admission through diversion and effective community treatment programs, develop more efficient evaluation and treatment approaches especially in the state hospital system, improve the speed and success of dispositions to community settings, or expand bed capacity.

The mental health treatment system should take three specific steps to make better use of available physical bed capacity for patients who are uninsured or who are eligible for Medicaid:

- **Continue the purchase of care program** that admits patients to private psychiatric hospitals who would otherwise be admitted to a state hospital bed. Although DMH reimburses the facility cost for the hospitalization, because the length of stay is substantially shorter, the total cost of hospitalization is actually lower than the total cost of hospitalization in a state hospital
- **The O'Malley Administration should place a high priority on working with the incoming Obama Administration to reinstate the IMD waiver** to allow adults covered by Medicaid to be treated in private psychiatric hospitals without losing the federal Medicaid match. There is limited unused bed capacity in acute general hospitals, so expanding psychiatric treatment capacity generally involves construction costs. In contrast, private psychiatric hospitals have unused physical bed capacity and a willingness to expand if funding is available. Hospitalization of a Medicaid patient in a private psychiatric hospital rather than an acute general hospital unit would be less expensive for both the state and federal government and would reduce the need to incur the cost of building new inpatient capacity at acute general hospitals.
- **DMH should expand arrangements to pay professional fees for uninsured patient admitted to open acute general hospital beds from another hospital's emergency department.** If there is no unit or no bed available at the initial hospital where the evaluation occurred, the usual alternatives are admission to a purchase of care bed and admission to a state hospital bed. This innovative arrangement is substantially less expensive for DMH and makes use of underutilized bed capacity. Facility costs are reimbursed through the uncompensated care fund.
- To minimize the likelihood that a patient will require transfer from an ED to another hospital for admission and maximize the likelihood that uncompensated care will be reimbursed through the all-payer system rather than the Departmental budget, **transport to and evaluation at an emergency department should be limited to hospitals that have an inpatient mental health unit** or that develop a specific admission agreement with an acute general hospital that has an inpatient unit.

With regard to understanding the longer term need for inpatient beds:

- **The Maryland Health Care Commission should project the need for inpatient beds in acute general hospitals, private psychiatric hospitals, and state hospitals over the coming five years.** Projections should use recent utilization trends and demographic changes to develop a baseline need projection, and then model a variety of different assumptions about the effectiveness of various demand reduction strategies and public policy changes. The projections should be included in the final report of this Task Force.
- **Immediate attention should be given to understanding the heavy use of state funded beds for residents of Anne Arundel, Queen Anne's, Kent, Caroline, Talbott, and Dorchester counties,** using this region as a pilot to understand the multiple causes of that high use rate and the actions and incentives needed to either reduce inpatient demand or increase inpatient capacity. The Mental

Hygiene Administration, relevant CSAs, Anne Arundel Medical Center, and Shore Health System should take the lead responsibility on this evaluation. The case study and recommendations should be included in the final report of this Task Force.

ALL-PAYER RATE SETTING

There is a widely held belief among acute general hospital administrators that the APR-DRG rates for adult inpatient hospitalization are too low to provide the proper incentives for needed capacity expansion. While the Health Services Cost Review Commission staff believes that costs are appropriately compensated, they have expressed both a recognition of problems with the DRG-based system and a willingness to consider rate adjustments to correct at least partially the level of reimbursement and the incentives influencing appropriate capacity expansion. The Task Force believes it is unlikely that strictly cost-based accounting will correct the disincentives to operation of a psychiatric unit, compared with “more desirable” services. Some base rate adjustments may be necessary to provide desirable incentives.

The all-payer system cannot reimburse uncompensated professional services; as a result, disincentives to admitting uninsured patients will remain. This problem applies to all uncompensated care, and is not unique to psychiatric care.

The current APR-DRG system captures a very small proportion of case variation in resource use – much lower than for most medical and surgical care. This means the severity adjusters are largely ineffective in assuring that inpatient units with higher actual severity requiring longer lengths of stay are appropriately reimbursed. Because of this problem with risk adjustment, desirable interventions can sometimes result in undesirable effects. For example, the presence of a hospital diversion program in the emergency department should result in fewer hospitalizations, but those hospitalized are likely to have more severe illness or fewer community supports and require a longer length of stay. If this increase in risk and severity of illness is not recognized by the reimbursement system, the hospital pays a price for allowing less severely ill patients to be diverted from its unit..

- In the near future, **the HSCRC should include one or more known predictors of resource use or length of stay in the rate calculation.** Involuntary status is one reasonable candidate.
- When the results of the current Johns Hopkins study of predictors of inpatient resource utilization are available in 3-5 years, the information should be used to **refine the APR-DRG risk adjustment and reimbursement methodologies.**
- **The HSCRC should re-examine the relationship between APR-DRG severity ratings and rates**
- **The HSCRC should consider whether an increase in the base rates is warranted** to provide appropriate incentives for operating or expanding a psychiatric inpatient program

- **The impact of hospital diversion programs on length of stay and severity adjusters should be studied and an appropriate case-mix adjustment made.**

REDUCING INPATIENT USE THROUGH COMMUNITY CRISIS SERVICES

Crisis intervention teams operate 24/7 in several counties. Some have special experience in and responsibility for **working with law enforcement**. These teams have both crisis intervention skills and knowledge about community resources for individuals in crisis. While there are limited data available to assess their effect on hospitalization rates in Maryland, they are a valuable component of the crisis response system and can help assure that individuals with treatable mental illness are properly involved with the mental health treatment system and are diverted, where appropriate, from the criminal justice system.

Hospital diversion programs for patients presenting to hospital emergency departments have been reasonably successful at finding alternatives to hospitalization, with ___ to ___% of referred patients successfully diverted. The most successful program has a wide array of resources available, including both **residential crisis beds** and, perhaps most importantly, **detoxification beds**. These percentages represent a high end of effectiveness, since some patients who would not necessarily be admitted may be referred to these teams for assistance in placement.

Finally, successful diversion of patients in crisis, like successful discharge from an inpatient stay, requires rapid follow-up and engagement in treatment. The ability to schedule next day appointments at mental health clinics or with other providers is an effective tool in arranging a diversion into ambulatory rather than inpatient care.

Several questions about optimum staffing and organization remain. Having teams with skills in crisis intervention, hospital diversion, and interaction with law enforcement may prove to be a more effective use of resources than having two or more teams.

Current investment in teams providing various crisis intervention services varies greatly by jurisdiction, based only in part on demand, and will be presented in more detail in the final report from this Task Force. In the meantime,

- In areas without these diversion programs, MHA and CSAs should work jointly to develop and fund teams knowledgeable about community resources to provide a range of acute intervention services including diversion programs. In less populous jurisdictions, multi-purpose teams providing crisis intervention, liaison with law enforcement, and hospital diversion may be the most effective use of resources.
 - Special attention and funding priority should be given to areas without these programs that are currently generating the highest number of referrals to state-funded beds.
 - The area study encompassing Anne Arundel, Queen Anne's, Kent, Caroline, Talbott, and Dorchester counties recommended above should

include this assessment of need for and funding of diversion and other acute care services in the study area.

- Since diversion programs depend on the availability of other community programs providing crisis services, a parallel consideration of these programs and of funding priorities in these target areas is essential.
- The Department should help assure that **facilities providing acute detoxification** and these **crisis intervention teams** have a strong working relationship to address patients who may present for psychiatric admission but whose acute need is actually detoxification.
- Clinics providing mental health services should have one or more **next day appointment times** reserved for crisis follow up or for diversion during the day. Achieving this goal may require the same kind of process reengineering used by the Institute for Healthcare Improvement to shorten dramatically the wait time for appointments in physician offices. Alternatively, jurisdictions may establish specific mental health urgent care clinics.

Since hospital diversion programs using specially trained and knowledgeable personnel is effective for individuals otherwise in need of a state-funded bed, it could be argued that these teams should be used more widely by payers, particularly Medicaid, prior to admission to any hospital in order to reduce treatment costs and assure proper community engagement and follow up. Before considering any such program, however, the likely effect on patient mix on inpatient units should be determined and appropriate adjustments made.

REDUCING INPATIENT USE THROUGH THE USE OF ACT TEAMS AND SIMILAR PROGRAMS

Assertive Community Treatment (ACT) teams and similar multidisciplinary programs deliver a range of psychiatric and supportive services to individuals in the community who have severe and persistent mental illness. A strong evidence base exists demonstrating that these interventions increase the likelihood of successful functioning in the community and reduce the likelihood of rehospitalization.

- Jurisdictions with enough clients to warrant an ACT team should develop an ACT program or an equivalent program.
- ACT teams and crisis intervention teams should have ready lines of communication to assure that crisis teams contact ACT team members when a patient in the ACT program presents in crisis.

REDUCING INPATIENT USE THROUGH THE EFFECTIVE TREATMENT OF CO-OCCURRING DISORDERS

[Still in development.]

REDUCING INPATIENT USE THROUGH THE USE OF RESIDENTIAL CRISIS BEDS OR STEP-DOWN UNITS

Residential crisis beds were originally intended primarily as an alternative to admission to an inpatient unit, and in jurisdictions with particularly effective diversion programs or emergency department disposition efforts may effectively serve that purpose. Some emergency department physicians have been reluctant to discharge patients from the ED to these programs because of lack of familiarity with their skills or because of liability concerns. The involvement of hospital diversion teams in that decision may aid the disposition.

Increasingly, however, these units serve as the community-based equivalent of a step-down unit, facilitating connections with community resources including outpatient treatment, housing options, transportation, and even potential employment. There is, however, limited evidence about the effectiveness of these crisis beds or of step-down units to convince payers, especially commercial payers, to cover these services.

- Hospitals should consider crisis beds and step-down units as an early disposition from inpatient status for selected patients – one that will help reduce average length of stay.
- Carriers (including Medicaid MCOs/BMCOs) should support through reimbursement a random assignment study of whether discharging a patient from an inpatient stay through a step-down unit or residential crisis program in Maryland affects length of inpatient stay, likelihood of rehospitalization, or total cost of the full episode. The study and related policy discussions should address whether there are patients for whom this is particularly useful (such as the homeless) and how these services could be funded (through a risk- and gain-sharing model, through enhanced payments to AGH units for discharges to step-down units or residential crisis beds, provided that the AGH units then support the programs, or through direct payments to the residential crisis program or the step-down unit.

As reimbursement begins to reward providers for avoiding rehospitalization (or to penalize inpatient units for patients who rapidly return to the hospital), community providers specializing in transitional services such as residential crisis bed programs may develop a special role helping assure the patient's successful reintegration into community life and treatment following a hospitalization. Changing the financial incentives may lead to a variety of gain-sharing arrangements that reward the ability of community programs to support patients and avoid hospitalizations.

IMPROVING STATE HOSPITAL CAPACITY/EFFICIENCY

Budgetary challenges recurrently face the public mental health system will be particularly challenging in the immediate future. Prioritizing among programs will become increasingly difficult, as increased numbers of forensic admissions, increased purchase of care and professional services expenditures, and increased need for effective community

services aimed at different populations (acute crisis, severe and persistent mental illness, trauma and abuse, children, court-involved) compete for limited funding.

In these circumstances, it becomes crucial to assure that the highest cost component of the treatment system, its hospitals, are operating with maximum efficiency. Reducing the average length of stay by 25% increases the capacity for admissions by a third – or allows those resources to be diverted to support community programs.

- Efforts underway to **work with the courts to develop a maximally efficient forensic evaluation, treatment, and disposition system** should continue and intensify.
 - Competency evaluations and criminal responsibility evaluations should be conducted simultaneously rather than seriatim whenever possible, with a return to court at the earliest reasonable date.
 - Consideration should be given to a more active program of community treatment while on probation as an alternative to court-ordered hospitalization. This formal arrangement while criminal charges are pending helps assure adherence and raises fewer concerns than its civil equivalent, outpatient commitment.
- To help track improvement, median and average lengths of stay by facility and by county of residence for specific types of forensic and non-forensic admissions should be published on the DMH web site and tracked via StateStat. Readmissions or returns from court for further evaluation should be tracked as a single admission.
- Similarly, to track the development of appropriate acute care capacity in the private hospital system, the total patient days, average lengths of stay, and distribution of lengths of stay for voluntary or civilly committed patients admitted to state hospitals without an immediately preceding psychiatric admission in a private facility should be published on the DMH web site, reported both by state facility and by county of residence.

TRANSPARENCY AND DATA GATHERING

Some of the concerns expressed by the Task Force members can be addressed through transparency and enhanced communication.

- The Mental Hygiene Administration should institute a more formal means of communication with interested parties, particularly with regard to changes in policies, operating procedures, or funding. Whether this consists of formal policy issuances or more informal weekly or monthly summaries, the communications should be distributed via a list-serve that goes automatically to a defined group and also allows individuals to subscribe. The focus should be on:
 - communicating policy changes that are under consideration, and soliciting comment when appropriate and feasible, and
 - communicating changes in policy, operating procedures, or funding after the decisions are made, with a brief statement of rationale.

- The Mental Hygiene Administration should develop a five year plan for state services, including an assessment of key challenges facing the care delivery system and MHA's priorities that will guide the allocation of resources.
 - The first plan should draw on the work of the Mental Health Transformation Grant and this Task Force.
- The state inpatient referral system should provide more information about both the status of specific referrals and the performance of the system as a whole. Currently, we have frequent anecdotes but little publicly available data. We believe this information will help determine the true frequency of prolonged emergency department stays attributable to difficulties finding a state-funded bed.
 - Consideration should be given to the development of a database documenting placement efforts
 - To assure privacy, access would be controlled by some combination of user name, password, and knowledge of a specific characteristic of the patient being referred.
 - Quarterly reports should be publicly available documenting the median and range of elapsed times from notification to confirmed admission plans.
- **Hospital emergency departments should develop a study to identify the frequency and causes of long stays in the ED** for patients with mental illnesses. These long stays have been attributed to multiple causes. One pilot study suggests that a substantial part of prolonged emergency department stays is attributable to processes within the hospitals including medical clearance and bed availability. Recurrent reports from inpatient facilities suggest that substantial delays may result from delays in the state process of finding an available state-funded bed or from delays obtaining pre-authorization from payers. This study would help verify the published state referral system data suggested above and give evidence of the frequency of delays due to state referral processes or unavailable carrier pre-authorization.
 - Data to be gathered would include demographics, diagnoses (including comorbidities), primary payer, number of previous hospitalizations, discharge within past 30 days, resources used (MH professional staff, diversion team, etc.), time of ED arrival and departure/disposition, time of 1st request for and approval/denial of payer authorization, time of 1st request to state for a state hospital or purchase of care bed and time of resolution, specific disposition
- CSAs should enhance the information they publish on the web about resources available in the service area (whether funded through the CSA or not), including a description of the services provided, hours of operation, and contact numbers.
 - Options to obtain acute care / crisis services, including any central referral number, should be prominently displayed
 - Information about other treatment resources, the types of patients served, the payment options, and intake processes should be available

During the deliberations of this Task Force, _____ made its debut, marking a significant step forward taken by the MHA and CSAs to provide this information

both to the public and to professionals responsible for planning clinically appropriate dispositions for clients.

A LOOK BEYOND: GREATER COORDINATION AND BETTER OUTCOMES THROUGH PAYMENT REFORM

These recommendations focus more the dysfunctional features of our current payment system and on building a more functional payment system over the long term.

There is wide recognition that our current payment system for health care is flawed. Despite the introduction of DRG's and limited residual experiments in capitation, it remains fundamentally a system of fee-for-service payments made to siloed providers with little regard for quality and outcomes.

One emerging strategy follows the approach taken with surgical procedures – provide payments for the treatment of episodes of care. The strategy remains siloed by provider, however: hospitals will be paid for an episode and will receive reduced reimbursements for avoidable complications and readmissions, while surgeons already receive a bundled payment that includes follow-up.

The challenge here is to use payment reform to incentivize actual or virtual systems of care. One such approach, in its infancy and hampered by federal laws, involves gain-sharing arrangements in which provider systems improve efficiency and lower cost (while demonstrating that quality remains unimpaired) and receive a share of the cost-savings generated by the efficient care. If community providers can reduce the rate of emergency department and hospitalization use through more intensive (but less expensive) community treatment, part of the savings come to them – and, if the hospital is a partner in the effort, to the hospital.

Of course, that was the intent of HMOs and managed behavioral health care organizations that are paid per member per month rates. Case management and disease management programs are similar efforts to improve quality and reduce the use of high cost services. However, each of these strategies stands a step removed from the providers actually making the decisions. As a payer-based intervention, it is often viewed with either suspicion or hostility by providers – and it is specifically those decision-making providers who need to be an integral part of the improvement in the value of care, and to share in the financial benefit of higher value health care.

We are a long way from the information systems, risk models, and provider reengineering that could implement such an outcomes- and value-based payment system that encourages a more integrated system of care. However, some steps might move in that direction over the next three years.

- Payers should support **specific research projects**, such as a random-assignment study of whether residential crisis beds reduce annual or total episode costs through more effective community reintegration or through hospital diversion.

- As previously noted, the **case mix adjustments or severity measures should be adjusted** so that efforts to improve value through effective hospital diversion are not penalized. (Of course, it would be even better if such diversion efforts were incentivized, but appropriate methods to assess the true extent of diversion and the associated cost reduction do not currently exist.)
- The all-payer system should include psychiatric admissions in a later phase of any effort to adjust payments to **reward effective aftercare and to penalize avoidable rehospitalizations.**
- **Payers should assure that post-discharge outpatient visits occur rapidly after discharge.** We know that system failures are particularly likely at handoff – and discharge from the hospital is no exception. Is the failure of follow-up a function of inadequate hospital discharge planning, network adequacy, or lack of support system? The payer is in the best position to answer that question and to assure appropriate aftercare.
- To assure both effective follow-up and effective crisis intervention, payers should incentivize community providers to hold times open for **next-day appointments** by paying substantially higher amounts for those appointments.
- Clearer federal guidance and a more efficient review process could facilitate experiments in **gain-sharing.**

While individually, these strategies are modest in scope, they share a common goal: reducing the barriers between and changing the incentives of different providers to produce a better integrated, higher value care delivery system for Marylanders with mental illnesses.



White Paper

**MEETING THE NEEDS FOR INPATIENT MENTAL HEALTH
SERVICES: A FRAMEWORK FOR PLANNING**

Prepared for the

**Task Force on the Plan to Guide the Future
Mental Health Service Continuum**

**For Review and Discussion at the
February 26, 2008 Task Force Meeting**

**MEETING THE NEEDS FOR INPATIENT MENTAL HEALTH SERVICES:
A FRAMEWORK FOR PLANNING**

TABLE OF CONTENTS

I. INTRODUCTION

- A. Joint Chairmen's Direction
- B. Mental Health Transformation
- C. Plan to Guide the Future Mental Health Service Continuum
- D. Purpose of White Paper

II. BACKGROUND

- A. U.S. and Maryland: Emergency Department and Inpatient Trends for Psychiatric Patients
- B. Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding
- C. Key Elements in Developing the Mental Health Services Plan
- D. Current Planning for Mental Health Bed Capacity in Maryland

III. PLANNING PRINCIPLES

IV. PLAN DESIGN AND ELEMENTS

- A. Complexity and Limitations of Mental Health Planning
- B. Determining Population Needs
 - i. Target Population
 - ii. Sub-Populations Needs
 - iii. Geographic Dimensions of Need
- C. Resource Availability and Accessibility
 - i. Defining the Services
 - ii. Barriers to Care
 - iii. Access to the Mental Health System
 - iv. Service Delivery and Financing Structure

V. PLANNING METHODOLOGIES

- A. Relevant Research and Planning Literature
- B. Planning Strategies

VI. SUMMARY AND TASK FORCE DISCUSSION

MEETING THE NEED FOR INPATIENT MENTAL HEALTH SERVICES: A FRAMEWORK FOR PLANNING

I. INTRODUCTION

A. Joint Chairmen's Direction

The 2007 Joint Chairmen's Report¹ (JCR) directed the Maryland Health Care Commission (MHCC or Commission) to work with the Department of Health and Mental Hygiene and Maryland's Mental Health Transformation State Incentive Grant (MHT-SIG) to develop a plan to guide the future mental health service continuum needed in Maryland. The report recommended that the Maryland Health Care Commission develop projections of future bed need for acute inpatient psychiatric services (in State-run psychiatric, private psychiatric and acute general hospitals) and community-based services and programs (private and publicly funded) needed to prevent or divert patients from requiring inpatient mental health services, including services provided in hospital emergency departments. To guide the development of the plan, the JCR identified key stakeholder organizations to be included on a Task Force to provide assistance to the Commission in the development of the plan.

B. Mental Health Transformation

In 2003, the President's New Freedom Commission on Mental Health issued its final report, *Achieving the Promise: Transforming Mental Health Care in America*² and articulated six (6) goals. According to the New Freedom Commission, in a transformed mental health system:

- Americans understand that mental health is essential to overall health;
- Mental health care is consumer and family driven;
- Disparities in mental health services are eliminated;
- Early mental health screening, assessment and referral to services are common practice;
- Excellent mental health care is delivered and research is accelerated; and
- Technology is used to access mental health care and information

As part of its plan to encourage implementation of the New Freedom Commission's goals, the Substance Abuse and Mental Health Services Administration (SAMHSA) has awarded Mental Health Transformation State Incentive Grants (MHT-SIG) to nine (9) states, including Maryland. In 2006, MHT-SIG conducted an initial needs assessment that focused on the qualitative aspects of transforming the public mental health system. The data analysis produced through this MHCC planning project will add a quantitative profile of key factors and patterns of service utilization within the mental health system to complement the MHT-SIG's qualitative evaluation completed in August 2006 in response to a year one grant requirement³. This initial review included a

¹ Chairmen of the Senate Budget and Taxation Committee and House Committee on Appropriations, *Report on the State Operating Budget (HB50) and the State Capital Budget (HB51) and Related Recommendations*, Joint Chairmen's Report, Annapolis, Maryland, 2007 Session, p. 97-98.

² The President's New Freedom Commission on Mental Health: *Achieving the Promise: Transforming Mental Health Care in America*, June, 2003.

³ Mental Health Transformation State Incentive Grant, Inventory of Resources/Needs Assessment Report, August 2006.

comprehensive systemic review of Maryland's mental health service delivery system accomplished through a variety of information gathering mechanisms, including a series of interviews with key administrators in State agencies; a number of group interviews and focus groups with adult consumers, youth consumers, families, providers, and other stakeholders; a series of public forums and hearings; and a review of existing written materials. The latter included such source documents as Maryland's Federal Block Grant application, the Governor's Office for Children's Three Year Plan, the Maryland State Disability Plan, and other comprehensive plans from a variety of State agencies. To further refine the report and assure its accuracy, a number of respondents were subsequently contacted to clarify some of the information collected.

C. Plan to Guide the Future Mental Health Service Continuum

The *Plan to Guide the Future Mental Health Service Continuum* is intended to examine the strengths and weaknesses of the existing Maryland system for treating mental illness and disorder. It will address a number of key questions, including:

- What are the service components of the crisis emergency system (including acute inpatient treatment)? How will the components differ across urban, suburban and rural areas?
- Which crisis response services should be generally available and which should be targeted to specific and/or enrolled clients?
- Who is using hospital emergency department services for mental health care and who is expected to access crisis response services? What are the diagnoses of these patients (mental disorders, substance abuse, developmental disabilities, co-occurring conditions)? What is their insurance status?
- Where are the services needed? What service components should be available in urban, suburban and rural areas?
- What will the service components cost?
- Who will purchase the services?
- What financial base is available to support service development and use? Will existing dollars be diverted to these services or will the services only be created through new funding?
- How will the plan be implemented?

The plan may be used to guide evaluations of need for projects seeking Certificate of Need (CON) approval, to set budgetary priorities, and to guide systems development. The plan should be developed and structured so that those persons and agencies responsible for mental health service policy development, facilities regulation, and service funding recognize its practical value in their work. To ensure that the plan has lasting value, it must be linked to resource allocation, either through regulatory processes such as CON, or as a template used in driving public appropriations and spending decisions.

D. Purpose of White Paper

This White Paper is the first in a series that will support the development of the *Plan to Guide the Future Mental Health Service Continuum*. The White Paper: (1) identifies factors that should be considered in future capacity planning, including planning principles, geographic regions within Maryland, appropriate age cohorts and clinical subpopulations, and definitions of the service categories for which capacity projections will be developed; and (2) outlines options with respect to the key framing decisions for capacity planning for discussion by the Task Force. It also reviews the relevant research and planning literature around inpatient bed need projections and

crisis system development. Articulating the challenges of public processes, the White Paper additionally discusses the complexities and limitations of mental health planning.

II. BACKGROUND

A. U.S. and Maryland: Emergency Department and Inpatient Trends for Psychiatric Patients

Nationally, the number of emergency department visits increased by 9 percent between 2000 and 2004, compared to 18 percent in Maryland.⁴ Increases in emergency room utilization and trends in psychiatric bed capacity, have led a number of states, including Maryland, to examine the adequacy of inpatient beds for psychiatric patients. In addition to the number of emergency room visits increasing in Maryland, the rate of use per 1,000 population has increased since 2000, both numerically and relative to the national average. In 2000, Maryland's rate of emergency department visits was 333 per 1,000 population, which was lower than the U.S. average of 374 per 1,000 lives.⁵ In 2004, Maryland's rate of emergency department visits had increased to 389 per 1,000 lives, which is above the U.S. average of 384 per 1,000 lives.⁶

In June, 2004 the President's New Freedom Commission on Mental Health issued a *Background Paper* from its Subcommittee on Acute Care.⁷ The Subcommittee noted the decline in inpatient psychiatric beds per capita between 1990 and 2000; the increase in admissions per 100,000; and the resulting increase in occupancy rates and decrease in length of stay. Admissions went from eight-hundred forty (840) per 100,000 population in 1990 to just over one thousand fifty (1050) per 100,000 population in 2000. Total admissions per capita have increased dramatically over the last decade, up by twenty-seven percent (27%). Admissions to general hospital psychiatric unit and private psychiatric hospitals saw the greatest increase.

With the supply of most types of short-term inpatient beds declining, the most severe drop occurred in publicly operated services. Although one hundred-ten (110) twenty-four hour and residential treatment beds per 100,000 population were available in 1990, that number dropped to only eighty (80) per 100,000 population in 2000.⁸ The Subcommittee concluded that problems with acute care were primarily a local phenomenon, and the Maryland experience reflects the trend nationwide. Although Maryland is sixth (6th) in per capita funding for mental health services⁹, it faces problems similar to those experienced in less well-funded states.

⁴ Maryland Health Care Commission. "Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding." January 1, 2007.

⁵ Ibid.

⁶ Ibid.

⁷ The President's New Freedom Commission on Mental Health, 2003.

⁸ The President's New Freedom Commission on Mental Health, *Subcommittee on Acute Care: Background Paper*. DHHS Pub. No. SMA-04-3876. Rockville, MD: 2004.

⁹ National Association of State Mental Health Program Directors Research Institute, Inc. (2006). *FY2004 Revenue and Expenditure Study Results*, Alexandria, VA.

Maryland's emergency room utilization rates also reflect national trends. A recent study found that U.S. emergency department waiting times increased thirty-six percent (36%) between 1997 and 2004, with the greatest increase occurring for those most in need of medical attention.¹⁰ According to the study's authors, the proportion of emergency department visits that are emergent has also increased, "which suggests that compromised access to primary care is driving more Americans to emergency departments for routine medical needs".¹¹ The MHCC study of Emergency Departments reported similar findings: indicators of crowding such as ambulance diversion continue to increase and thirty-five percent (35%) of emergency visits were primary care-treatable.¹² At the same time, states like Maryland are experiencing physician shortages that may be having an impact on the demand for emergency department care. Although Maryland has the nation's second highest rate of licensed physicians per capita, almost forty percent do not see patients, according to a study released recently by MedChi and the Maryland Hospital Association.¹³ The greatest shortages were found in rural areas and in some specialties, including primary care and emergency medicine.

Emergency department crowding has also been attributed to a lack of a broad array of outpatient psychiatric services that might forestall or serve as an alternative to inpatient care. A study conducted by HealthPartners Regions Hospitals in Minneapolis/St. Paul found that the lack of psychiatric services caused severe crowding of emergency departments and resulted in unnecessary admissions to inpatient psychiatric units.¹⁴ In the HealthPartners system of six hundred (600) inpatient psychiatric beds, there were forty (40) to fifty (50) admissions per month from emergency departments for patients who would not have needed hospital services if there were less intensive community resources available.

As a component of the President's New Freedom Commission's work, a subcommittee considered the need for acute care as "an essential component of a system of mental health services in a community".^{15, 16} Identifying one of the Subcommittee's concern as the excessive use of hospital emergency rooms¹⁷, the report points out the twenty seven percent (27%) decline in beds per capita between 1990 and 2000, with State and county psychiatric hospital beds decreasing most sharply by forty-four percent (44%). During this period, admissions per 100,000 increased by ninety-one percent (91%) in private psychiatric hospitals but declined by twelve percent (12%) in State and county hospitals. Occupancy rates during this period rose to ninety-two percent (92%),

¹⁰ Wilper, A.P. et al. (2008). Wait to see an emergency department physician: U.S. trends and predictors, 1997-2004. *Health Affairs*, Volume 27, Number 1.

¹¹ Op cit.

¹² Maryland Health Care Commission, 2007.

¹³ Baltimore Sun, *State Lacks Practicing Physicians*, M. William Salganik, Sun Reporter, January 16, 2007.

¹⁴ Minneapolis/St. Paul Business Journal, *Lack of Psych Services Crowds ERs, Hospitals*, Lauren Wilbert, Staff Writer, March 15, 2007.

¹⁵ Schreter, R.K. (2000). Alternative treatment programs: The psychiatric continuum of care. *Psychiatric Clinics of North America*, 23, 355-346.

¹⁶ Subcommittee on Acute Care, 2004.

¹⁷ Schafermeyer, R. W. & Asplin, B.R. (2003). Hospital and emergency department crowding in the United States. *Emergency Medicine*, 15, 22-27.

with private psychiatric hospitals at eighty-nine percent (89%). However, the Sub-committee's report notes that, while these data show the inpatient trend, they "provide no information on the availability of alternative services that could lessen the demand for acute inpatient care".¹⁸ The Subcommittee report concluded with an appeal for consensus standards on the number of acute beds needed and for agreement on the array of services that constitute an ideal system of care.

B. Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding

In January, 2007, the Maryland Health Care Commission (MHCC) issued a report on *The Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding*. Although mental health consumers represented only three percent (3%) of emergency department (ED) patients, difficulty in finding appropriate dispositions for these patients was frequently noted as a major contributing factor in ED crowding. Twenty-nine percent (29%) of psychiatric patients presenting at the ED were admitted to inpatient care in contrast to an admission rate of eighteen percent (18%) for all ED patients; however, since approximately 40% of Maryland's acute general hospitals do not have an inpatient psychiatric unit, arranging for admission to other general hospital units, to specialty psychiatric hospitals, or to state hospital facilities is often necessary and contributes to delays. This finding led to the recommendation that MHCC consider the increase in admissions through the emergency departments as a factor in State Health Plan updates of inpatient bed need projections. The report further recommended that the Department of Health and Mental Hygiene (DHMH) develop a plan to guide the future role and capacity of state psychiatric hospitals and that MHCC develop projections of future bed need for acute inpatient services.

The Joint Chairmen's direction to the Commission to develop a plan to guide a continuum of services recognizes that the need for inpatient services is closely related to the adequacy of community services for acute intervention, for relapse prevention, and for community support. Addressing ED crowding related to the care of mental health patients could be limited to strategies for expanding effective bed capacity, thereby improving patient "throughput", by constructing more beds and/or managing use of beds more effectively. However, it can also be addressed by establishing adequate community-based services for individuals with mental illness thereby reducing the demand for inpatient hospitalization.

C. Key Elements in Developing the Mental Health Services Plan

From the Commission's January, 2007 recommendations, there are three key elements to be analyzed in developing the mental health service plan. The first is the question of the number of acute inpatient treatment beds required in Maryland; the second is the role of the State-operated facilities in filling that capacity for acute inpatient treatment; and the third is the identification of "community-based services needed to prevent or divert patients from requiring inpatient mental treatment, including services provided in hospital emergency departments"¹⁹.

Although each of these questions can be evaluated separately they are inextricably linked. The number of acute inpatient beds required in a system must be evaluated in the context of the

¹⁸ Subcommittee on Acute Care, 2004.

¹⁹ Maryland Health Care Commission, *Plan to Guide the Future Mental Health Services Continuum in Maryland*, Scope of Work, August, 2007.

availability of a crisis response system. Since alternatives to acute inpatient treatment can effectively reduce demand for hospital care, community-based crisis services must be developed in tandem with inpatient capacity.²⁰ If a mental health or a health care system has adequate access to primary and urgent care services, the need for emergency treatment and hospitalization can be minimized.

Maryland's crisis alternatives must also be developed in the context of its all payer hospital rate setting system, which provides the mechanism for incentives and payments for emergency department, inpatient and ambulatory care within Maryland's community-based hospital system. This, in addition to the role of Medicaid, Medicare, state funded services and private insurance serves to define Maryland's mental health system as it currently exists and will need to be considered as recommendations are made moving forward.

Maryland operates acute care beds in the public sector, unlike many States in which acute inpatient treatment is the sole purview of the private hospital sector and the State limits its role to the provision of intermediate, forensic and long-term inpatient treatment. In these States, an explicit policy delegating acute inpatient treatment to the private hospital sector was established. Even in States where some acute inpatient treatment is provided in State facilities, it is typical to find the State attempting to predominately utilize the general hospital psychiatric unit setting, so that Medicaid financing is available to support the cost of care for indigent patients.

Maryland has also historically relied on freestanding, private psychiatric hospitals to provide needed inpatient services. For this reason, access to inpatient care has recently been compromised through a decision of the Center for Medicare and Medicaid Services (CMS). CMS has decided not to renew a limited waiver of the Institute for Mental Disease (IMD) acute care payment restrictions for adults. While freestanding, private psychiatric hospitals have provided limited acute care for adult Medical Assistance beneficiaries for the past ten years, this decision will result in a further restriction of publicly-purchased beds for adult acute psychiatric care in Maryland. Without the IMD waiver, Maryland's Medicaid program will not be able to reimburse freestanding psychiatric hospitals for acute inpatient treatment, although the State is continuing to purchase beds through State General Funds for persons who are uninsured. Planning for psychiatric beds is further complicated by the increasing need for forensic placements. As is the case in most other States, an increasing proportion of Maryland's State psychiatric hospital beds are being used for individuals whose admission was ordered by a Court. Some of the crowding in hospitals could be alleviated with jail diversion programs and with adequate community treatment options.

Practices in other service systems also influence the demand for acute mental health treatment. A shortage of mental health services for child welfare or juvenile justice populations can drive emergency room utilization as can higher co-pays for mental health treatment for Medicare beneficiaries. Similarly, homeless persons with mental health needs who are not connected to the mental health system may be overly-reliant on hospital emergency department care because their psychiatric needs are not being met.

Finally, in addition to public policy and resource allocation, private insurance practices and coverage affect mental health utilization, both inpatient and outpatient. Benefit design, deductibles and co-pay requirements, and network capacity can all shape private pay utilization patterns and create demands for the public mental health system.

²⁰ The President's New Freedom Commission on Mental Health, *Subcommittee on Acute Care: Background Paper*. DHHS Pub. No. SMA-04-3876. Rockville, MD: 2004.

D. Current Planning for Mental Health Bed Capacity in Maryland

1. Maryland Health Care Commission

Through the health planning statute, the Maryland Health Care Commission is responsible for the administration of the State Health Plan, which guides decision making under the Certificate of Need program and the formulation of key health care policies, and the administration of the Certificate of Need program, under which actions by certain health care facilities and services are subject to Commission review and approval. Through the Certificate of Need program, the Commission regulates health care facilities and individual medical services covered by CON review requirements, as well as other actions the regulated providers may propose, such as increases in bed or service capacity, capital expenditures, or expansion into new service areas.

The method of projecting future need for inpatient psychiatric services under the Plan currently in effect is regional in its focus, based on the five historic health planning areas: Western Maryland (which since 1987 has included Carroll County, by the designation of the county's government), Montgomery County, Central Maryland (Baltimore City and the Baltimore metropolitan counties, minus Carroll), Southern Maryland (including Prince George's County), and the Eastern Shore. This regional approach to bed need projection distinguishes acute inpatient psychiatry in acute general hospitals from the other inpatient acute care hospital services, for which need is evaluated on a jurisdictional basis.

2. Mental Hygiene Administration

On behalf of the Mental Hygiene Administration (MHA), the Core Service Agencies²¹ (CSA) are local mental health authorities responsible for planning Public Mental Health System services at the local level. The MHA issues Planning Guidelines, and the county plan review process takes place between January and March/April. It begins with the identification of local needs and strategies and is followed by the CSAs' submission of two-year plans, with plan updates every other year. The CSA plans inform the MHA plan and budget with respect to systemic issues, policy, and program development, and also inform the MHA Plan and Annual Report. The annual State MHA Plan includes MHA's goals, objectives, and strategies for the coming year, reflecting State priorities and the input from the local CSA processes and from other stakeholders.

With respect to the children's system, the plans submitted by CSAs reflect collaboration and planning with Local Management Boards²² (LMBs) in their jurisdictions. The LMBs, which are under the auspices and funded by the Governor's Office on Children (GOC), are required to do a needs assessment of service delivery to the children, youth, and families in their jurisdictions every three years. Although their assessments are community based and across local systems, CSAs participate with them in identifying mental health issues and needs.

²¹ Core Service Agencies are local mental health authorities that are connected to each county or, in some cases, are connected to groups of counties.

²² Local Management Boards are local children's authorities that include review of mental health services and needs.

III. PLANNING PRINCIPLES

Every planning process begins with a statement of principles that are used to guide elements in the plan and decisions about directions. For the *Plan to Guide the Future Mental Health Services Continuum*, the following general principles are proposed:

Targeting Services for Specific Populations

- **Services should be targeted to identified populations with specific service needs, including adults with serious mental illness and children/adolescents with serious emotional disturbance, as well as people with less serious clinical conditions who rely on publicly-funded mental health treatment.** Diagnosis and severity of disability are used to determine/identify serious mental illness or emotional disturbance. In particular, adults and children/adolescents with co-occurring psychiatric and addictive disorders require tailored services and integrated treatment. Special populations such as those who are homeless, involved with the child welfare system, or exiting the criminal justice system should receive special attention in system planning. Services should be customized for individual populations so that maximal outcomes are reached.

Promoting Development and Maintenance of Services Shown to be Effective

- **To the extent possible, evidence-based mental health treatment modalities, selected for their clinical effectiveness should be included in planning.**²³ However, since there are still few evidence-based practices in mental health, the service array should also use practice-based evidence to identify desired treatment options and will consider consensus-driven best or promising practices. Evidence-based practice integrates the best research evidence with clinical expertise and patient values.²⁴ The long-term goal is reliance on evidence-based decision making for clinical care.

Prioritization

- **Priorities should be established among resource development and resource allocation options using cost-benefit considerations to determine the comparative effectiveness of individual service modalities and cost-effectiveness analysis to analyze choices among competing options for meeting the same treatment objectives.** Both direct costs of treatment and the quantifiable costs to government (justice system, welfare and other social services, including housing) of untreated illness should be considered. Those services with reasonable direct costs and high 'other cost avoidance' quotients should be optimized.

²³ Lehman, AF, Goldman HH, Dixon, LB, Churchill, R: *Evidenced-Based Mental Health Treatments and Services: Examples to Inform Public Policy*. (Milbank Memorial Fund: New York) 2004.

²⁴ Institute of Medicine, 2001. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press.

Access to Services

- **Planning for mental health services should consider barriers to care and promote access to services by addressing the needs of underserved populations and racial disparities.** To assure appropriate access and effective treatment, mental health systems should understand the cultural demographics both of those in the service system and those who are in need of service but who are not engaged by the system. Efforts should also be made to understand, recognize and utilize the familiar and valued community resources of minority cultures and to integrate these resources into the community mental health system. Efforts are also needed to ensure that a culturally competent workforce is available to serve minorities and, where language is a barrier to care, that bilingual mental health professionals and/or sensitive interpreter and translation services are available.

Accountability

- **Services should be accountable, to the people served and to payers and purchasers.** Accountability should be demonstrated through providers' ability to produce results and provide evidence of positive outcomes for consumers and families. Outcomes should be framed in ways that customers and taxpayers can understand, for example using employment, not 'productivity' as a benchmark. Providers' responsiveness to consumers', families' and purchasers' opinions and experience is also an indicator of accountability

Evaluation

- **Services delivery should be performance-focused and always accompanied by the collection of timely and comprehensive performance data, with providers and practitioners conducting continual assessment of the client's experience, his/her perceptions of the quality of care and the results being achieved.** Outcome management systems should identify opportunities for process improvement and profile performance in key clinical areas.

Adopting a set of planning principles will assist decision makers in setting priorities and selecting options for system development and financing.

IV. PLAN DESIGN AND ELEMENTS

A. Complexity and Limitations of Mental Health Planning

Mental illness is the second leading cause of disability and premature mortality in the United States.²⁵ Yet, nearly half of all Americans with a mental illness do not seek treatment. This may be due to a failure to recognize the symptoms, the societal stigma associated with mental illness, financial barriers, or a lack of awareness as to how and where to find help. Since not all who meet the diagnostic criteria for a mental health disorder experience significant impairment, at issue is how many residents of a state will actually need treatment services, and of what type and intensity. Adding to this issue is the fact that many people with mental illness actually receive mental health care from providers outside the traditional publicly financed mental health

²⁵ World Health Organization. (2001). *The World Health Report 2001 - Mental Health: New Understanding, New Hope*. Geneva: World Health Organization.

system, such as primary care providers, health centers, schools, child welfare, juvenile services, courts, local jails, homeless systems or nursing homes. Planning for mental health services must therefore balance these issues of frequency of occurrence, variability in severity, and the role that other systems may have in providing care.

One of the characteristics of mental health services that makes quantitative need projections challenging is the high degree of interchangeability of certain services in the mental health continuum. Acute care is such a service. If there are no community-based crisis and emergency services, demand for acute inpatient care will be quite high; with the provision of targeted outpatient-delivered crisis intervention, demand for acute inpatient treatment may be reduced. Possibly more than medical/surgical services, mental health services interact with each other and with social services and supports.²⁶ Many public systems have created a continuum of community-based crisis and emergency services that serve to decrease inpatient utilization. Development of 'warm lines', 24-hour crisis lines, urgent care clinics, mobile crisis teams, respite options, crisis hostels, and crisis residential treatment centers have all assisted various public behavioral health systems to reduce their reliance on inpatient treatment. Additionally developing specific services and therapeutic interventions for individuals who are frequently admitted to inpatient facilities (e.g., persons with substance use disorders, persons who are homeless) has also contributed to reductions in hospital care.

Because acute inpatient alternatives can reduce the demand for more expensive and invasive hospital-based services, public mental health systems must carefully evaluate their community-based crisis continuum in conjunction with planning for inpatient acute capacity. Are community-based alternatives available and delivered effectively? Are they targeted to the persons who are presenting at emergency departments? Is there adequate affordable housing so that economic or domiciliary crises don't precipitate admissions?

While adequate funding is an essential element in a well-resourced system, other elements are also important. In order to maximize return on investment, the services purchased must be efficiently operated. Further, efficiently operated services are not sufficient but must also be delivered in effective way so that consumers and their families benefit from treatment and are able to move toward recovery and resilience. Ideally, a well-run system would ensure that services that are delivered are both effective and efficient. There should be methods to assess each and these should be part of the metrics that are tied to recovery and process outcomes. Funding should follow these metrics.

Even in systems with adequate funding, there is still much under-treatment and most consumers do not receive evidence-based care.²⁷ For example, in 2002 only fifty-six percent (56%) of schizophrenia medications were prescribed in appropriate dose and duration, up from forty-nine percent (49%) in 1997; slightly less than half of the patients served received sub-optimal medication-assisted treatment.²⁸ A purchaser could be directing significant spending to medication-assisted treatment but receiving little return on investment if ineffective therapeutic interventions are being employed.

²⁶ Elpers, J. R and Crowell, A. (1982) How many beds: An overview of resource planning, *Psychiatric Services*, Volume 33, pp. 755-761.

²⁷ Frank, R., *Mental Health Care: Gaps and Gains*, Presentation to the National Association of State Mental Health Program Directors, July, 2007.

²⁸ Op cit.

The public mental health planning process itself presents significant challenges to any quantitatively-driven forecasting. While State Mental Health Authorities (SMHA) are required to develop comprehensive plans on an annual basis, most of these plans focus on incremental changes to the service system and identify desired service enhancements; they don't "rightsize" the system. Very often, budget initiatives, not systems development, determine a public system's direction and priorities. Rarely are systems 'zero-based' or is funding re-directed from ineffective to more effective services. Policy decisions often serve a "satisficing" rather than optimizing purpose²⁹, given the need for SMHAs to continually react to environmental changes, stakeholder feedback, and political influences.

The payer mix for mental health spending must also be considered in any planning process. In 1997, the last year comparable data were available, fifty-seven percent (57%) of mental health expenditures were derived from public sources, compared with forty-six percent (46%) of health care spending.³⁰ Within the public sector, Medicaid accounted for twenty-seven percent (27%) of expenditures for mental health treatment in 2001.³¹ When combined with Medicare's contribution of seven percent (7%), these two sources contributed more than State general funds, which stood at twenty-three percent (23%). Clearly, the Single State Authority (Medicaid) must be a strong partner in mental health system planning. On the other hand, Medicaid's ability to plan is actually limited to the decision whether to include a service in the State Plan. Once that decision is made, any willing and qualified provider can apply to offer that service, without regard to specific, regional need or demand for the service. State and local Mental Health Authorities have more discretion in network development and can selectively fund services and, therefore, providers, in targeted geographic areas based on needs.

B. Determining Population Needs

1. Target Populations

The first issue for mental health planners is to define the target population who will access the service system. This will help determine the goals of the system, the services necessary to meet those goals and the accompanying resources needed to provide such services. The characteristics and needs of the population will inform efforts to develop services and identify the resources to support these services. For instance, a plan may include the general population that would benefit from prevention and early intervention activities. This may include such activities as: educational and information campaigns to reduce stigma, real-time information on resources for individuals and families who may have early symptoms, or maintaining and implementing a mental health component of a disaster response plan. In addition, crisis response systems may be defined for the general population who experience mild to acute crisis but may not necessarily be receiving or needing ongoing mental health treatment and supports.

While most state mental health authorities have jurisdiction over mental health services for all residents of the state, limited public mental health resources often require these systems to be selective in who benefits from publicly financed mental health services. This has led many states

²⁹ Lindbloom, C., (1995). "The Science of Muddling Through." *Administrative Science Review*. 19: 79-99.

³⁰ Coffey, R.M., Mark, T., King, E. Harwood, H., McKusick, D., Genuardi, J. et al. (2000). *National Estimates of Expenditures for Mental Health and Substance Abuse Treatment, 1997* (SAMHSA Publication SMA-00-3499). Rockville, MD: Substance Abuse and Mental Health Services Administration.

³¹ Frank, 2007.

to either limit services to those with the most severe or disabling disorders, to those whose income or level of disability make them eligible for public support under the Medicaid program, or to those individuals referred by the Court system. Although a mandated population, this latter group may or may not meet other criteria under the State's target population definition. While these strategies are often necessary, they further test the ability of mental health planners to develop comprehensive systems of care.

In Maryland, the State Mental Health Authority is responsible for running the Medicaid mental health program and also for covering persons without insurance whose incomes fall below 116% of the federal poverty level, in addition to high risk groups. The criteria for the other groups include whether a person is homeless, newly released from prison, jail, or another correctional facility, have been discharged within three months from a psychiatric hospital, are receiving services as required by a court-ordered conditional release, or have social security disability insurance as a result of a mental health disorder.³²

The target population of the plan may also include the clients of other agencies or institutions that rely on the mental health system to supplement their roles and responsibilities. These may include individuals referred by schools, child protective services, and other health and human services agencies (e.g., alcohol and addiction services, mental retardation). These individuals may request or require education and information that will also help to reduce stigma and identify the best strategies for accessing publicly funded mental health services in their area.

The target population of a mental health plan will always include individuals who have significant mental health needs and their families. These include children with serious emotional and behavioral disorders and their families as well as adults with serious mental illness. It may also include families or caregivers of these adults. These individuals have complex needs that require a system of care that includes a range of acute, outpatient and rehabilitative services. The implementation and coordination of these services require careful analysis and planning.

Many states have historically limited services only or primarily to those with serious mental illnesses (SMI) or serious emotional disturbance (SED) as defined by diagnosis, disability, and level of functioning. Once defined as meeting the particular criteria, the consumer usually has access to an extensive array of services. A conflicting problem for states that have limited their services to those with serious mental illness is the concept of triage – providing for those who present in crisis and who could benefit from services. These individuals do not always meet the SMI/SED criteria developed by the state, yet need crisis and triage to address their mental health needs. To respond to this conflict, many states have included crisis and emergency services as supported programs open to all who may be in need. This concept seeks to address the immediacy of the crisis and assess whether short or long-term mental health services are needed.

A challenge for the public mental health system is to define what it seeks to accomplish. Without establishing specific goals for the service system, the public mental health system runs the risk of trying to do everything and accomplishing, at best, a little of each. Public systems have faced planning challenges for a number of reasons, including limited funding and the absence of a fully developed population-based public health model for providing mental health services that flow from primary prevention, early intervention through deep end services. Secondly, responsibility for purchasing or providing mental health services is spread through various components of state and local government—child welfare, corrections, schools, etc. In addition, public and private

³² Task Force to Study Access to Mental Health Services Final Report. December 2004.

coverage of mental health services is typically not coordinated, causing intended or unintended cost shifting among payers.

The recent report of the President's New Freedom Commission on Mental Health³³ strongly urged the adoption of the idea of recovery as possible for all and as the guiding goal for public mental health services. The New Freedom Commission defined recovery as "the process in which people are able to live, work, learn and participate fully in their communities".³⁴ Factors contributing to recovery include symptom reduction, independent living, and improved vocational functioning and social relationships. The consumer movement also sees the experience of recovery bringing with it valued roles, self-esteem and empowerment. Recovery as a guiding goal for state mental health systems can also help to integrate mental health services with the concepts of self-help, protection of rights and rehabilitation and treatment.³⁵ For children and their families, 'resilience' is the goal that has many of the same attributes of recovery for adults; it's "the personal and community qualities that enable us to rebound from adversity, trauma, tragedy, threats, or other stresses—and to go on with life with a sense of mastery, competence and hope".³⁶

2. Sub-Populations Needs

To be effective, most mental health services must be tailored to specific groups of clients, beginning first with age cohorts. While somatic medicine orients treatment to pediatric, adult and geriatric populations, mental health services are typically targeted to children, adolescents, young adults, adults and older adult populations. In providing outpatient treatment, for example, best practice would have therapists who specialize in children, adolescents, transition aged youth, adults or geriatric practice. Clinicians who treat children should understand developmental psychology and family dynamics. Practitioners who serve older adults should understand the effects of the aging process on both physical and mental health.

As funds and services for individuals with substance abuse have decreased, individuals with substance abuse problems have increasingly used the emergency department for their services. The use of contingency psychiatric symptoms to access a residential placement has added to competition for mental health resources. An additional problem for emergency departments is dealing with individuals with developmental disabilities. These individuals generally have insurance but do not fit well with the case rates and experience placement problems.

Similarly, major groups of clinical conditions require special attention. Clinical guidelines for treating schizophrenia are not the same as for major depressive disorder. Practitioners need to be knowledgeable about the diagnoses they treat. Given the prevalence of co-occurring psychiatric and addictive disorders, all mental health practitioners must be capable of assessing for either disorder and providing some initial level of treatment for both.

Inpatient treatment needs to be tailored for children/adolescents and adults, and preferably for older adults as well. While initial emergency evaluation, crisis intervention and triage may not be

³³ The President's New Freedom Commission on Mental Health, 2003.

³⁴ Op cit

³⁵ Institute of Medicine, 2001. *Improving the Quality of Health Care for Mental and Substance-Use Conditions*. Washington, D.C.: National Academy Press.

³⁶ Op cit

age-specific, subsequent clinical treatment should be. For acute or emergency treatment, rapid assessment and crisis intervention are the specialties, not necessarily specific clinical conditions.

Table 1 below outlines options for defining the age cohorts of the target population. Under the Commission's State Health Plan, four age cohorts are used: children (0-12 years); adolescents (13-17 years); adults (18-64 years); and geriatric (65 years and over).

Table 1
Comparison of Alternate Options for Defining Target Population Age Groups

Option	Target Population Age Groups
Option 1	Children and Adolescents (Under 18 Years) Adults (18 Years and Over)
Option 2	Children (0-12 Years) Adolescents (13-17 Years) Adults (18-64 Years) Geriatric (65 Years and Over)
Option 3	Children (0-15 Years) Transitional Adolescent/Young Adults (16-24 Years) Adults (25-64 Years) Geriatric (65 Years and Over)

3. Geographic Dimensions of Need

In planning for mental health service capacity, a state needs to establish some type of 'planning areas' that are used to predict utilization volume and to distribute resources. Defining geographic regions by examining referral patterns for hospital services reflecting an analysis of where patients live and where they seek care is one approach to establishing planning areas. This approach has been used by Wennberg to analyze patterns to utilization for health care services.³⁷

In most states, planning areas for mental health services are larger than counties (with the exception of large, urban counties) and could be established based on an expected critical volume of persons who would rely on public mental health services. For example, some states have defined persons who are at two hundred percent (200%) of the federal poverty level as either the eligible or the target population for publicly funded services. These states then create groupings of counties whose combination resulted in a certain threshold population base of persons in poverty. Counties would be grouped not just on population, but also based on transportation systems, natural boundaries (e.g. bodies of water, mountains) or commerce patterns. Some services, like outpatient treatment or community support, would be available in every 'planning area'; others would only be available to groups of planning areas ('regions'). Less intensive and expensive services would be broadly available, while more intensive treatment options might be available on a regional basis. The need for some intensive services is specifically

³⁷ Wennberg, JE. The Dartmouth Atlas of Health Care in the United States.

linked to high resource utilization and their distribution should be driven by this. Assertive Community Treatment (ACT), for example, requires a baseline high volume of inpatient utilization in the targeted client population to justify the cost of this service; given the team staffing model, ACT also requires a minimum caseload between fifty (50) and sixty (60) clients. It would not be economically feasible to support an independent team in every county.

Organizational and delivery models will also need to be tailored to types of geographic areas, most specifically urban, rural and frontier. Some intensive treatment options (inpatient, for example) will never be as accessible in rural or frontier areas, since their expense and overhead requires a substantial population base for economic viability. Creative alternatives to inpatient care must be developed in order to accommodate the lack of inpatient capacity. Similarly, the model for a crisis response system will not be identical for a large urban area and a rural region.

Potential options for defining geographic regions for planning acute inpatient mental health services are outlined in Table 2. The Commission's State Health Plan establishes five planning regions: Western Maryland; Montgomery County; Southern Maryland; Metropolitan Baltimore; and, Eastern Shore. The plan also identifies sub-regions for Western Maryland, Southern Maryland, Metropolitan Baltimore, and Eastern Shore. An alternative option for establishing planning regions would be to use the Census Bureau guidelines for the metropolitan Washington and Baltimore areas. The general concept of a metropolitan area is that of a core area containing a large population nucleus, together with adjacent communities having a high degree of economic and social integration with the core area. For the Metropolitan Washington area, this would add Frederick County, which under the Commission's State Health Plan is now part of Western Maryland. For the Metropolitan Baltimore area, this would add Queen Anne's county, which is included on the Eastern Shore under the Commission's State Health Plan. This general approach, outlined in Option 2, would define four planning regions. Another approach would be to blend the Census Bureau guidelines with the some of the sub-regions identified in the Commission's State Health Plan. This approach is outlined in Option 3 and would define six planning regions.

C. Resource Availability and Accessibility

1. Defining the Services

For many years, a key tension in mental health planning has been the allocation of resources between inpatient and outpatient care. The introduction of the Balanced Service System in the late 1970s by the Joint Commission brought recognition that a mature and effective mental health system required a broad array of services, including inpatient and outpatient community based services. The balanced service system introduced the concept of fifteen (15) types of programs based on the type of service provided, type of environment (natural, protective, supportive), and the type of setting (residential, non-residential) where services were to be provided. Although the balanced service system concept languished, the concept that people with mental illness need a variety of services in different kinds of setting continues today.

Services for people with mental illness are interconnected. Consumers of mental health services use many different services and many at the same time. Planning needs to consider that providing a consumer with an assertive community treatment or outpatient medication management may not mitigate the need for a supported housing placement or a psychosocial rehab program. The interconnectedness of services may also require case management or other linking functions to help ensure that care is coordinated across such services. As the course of the illness and the corresponding disability that comes from mental illness also changes, one's service needs may also change, thereby requiring some flexibility in service design and capacity.

**Table 2
Comparison of Alternate Options for Defining Geographic Regions for
Planning Acute Mental Health Services**

	Western Maryland	Metropolitan Washington	Metropolitan Baltimore	Eastern Shore
Option 1 MHCC State Health Plan (5 regions) (Note 1)	Allegany Co. Frederick Co. Garrett Co. Washington Co. [Population: 498,050]	Montgomery Co. [Population: 987,000] Calvert Co. Charles Co. Prince George's Co. St. Mary's Co. [Population: 1,234,300]	Anne Arundel Co. Baltimore City Baltimore Co. Carroll Co. Harford Co. Howard Co. [Population: 2,721,950]	Caroline Co. Cecil Co. Dorchester Co. Kent Co. Queen Anne's Co. Somerset Co. Talbot Co. Wicomico Co. Worcester Co. [Population: 456,300]
Option 2 Census Bureau Metropolitan Statistical Areas (4 regions) (Note 2)	Allegany Co. Garrett Co. Washington Co. [Population: 254,850]	Calvert Co. Charles Co. Frederick Co. Prince George's Co. Montgomery Co. St. Mary's Co. [Population: 2,464,500]	Anne Arundel Co. Baltimore City Baltimore Co. Carroll Co. Harford Co. Howard Co. Queen Anne's Co. [Population: 2,771,150]	Caroline Co. Cecil Co. Dorchester Co. Kent Co. Somerset Co. Talbot Co. Wicomico Co. Worcester Co. [Population: 407,000]
Option 3 Blended Census Bureau and SHP Sub-regions (6 regions)	Allegany Co. Garrett Co. Washington Co. [Population: 254,850]	Frederick Co. Prince George's Co. Montgomery Co. [Population: 2,113,950] Calvert Co. Charles Co. St. Mary's Co. [Population: 350,550]	Anne Arundel Co. Baltimore City Baltimore Co. Carroll Co. Harford Co. Howard Co. [Population: 2,721,950]	Caroline Co. Cecil Co. Kent Co. Queen Anne's Co. Talbot Co. [Population: 249,200] Dorchester Co. Somerset Co. Wicomico Co. Worcester Co. [Population: 195,400]

Note (1) Under COMAR 10.24.07 subregions are designated as follows: Western Maryland (Allegany/Garrett Counties and Frederick/Washington Counties); Southern Maryland (Calvert, Charles, and St. Mary's Counties); Central Maryland (Baltimore City and Anne Arundel, Carroll, Harford, and Howard Counties); and Eastern Shore (Upper Eastern Shore including Caroline, Cecil, Kent, Queen Anne's, and Talbot Counties; and Lower Eastern Shore including Dorchester, Wicomico, Somerset, and Worcester Counties).

Note (2) The Census Bureau's designated Washington-Baltimore Consolidated Metropolitan Statistical Area (CMSA) is composed of the Washington, D.C. Primary Metropolitan Statistical Area, the Baltimore, Md. Primary Metropolitan Statistical Area, and the Hagerstown, Md. Primary Metropolitan Statistical Area. The table includes the Maryland jurisdictions in the Washington, D.C. and Baltimore Primary Metropolitan Statistical Areas. Although included in the Metropolitan Washington area on this table, St. Mary's County is not part of the Washington, D.C. Primary Metropolitan Statistical Area. (Source: Population Division, U.S. Census Bureau, Metropolitan Statistical Areas and Components, December 2005. Internet release date: January 19, 2006.)

Population data reflect 2010 projections from the Maryland Department of Planning, Planning Data Services, October 2007.

Mental health systems place high value on services that are person centered and developed using appropriate assessment criteria and methods. When consumers are being assessed, a "person orientation" will help the recovery process by identifying those areas where client's strengths can be used to promote access to existing resources that may be outside of the public mental health system. Such resources might include recreational programs available at the YMCA or through local recreation departments, or educational and vocational training that might be available through community colleges or adult education programs.

Additionally, client-driven services foster opportunities for self-determination and choice for consumers of services. The recovery process can be facilitated further by providing the consumer the opportunity to determine his or her own goals for care, to choose the methods to achieve those goals and to select the provider of the service. Consumers may also need to be educated about treatment options and the kinds of providers available to them so that they can make informed decisions about their care.

Consumer and family involvement in the planning for mental health services is well understood as a prerequisite for system planning. Meaningful opportunities for consumer and family participation in the design and delivery of mental health services are essential to ensure the system's responsiveness. Congress has recognized the importance of such involvement through a mandate that state mental health planning councils include family and consumer participation.

There is clear recognition that community-based non-institutional services can meet the needs of most persons with serious mental illnesses.³⁸ At a minimum, the treatment services needed include:

- Emergency and Crisis Stabilization Services
- Inpatient Psychiatric Services
- Outpatient Care, including cognitive behavior interventions and medication management
- Integrated treatment for those with co-occurring psychiatric and substance abuse disorders
- Integration with somatic health services
- Integration with other service delivery systems
- Prevention and early intervention services

³⁸ Satcher, D. (1999). *Mental Health: A Report of the Surgeon General*, U.S. Department of Health and Human Services, Center for Mental Health Services and National Institute of Mental Health, Rockville, MD: U.S. Government Printing Office.

Table 3
Comparison of Alternate Options for Defining Services for Projecting Need

Option	Services
Option 1	Inpatient Beds Only
Option 2	Inpatient Beds Community-Based Emergency and Crisis Stabilization Services Diversion Services
Option 3	Inpatient Beds Community-Based Emergency and Crisis Stabilization Services Diversion Services Services Needed by Persons Who Frequently Use, or Would Likely Frequently Need Inpatient Psychiatric Care

In addition to these treatment services, services to persons with serious mental illness typically include appropriate care management practices such as assertive community treatment and case management.

Support and rehabilitative services for those with a serious mental illness typically includes an array of supportive and independent housing, supported education and employment services, and psychosocial rehabilitation services, such as clubhouses and drop-in centers. For children, intensive home-based intervention, wraparound services and family support are considered to be critical system components. Family psycho-education and peer support are increasingly seen as essential. Recently, many public purchasers have begun adding recovery/resilience support services to their system's array.

Because the focus of the Task Force is on diversion of persons with mental illness from inpatient psychiatric care, the Task Force will need to focus on services likely to reduce the need for acute, inpatient psychiatric care. However, some persons with serious mental illness are able to reduce their need for inpatient care with the receipt of services that would not generally be regarded as directly reducing the need for inpatient psychiatric care. Therefore, identifying the persons with serious mental illness who frequently use inpatient psychiatric care, and examining their service needs, may be just as valuable as defining the services likely to directly reduce the need for inpatient psychiatric care.

2. Barriers To Care

The planning of mental health services should also consider barriers to care. Among these are cultural diversity of those to be served, geographic considerations, and workforce considerations.

a. Cultural Diversity

The US Surgeon General's Report on Mental Health³⁹ noted that America's mental health system was ill-equipped to meet the needs of racial and ethnic minority populations and that, as a result, these individuals are generally underserved by the mental health service system. To assure appropriate access and effective treatment, mental health systems must understand the cultural demographics both of those in the service system and those who are in need of service but who are not engaged by the system. Efforts should also be made to understand, recognize and utilize the familiar and valued community resources of certain minority cultures and to integrate these resources into the community mental health system. Efforts are also needed to ensure that a culturally competent workforce is available to serve minorities and, where language is a barrier to care, that bilingual mental health professionals and/or sensitive interpreter and translation services are available.

b. Rural Services

Often, the design of the services system is based on population centers where there are wider choices for care and where access to care is made easier through a critical mass of consumers and, often, the availability of public transportation. In rural settings, primary medical practitioners and social service agencies are often the mental health providers of choice. The broad array of mental health services found in urban areas is not typically available in rural settings. If such services are required, consumers must travel long distances, and because people with serious mental illness are often poor and don't have adequate transportation, services cannot be accessed. When a consumer is unable to access appropriate mental health services, they must rely on friends, family and other natural supports. In those rural locations where care is available, choices are often limited.

c. Workforce

The availability and array of mental health services can also be constrained by limitations in the mental health workforce. The lack of adult or child psychiatry in certain areas often requires changes in the types of services offered in the community. The unavailability of appropriate community mental health services for children in most areas of the country often results in children being hospitalized for needed care. Similarly, the lack of specialists trained to deal with co-occurring mental health and substance abuse disorders may result in ineffective treatments or no treatment at all. The expansion of evidence-based services requires the supply of well-trained mental health professionals able to deliver such services.

3. Access To The Mental Health System

Planning for a community mental health system must also consider how those in need access care. The mental health system may adequately serve those already "in the system", but those outside the system or those in crisis are often not adequately served. Most community mental

³⁹ United States Public Health Service Office of the Surgeon General (2001). *Mental Health: Culture, Race, and Ethnicity: A Supplement to Mental Health: A Report of the Surgeon General*. Rockville, MD: Department of Health and Human Services, U.S. Public Health Service.

health services are fragmented, making it difficult to know where to go for help. Once the front door of the system is found, waiting lists or a backlog of appointments often prevent those-in-need from obtaining services. In recent years, hospital emergency rooms, child welfare systems, jails, nursing homes and homeless shelters have become the alternatives to the community mental health system.

To address this issue, mental health systems must facilitate access to care by better coordination and linkages with these other systems. Appropriate access standards also need to be developed, so that those who do find themselves in hospital emergency rooms or in police custody can be diverted to the appropriate type of mental health care in a reasonable timeframe. Those being discharged from crisis or inpatient settings also need appropriate outpatient follow-up within a reasonable time to guard against relapse. The development of reasonable access standards will help to identify gaps in the service system and pinpoint where new resources may be needed to ensure adequate entry into the mental health system.

4. Service Delivery and Financing Structure

Planning the source and methods for service financing and delivery should follow as the target population, system goals and mental health services are defined. Too often, the opposite is true; the funding stream or the organization of services dictates what will be provided and to whom.

Although a substantial amount of money is spent in public mental health systems, additional resources and/or a better system for allocating them is almost always needed. Key to this is ensuring that the current available resources are spent wisely and allocated based on need, optimal performance and desired outcomes. The tendency has been to add new programs and services without defining how the current set of services can be restructured or altered to provide better or more appropriate care.

The public mental health system is not immune to state and local politics. Every major professional group and institution will see the planning process as either an opportunity or a threat. The planning process must determine the degree of change desired in the way business is traditionally done, and whether the political will exists to make such to changes.

V. PLANNING METHODOLOGIES

A. Relevant Research and Planning Literature

On the topic of developing mental health services capacity, the relevant literature covers two main subjects: (1) predicting need for mental health services; and (2) forecasting the need for acute care and inpatient beds.

1. Demand for Mental Health Services

While predictable estimates of the prevalence of mental illness are readily available, translating those estimates into measures of service level need is less precise. According to various national studies, about five (5%) to seven percent (7%) of adults have a serious mental illness in any year; about five (5%) to nine percent (9%) of children will have a serious emotional disturbance.⁴⁰ However, experts caution against using a single national rate for service planning

⁴⁰ Kessler, R.C., Berglund, P.A., Bruce, M.L., Koch, J.R., Laska, E. M, Leaf, P.J. et al. (2001). The prevalence and correlates of untreated serious mental illness. *Health Services Research*, 36, 987-1007.

and point out that other factors may need to be considered (e.g., population in poverty, rate of uninsurance and under-insurance, provider capacity, etc.).⁴¹ Typically, predictions of the need for public sector capacity to deliver behavioral health services rely heavily on poverty rates, using this as an indicator of the population reliant on publicly funded treatment. Special factors that are often considered include the rate of homelessness, since this population has been shown to have a greater need for behavioral health services than the general population. According to the National Resource Center on Homelessness and Mental Illness⁴² sixty-six percent (66%) of homeless persons report having either substance use and/or mental health problems. Thirty-eight percent (38%) report alcohol use problems; twenty six percent (26%) report problems with other drugs; and thirty nine percent (39%) report some form of mental health problem. Twenty (20%) to twenty five percent (25%) meet criteria for serious mental illness (compared to about five percent [5%] of the general population).⁴³ For both adults and adolescents, the prevalence of co-occurring psychiatric and addictive disorders must be addressed in the service planning process. About fifteen percent (15%) of all adults who have a mental illness also have a substance abuse disorders.⁴⁴ Conversely, between forty one (41%) and sixty five percent (65%) of individuals with a lifetime history of a substance abuse disorder also have a lifetime history of mental illness.⁴⁵ Research has shown that individuals with co-occurring disorders have a higher likelihood of relapse and higher rates of hospitalization.⁴⁶ Many public jurisdictions are now finding that a high proportion of acute inpatient psychiatric admissions are due to untreated or inadequately treated substance abuse problems.

In addition to need, the supply of health care services significantly influences demand for services. In fact, some researchers discourage the use of "rates under treatment" (the percent of those with a mental disorder who receive treatment), saying that it represents "effective demand" more than "need".⁴⁷ Commercial insurance practices can drive the need for public sector services when benefit packages are limited and use of inpatient treatment is restricted. Inadequate coverage for community-based alternatives can increase demand for inpatient treatment, either in increased admissions or increased length of stay. Consumer and family preference are also drivers of service utilization and these preferences must be considered with evidence-based knowledge and clinical judgment in planning services and supports.

⁴¹ Technical Assistance Collaborative, Incorporated and Health Systems Research, Incorporated, *Behavioral Health Needs and Gaps in New Mexico*, July, 2002.

⁴² Funded by the Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. Available from the World Wide Web: <http://www.nrchmi.com>

⁴³ Op cit.

⁴⁴ Kessler, R.C., Berglund, P.A., Zhao, S., Leaf, P.J., Kouzis, A.C., Bruce, M.L. Friedman, R.M., Grossiers, R.C., Kennedy, C., Narrow, W.E., Kuehnel, T.G., Laska, E.M., Manderscheid, R.W., Rosenheck, R.A., Santoni, T.W., & Schneier, M., (1996). The 12-month prevalence and correlates of serious mental illness.

⁴⁵ Satcher, D., 1999.

⁴⁶ Drake, R.E., Essock, S.M., Shaner, A., Carey, K.B., Minkoff, K., Kola, L., Lynde, D., Osher, F.C., Clark, R. E., & Richards, L. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52, 469-476.

⁴⁷ Elpers & Crowell, 1982.

2. Bed Need Methodologies

Most of the existing literature concerning the evaluation of need for inpatient mental health services dates from the 1970s and 1980s when mental health policy makers and researchers were required to address mental health services in State and/or regional health plans mandated and partially funded through federal legislation.

There is wide variability in standards developed in this era. In the late 1970s, the National Institute on Mental Health (NIMH) conducted a comprehensive survey of acute bed need projections and found that bed to population ratio used as need standards or benchmarks by states ranged from twenty (20) to three hundred seventy-five (375) beds per 100,000 population.⁴⁸ Most experts surveyed by NIMH thought that from fifty (50) to one hundred (100) acute care beds would be needed per 100,000 population.

One national study of state health planning agencies found that eleven states utilize statewide proactive planning for psychiatric beds.⁴⁹ The study found that these states typically have formulas based on population and target occupancy rates. Other factors included in formulas included geographic location, travel time to other institutions, estimated prevalence of mental illness, estimated need for inpatient psychiatric services among the population with mental illness. Commission staff conducted a limited review of states' methods of planning for psychiatric beds. States in geographic proximity to Maryland (Virginia, West Virginia, Delaware, North Carolina, and the District of Columbia) were included in this review. The results of this review are summarized in Table 4 below. Delaware and the District of Columbia regulate the number of acute care beds, but do not have a separate methodology specifically for psychiatric beds, and therefore are not included in Table 4.

Three of the bed projection methodologies described in Table 4 are based on the current use of psychiatric beds (Virginia, North Carolina, and Maryland). The advantages of this approach, also referred to as a "current use model," are that it is easy to use and apply.⁵⁰ If rates of utilization are relatively stable, then the model will provide an accurate forecast of future use.⁵¹ The disadvantage of this model is that it does not account for trends in health care that may reduce the use of inpatient beds, such as changes in treatment options. One study of the use of this type of model in Hawaii found that the projections from the model overestimated hospital days by 11.7% in year 2000.⁵² As an alternative to this model, the authors of this study developed a model based on trend analysis ("trend analysis model".)

⁴⁸ Hagedorn, H., *A Manual on State Mental Health Planning*, Rockville, MD: National Institute of Mental Health, 1977.

⁴⁹ Bryan, T. and Pathak, D. "An Evaluation of Methodologies Used in Developing a Statewide Proactive Acute Care Bed Plan: A National Survey." (2003).

<http://gateway.nlm.nih.gov/MeetingAbstracts/102275622.html>

⁵⁰ Hawaii Health Information Corporation. "Maui Bed Needs Study, 2005-2025."

<http://hawaii.gov/health/shpda/shmauibe.pdf>

⁵¹ Ibid.

⁵² Ibid.

Table 4: Comparison of Acute Psychiatric Bed Projection Methodologies Used in Select States

Category	Virginia¹	West Virginia²	North Carolina³	Maryland⁴
Population Groups Used to Estimate Need	Current users of inpatient care. No separate age groups.	Ages 0-17 and 18+	Current users of inpatient care, adjusted downward 20% for children due to utilization trend, but no adjustment for adults.	Children (0-12) Adolescents (13-17) Adults (18+)
Occupancy Level Required Before Approval of Additional Beds	85% to 90% for the prior year(depends on the number of beds at existing facilities)	Not included	Not included.	Between 80% and 90% for two consecutive years (level depends on number of beds at an existing facility)
Target Occupancy Level	Not included	Not included	75%	85%
Estimated Prevalence of Mental Illness in the Population	Not included	12% for ages 0-17 and 22.1% for ages 18+	Not included	16.5% for adults (18+) and 11.6% for children
Estimated Use of Acute Inpatient Services	It is assumed that three years into the future, the need will be 90% of the current utilization pattern.	.12% for ages 0-18 and not defined for 18+	It is assumed that two years into the future, the need should reflect 75% occupancy, based on current utilization pattern.	0.3% for adults and 1.85% for children
Travel Time Standard	Within 60 minutes for 95% of the population	Not included	Not included	For adults: 30 minute drive for 90% of the population. For children: the same, except must be within 45 minutes.

¹ Source: <http://www.vdh.state.va.us/OLC/Laws/documents/COPN/SMFP%20composite.pdf>

² Sources: http://www.hcawv.org/CertOfNeed/Support/Behavioral_Health.pdf and <http://www.hcawv.org/CertOfNeed/Support/AcuteBedsapp.pdf>

³ Source: <http://facility-services.state.nc.us/plan2007/plan2007.pdf>

⁴ Source: COMAR 10.24.07

The primary difference between the trend analysis model and the current use model is that the trend analysis model includes calculating a regression formula for age groups, sex, and other factors. The linear regression formula is then applied to future populations. The advantage of the trend analysis model is that it is more likely to reflect changes in treatment approaches. However, the disadvantage of this model is that it also assumes that trends will continue at steady rates in the future; it cannot predict sudden changes. In the context of examining the need for acute inpatient psychiatric services in Maryland, such a sudden change might be the availability of crisis intervention services or intense supportive services. Therefore, it is important to determine how the availability of these services may impact the need for inpatient psychiatric services.

Among the states listed in Table 4, West Virginia alone includes projections of need for supportive psychiatric services that in some cases may serve to reduce the need for inpatient psychiatric care. For example, for children, it is assumed that among the 12% with a mental health disorder, about 5% of these will need residential treatment; 5% will need crisis respite services; and 8% will need day treatment. Similarly, for the adult population, West Virginia includes projections for certain services needed by some adults with mental illness (inpatient care is not included). The aforementioned projected needs are part of CON review in West Virginia, rather than an explicit plan for creating an optimal system of care. Therefore, further research regarding the methods used to develop these standards and the impact of these standards on psychiatric care in West Virginia, may be helpful in determining whether such an approach would be helpful in evaluating the need for inpatient psychiatric care in Maryland.

Although Virginia does not include in its evaluation of CON projects estimates for outpatient psychiatric services, it has attempted to determine how the need for inpatient care among current and former patients in its State psychiatric institutions may be reduced through examining the change in days of inpatient psychiatric care needed by persons both before and after receiving assertive community treatment services.⁵³ To the extent that Maryland is capable of tracking patients' use of services in the public health system prior to and following interventions identified as best practices for reducing inpatient acute care, it may be possible to quantify the number of inpatient bed days that could be reduced through increasing the availability of such services.

Virginia also has attempted to better determine the need for acute inpatient psychiatric care by examining the number of psychiatric patients in state institutions who are delayed in being discharged due to a lack of community services.⁵⁴ This approach is also potentially useful for Maryland in estimating the number of inpatient bed days that could be eliminated through the provision of community services. However, in many cases, these services may not be regarded as crisis services or services that divert the need for inpatient care, and therefore could be considered outside the scope of the Task Force.

Another possible approach to examining the need for inpatient psychiatric care and crisis services is to gather expert opinions and opinions of those who provide services to the target population. This approach was reportedly used by both South Carolina and the District of Columbia, during

⁵³ Eileen Fleck, staff for JLARC report, "Availability and Cost of Psychiatric Services in Virginia." Available at <http://jlarc.state.va.us/Reports/Rpt365.pdf>

⁵⁴ Eileen Fleck, staff for JLARC report, "Availability and Cost of Psychiatric Services in Virginia." Available at <http://jlarc.state.va.us/Reports/Rpt365.pdf>

the 1980's to project the services needed for children.⁵⁵ Based on the sources listed in West Virginia's CON standards, it may have also relied on this method, or some of the conclusions drawn by these states, in creating its CON standards for psychiatric services for children.⁵⁶

In addition to the information presented here regarding other states' planning for future inpatient psychiatric beds and community services, it will be helpful to review studies that have specifically focused on the avoidance of inpatient psychiatric care through the provision of other services. Additional information of this topic will be made available in a future White Paper on best practices.

B. Planning Strategies

Common planning strategies include:

1. Developing a Plan for the Optimal System—this plan would identify the services and funding needed to address the needs of the target population(s) regardless of the availability of funding. This would be considered the "ideal" scenario—ensuring that all individuals in the target population would be offered and use the right services at the right time. In addition it would assume that the provider and the community had the capacity to develop and provide these services effectively. A comparison of current spending by service and the desired array would result in a "gaps analysis" that would guide future resource allocation.
2. Developing a Plan Based on Current Resources—this plan would assume that the current resources for the public mental health system would not change significantly over the next several years. This would require a plan that considers the constraints of current resources by prioritizing subpopulations within the target population or specific needs of the target population. This may require review of each service currently provided and a determination of whether it should remain in the plan, be eliminated or whether it requires further evaluation. In addition, there would need to be a determination regarding if and what volume of new services can be supported with no new resources.

Using the current resource level as the base, there would need to be a review of the distribution of resources across services in order to determine whether the system was balanced across the array. Is the ratio of inpatient to community spending correct? Does the ratio of crisis to non-crisis spending support prevention and early intervention? Are funds balanced across residential and non-residential care? Since the funding level is presumed to be constant, the mix of services becomes the critical variable. This scenario also emphasizes the importance of moving away from services that have not proven effective and into those services that have been shown to be effective or promising.

3. Developing a Plan Based on Current Resources Plus Modest Growth—this planning methodology would be similar to the previous one but would take into account a reasonable increase in the allocation for mental health services. This strategy would also require the establishment of priorities for purchasing existing and new services. Another strategy that can be used under this set of assumptions is the development of a plan based on a

55

http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/22/d8/46.pdf

⁵⁶ http://www.hcawv.org/CertOfNeed/Support/Behavioral_Health.pdf

benchmark for addressing need or developing service capacity. For instance, the plan may have as its goal to serve 5% or 10% more of the target population currently needing but not receiving services. The plan may also establish goals for developing capacity based on access and/or areas that have shortages of providers or practitioners.

4. Developing a Plan Benchmarked against 'Reasonably-Resourced State'—this plan would identify one or more states that have made a significant investment in their public mental health system and compare and contrast services and resources to those existing in the planning jurisdiction. This would include selecting jurisdictions with sizable investment (total expenditures) and well performing investments (positive outcomes for the target population(s)). Once a comparison jurisdiction is selected, there are several system elements that can be used for the comparison. One element could be the spending for mental health services (including prevention and early intervention) per capita or per consumer. Another could be the proportion of resources across services, comparing such items as the proportion of expenditures made for acute or crisis services, or the percentage of expenditures dedicated to evidenced based/best practices.
5. Developing a Multi-agency Resource Allocation Plan—this plan would review the purchasing practices across agencies that serve individuals in the target populations or subpopulations. The purpose of this review would be to identify the duplication and gaps in resources for the target population. The agencies would develop a collective purchasing plan that would be more efficient in distributing resources to meet the needs of the target population. While this kind of plan is most often developed across Medicaid, child welfare and juvenile justice agencies, inclusion of primary health care is becoming more important as the significant co-occurring physical and psychiatric needs of persons with serious mental illness are better known.

This is a crucial step in the planning process. The forecast of the available resources for the planning effort will most likely require a second review of the target population(s) and the state's purchasing priorities for its limited resources.

In summary, this Section describes various scenarios that public mental health systems have used to define their planning parameters. The sharpest contrast occurs between Scenario One that plans for an optimal system and Scenario Two that bases the plan on current resources. In Option One, the plan would use selected factors discussed earlier to create estimates of the number of general and specific populations in need. A service array would be described and clinically optimal utilization patterns for each service would be developed. Crossing the population estimates with the services volume would result in the statewide projections of service units required for an ideal system. Unless the population estimates were very conservative, this methodology would result in a required funding base much higher than most, if not all, public mental health systems.

In Option Two the determination is made that the prudent planning approach works with the current resource base, without projected growth. Much like an individual investor's 'asset allocation plan', this methodology attempts to maximize the use of known funds. After creating an inventory of current funds by service, the jurisdiction would use both literature-based and consensus-driven processes to determine the desired mix of services across inpatient and outpatient, residential and community, and acute vs. non-acute care. Applying these percentages to the resource base could result in a new funding pattern against which current spending is evaluated. When imbalances are discovered, spending and contracting adjustments are made.

These two contrasting scenarios differ on a few major dimensions. Option One is usually politically acceptable to advocates since it projects growth in mental health funding, usually

across all components of the service system. No provider sector appears to be a 'loser' in this scenario. However, plans developed with this methodology are rarely implemented since they require significant additional public funds, typically out of the reach of the mental health system.

Option Two is far more pragmatic but far less politically acceptable. When State Mental Health Authorities have conducted this kind of analysis, they have found their systems significantly out of balance, based on some of the planning limitations. In these states, public funding had grown incrementally, in many cases based on special projects, and rarely in line with any formal system's plan. Re-distribution of funding must occur on a multi-year basis, with careful attention to issues of access and continuity as money is moved from one service to another. A public purchaser could also use both Options simultaneously in order to make decisions about the intersection of under-funding and re-distribution in a way that yields maximum results.

VI. SUMMARY AND TASK FORCE DISCUSSION

Based on the relevant research, planning literature, and guidance from the Task Force, Maryland's *Plan to Guide the Future Mental Health Service Continuum* should articulate the vision for both inpatient and community-based acute and emergency crisis services. The development of the plan will be guided by the JCR's recommendation that MHCC develop projections of future bed needs for acute inpatient psychiatric treatment and the community-based services that are needed to prevent or divert consumers from inpatient treatment.

Rather than select a single economic assumption as the basis for planning, it may be preferable to recommend a phased approach for the *Plan*. Given Maryland's per capita spending on mental health services, it would seem prudent to use either the current resource base or the "base with modest growth" scenario as the economic assumption. This could serve as a short-term planning goal, followed by intermediate and long-term goals that focus on the "well-resourced" state or the optimal mental health system scenarios. This approach should permit analysis of what could be accomplished over time with increasing resources. The preferred approach would be to set up a sequence of phased steps to achieve the best possible mental health system with a progressive and creative statewide inpatient and community-based acute and emergency crisis response system, one that will also pass an economic feasibility test.

Similarly, there are contrasting options regarding an approach to defining services for which need should be projected, target population age groups, geographic regions. One methodology would only project the number of acute inpatient treatment beds required; the second would develop projections for *acute care services* that would include both inpatient and community-based capacity. While the first option is, in some ways, more straightforward, it will only address part of the mental health equation. Unless community-based crisis, emergency and urgent care availability grows commensurate with acute inpatient capacity, demand for inpatient treatment will be higher than necessary based on clinical criteria. The White Paper also outlines potential options for defining target population age groups that range from two cohorts (children/adolescents and adults) to more refined groups that would target four cohorts including, children, transitional adolescent/young adult, adult, and geriatric populations. In planning for mental health service capacity, there is also a need to establish planning regions that are used to predict utilization volume and to distribute resources.

Task Force Discussion Questions

Task Force input is sought on the following questions to guide the development of the Plan:

- What principles should guide this planning effort?
- Who should be the target populations? How should the target populations be defined?
- What geographic regions should be used for planning?
- For which specific inpatient and community-based acute and emergency crisis services should need projections be developed? What specific services should be defined as crisis services that potentially reduce the need for inpatient care? What information needs to be collected to inventory and understand the capacity of these services?
- Are there barriers to care that it is critical to know more about in order to plan for inpatient psychiatric bed needs?
- What economic assumptions should guide this planning effort?
- What other factors need to be considered in establishing a framework for planning to meet the needs for inpatient mental health services?



White Paper

**ROLES OF STATE AND PRIVATE HOSPITALS IN THE PROVISION
OF INPATIENT PSYCHIATRIC TREATMENT**

Prepared for the

**Task Force on the Plan to Guide the Future
Mental Health Service Continuum**

**For Review and Discussion at the
April 10, 2008 Task Force Meeting**

MARYLAND HEALTH CARE COMMISSION

Plan to Guide the Future Mental Health Services Continuum in Maryland

Roles of State and Private Hospitals in the Provision of Inpatient Psychiatric Treatment

Table of Contents

I. INTRODUCTION

- A. Joint Chairmen's Direction
- B. Plan to Guide the Future Mental Health Service Continuum
- C. Purpose of White Paper

II. BACKGROUND

- A. Inpatient Treatment of Mental Illness: A Brief Historical Context
- B. Licensure: Acute General Hospitals and Special Hospitals
- C. Licensed Bed Capacity
- D. Definition and Description of Acute Inpatient Psychiatric Treatment

III. PSYCHIATRIC SERVICE INPATIENT CAPACITY AND UTILIZATION

- A. Current and Historical Bed Capacity
- B. Role of State Hospitals
- C. Inpatient Capacity Across Sectors by Type of Bed and Patient Age
- D. Inpatient Psychiatric Service Utilization and Occupancy

IV. PAYMENT, POLICIES AND PRACTICES

- A. Maryland's Public Mental Health System (PMHS)
- B. Maryland All-Payer System
- C. The Federal Institutions for Mental Disease Rule
- D. Referral Practices for Mental Health Patients
- E. Payment Source and Diagnosis

V. OVERVIEW OF MENTAL HEALTH SYSTEMS IN SELECTED STATES

- A. Brief Look at Four States
- B. Comparative Review of Maryland's Inpatient Utilization

VI. SUMMARY

VII. POLICY OPTIONS

VIII. TASK FORCE DISCUSSION QUESTIONS

MARYLAND HEALTH CARE COMMISSION

Plan to Guide the Future Mental Health Services Continuum in Maryland

Roles of State and Private Hospitals in the Provision of Inpatient Psychiatric Treatment

I. INTRODUCTION

A. Joint Chairmen's Direction

The 2007 Joint Chairmen's Report¹ (JCR) directed the Maryland Health Care Commission (MHCC or Commission) to work with the Department of Health and Mental Hygiene and Maryland's Mental Health Transformation State Incentive Grant (MHT-SIG) to develop a plan to guide the future mental health service continuum needed in Maryland. The report recommended that the Maryland Health Care Commission develop projections of future bed need for acute inpatient psychiatric services (in State-run psychiatric, private psychiatric and acute general hospitals) and community-based services and programs needed to prevent or divert patients from requiring inpatient mental health services, including services provided in hospital emergency departments. To guide the development of the plan, the JCR identified key stakeholder organizations to be included on a Task Force to provide assistance to the Commission in the development of the plan.

B. Plan to Guide the Future Mental Health Service Continuum

The Plan to Guide the Future Mental Health Service Continuum is intended to address a number of key questions, including:

- What are the service components of the crisis emergency system (including acute inpatient treatment)? How will the components differ across urban, suburban and rural areas?
- Which crisis response services should be generally available and which should be targeted to specific and/or enrolled clients?
- Who is expected to access the services (public consumers, privately insured individuals or both)?
- Where are the services needed? What service components should be available in urban, suburban and rural areas?
- What will the service components cost?
- Who will purchase the services (public payers, commercial carriers or both)?
- What financial base is available to support service development and use? Will existing dollars be diverted to these services or will the services only be created through new funding?
- How will the plan be implemented?

¹ Chairmen of the Senate Budget and Taxation Committee and House Committee on Appropriations, *Report on the State Operating Budget (HB50) and the State Capital Budget (HB51) and Related Recommendations*, Joint Chairmen's Report, Annapolis, Maryland, 2007 Session, p. 97-98.

Plans can be used to guide evaluations of need for projects seeking Certificate of Need (CON) approval, to set budgetary priorities, and to guide systems development. A plan should be developed and structured so that those persons and agencies responsible for mental health service policy development, facilities regulation, and service funding recognize its practical value in their work. To ensure that the plan has lasting value, it must be linked to resource allocation, both through regulatory processes such as CON and through its influence on public appropriations and private behavioral health coverage policies.

C. Purpose of White Paper

Understanding both the historical role of the states in providing inpatient mental health care and the complex federal, state, and private funding streams financing both inpatient and outpatient mental health care in Maryland is an essential first step in crafting viable options for a continuum of care. This White Paper is the second in a series that will support the development of the *Plan to Guide the Future Mental Health Service Continuum*. The White Paper discusses the role of state hospitals, general hospitals and private psychiatric hospitals in providing inpatient and acute inpatient psychiatric care. Changes in the roles of each of these sectors are examined through analyzing historical information on Maryland's inpatient capacity and utilization. The impact of state and federal policies on hospitals' decisions regarding the provision of inpatient psychiatric care is also discussed. Maryland's system is compared to four other states in order to identify opportunities for changing the roles of hospitals with regard to inpatient psychiatric care. Finally, the paper offers some possible policy options for Maryland and questions for Task Force discussion.

II. BACKGROUND

A. Inpatient Treatment of Mental Illness: A Brief Historical Context

In the United States, special hospitals for the treatment of mental disorders were first founded in the early part of the 19th century as private institutions. In the mid-19th century, states assumed the major responsibility for inpatient psychiatric care, as reformers convinced states that the humane treatment of their mentally ill citizens was a state responsibility and that humane treatment could best be provided in asylums. These state hospitals remained the dominant treatment modality for over a century, because few could afford private inpatient care and because treatment was relatively ineffective, leading to long – or life-long – stays in state institutions.

In the mid-20th century, several developments led to a marked change in the approach to inpatient treatment of mental illnesses. Relatively effective treatments for serious mental illnesses increased the possibility of partial or complete recovery and return to the community. This improved treatment coupled with budget challenges in state hospitals contributed to increasing criticism of state mental hospitals and a movement to de-institutionalize these patients. De-institutionalization of state facilities and the use of brief inpatient hospitalizations for acute care require a network of services in the community, both to decrease the need for readmission after an acute episode of illness and to assure that individuals with more chronic illnesses can function well in the community and move toward recovery. Unfortunately, in most states, de-institutionalization moved forward before those community resources were in place.

In parallel to the changing function of the state hospital system, the rise of private health insurance meant a substantial part of the population had coverage for inpatient care.

However, insurance benefits for both inpatient and outpatient treatment of mental illnesses have traditionally been less generous than benefits for other medical conditions, and both private and public coverage have relied on the continuing existence of state mental hospitals. When health insurance policies covered inpatient psychiatric care, they often covered only acute stays. Nonetheless, this coverage stimulated the expansion of existing private psychiatric hospitals, the development of new specialty hospitals, and the development of psychiatric units in general hospitals to provide short-term inpatient treatment in the patient's community. With an increase in insurance coverage for mental illnesses, payers have turned to managed behavioral health care organizations to assure the efficient delivery of services, to reduce costs, and to further reduce the duration of inpatient hospitalizations.

The rise of psychiatric units in general hospitals was given further impetus by the exclusion of "institutions for mental diseases" (IMDs) from Federal coverage under the Medicaid program. The IMD exclusion prohibits Medicaid payments for the treatment of covered adults under age 65 in institutions with more than 16 beds that are predominantly involved in the treatment of mental illnesses, but allows coverage of treatment in the psychiatric units of general hospitals. The IMD exclusion reflects the unwillingness of the federal government to assume the substantial financial burden of state hospital funding, traditionally a state responsibility.

B. Licensure: Acute General Hospitals and Special Hospitals

In Maryland, inpatient psychiatric services are provided in licensed hospital settings, either in a designated psychiatric unit of an acute general hospital or in freestanding private or state hospitals. These last two facility types are classified as "special hospital" beds under the State's licensing statute. Under COMAR 10.07.02, a hospital is classified as a general hospital if the hospital at minimum has the facilities and provides the services that are necessary for the general medical and surgical care of patients. A hospital is classified as "special" if the hospital: (1) defines a program of specialized services, such as mental health; (2) admits only patients with needs within the program; and (3) has the facilities for and provides those specialized services.²

C. Licensed Bed Capacity

There are important differences in how bed capacity is established for psychiatric services within each of the licensure categories. For acute general hospitals, total licensed bed capacity is calculated annually based on a number equal to one-hundred forty percent (140%) of the last full twelve months of data.³ Use of 140% reflects an average annual occupancy rate of 71%. As part of this process administered by the Maryland Health Care

² Other specialized services licensed as "special" hospitals under COMAR 10.07.02 include: obstetrics, tuberculosis, orthopedy, chronic disease, or communicable disease. In addition, there are provisions for licensure of Special Rehabilitation Hospitals under COMAR 10.07.02.

³This licensure process, which was initiated in October 2000, implemented changes in the calculation of licensed hospital bed capacity adopted by the 1999 General Assembly in HB 994. With the adoption of a utilization based approach to establishing annual licensed bed capacity, provisions in the law permitting acute general hospitals to increase beds under so-called "waiver" bed rules, which permitted the addition of the lesser of 10 beds or 10% of total licensed beds every two years with notice to the Commission, were removed. A hospital may, however, temporarily adjust its calculated licensed bed capacity if necessary to meet demand for services.

Commission, on July 1st of each year, hospital licenses issued by the Office of Health Care Quality are revised to reflect that the hospital is licensed (and may legally operate) a total number of acute care beds equal to 140%) of the average daily census of acute care patients reported by that hospital for the twelve month period ending on March 31st of that same year. As part of the annual licensure process, acute general hospitals allocate their total licensed bed capacity to each existing clinical service, including the psychiatric service. This licensure process allows acute general hospitals to reconfigure their bed capacity among existing medical services annually. As a result, the beds assigned to major clinical services, including psychiatry, may increase or decrease as the hospital allocates its approved total. While licensed beds under this approach may not always match physical bed capacity, use of a utilization measure to establish capacity has increased the correspondence between the actual physical space to provide care and licensed beds.

The hospitals licensed as Special Hospital-Psychiatric facilities, including both private psychiatric hospitals and State-operated psychiatric hospitals, are not subject to the annual 140% rule for establishing the number of licensed acute general hospital beds. The number of beds for these hospitals is specified on the license issued every three years to reflect the accreditation cycle of the Joint Commission. For some Special Hospital-Psychiatric facilities, the number of beds on the license reflects historical capacity and may not correspond well to current physical capacity to provide care. For State-operated Special Hospital-Psychiatric facilities, the Mental Hygiene Administration maintains and reports data on available staffed beds. Special hospitals have the ability to incrementally expand bed capacity over time without CON review and approval by requesting authorization of "waiver beds".

D. Definition and Description of Acute Inpatient Psychiatric Treatment

The Commission's *State Health Plan for Facilities and Services* (COMAR 10.24.07) defines acute inpatient treatment as follows:

Acute Psychiatric Services means mental health services provided in a hospital setting to patients with short lengths of stay of generally 30 days or less. The major functions of acute psychiatric care include: crisis intervention, acute treatment, correction of decompensation, prevention of chronicity and the promotion of patient maintenance in the community. The acute psychiatric services covered in this chapter are limited to patients with a mental disease or emotional disorder defined as Diagnosis Related Groups (DRGs) codes 424-428 and 430-432.

The Health Services Cost Review Commission also uses a definition for psychiatric acute inpatient treatment in its *Accounting and Budget Manual for Fiscal and Operating Management*:

"Psychiatric Acute Care Units provide care to patients admitted to acute/general hospitals for diagnosis as well as treatment on the basis of physicians' orders and approved nursing care plans. The units are staffed with nursing personnel specially trained to care for the mentally ill, mentally disordered, or other mentally incompetent persons."

Drawing from both existing definitions and expanding on the features of psychiatric acute inpatient treatment, the following definition is proposed for use in the *Plan to Guide the Future Mental Health Services Continuum in Maryland*:

Acute Inpatient Psychiatric Services means mental health diagnostic and treatment services, based on physicians' orders and approved nursing care plans, provided in a hospital setting to admitted patients with short lengths of stay. Traditionally, the definitional dividing line between 'acute' inpatient care and 'long-term' or 'chronic' inpatient care has been a hospital stay of 30 days, with 'acute' care generally involving stays of 30 days or less. However, the average length of hospital stay for acute psychiatric hospital patients is now much lower than 30 days, which makes the use of hospital length of stay less relevant as a means for defining acute inpatient care. The major functions of acute inpatient psychiatric care include: crisis intervention that cannot be managed outside of the hospital setting, acute treatment, correction of decompensation, prevention of chronicity, and the development of skills and ongoing treatment plans to promote patient maintenance in the community following discharge from the hospital. Acute inpatient psychiatric care units are staffed with nursing and other personnel specially trained to treat persons with acute psychiatric conditions. The primary goals of acute inpatient treatment are to: provide a comprehensive evaluation; rapidly stabilize acute symptoms; address the individual's health and safety needs; and develop a comprehensive discharge plan that allows the individual to quickly return to the community or other appropriate levels of care. In these settings, interventions are tailored to the individual's needs and their presenting symptoms and may include, but are not limited to: medication evaluation and management; individual or group therapy; psycho-educational groups; and family interventions including meetings with individual family members or with the family as a whole.

III. PSYCHIATRIC SERVICE INPATIENT CAPACITY AND UTILIZATION

A. Current and Historical Bed Capacity

In 2008, there are 40 hospitals with a total of 2,398 inpatient psychiatric beds operating in Maryland. Table 1 shows the Maryland psychiatric service inventory by hospital license type, control, number of beds, and hospital system affiliation. Map 1 shows location of acute general hospitals with and without psychiatric units, private psychiatric hospitals, and state-operated psychiatric hospitals. As shown in Table 1, 1,182 beds are located in 7 state hospitals, 535 beds are located in 5 private psychiatric hospitals, and 681 beds are located in 28 acute general hospital psychiatric units.

Table 1. Psychiatric Service Inventory and System Affiliation: Maryland, 2008

Jurisdictions	Hospital Name	Hospital License Type	Control	Psychiatric Beds	Hospital-System Affiliation
Allegany Frederick Washington	Braddock Hospital	Acute General	Private	18	Western Md Hlth System Mental Hygiene Administration
	Thomas B. Finan Center	Special Hospital	State	88	
	Frederick Memorial Hospital	Acute General	Private	16	
	Brook Lane Health Services Washington County Hospital	Special Hospital Acute General	Private Private	65 18	
WESTERN MARYLAND TOTAL				205	
Montgomery	Montgomery General Hospital	Acute General	Private	25	MedStar Health Adventist Hlth Care
	Potomac Ridge Behavioral Health Center	Special Hospital	Private	97	
	Suburban Hospital	Acute General	Private	24	Adventist Hlth Care
	Washington Adventist Hospital	Acute General	Private	40	
MONTGOMERY COUNTY TOTAL				186	
Calvert Prince George's	Calvert Memorial Hospital	Acute General	Private	14	Dimensions Hlth System Dimensions Hlth System
	Laurel Regional Hospital	Acute General	Private	12	
	Prince George's Hospital Center	Acute General	Private	25	
	Southern Maryland Hospital Center	Acute General	Private	25	
St. Mary's	St. Mary's Hospital	Acute General	Private	12	
SOUTHERN MARYLAND TOTAL				88	
Anne Arundel Baltimore City Baltimore Co. Carroll Harford Howard	Baltimore Washington Medical Center	Acute General	Private	14	Univ of Md Med System Johns Hopkins Hlth System Johns Hopkins Hlth System Univ of Md Med System LifeBridge Health MedStar Health Univ of Md Med System Mental Hygiene Administration MedStar Health LifeBridge Health Mental Hygiene Administration Sheppard Pratt Health System Mental Hygiene Administration Upper Chesapeake Hlth Sys Mental Hygiene Administration Johns Hopkins Hlth System Sheppard Pratt Health System
	Bon Secours Hospital	Acute General	Private	32	
	Johns Hopkins Bayview Medical Center	Acute General	Private	20	
	Johns Hopkins Hospital	Acute General	Private	100	
	Maryland General Hospital	Acute General	Private	28	
	Sinai Hospital of Baltimore	Acute General	Private	24	
	Union Memorial Hospital	Acute General	Private	26	
	University of Maryland Medical Center	Acute General	Private	56	
	Walter P. Carter Center	Special Hospital	State	34	
	Franklin Square Hospital	Acute General	Private	24	
	Northwest Hospital	Acute General	Private	14	
	St. Joseph Hospital	Acute General	Private	19	
	Spring Grove Hospital Center	Special Hospital	State	375	
	Sheppard Pratt Hospital	Special Hospital	Private	322	
Carroll Hospital Center	Acute General	Private	20		
Springfield State Hospital	Special Hospital	State	351		
Harford Memorial Hospital	Acute General	Private	20		
Clifton T. Perkins Hospital Center	Special Hospital	State	218		
Howard County General Hospital	Acute General	Private	20		
Sheppard Pratt at Ellicott City	Special Hospital	Private	36		
CENTRAL MARYLAND TOTAL				1,753	
Cecil Dorchester	Union Hospital of Cecil	Acute General	Private	7	Univ of Md Med System Mental Hygiene Administration Mental Hygiene Administration Adventist Hlth Care Mental Hygiene Administration
	Dorchester General Hospital	Acute General	Private	16	
	Eastern Shore Hospital Center	Special Hospital	State	78	
	Potomac Ridge Behav. Hlth-Eastern Shore	Special Hospital	Private	15	
	Upper Shore Comm. Mental Health Center	Special Hospital	State	38	
Wicomico	Peninsula Regional Medical Center	Acute General	Private	12	
EASTERN SHORE TOTAL				166	
MARYLAND TOTAL				2,398	

Source: Maryland Health Care Commission (Data reported for acute general hospitals is from the *Annual Report on Maryland Acute Care Hospital Services and Licensed Bed Capacity: Fiscal Year 2008*; data for Special Hospital-Psychiatric facilities operated by the State is from the Department of Health and Mental Hygiene, Mental Hygiene Administration; and, data reported for Special Hospital-Psychiatric facilities operated by private organizations is from the Office of Health Care Quality. The number of beds for acute general hospitals refers to licensed beds; for Special Hospital-Psychiatric Facilities operated by the State the number of beds refers to staffed beds, and, for Special Hospital-Psychiatric Facilities operated by private organizations the number of beds refers to licensed beds.)

Between 1982 and 2008, Maryland's total inpatient psychiatric capacity decreased by 59.1%. State hospital beds saw the greatest decline (73.1%) while private psychiatric hospital beds decreased by about half that amount (35.5%); only acute general hospital psychiatric beds increased, by 6.1%, as shown in Table 2.

Table 2. Psychiatric Beds by Hospital Type: Maryland, Selected Years 1982-2008

Hospital Type	1982	2000	2002	2005	2008	Change 1982-2008
State Special Hospital-Psychiatric	4,390	2,058	1,204	1,245	1,182	(-73.1%)
Private Special Hospital - Psychiatric	830	712	663	519	535	(-35.5%)
Acute General Hospital	642	692	712	678	681	6.1%
TOTAL	5,862	3,462	2,577	2,442	2,398	(-59.1%)

Source: Maryland Health Care Commission (Data reported for acute general hospitals and private Special Hospital-Psychiatric facilities refers to licensed beds. Data reported for State Special Hospital-Psychiatric facilities refers to staffed beds. All private special hospital and general acute care hospital beds shown are acute care beds. State special hospital beds include acute care beds and long-term care beds.)

Maryland's decline in State Hospital beds also reflects the national trends, although Maryland's decrease in inpatient capacity was slightly higher than the nationwide rate. The most striking difference between Maryland and the United States as a whole occurred in private psychiatric facilities; this sector increased 56.1% nationwide during that period, but dropped by 14.2% in Maryland. Similarly, acute general hospital inpatient psychiatric capacity grew 28.3 % for the country as a whole during this period but increased only 7.8% in Maryland.

Table 3. Inpatient Psychiatric Bed Capacity: United States and Maryland, 1980/1982 and 2000

Hospital Type	US		Maryland		Change, 1980-2000	
	1980	2000	1982	2000	US	Maryland
State Psychiatric Hospitals	156,482	59,403	4,390	2,058	(-62.0%)	(-53.1%)
Private Psychiatric Hospitals	17,157	26,789	830	712	56.1%	(-14.2%)
Acute General Hospital	29,384	37,692	642	692	28.3%	7.8%
TOTAL	203,023	123,884	5,862	3,462	(-39.0%)	(-40.9%)

Source: *Mental Health, United States, 2002* and Maryland Health Care Commission (Maryland data reported for acute general hospitals and private Special Hospital-Psychiatric facilities reflects to licensed beds. Maryland data reported for State Special Hospital-Psychiatric facilities reflects staffed beds. All Maryland private special hospital and general acute care hospital beds are acute care beds. Maryland special hospital beds include acute care beds and long-term care beds.)

In the 1990s, 44 state hospitals were closed in the U.S. as the number of hospital residents decreased to about 54,000.⁴ According to the National Association of State Mental Health Program Director's Research Institute, Inc., as an impact of these closings, over half of the states are experiencing a shortage of psychiatric beds.⁵ Between 2002 and 2006 only four states have closed hospitals or psychiatric beds in State hospitals—New Jersey, New York, and Pennsylvania, in addition to Maryland. By 2006, the number of state psychiatric hospital beds had decreased further to 49,000.

Similarly, between 2001 and 2006, 24 states experienced declines in the number of general hospital specialty unit psychiatric beds and 19 states experienced a decline in the number of private psychiatric hospital beds. In 34 states, the result is a shortage of acute care beds,

⁴ National Association of State Mental Health Program Directors Research Institute, Inc. *Closing and Reorganizing State Psychiatric Hospitals: 2003*, March 2004.

⁵ Op. cit.

in 16 states a shortage of long-term beds, and in 24 states a shortage of forensic beds.⁶ According to NRI, states report that they are undertaking a variety of activities to address these problems; initiatives include increasing funding for community inpatient and crisis services, increasing Assertive Community Treatment programs, and conducting studies of the problem. Forty-three (43) states report that they are developing or supporting alternative forms of mental health treatment to reduce the need for these hospitalizations.

B. Role of State Hospitals

As shown in Table 4, the proportion of licensed psychiatric beds located in state hospitals decreased significantly. Whereas in 1982 state hospitals held the vast majority of psychiatric beds (74.9%), by 2008 state hospitals held about 49% of the psychiatric beds in Maryland. Nationally, a similar change occurred. Table 5 shows that the proportion of state, private, and general psychiatric beds for the United States is very similar to the distribution in Maryland.

Table 4. Proportion of Total Psychiatric Beds by Hospital Type: Maryland, Selected Years 1982-2008

Hospital Type	1982	2000	2002	2005	2008
State Special Hospital-Psychiatric	74.9%	59.4%	46.7%	51.0%	49.3%
Private Special Hospital - Psychiatric	14.2%	20.6%	25.7%	21.3%	22.3%
Acute General Hospital	11.0%	20.0%	27.6%	27.8%	28.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Maryland Health Care Commission (Data reported for acute general hospitals and private Special Hospital-Psychiatric facilities reflects to licensed beds. Data reported for State Special Hospital-Psychiatric facilities reflects staffed beds. All private special hospital and general acute care hospital beds are acute care beds. State special hospital beds include acute care beds and long-term care beds.)

Table 5. Proportion of Total Psychiatric Bed Capacity by Hospital Type: U.S., 1980 and 2000

Hospital Type	1980	2000
State Psychiatric Hospitals	77.1%	48.0%
Private Psychiatric Hospitals	8.5%	21.6%
Acute General Hospital	14.5%	30.4%
TOTAL	100.0%	100.0%

Source: *Mental Health*, United States, 2002

Even with Maryland's larger historical decrease in state hospital and private psychiatric capacity, the state does not look dramatically different than the country as a whole. Its overall beds per 100,000 population are almost identical to the United States rate, with the state hospital rate just slightly higher and the general hospital/private psychiatric facility rate just slightly lower than the national average, as shown in Table 6.

⁶ Op cit.

Table 6. Psychiatric Beds Per 100,000 Population and Bed Distribution by Hospital Type: Maryland, 2008 and U.S. 2000

Hospital Type	Psychiatric Beds Per 100,000 Population		Proportion of Total Psychiatric Beds (%)	
	Maryland 2008	U.S. 2000	Maryland 2008	U.S. 2000
State Psychiatric Hospitals	22	21	49.3%	48.0%
Private Psychiatric Hospitals	9	10	22.3%	21.6%
Acute General Hospitals	12	13	28.4%	30.4%
TOTAL	43	44	100.0%	100.0%

Source: *Mental Health, United States, 2002* and Maryland Health Care Commission. (United States data is for 2000 which is the most recent year *Mental Health United States* presented in this detail. Maryland data reported for acute general hospitals and private Special Hospital-Psychiatric facilities reflects to licensed beds. Maryland data reported for State Special Hospital-Psychiatric facilities reflects staffed beds. All Maryland private special hospital and general acute care hospital beds are acute care beds. Maryland special hospital beds include acute care beds and long-term care beds.)

Table 7. Psychiatric Beds Per 100,000 Population by Hospital Type: Maryland and U.S., 1980 to 2008

Hospital Type	Mental Health Beds per 100,000 Population			
	U.S. 1980	Maryland 1982	U.S. 2000	Maryland 2008
State Psychiatric Hospitals	70	104	21	22
Private Psychiatric Hospitals	8	20	10	9
Acute General Hospital	12	15	13	12
TOTAL	90	139	44	43

Source: *Mental Health, United States, 2002* and Maryland Health Care Commission. (United States data is for 1980 and 2000 which is the most recent year *Mental Health United States* presented in this detail; Maryland's data is for 1982 and 2008. Maryland data reported for acute general hospitals and private Special Hospital-Psychiatric facilities reflects to licensed beds. Maryland data reported for State Special Hospital-Psychiatric facilities reflects staffed beds. All Maryland private special hospital and general acute care hospital beds are acute care beds. Maryland special hospital beds include acute care beds and long-term care beds.)

C. Inpatient Capacity Across Sectors by Type of Bed and Patient Age

As shown in Table 8, statewide, Maryland has 40 facilities operating 2,398 inpatient psychiatric treatment beds, and the majority of facilities operate only acute care beds. Only state facilities have long-term care and forensic beds. About one-half of State beds are devoted to long-term care (48.5%). Forensic beds account for about 18.4% of total state hospital capacity, and acute care beds account for 33.1%, as shown in Table 9.

Table 8. Psychiatric Bed Inventory by Hospital and Bed Type: Maryland, 2008

Bed Type	Hospital Setting							
	Acute General Hospital		State Special Hospital - Psychiatric		Private Special Hospital - Psychiatric		Total	
	Facilities	Beds	Facilities	Beds	Facilities	Beds	Facilities	Beds
Acute Care	28	681	6	391	5	535	39	1,607
Long-Term Care	0	0	4	573	0	0	4	573
Forensic	0	0	1	218	0	0	1	218
TOTAL	28	681	7	1,182	5	535	40	2,398

Source: Maryland Health Care Commission (Data reported for acute general hospitals and private Special Hospital-Psychiatric facilities refers to licensed beds. Data reported for State Special Hospital-Psychiatric facilities refers to staffed beds. Of the 6 non-forensic State hospitals, 4 provide long term care.)

Table 9. Psychiatric Beds by Hospital and Bed Type: Maryland, 2008

Bed Type	Hospital Type			Total
	Special Hospital - Psychiatric		Acute General Hospital	
	State	Private		
Acute Care	33.1%	100%	100%	59%
Long-Term Care	48.5%	0%	0%	33%
Forensic Beds	18.4%	0%	0%	9%

Source: Maryland Health Care Commission (Data reported for acute general hospitals and private Special Hospital-Psychiatric facilities refers to licensed beds. Data reported for State Special Hospital-Psychiatric facilities refers to staffed beds. All private special hospital and general acute care hospital beds shown are acute care beds. State special hospital beds include acute care beds and long-term care beds. The categorization of State hospital beds by type is from the Mental Hygiene Administration, DHMH.)

Due to time constraints, comparable information on the proportion of different bed types in other states' state hospitals could not be collected. The National Association of State Mental Health Program Directors (NASMHPD) attempted to collect this information from states for 2005, but many states did not report the information. According to staff at NASMHPD, this may be due to the information not being available, or if may occur because a state does not set aside a specific number of forensic beds.

Table 10 summarizes available data on psychiatric beds at acute general hospitals and State Special Hospital-Psychiatric facilities targeted for specific age groups.

Table 10. Psychiatric Beds by Targeted Age Group Programming and Hospital Type: Maryland, 2008

Hospital Type	Child	Adolescent	Adult	Geriatric	Forensic	Total
State Special Hospital - Psychiatric	0	31	836	97	218	1,182
Private Special Hospital - Psychiatric	NA	NA	NA	NA	0	535
Acute General Hospital	32	12	624	13	0	681
Total	32	43	1,460	110	218	2,398

Source: Maryland Health Care Commission (Data reported for acute general hospitals is from the Annual Report on Maryland Acute Care Hospital Services and Licensed Bed Capacity: Fiscal Year 2008; data reported on State Special-Hospital Psychiatric facilities is from the Mental Hygiene Administration, DHMH. Data for Private Special Hospital-Psychiatric facilities by age group programming is not available for 2008. The number of beds for acute general hospitals refers to licensed beds; for Special Hospital-Psychiatric facilities operated by the State the number of beds refers to staffed beds; and for Special Hospital-Psychiatric facilities privately operated the number of beds refers to licensed beds.)

D. Inpatient Psychiatric Service Utilization and Occupancy

During the four-year period from 2003 to 2006, overall discharges from inpatient psychiatric settings increased slightly (7.4%). Discharges from private psychiatric facilities increased more than those from acute general hospital units (28.3% vs. 5.1%), while discharges from State hospitals decreased 16%. The State has been buying beds since 2002 in the private sector. In FY07, MHA bought beds for 890 admissions under this program; these admissions and discharges are reported in the data for the private hospitals.

Table 11. Psychiatric Discharges By Hospital Type: Maryland, 2003-2006

Hospital Type	2003	2004	2005	2006	Change 2003 - 07
State Special Hospital - Psychiatric	3,268	3,215	2,787	2,745	(-16.0%)
Private Special Hospital - Psychiatric	18,488	19,238	21,650	23,728	28.3%
Acute General Hospital	132,564	137,190	138,054	139,316	5.1%
Total	154,320	159,643	162,491	165,789	7.4%

Source: Maryland Health Care Commission (Data reported for acute general hospitals and Private Special Hospital-Psychiatric facilities is from the Hospital Discharge Abstract Data Base; data reported for State Special Hospital-Psychiatric facilities is from the Mental Hygiene Administration.)

Based on staffed beds, State hospitals operate at 97% occupancy. The occupancy rates for private psychiatric hospitals and acute general hospital psychiatric units, which are not directly comparable to data reported for State hospitals because of differences in the bed inventory, are lower, as shown in Table 12.

Table 12. Average Daily Census, Bed Inventory, and Average Annual Occupancy Rate by Hospital Type: Maryland, 2007

Hospital Type	Average Daily Census	Bed Inventory	Average Annual Occupancy Rate of Beds
State Special Hospital - Psychiatric	1,200	1,218	97%
Private Special Hospital - Psychiatric	300	519	58%
Acute General Hospital	500	678	74%
Total	2,000	2,415	82%

Source: Maryland Health Care Commission (Data reported for acute general hospitals and private Special Hospital-Psychiatric facilities refers to licensed beds. Data reported for State Special Hospital-Psychiatric facilities refers to staffed beds. All private special hospital and general acute care hospital beds shown are acute care beds. State special hospital beds include acute care beds and long-term care beds.

IV. POLICIES, PAYMENT AND PRACTICES

With regard to the role of the private sector in providing inpatient psychiatric care, there are certain state and federal policies that may affect the willingness of general hospitals and private psychiatric facilities to treat certain types of patients and their decisions on the number of psychiatric beds to have licensed and staffed. These policies include hospital rate regulation, federal law governing Medicaid reimbursement for inpatient treatment, and MHA payment policies. Each of these is explained in further detail below.

A. Maryland's "Public Mental Health System" (PMHS)

In Maryland, the PMHS is overseen by the Mental Hygiene Administration (MHA), located within the Department of Health and Mental Hygiene (DHMH). Local mental health authorities called Core Service Agencies (CSA) bring together stakeholders and plan for public mental health services on the local level. CSAs receive funding for needed community services which are not provided through the fee-for-service system. They also work at service coordination and prevention activities. An important partner of the CSAs in the planning and implementation of services for children and families are the Local Management Boards (LMB). These agencies work to return children and divert children from out-of-state and out-of-home placements. They coordinate efforts of child serving agencies and fund prevention services.

As part of Maryland's 1115 HealthChoice waiver implemented in 1997, specialty mental health services for Medicaid recipients were carved out of the managed care system and placed under the auspices of the MHA in a managed fee-for-service environment. With the assistance of an Administrative Services Organization (ASO) partner, MHA authorizes non-emergency public mental health services, both inpatient and outpatient, for Medicaid recipients and for uninsured individuals who meet medical necessity criteria and financial and/or other specific criteria.

Maryland's MHA directly operates a system of State psychiatric inpatient facilities which include hospitals providing acute and long term psychiatric care, a hospital providing this care to forensic patients, and three residential treatment centers known as Regional Institutes for Children and Adolescents. Although the State has historically had a major role in providing inpatient psychiatric services, this role has diminished over time as State hospital beds were reduced, general hospital and private facility beds increase, and community services grew. Although acute inpatient services have increasingly been provided in private sector hospitals, the State's role in paying for acute inpatient services for the uninsured remains substantial.

When an individual who is eligible for Medicaid presents in an emergency room and requires inpatient treatment, the ASO will be contacted and will either authorize care in the facility where the individual presented or will attempt to find an appropriate resource in another facility. Admission to an acute general hospital unit will be funded with Medicaid funds; admission to a private psychiatric facility can only be funded using State funds. As a last resort, referral is made to the State psychiatric hospital through the Centralized Admission Unit.

When an uninsured individual presents in an emergency room and requires inpatient treatment, the facility will either admit the individual to their psychiatric unit if they have a psychiatric unit and if a bed is available (in which case the hospital is compensated through the rate-setting system) or refer the individual to the Centralized Admission and Referral

Unit who will authorize payment in a private psychiatric hospital or an acute general hospital psychiatric unit as a 'Purchase of care' case using only State funds.

In addition to authorizing and paying claims for psychiatric care in acute general hospitals and private psychiatric hospitals, this system authorizes and funds a variety of community treatment and support services generally rendered by approved organizations or licensed individuals and groups. In addition to inpatient services, treatment services include partial hospitalization, mobile treatment/ACT, residential crisis, and traditional outpatient services as well as support services including psychiatric rehabilitation, residential rehabilitation, supported employment, and case management services. These community services are available to Medicaid recipients and to uninsured individuals who meet MHA eligibility criteria.

B. Maryland's All Payer System

Although the same forces shaping inpatient psychiatric treatment nationally have influenced the development of these services in Maryland, the organization and financing of hospital care in Maryland has also been heavily influenced by the state's unique combination of certificate of need regulation and rate-setting through the all-payer system – a rate setting system that exists only in Maryland. Under this system, all payers, including the uninsured, pay the same amount for a given hospital service. In general, hospitals do not have to rely on private insurance to cross-subsidize lower payments by Medicare and Medicaid.

In 1977, the Health Services Cost Review Commission (HSCRC) negotiated a Medicare waiver with the federal government, permitting Maryland to establish an "all-payer" system in which every payor, including Medicaid and Medicare, pays the same hospital rates set by HSCRC. In order to maintain this waiver, HSCRC must ensure that all payers pay the same set rates and that the rate of growth in Medicare hospital payments does not increase as rapidly as it does for the United States overall. Maryland's system is unique in that uncompensated hospital care is built into each hospital's rate structure in order to encourage access and to help distribute the burden of caring for persons who are uninsured. Reimbursement is included in the hospitals' rates allowing for a set percentage of gross patient revenues in uncompensated care (currently ranging from 3% to 8%); hospitals with more than the target percent of gross patient revenues in uncompensated care receive revenues from an uncompensated care pool, to which each hospital contributes a percent of annual revenues.⁷ Uncompensated care consists of bad debt and charity care, each of which is defined at the individual hospital level.

Private psychiatric hospitals are treated differently under the all payer system in that only private insurers are obligated to pay the HSCRC-established rates. Medicare pays prospective rates and Medicaid pays rates that, until 2004, were cost-based and adjusted with periodic retrospective settlements based on actual costs. In 2004, Medicaid switched to a prospective rate of 84% of the HSCRC rate. Since July 2007, Medicaid no longer pays for adults in private psychiatric hospitals (related to the end of the IMD waiver); however, the PMHS continues to pay the established Medical Assistance rate with general funds.

In 2000, the all-payer system underwent a major redesign that included the following features:

⁷ Maryland HRSA State Planning Grant, *The Costs of Not Having Health Insurance in the State of Maryland*, Johns Hopkins School of Public Health and the Maryland Department of Health and Mental Hygiene, December 2003.

- An overall hospital charge-per-case target;
- An annual update factor to adjust for inflation and for unique system-wide circumstances;
- Unit rates for each revenue center to limit charges at the departmental level;
- A full rate review process to examine the hospital's rate structure;
- A full and partial rate application mechanism for hospitals to petition for rate increases;
- A screening methodology to identify high-charge hospitals and a spend-down provision to reduce the rates of high-charge hospitals;
- An audited, uniform accounting statement and reporting data to assure complete, accurate and comparable financial information; and
- A discharge data reporting system to provide detailed information on each hospital's patient acuity (case mix).⁸

Maryland is the only state in which all payer groups share the burden of uncompensated care equally, with the intention of eliminating or avoiding the need for public hospitals for the poor. The regulated, unitary rate setting system makes each hospital whole financially and provides coverage for those who are uninsured. For all services except psychiatry, if an individual goes to a hospital that does not have a specific service, that individual is transferred to another acute general hospital for that needed care, regardless of ability to pay. The receiving hospital is then covered for uncompensated care. For psychiatric patients, if the hospital does not have the service, they are referred to the State hospital system.

Over the years, representatives of inpatient psychiatric services have criticized the all-payor system as being unfavorable to psychiatry, in that it creates pressure to reduce length of stay in the acute general hospital setting because of the HSCRC's charge-per-case rate-setting approach. They argue that HSCRC's rate-setting methodology provides a disincentive to general hospitals to take more difficult patients; because the "resource-utilization predictions" required in order to balance overall lengths of stay within a department's target cannot be made about medically complicated psychiatric patients, in the way they can be made for medical/surgical patients. Some assert that acute general hospitals may look for a sufficient volume of 'easy patients' or plan for discharge on the day of admission in order to protect their performance against charge-per-case targets.⁹ To the extent that hospitals perceive inpatient psychiatric services as an unfavorable financial risk, hospitals will likely not have an interest in expanding their services.

The HSCRC rate-setting methodology treats psychiatric services no differently than it does somatic treatment, with one exception. Although all rates are based on Diagnostic Related Groupings (DRG), only four (4) of the current total of three hundred-fifty (350) DRGs are dedicated to psychiatric disorders. HSCRC staff does agree that there is more variability in the risk/reward equation for psychiatric treatment, given the need for greater refinement in the psychiatric Diagnostic Related Groupings (DRG). The greater variability among psychiatric patients with the same DRGs means that there is a greater risk of hospitals being over- or under-compensated for the care of psychiatric patients. Further study of the use of DRGs in predicting resource use would be useful, and a new study may be underway

⁸ Maryland Hospital Association, *Achievement, Access and Accountability: Maryland's All-Payor Hospital Payment System*, 2007.

⁹ Maryland Health Care Commission, *Working Paper: Inpatient Psychiatric Services*, 2001.

shortly. Johns Hopkins has just received federal funding to conduct a study of the psychiatric DRGs in order to evaluate their strength and use in the all-payer system.

C. The Federal Institutions for Mental Disease Rule

By statute, the federal government does not allow Medicaid reimbursement for persons aged 22 through 64 who are residents of Institutions for Mental Disease (IMD). An IMD is defined as "a hospital, nursing facility, or other institution of more than 16 beds that is primarily engaged in providing diagnosis, treatment or care of persons with mental diseases, including medical attention, nursing care and related services" (USDHHS 1992). Further, an institution is an IMD if its overall character is that of a facility operated primarily for the care and treatment of individuals with mental diseases" (USDHHS 1994). Congress did, however, allow funding for inpatient psychiatric care provided in general hospitals as well as certain services for IMD residents age 65 year or older and persons aged 21 or younger (USDHHS 1992). In order to cover these services, however, a state must include them as optional services under its Medicaid State Plan. Because of the IMD rule, Medicaid reimbursement is not available for adults aged 22 – 64 years old in freestanding psychiatric hospitals operated by either governmental (State, County) or private organizations (for-profit or non-profit).

Maryland has historically relied on freestanding, private psychiatric hospitals to provide needed inpatient services. As part of its 1115 Medicaid Waiver application that established a managed care system for Medicaid recipients' somatic care and a managed fee-for-service system to specialty psychiatric care, Maryland was granted an IMD waiver in 1997. Under this waiver, Medicaid agreed to participate in the cost of care for adults in private psychiatric hospitals, with certain limitations. Payment was limited to the first thirty (30) days of such a stay, and reimbursement for each consumer was limited to sixty (60) days per year.

Access to inpatient care has recently been compromised through a decision of the Center for Medicare and Medicaid Services (CMS) to not renew Maryland's IMD waiver. While freestanding, private psychiatric hospitals have provided acute care for adult Medical Assistance beneficiaries for the past ten years, this decision may potentially result in a further restriction of publicly-purchased beds for adult acute psychiatric care in Maryland. Without the IMD waiver, Maryland's Medicaid program will not be able to reimburse freestanding psychiatric hospitals for acute inpatient treatment. In order to address this issue, the State is continuing to purchase beds through State General Funds for persons who are Medicaid-eligible. Mental Hygiene Administration's 2008 appropriation was increased by \$3,000,000 to cover private psychiatric facility admissions for Medicaid recipients.

D. Referral Practices for Mental Health Patients

The Mental Hygiene Administration designates Psychiatric Emergency Facilities as hospitals that will evaluate individuals for whom an emergency petition has been filed. Currently there are 37 emergency receiving facilities, 9 of which do not have psychiatric units. Map 2 shows the location of designated Psychiatric Emergency Facilities. Although both acute general hospitals and private psychiatric facilities will accept involuntary admissions, referral practices vary significantly across hospitals with and without psychiatric units and based on the individual's insurance coverage.

There are several possible referral pathways. Individuals who present at an Emergency Department (ED) in an acute general hospital with a psychiatric unit will typically be

admitted to that unit, regardless of ability to pay. If that hospital's unit is full, however, the uninsured individual would be referred to MHA for state-operated treatment or purchase of care. A person with insurance would be referred and then transferred to another hospital's psychiatric unit. If an individual goes to an ED in an acute hospital without a psychiatric unit and they have insurance, they will be sent to another acute general hospital psychiatric unit or to a private psychiatric hospital. If the individual is uninsured, they'll be referred to a State Hospital. Tables 13 and 14 summarizes the differences among hospitals with regard to referral patterns and patient disposition.

Typically, about half of the patients in State hospitals are admitted from general hospital emergency rooms or psychiatric units (44% of State patients in 1998) or from private psychiatric hospitals (6% in the same year).¹⁰

In an attempt to reduce acute inpatient utilization at state hospitals, since 2002 MHA has had a "purchase of care" program in which they purchase beds in private psychiatric facilities in the State's central region for uninsured persons who have been referred from general hospitals. These individuals are referred first to a purchase-of-care bed in the private sector; they are only admitted to a State hospital if no private bed is available. In 2007, this fund supported approximately 900 admissions, 25 percent of whom were converted to Medicaid after the referral to MHA. In 2008, purchase-of-care admissions are expected to rise to about 1,000.

Table 13. Key Mental Health Service Policy and Payment Characteristics of Different Hospital Types

Characteristics		Acute General Hospital		Special Hospital - Psychiatric	
		Without Psychiatric Unit	With Psychiatric Unit	Private	State
Rates Regulated by HSCRC		Yes	Yes	Partially	No
Affected by IMD Rule		No	No	Yes	Yes
Accepts Psychiatric Admissions	Voluntary	No	Yes	Yes	Yes
	Involuntary	No	Yes	Yes	Yes
	Forensic	No	No	No	Yes
Accepts Transfer of Psychiatric Patients	With Insurance Coverage	No	Yes	Yes	Yes
	Without Insurance Coverage	No	No	Yes, through Purchase of Care Program	Yes
Designated Psychiatric Emergency Facilities (#)		9	28	0	0

Source: Maryland Health Care Commission

¹⁰ Op cit.

Table 14. Disposition of Mental Health Patients Presenting at Acute General Hospital Emergency Departments or at Special Hospitals-Psychiatric

Patient's Payment Coverage	Acute General Hospital – Patients Presenting at Emergency Department		Special Hospital – Psychiatric Patients Presenting at Hospital	
	Without Psychiatric Unit	With Psychiatric Unit	Private	State
With Insurance or Other Payment Source	Transfer patient to hospital with psychiatric unit	Admit to hospital or transfer to another hospital with psychiatric unit, if no bed available	Admit to hospital or transfer to another hospital with psychiatric unit, if no bed available	Seek general hospital or private special hospital-psychiatric for transfer of patient
No Insurance or Other Payment Source	Refer to Mental Health Administration	Admit to hospital or transfer to another hospital or refer to Mental Health Administration, if no bed available	Refer to Mental Health Administration for Purchase of Care Program	Seek general hospital for transfer or private special hospital-psychiatric for transfer of patient through Purchase of Care Program

Source: Maryland Health Care Commission

E. Payment Source and Diagnosis

Maryland's Public Mental Health System (PMHS) covers most DSMIV diagnoses¹¹ but also targets its services to clients who have particular diagnoses that indicate the presence of a serious mental illness for adults or serious emotional disturbance for children. Inpatient psychiatric treatment payment data was analyzed by payor mix, diagnoses and hospital type in order to determine whether any differences exist in payor mix or diagnoses by hospital type. Based on 2006 data, Table 15 shows that there are variations in payor mix for those diagnoses that do and don't fit the PMHS criteria. Medicaid constitutes a higher percentage of payments for eligible diagnoses, as does Medicare. Commercial payments do not appear to vary across diagnoses while self-pay varies significantly. As expected, State hospitals only serve those with eligible diagnoses.

¹¹The following diagnoses, referred to in this document as the "PMHS Diagnoses", are those for which the Mental Hygiene Administration has responsibility in the Maryland Medical Assistance program:

1. Schizophrenia 295
2. Major Affective Disorder 296
3. Other Psychotic Disorder 297-298
4. Other Mental Health 300-302, 307.1,307.5,307.51,308-314,316

Table 15. Payment Source of All Mental Health Patient Discharges, Patients with a Public Mental Health System Diagnosis and Patients with a Non-Public Mental Health System Diagnosis: Maryland, 2006

Primary Payment Source	All Mental Health Discharges	Discharges with PMHS Diagnosis	Discharges with Non-PMHS Diagnosis
Medicaid	30.3%	33.4%	24%
Medicare	21.4%	22.4%	19.5%
Commercial	24.8%	25.9%	22.7%
Workers Comp	0.1%	0.0%	0.1%
Self Pay	16.1%	11.3%	25.7%
No Charge	1.5%	0.2%	4%
Other Government	1.4%	1.5%	1.4%
Other/Unknown	2.8%	3%	2.3%
State Hospitals	1.7%	2.1%	0.4%
TOTAL	100%	100%	100%

Source: HSCRC Discharge Abstracts, Maryland Health Care Commission Tabulations.

Variation is also evident in comparisons of the volume of discharges with eligible diagnoses by setting, as shown in Table 16. Overall, 67% of all 2006 discharges had eligible diagnoses, with private psychiatric hospitals at 64% and general hospital psychiatric units at just under 79%.

Table 16. Proportion of Total Mental Health Discharges with Public Mental Health System Diagnosis by Hospital Setting: Maryland, 2006

Hospital Setting	Discharges with PMHS Diagnosis
All Hospitals	67%
General Acute Care Hospitals	79%
Private Special Hospitals - Psychiatric	64%
State Special Hospitals - Psychiatric	100%

Source: HSCRC Discharge Abstracts, Maryland Health Care Commission Tabulations.

Additional detail within the PMHS category reveals further distinction among diagnosis by payer source, as shown in Table 17. Schizophrenia represents 30% of the diagnoses for state hospital discharges but only 7.3% for commercial insurance; Medicaid and Medicare fall in between. Major affective disorders account for 58.9% of commercial insurance discharges but only 33.4% of either self/no pay or state hospital discharges; Medicaid and Medicare again fall in between. While substance abuse represents 41.5% of all self/no pay diagnoses, all other payers are within a range of 9% to 13%.

Table 17. Selected Payer Mix of All Mental Health Discharges by Diagnosis: Maryland, 2006

	Medicaid	Medicare	Commercial Insurance	Self/No Pay	State Hospital
Schizophrenia	20%	28%	7%	7%	30%
Major Affective Disorder	50%	36%	59%	34%	33%
Other Psychosis	4%	5%	3%	3%	8%
Other PMHS Diagnoses	15%	9%	16%	15%	19%
Substance Abuse	11%	12%	13%	42%	0%
Other	1%	9%	1%	0%	10%

Source: HSCRC Discharge Abstracts, Maryland Health Care Commission Tabulations.

Analysis of diagnoses by payor source also shows variation with the most significant difference occurring in self-pay where only 46.7% of discharges had eligible diagnoses (Table 18). Medicaid had the highest percentage of eligible diagnoses (at 73.5%) but Medicaid (69.7%) and commercial payors (69.5%) were only slightly less.

Table 18. Proportion of Mental Health Discharges Falling Within the Public Mental Health System Diagnoses by Payment Source: Maryland, 2006

Primary Payment Source	Mental Health Discharges for this Payment Source Falling Within the PMHS Diagnoses
Medicaid	73.5%
Medicare	69.7%
Commercial	69.5%
Workers Comp	2.7%
Self pay	46.7%
No Charge	7.7%
Other Governmental	67.0%
Other/Unknown	72.3%
State Hospital	100.0%

Source: HSCRC Discharge Abstracts, Maryland Health Care Commission Tabulations.

V. OVERVIEW OF MENTAL HEALTH SYSTEMS IN SELECTED STATES

It is said that if you have seen one state mental health system, you've seen only one state mental health system. According to the National Association of State Mental Health Program Directors (NSAMHPD), public mental health expenditures in the United States top \$29.5 billion and serve 6.1 million individuals (2006).¹² State mental health agencies vary widely on how they are organized, where they sit within state government and the breadth of their responsibility. More than half of the nation's mental health authorities are also responsible for the provision of alcohol and drug abuse treatment services. In eight states, the mental

¹² National Association of State Mental Health Program Directors, website 2008.

health authority is also responsible for mental retardation and developmental disability services.

State mental health systems also vary widely in the specific services and populations groups for which they are responsible for providing mental health services. In at least four states, the provision of mental health services to children and adolescents are located in a separate state agency or division from adult mental health services. Similarly, adult forensic mental health services or services to sex offenders are often outside the state mental health system and the responsibility of state corrections or public safety agencies.

In 2006, 69% of state mental health agency appropriations (\$18.9 billion) were expended on community-based mental health services; this is in contrast to 1981 when community services accounted for only 33% of state mental health expenditures.¹³ The four methods used by states to provide these services are 1) direct contract by the state mental health agency with local (usually non-profit) community based providers; 2) funding by the state to local government (city, county or multi-county) which in turn operate or contract for community mental health services; 3) direct operation of community-based services by employees of the state agency; or 4) a combination of these methods. In 15 states, the responsibility for public mental health services falls on county or city government. These local jurisdictions receive funds through the state authority which are augmented or matched by local revenues generated through local taxes or levies.

Publicly supported community mental health services include a wide range of treatment and support services usually available to those adults who are defined as having a serious mental illness (defined by diagnosis, disability and the duration of the illness), and to children and adolescents who have been found to have a serious emotional disorder. Community mental health services include emergency and crisis stabilization, outpatient and assertive community treatment, residential treatment, psychosocial rehabilitative services, supported housing and employment, and case management. Community-based inpatient care for non-forensic mental health patients is typically provided within psychiatric units of general hospitals or in freestanding psychiatric hospitals. However, due to limitations imposed by the Centers for Medicare and Medicaid (CMS), Medicaid reimbursement is not available for freestanding psychiatric units of more than 16 beds without a waiver from CMS.

State mental health authorities also have responsibility for the operation of inpatient psychiatric services provided in state hospitals. However, in Colorado and North Dakota the responsibility for state psychiatric hospitals fall outside the jurisdiction of the state mental health agency. Only Rhode Island has no freestanding state mental health hospital, using a unit in a state-operated general hospital for its inpatient psychiatric capacity.

From 1970 to 2006, the number of state psychiatric hospitals in the United States declined by 28%, from 315 to 228.¹⁴ The reduction in psychiatric bed capacity is not limited to state hospitals. Over the last five years, 24 states have reported declines in the number of general hospital psychiatric beds, and 19 states report a decline in private psychiatric hospital beds. The impact is that 35 states, including Maryland, now report a shortage of psychiatric beds in their state. Of these, 34 report shortages in acute care beds, 16 report shortages in long-term care beds, and 24 report a shortage in forensic beds.¹⁵ According to

¹³ *State Profile Highlights*, National Association of State Mental Health Program Directors Research Institute. No. 06-3, November 2006.

¹⁴ *Ibid.*

¹⁵ *Ibid.*

the National Association of State Mental Health Program Directors, the impact of these bed shortages are increased waiting lists for state hospital beds (23 states), increased waits for other psychiatric beds (11 states), overcrowding in state hospitals (14 states), and persons being held in emergency rooms (3 states).¹⁶

From Fiscal Years 2001 to 2004, expenditures for state psychiatric hospitals increased by 5.5%, but their share of the total state mental health expenditures decreased from 32% in FY 2001 to 28% in FY 2004.¹⁷ Expenditures for forensic patients continue to grow in all states and now represent 33% of state hospital expenditures.

How state hospital beds are used also varies widely across states. Many states use their state hospital beds for long-term or forensic care. Other states continue to use state hospital beds for acute care or a combination of acute and long-term care. Seventeen (17) states now require the use of general or community hospitals as an initial admission site for adult psychiatric inpatient care before utilizing state hospitals, and 11 states make the use of community inpatient facilities a requirement for the admission of children and adolescents. This requirement is designed to provide care closer to the individual's home and maximize third-party reimbursement for inpatient care. Currently 25 states do not require the use of local hospitals before an admission to a state hospital.

A. Brief Look at Four States

What follows is a brief description of key aspects of the provision of mental health services, in four states, with a particular focus on acute, inpatient psychiatric care. The states reviewed were Virginia, Pennsylvania, New Jersey and Massachusetts. These states were chosen because of either their geographic proximity to Maryland or the similar size population. Descriptions follow of how these state mental health systems are organized and funded, how state hospitals are used, how general and private hospitals are used, and how crisis community services are provided.

- **Organization and Funding of Mental Health Services at the State and Local Level**

In the states reviewed, the provision of public mental health services is largely state-funded, but local or regional government entities have a role in the administration of mental health services. However, states reviewed ranged from being primarily state funded and administered at a regional level (Massachusetts), to being administered and funded by a combination of state and local government entities (Virginia and Pennsylvania), to being primarily state-funded and privately operated (contracted out), as in New Jersey. Maryland is most similar to Virginia and Pennsylvania in that both the state and local mental health authorities are responsible for administering mental health services, as previously explained.

In Massachusetts, responsibility for mental health services falls under the Department of Mental Health within the Executive Office of Health and Human Services. There are six directors for each of six geographic areas in the state, which are further sub-divided into local service sites.¹⁸ These sites oversee the provision of mental health services provided

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸

<http://www.mass.gov/?pageID=eohhs2terminal&L=4&L0=Home&L1=Government&L2=Departments+>

through both the state and private sectors. Although sites oversee the provision of services, funding is provided through state, rather than local funds.¹⁹

In Virginia, mental health services are administered by the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) through 40 community service boards (CSBs) which generally are part of county government, but which also may be operated as an agent of local government. Funding for CSBs is provided mainly through a combination of state funds, Medicaid fees, and local funds.²⁰ In fiscal year 2005, most CSBs (29) received less than ten percent of their funds from local government.²¹ However, the overall state average with respect to the percentage of local funds was much higher, 25%, due to a few localities, which provide substantially more local funds for mental health services.²²

Similar to Virginia, Pennsylvania's has a central state agency responsible for mental health services. For Pennsylvania, this is the Office of Mental Health and Substance Abuse, within the Department of Public Welfare. It works in partnership with county government for the provision of mental health services. Also, similar to Virginia, funding for public mental health is split between the state and counties. For inpatient and partial hospitalization services in Pennsylvania, the State pays 100 percent of established rates. For all other services, the state reimburses 90 percent, and the county contributes ten percent. In addition, the State allocates federal social service, Substance Abuse Prevention and Treatment, and Community Mental Health Services Block Grant funds to the counties.

In New Jersey, the central state agency responsible for mental health services, the Division of Mental Health Services within the New Jersey Department of Human Services, contracts out services with 120 private agencies.²³ The funding for these services appears to be largely through state funds.²⁴ While it is the state that enters into contracts for mental health services, there is some involvement from localities in the process. In each county, there are mental health boards that advise the state on local needs.

In terms of the benefits of the different approaches used among the states reviewed, one benefit of splitting responsibility between the state and local entities may be that it encourages localities to take responsibility for addressing the unique needs of their community. On the other hand, if the state has sole responsibility for the funding and provision of services, it may be possible to insure a more uniform level of services is available throughout the state. With regard to the use of contracting, it could be a more efficient and effective way to meet needs. In some cases, this could be due to the ability of the private sector to achieve economies of scale not possible for a government entity devoted to serving a limited segment of the population. Also, as in New Jersey, the reliance on state-level contracts can still incorporate feedback from localities regarding the needs in their communities. With regard to Maryland, at this time there does not appear to be a

and+Divisions&L3=Department+of+Mental+Health&sid=Eeohhs2&b=terminalcontent&f=dmh_g_about&csid=Eeohhs2

¹⁹ NASMHPD Research Institute Inc. "State Mental Health Agency Profiling System 2005:Massachusetts." <http://www.nri-inc.org/projects/profiles/StateProfileReport>

²⁰ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia" <http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p8)

²¹ Ibid.

²² Ibid

²³ http://www.state.nj.us/humanservices/dmhs/BLOCK_GRANT_YRS_05-07.pdf (see p22)

²⁴ <http://www.state.nj.us/humanservices/DHS%20Publications/FY2007AppropActSummaries.pdf>

reason to consider changing the basic structure and funding of the provision of mental health services.

- **Role of State Hospitals**

Among the states reviewed, there are some differences in how state hospital beds are utilized. These differences are described in greater detail below, for the following key areas: admission criteria, management of admissions, types of "beds" (acute/long-term/forensic), and ages of patients. In addition, there is a discussion of states' struggles to discharge patients to appropriate community settings once their treatment is complete at the state hospital is complete.

Admission Criteria

Generally, among the states reviewed, in order to be admitted to a state hospital, persons must be a danger to themselves or others and unable to be served in another setting. This is also the case for Maryland's state psychiatric hospitals.²⁵ The other additional criteria for admittance to a state hospital that states use tend to vary among states, as shown in Table 19.

Admission criteria are one of the ways in which the role of state hospitals is defined. Therefore, it is important to examine who states choose to serve. When, or if criteria change, private hospitals may perceive that their responsibility has increased.²⁶

Management of Admissions to State Hospitals

As would be expected, in all of the states reviewed, state hospital staff are involved in the admission decision. However, in at least two of the states reviewed (Virginia and New Jersey) other local government employees are involved in the decision too. Greater description of how Maryland compares to these two states and Massachusetts follows.

²⁵ http://mlis.state.md.us/asp/web_statutes.asp?ghg&10-632

²⁶ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"
<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p105)

Table 19: Admission Criteria for State Hospitals in Select States

<p>Virginia requires that persons admitted to a state hospital be:</p> <ul style="list-style-type: none">• Free of acute physical/medical complications requiring medical hospitalization²⁷;• Meet the appropriate statutory requirements established by the Code of Virginia which include²⁸:<ul style="list-style-type: none">○ by reason of mental illness, presents an imminent danger to self; or○ by reason of mental illness, presents an imminent danger to others; or○ by reason of mental illness, has been proven to be substantially unable to care for self; and,○ Alternatives to inpatient care and treatment have been investigated and deemed unsuitable and there is no less restrictive alternative to hospitalization.
<p>In New Jersey, the standard for admission to a state hospital is:</p> <ul style="list-style-type: none">• Meets the state's commitment standard• Local inpatient care is either unavailable or inappropriate.• Clear and present danger to self; or• Clear and present danger to others;• Danger to self includes inability, without assistance, to satisfy need for nourishment, personal or medical care, shelter, or self-protection and safety, and reasonable probability that death, serious bodily injury or serious physical debilitation would ensue within 30 days.²⁹
<p>In Pennsylvania, the standard for admission to a state hospital is:</p> <ul style="list-style-type: none">• Clear and present danger to self; or• Clear and present danger to others;• Danger to self includes inability, without assistance, to satisfy need for nourishment, personal or medical care, shelter, or self-protection and safety, and reasonable probability that death, serious bodily injury or serious physical debilitation would ensue within 30 days.³⁰
<p>In Massachusetts, the standard for admission is:</p> <ul style="list-style-type: none">• demonstrate symptoms consistent with DSM-IV (AXES 1-V) diagnosis, which requires and will respond to therapeutic intervention.• be free from any physical conditions that require primary medical care and cleared for treatment in a non-medical, non-surgical treatment environment.• require 24-hour medical, psychiatric, and nursing services that can appropriately be provided only at an acute level of hospital care.• have a psychiatric condition that results in serious dysfunction such as increased suicidal gestures, assaultive behavior, or sudden inability to provide self-care, that endangers the member or others.• present conditions that can reasonably be expected to improve to the extent that psychiatric inpatient hospital services will no longer be needed or further regression of the member's condition will be prevented.

Source: Refer to footnotes as indicated.

In Virginia, admissions to state hospitals are managed by staff from the local community service boards (CSBs). For involuntary admissions, CSB staff screen persons.³¹ For voluntary admissions, the CSB staff and staff at a state hospital jointly make the decision.³² In order to improve the utilization of state hospitals, recently regional partnerships were

²⁷ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p100)

²⁸ <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+37.2-817>

²⁹ <http://www.psychlaws.org/LegalResources/statechart.htm>

³⁰ <http://www.psychlaws.org/LegalResources/statechart.htm>

³¹ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf>

³² Ibid.

created, based on the service areas of the seven state hospitals.³³ These regional partnerships have entered into agreements to create regional utilization committees that consist of CSB staff from localities in the region, the state hospital, and sometimes staff from licensed hospitals.³⁴ These committees make decisions about which patients are accepted to the state hospital in their respective regions. Such an arrangement may have the benefit of encouraging cooperation among localities and encouraging the best use resources available in both state hospitals and the larger community.

In New Jersey, there are county Screening Centers that serve as gatekeepers to involuntary treatment.³⁵ This is similar to Virginia's use of CSB staff for the screening of involuntary admissions. New Jersey also appears to be similar to Virginia with regard to conserving the use of state hospitals, as indicated by the state hospital admission criteria; local inpatient care must be unavailable or inappropriate.³⁶

In contrast to Virginia and New Jersey where the screeners of all involuntary patients are government employees, in Maryland, screening is conducted by staff of general hospitals or private psychiatric hospitals. (Those which have been designated as "emergency screening facilities," as described previously).³⁷ With Maryland's approach, there may be a greater degree of variability in how screening decisions are made. As a result, there may be greater potential for persons to be inappropriately screened in, resulting in unnecessary utilization of resources, including inpatient beds.

With regard to admission to state hospitals in Maryland, state hospital staff make the decisions, and the referral source of the request will depend on the geographic location of the hospital making the request.³⁸ In the eastern and western areas of the state, where there are not hospitals with psychiatric beds, then a patient may be admitted through a physician from a hospital's emergency department contacting a state hospital directly. For hospitals located in the central region of the state, there will be a review by the Centralized Admission Review Center.

In Massachusetts, there are almost no direct admissions to state hospitals that provide continuing (long-term) care. The exception might be someone who was discharged from a state hospital and needed to be readmitted very shortly thereafter.³⁹ The acute care beds for the state are located at two facilities, each with no more than 16 beds.⁴⁰ The staff at these locations make decisions regarding admissions.⁴¹ With regard to Pennsylvania, detailed information could not be obtained by the deadline for this paper.

Types of Beds in State Hospitals (Acute/Long Term/Forensic)

In addition to considering the admission criteria to state hospitals, it is important to consider their role in serving particular categories of persons, specifically those who require

³³ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p119)

³⁴ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p120)

³⁵ http://www.state.nj.us/humanservices/dmhs/BLOCK_GRANT_YRS_05-07.pdf

³⁶ Ibid.

³⁷ Maryland Department of Health and Mental Hygiene, Mental Hygiene Administration

³⁸ Conversation with Brian Hepburn, MD, 4/2/08

³⁹ Conversation between with Elaine Hill (Massachusetts Department of Mental Health) and Eileen Fleck, MHCC staff, on 4/3/08.

⁴⁰ Ibid.

⁴¹ Ibid.

acute care versus long term care, and those who are forensic patients. In part, the role of state hospitals in serving these populations is revealed through the number of beds devoted to each of these categories.

In some states, such as Maryland, there is a clear distinction among state beds used for acute, short-term treatment, intermediate or long-term treatment, and forensic treatment. However, in at least two of the states reviewed, (Virginia and New Jersey) such distinctions are not made.⁴² A summary of the breakdown in types of beds for the four states reviewed and Maryland, to the extent known, is provided in Table 20.

Table 20. State Comparison of Number of Acute, Long-Term, and Forensic Beds in State Hospitals

Bed Type	Maryland⁴³	Virginia	Pennsylvania⁴⁴	New Jersey⁴⁵	Massachusetts⁴⁶
Acute	391	N/A	0	N/A	48
Long Term	573	N/A	Unknown	N/A	650
Forensic	218	381 ⁴⁷	Unknown	210	250
Total	1,182	1,686⁴⁸	2,080	2,015	948

Source: Please refer to footnotes as indicated. Note: N/A means the category is not applicable because beds are not designated as solely for acute or long term patients.

With regard to forensic beds, in almost all of the states reviewed, a specific number of forensic beds could be reported, as shown in Table 20. This makes it possible to examine the proportion of forensic beds relative to long-term and acute care beds. This proportion is meaningful in that it suggests the level of responsibility of a state's state hospitals for psychiatric patients relative to the private sector. As shown in Table 20, Maryland appears similar to both Virginia and New Jersey with respect to the proportion of forensic beds.

In terms of how Maryland compares to the U.S as a whole, a survey of states conducted by NASMHD regarding the admission status of persons in state hospitals on the last day of the year showed that Maryland's forensic population was at 40%. This is below the national average for states that reported information, which was 60% (33 states reported information). Therefore, it appears that Maryland's state hospitals have a greater responsibility for non-forensic patients than other states' state hospitals.⁴⁹

With regard to acute care, among the states reviewed, there is a wide range in the number of beds. Pennsylvania, with zero acute care beds is at the low end, and Maryland is at the

⁴² Per conversation between Karen Lee of the New Jersey Division of Mental Health Services and Eileen Fleck, MHCC staff 4/3/08; Per conversation with Wendy Brown at Virginia's Department of Mental Health, Mental Retardation, and Substance Abuse Services and Eileen Fleck, MHCC staff 4/3/08

⁴³ Maryland Health Care Commission, Refer to Table 8.

⁴⁴ Pennsylvania Office of Mental Health & Substance Abuse Services. *Community Mental Health Services Block Grant Application*. April 2006.

⁴⁵ Information is as of 4/3/08, per conversation between Karen Lee of the New Jersey Division of Mental Health Services and Eileen Fleck, MHCC staff

⁴⁶ http://www.mass.gov/Eeohhs2/docs/dmh/publications/inpatient_report.pdf

⁴⁷ As of March 27, 2008, per conversation with Wendy Brown at DMHMRSAS on 4/3/08.

⁴⁸ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf>

⁴⁹ <http://www.nri-inc.org/projects/Profiles/Report.cfm>

high end with 232. Nationally, based on a survey conducted by the National Association of State Mental Health Directors (NASMHD), nearly two-thirds of state hospitals maintain some acute care beds.⁵⁰ Unfortunately, the range in the amount of acute care provided by state hospitals was not captured. Therefore, it is unknown whether most states are more similar to Maryland in the amount of acute care provided in State hospitals (232 beds) or more similar to Massachusetts (48 beds).

Although many states still provide acute care, there is a trend toward reducing the use of state hospital beds for acute care. In some states, or geographic locations within states, reducing the use of state hospital beds is challenging due to the lack of alternatives; a state hospital may be the only option within a reasonable driving distance. However, in Maryland, this is not the case.⁵¹

Another barrier may be the cost of treating uninsured psychiatric patients. Hospitals may be concerned about their financial bottom-line. If state hospitals frequently admit patients for acute care due to their lack of insurance, hospitals in the private sectors will likely be concerned if this policy is reversed. The shifting of care for these persons from the public sector to the private sector may lead hospitals in the private sector to anticipate that they will have to provide a greater amount of uncompensated care. For states that have been able to substantially reduce the use of state hospital beds, the system for funding uncompensated care may be a major factor. With the all payor system in Maryland, the financing of uncompensated care for psychiatric patients should not be a major barrier. However, as described previously, referral patterns for psychiatric patients are still influenced by their insurance status.

Persons Served in State Hospitals by Age Group

Maryland is similar to most of the states reviewed in that, with the exception of Virginia, children are not served in state hospitals, as shown in Table 21. Because of the trend toward treating people in community based services, it would probably not be desirable to add children’s beds at Maryland’s state hospitals. However, it is notable that some children are reportedly treated at Maryland state hospitals. Based on the CMHS uniform reporting tables, there were 223 admissions to state hospitals for children in 2006.

Table 21: State Comparison of Persons Served in State Hospitals by Age Group

Age Group	Maryland	Virginia	Pennsylvania	New Jersey	Massachusetts
Adults	Yes	Yes	Yes	Yes	Yes
Children ⁵²	No	Yes	No	No	No
Geriatric Persons	Yes	Yes	Yes	Yes	Yes

Note: It is assumed that all state hospitals used to treat adults also treat geriatric patients

With regard to the treatment of geriatric patients in state hospitals, only limited information could be obtained. At least one state, Virginia, specifically allocates beds for geriatric

⁵⁰ <http://www.nri-inc.org/projects/Profiles/Report.cfm> (2005)

⁵¹ Conversation with Brian Hepburn, MD, Maryland Department of Health and Mental Hygiene, 4/7/08.

⁵²

<http://www.ccca.dmhmr.sas.virginia.gov/content/Directory%20of%20State%20Child%20&%20Adol%20Hospitals.pdf>

patients.⁵³ However, in Maryland, there are no state hospital beds identified specifically for geriatric patients.⁵⁴ One advantage of having a specific allocation is that it allows programs specific to the geriatric population to be created because there is a critical mass of these patients in a few locations. A potential disadvantage though is that some patients must travel further either to receive these special services or because space that would otherwise be available to them is not available.

Appropriateness of the Use of State Beds

As previously described, there is a trend toward reducing the use of state hospital beds and trying to serve persons with mental illness in community settings. In part, this trend may be driven by legal concerns that stem from a U.S. Supreme Court decision in 1999 for the case *Olmstead v. L.C.*⁵⁵ In brief, the Court held that the Americans with Disabilities Act requires that states provide community-based treatment to persons with mental disabilities when such treatment is deemed appropriate.⁵⁶

Many of the states reviewed appear to track the number of persons in state hospitals with discharge barriers and have focused their attention on reducing the number of persons who are ready for discharge, but who cannot be discharged because of a lack of community services. Although states are making progress in this area, it is likely that no state has completely eliminated delays in the discharge of patients from state hospitals. A description of some states' attempts to address this issue are described below.

New Jersey⁵⁷

In 2000, as part of an initiative intended to make system-wide improvements to the state's mental health system, a review was conducted of patients in state hospitals. This review found that of 1,500 patients screened, almost 400 patients no longer need intensive hospital inpatient treatment and could return to the community if appropriate community services, including housing, were developed for them. As a result of this study, additional state appropriations resulted in 509 community residential spaces for patients appropriate for discharge. In addition, the state expanded its Program for Assertive Community Treatment (PACT) to provide 31 PACT teams operating in the state's 21 counties.

Massachusetts⁵⁸

A 2004 review of inpatient services included surveying clinicians regarding the number of clients who could be discharged within the next year, if the necessary community resources were available. Clinicians' responses to the survey revealed that 268 adults were ready for discharge. These results were used to estimate the cost of serving persons ready for discharge to the community and to plan for the closure of state beds and the reinvestment of estimated savings.

⁵³ Per conversation with Wendy Brown at Virginia's Department of Mental Health, Mental Retardation, and Substance Abuse Services and Eileen Fleck, MHCC staff 4/3/08

⁵⁴ Conversation with Brian Hepburn, MD, Maryland Department of Health and Mental Hygiene, 4/7/08.

⁵⁵ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p18)

⁵⁶ Ibid.

⁵⁷ http://www.state.nj.us/humanservices/dmhs/BLOCK_GRANT_YRS_05-07.pdf

⁵⁸ http://www.mass.gov/Eeohhs2/docs/dmh/publications/inpatient_report.pdf (see pages 22-23)

Virginia

For the 2001-2002 biennium budget, language was included that directed the Commission of the state's mental health agency to work with community service boards to "develop and implement a plan to discharge eligible state hospital residents to the greatest extent possible, utilizing savings from gains in system efficiency."⁵⁹ This effort appears to have continued for many years. Currently, projects are managed at the regional level and are referred to "discharge assistance projects."⁶⁰

Through undertaking a review of persons in state hospitals that are ready for discharge, Maryland could potentially reduce its use of state hospital beds, as other states appear to have done. Maryland has taken a similar approach in the past, and it is working on moving individuals out of facilities.⁶¹ However, due to a lack of funding the process is slow.

Funding of State Hospitals Compared to Community Services

In order to reduce the use of state hospitals, an adequate community funding base is required. Of the five states reviewed, only Massachusetts spends more on community services per capita than Maryland. According to the CMHS Uniform Reporting System, Maryland spends 30% of its funding on State Hospitals and 70% on community services. As shown in Table 21, Maryland is at the midpoint in comparison to the four targeted states, with two states spending a higher percentage on state hospitals and two spending less of their funds on them.

Table 22. Per Capita Funding Comparison by State: 2004

State	Total Per Capita	State Hospital Per Capita		Community Per Capita	
		\$	%	\$	%
Maryland	\$151.37	\$45.77	30%	\$105.60	70%
Virginia	\$70.51	\$42.52	60%	\$27.99	40%
New Jersey	\$134.36	\$48.41	36%	\$85.95	64%
Massachusetts	\$103.72	19.85	19%	\$83.87	81%
Pennsylvania	\$187.08	\$34.43	18%	\$152.65	82%
U.S.	\$87.92	\$25.09	29%	\$62.83	71%

Source: CMHS Uniform Reporting System

- **Role of General Hospitals and Private Psychiatric Hospitals**

Generally, there is a trend toward treating patients in community settings rather than state hospitals. Community settings appear to be regarded as more convenient, less stigmatizing, and in some cases, less costly than state hospital beds. Maryland appears to be very similar to Virginia in terms of the overall proportion of state hospital beds compared to general and private beds. However, comparable information was not obtained for all of the states

⁵⁹ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"
<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p118)

⁶⁰ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"
<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p121)

⁶¹ Conversation with Brian Hepburn, M.D., Department of Health and Mental Hygiene, MHA, 4/7/08.

reviewed. Information on the number of beds in the private and public sectors for two states and Maryland is shown in Table 23.

Table 23. Estimated Number of Licensed Beds By Type of Hospital for States Reviewed

Hospital Type	Maryland	Virginia ⁶²	Pennsylvania ⁶³	New Jersey	Massachusetts ⁶⁴
State Hospital	1,182	1,686	2,080	2,015 ⁶⁵	948
Private/Acute General Hospital	1,216	1,794	4,414	3,030 ⁶⁶	733 ⁶⁷
Total	2,398	3,480	6,494	5,045	1,681

Source: Refer to footnotes as indicated.

In Virginia about 50% of the psychiatric beds in the state are located in state hospitals, which is similar to Maryland. Although this might suggest a heavy reliance on state beds, a recent review of the use of psychiatric beds in Virginia revealed that only 14% of patients discharged from psychiatric hospitals in 2005 were discharged from state hospitals.⁶⁸ This is attributable to the much longer lengths of stay for patients in state hospitals.⁶⁹ Comparable information on discharges is not available for Maryland; such information would provide a much clearer picture of the role of its state hospitals.

In Pennsylvania, about one-third of psychiatric beds are located in state hospitals, which is substantially less than Maryland. One probable reason for this difference is that Pennsylvania does not provide acute care. If Maryland only had long-term care beds and forensic beds (1,003), then the percentage of state beds among all psychiatric beds would be about 36%, which is similar to the proportion of state beds in Pennsylvania.

In terms of further reducing the use of state beds and increasing the role of the private sector, at least one state of those reviewed has plans to further reduce the number of state beds. Pennsylvania plans to close one of its state hospitals (Mayview) by December 2008. As a result, the number of state beds will be reduced by 225.⁷⁰

To the extent that Maryland has an interest in further reducing the use of state beds, it may be useful to further investigate how Pennsylvania achieved its reduced use of state beds for

⁶² JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf>

⁶³ Elaine Foster from the Pennsylvania Hospital and Healthcare Association provided the total number of licensed psychiatric beds for the year ending June 30, 2006. I then subtracted the number of beds in state hospitals from the Community Mental Health Services Block Grant Application (April 2006) to estimate the number of psychiatric beds in the private sector.

⁶⁴ http://www.mass.gov/Eeohhs2/docs/dmh/publications/inpatient_report.pdf

⁶⁵ Information is as of 4/3/08, per conversation between Karen Lee of the New Jersey Division of Mental Health Services and Eileen Fleck, MHCC staff

⁶⁶ Email from Jack Greenburg 4/4/08

⁶⁷ Per voicemail from David Smith with the Massachusetts Hospital Association on 4/4/08.

⁶⁸ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"

<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p111).

⁶⁹ Ibid.

⁷⁰ *Mayview State Hospital Closure Press Release*. Pennsylvania Department of Public Welfare Press Release. August 2007.

acute psychiatric care. It could also be useful to further investigate how Massachusetts has reduced its use of state beds, since it appears too largely relies on the private sector for acute psychiatric beds.

Management of General Hospital and Private Psychiatric Beds Funded through State or Local Government

In addition to considering states' direct operation of state hospitals, it is useful to examine their use of beds in the private sector. Among the four states reviewed, one state does not purchase or contract for any beds in the private sector (Massachusetts), but two other states do purchase beds in the private sector, as Maryland does. Greater description of other states' use of private sector beds follows.

In Virginia, the seven regional partnerships (previously described) also participate in decisions about the purchase of private beds, as an alternative to the use of state hospital beds. One of these projects is referred to as local inpatient purchase of services (LIPOS).⁷¹ LIPOS funds are used to purchase bed days at licensed psychiatric hospitals for persons who meet the criteria for admission to a state hospital.⁷² Additional criteria are also used, which tend to vary among regions. For example, in some regions LIPOS funds may only be used for someone without insurance, but in other regions the funds can also be used to purchase bed days for persons whose stay exceeds their insurance coverage. Although the average cost of care per day is higher for patients funded through LIPOS, the state's mental health agency thinks the average shorter length of stay (compared to other state hospital patients) offsets this.

In Maryland, just as the management and process for admission to a state hospital varies by geographic location, the process for the purchase and use of general psychiatric hospitals varies by location. In three localities, Montgomery County, Baltimore City, and Anne Arundel County, the respective core service agencies have contracts with local crisis teams make the decision regarding the purchase of beds for the central region of the state.⁷³ For the other localities in the central region of the state, the Centralized Admissions and Referral Center entity makes the decision regarding the purchase of beds.⁷⁴

In Massachusetts, there is no state purchasing of beds at general and private psychiatric hospitals.⁷⁵ Prior to the change in Massachusetts that requires all residents to have insurance, for persons without insurance, there was a "free care pool" of funds.⁷⁶ These funds were used to reimburse hospitals for uninsured psychiatric patients. With regard to Pennsylvania, information could not be obtained in time for this report, but would potentially be very useful, if Maryland wants to consider reducing its use of acute care beds in state hospitals, as Pennsylvania has done.

⁷¹ JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"
<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p121).

⁷² JLARC. "Availability and Cost of Licensed Psychiatric Services in Virginia"
<http://jlarc.state.va.us/Reports/Rpt365.pdf> (see p122).

⁷³ Conversation with Brian Hepburn, MD, Maryland Department of Health and Mental Hygiene, 4/2/08.

⁷⁴ Conversation with Brian Hepburn, MD, Maryland Department of Health and Mental Hygiene, 4/2/08.

⁷⁵ Conversation between with Elaine Hill (Massachusetts Department of Mental Health) and Eileen Fleck, MHCC staff, on 4/3/08.

⁷⁶ Ibid

Use of General and Private Hospital Psychiatric Beds for Children

As previously mentioned, it appears that many states have made a policy decision not serve children in state hospitals. In terms of states' role in making sure that children are served in the private sector, only limited information could be obtained for this report due to time constraints. In Vermont, the state has a contract for the use of beds in a private psychiatric facility.⁷⁷ Alternatively, it may be the case that in some states such a contract is not required because of the availability of beds for children.

In Maryland, as previously noted, there are no state beds for children. If a bed is needed for a child without insurance coverage, then the state will purchase a bed in the private sector.⁷⁸ However, this rarely occurs because most children are covered by Medicaid.⁷⁹

B. Comparative Review of Maryland's Inpatient Utilization

Below are tables showing Maryland in relation to the other states described above. These data are derived from the Center for Mental Health Services' Uniform Reporting System (URS). The URS data was developed in response to the need for accountability for the expenditure of community mental health block grant funds received by States from the Federal Government. CMHS and state mental health agencies and the NASMHPD Research Institute have worked together since 1997 in an effort to ensure the uniform reporting of State-level data to describe the public mental health system and the outcomes of its programs. The URS data are submitted by the states and has been used to create 14 different Output Tables that show performance on issues of Access, Appropriateness, Outcomes, and System Management.

The states use the following guidelines for including and counting people in the URS:

1. All persons served directly by the State mental health agency (including persons who received services funded by Medicaid)
2. All persons in the system for whom the State mental health agency contracts for services (including persons whose services are funded by Medicaid).
3. Any other persons who are counted as being served by the State mental health agency or come under the auspices of the State mental health agency system. This includes Medicaid waivers, if the mental health component of the waiver is considered to be part of the SMHA system.
4. All identified persons who have received a mental health service, including screening, assessment, and crisis services. Telemedicine services were counted if they were provided to identified clients.
5. For States where a separate State agency is responsible for children's mental health, where feasible, efforts were made to unduplicate clients between the child mental health agency and the adult mental health agency. If this unduplication was not feasible, this potential duplication was reported to indicate there was an overlap between the age 0-17 group and the Age 18 and over group but that there was unduplication within each group.

⁷⁷ Email correspondence between John Pandiani of Vermont and Eileen Fleck, MHCC staff 3/28/08 and email correspondence between Martin Brennan of Vermont and Eileen Fleck on 3/27/08.

⁷⁸ Conversation with Brian Hepburn, MD, at the Maryland Department of Health and Mental Hygiene 4/7/08.

⁷⁹ Ibid.

Using these criteria, then, the URS covers clients and services whose funding is under the control of the State Mental Health Authority.

Persons who were not included in the URS tables:

1. Persons who just received a telephone contact were not included, unless it was a telemedicine service to a registered client. Hotline calls to anonymous clients were not counted.
2. Persons who only received a Medicaid funded mental health service through a provider who was not part of the SMHA system were not included.
3. Persons who only received a service through a private provider or medical provider not funded by the SMHA were not included.
4. Persons with a single diagnosis of substance abuse or mental retardation were not included. All persons with a diagnosis of mental illness were counted, including persons with a co-occurring diagnosis of substance abuse or mental retardation.

These data do provide a snapshot of these state systems and how they compare to the US rate (aggregate of all state responses). The intent of the URS is not to make comparisons between States but rather to track trends within states over time. However, through gathering additional information from states, it may be possible to make a determination as to what differences are meaningful and suggest ways to reduce the use of inpatient psychiatric beds and which differences are simply an artifact of who is counted in the data.

From the comparative statistics presented below, some Maryland highlights emerge:

- Maryland is at the midpoint of the five states for state hospital utilization per 1,000 population and just at the national average (Table 24);
- Maryland is at the midpoint of the five states for state hospital beds per 1,000 population and is lower than the national average, although preliminary data for 2006 shows Maryland thirty-seven percent (37%) higher than the national average (Table 25);
- Maryland has the second highest admission rate per 1,000 population among the five states but is still below the national average (Table 26).
- Maryland is the second highest of the five for state hospital admission rate (Table 26). This indicates that Maryland, like Virginia and perhaps New Jersey, has a higher proportion of beds devoted to acute or short-term treatment than do Massachusetts or Pennsylvania. Maryland and Virginia have the shortest lengths of stay for discharges (26 and 24 days respectively), well below MA, NJ and PA and 80% below the national average (Table 28).
- Maryland's 30-day readmission rate for state hospitals is second highest of the states reporting, but 30% below the national average (Table 27).

Table 24. Mental Health Service Utilization Rates (per 1,000 population): FY 2006

	MD	MA*	NJ	PA	VA	US Rate
Total MH Service Penetration Rate	16.29	4.30	38.96	17.20	15.07	19.88
Community Services Utilization	16.07	4.17	36.75	17.18	14.95	18.58
State Hospital Utilization	0.60	0.26	0.58	0.28	0.76	0.59
Other Psychiatric Inpatient Utilization	1.42	0.14	1.80	2.56	1.26	1.42

Source: CMHS Uniform Reporting System *Data is for SMHA utilization only.
Does not include acute services controlled by state Medicaid agency.

The information collected from states on state hospital utilization rates and other psychiatric inpatient utilization is only a starting point for determining which states have been effective in reducing the use of inpatient psychiatric beds. Although the state hospital utilization is somewhat lower in Pennsylvania than in Maryland, it is notable that the use of other psychiatric inpatient utilization is much higher than Maryland. This was also noted for some other states reporting low use of state hospital beds, such as Arizona. States that reported low use of both state hospital beds and other psychiatric inpatient beds include Vermont, Hawaii, and Minnesota, Connecticut, and Massachusetts. However, for some of these states, it may not be the case that a low per capita use of inpatient psychiatric hospital beds have been achieved. Instead, it may be that the funding source is affecting the numbers reported. MHCC staff intend to contact states and seek information on the number of discharges per capita. However, if task force members have knowledge of other states that have reduced the use of inpatient psychiatric beds and could serve as models, it would be helpful to investigate specifically those states.

Table 25. State Operated Psychiatric Beds: FY 2006

	MD	MA	NJ	PA	VA	US 2000	US 2006
State Hospital Beds	1,244	900	2,149	2,080	1,686	63,000	49,000
Beds per 1,000 population	0.22	0.13	0.25	0.16	0.22	0.21	0.16

Source: Various CMHS/URS state reports; US Census Bureau. US 2006 rate is preliminary only at this point and has not yet been included in the URS system.

Table 26. Psychiatric Inpatient Admissions: FY 2006

	MD	MA	NJ	PA	VA	US Rate
State Hospital Admission Rate per 1,000 population	0.47	0.16	0.40	0.13	0.70	0.56
Total Number of Admissions to State Hospitals	2,622	1,053	3,446	1,616	5,334	169,299

Source: CMHS Uniform Reporting System

Table 27. Psychiatric Inpatient Readmissions (Civil Non-Forensic): FY 2006

	MD	MA	NJ	PA	VA	US Rate
Readmission to any Psych Hospital: 30 days	10.7%	N/A	5.2%	18.0%	6.6%	13.9%
Total State Hospital Readmissions: 30 Days	6.0%	3.5%	7.5%	0.7%	7.8%	9.1%

Source: CMHS Uniform Reporting System

Table 28. Psychiatric Inpatient Length of Stay: FY 2006

	MD	MA	NJ	PA	VA	US Rate
State Hospital Length of Stay - Discharged Patients	26 days	72 days	91 days	154 days	24 days	121 Days
State Hospital Length of Stay - Resident Patients	1,205 days	1,095 days	1,226 days	2,161 days	512 days	869 Days

Source: CMHS Uniform Reporting System

VI. SUMMARY

Like other states and the nation, Maryland has experienced a dramatic decrease in inpatient psychiatric capacity during the last twenty years. State hospital beds were reduced by more than one-half in Maryland and, unlike the United States' experience, Maryland's private psychiatric beds also declined. The State's general hospital psychiatric beds increased, but at a lower rate than experienced by the nation as a whole.

Based on available data, Maryland's overall psychiatric beds per 100,000 rate is almost identical to the United States rate, with the state hospital rate just slightly higher and the general hospital/private psychiatric facility rate just slightly lower than the national average. A slightly higher percentage of Maryland's inpatient capacity is operated by the State, while the acute general hospital setting operates a slightly lower percentage of total capacity.

During the most recent four-year period for which Maryland data are available (2003 – 2006), discharges from inpatient psychiatric settings increased slightly (7.4%). Discharges from general hospital psychiatric units increased (5.1%) while those from private psychiatric facilities increased by 28.3%. Discharges from State hospitals decreased 16.1%. Based on staffed beds, State hospitals operated at 97% occupancy in 2007. The occupancy rates for private psychiatric hospitals and acute general hospital psychiatric units, which are not directly comparable to data reported for State hospitals because of differences in the bed inventory, are lower. In 2007, occupancy for acute general hospital psychiatric units was 74%, while private psychiatric facilities had an occupancy rate of 58%.

Looking at comparative data from Maryland and the four highlighted states, Maryland is at the midpoint on most of the statistics and at the national average on many. It is, however, an outlier on average length of stay for discharges, indicating that Maryland has a higher proportion of beds devoted to acute or short-term treatment than do the other four states or State hospitals nationwide.

Maryland's all-payer rate setting system is unique and offers the opportunity for all payers to share the burden of uncompensated care equally. On the general medical side, the system has allowed the State to avoid having public general hospitals for people who are uninsured or poor. On the psychiatric side the system has not worked quite as effectively, in that State hospitals still operate acute beds and receive about half of their admissions from general hospital emergency rooms or psychiatric units. The state hospitals remain as facilities for those who are uninsured and otherwise poor.

Given the large role that freestanding, private psychiatric facilities play in Maryland's system, the loss of the IMD waiver presents a significant financial challenge to the system. Since, under the standard IMD rule, Medicaid reimbursement is not available for adults aged 22 – 64 years old in freestanding psychiatric hospitals, any acute inpatient treatment for these individuals will be fully financed with State general revenue funds.

Maryland has a set of system policies and practices around referrals and transfers that vary across hospital type and create barriers to care for individuals who are uninsured or poor. These practices also undermine the State's rate setting system's objectives around all payer groups sharing the burden of uncompensated care equally.

VII. POLICY OPTIONS

Crafting effective and cost-effective models for the delivery of mental health care in Maryland is in many ways more difficult than crafting models for the delivery of general

health care. The State is much more directly involved in providing and funding both inpatient and community-based mental health care than general health care. Funding streams for mental health care take on added complexities: private insurance coverage varies significantly across plans, Medicaid excludes state and specialty psychiatric hospitals from federal reimbursement, and the all-payer and uncompensated care systems encompass only psychiatric inpatient units in general hospitals. Effective secondary and tertiary prevention of episodes of mental illness requires a broader array of community programs and supports than most medical and surgical illnesses. Finally, most observers believe that the strength and effectiveness of community-based mental health programs bear a more direct relationship to the need for inpatient care than in the case of other medical disorders.

This White Paper has provided background information about inpatient psychiatric services in Maryland to inform discussion about the current and future roles of the State hospital, the private psychiatric hospital, and the psychiatric unit of general hospitals. Understanding the options for the organization and financing of inpatient services is an essential first step to considering the models for broad continua of care that the Task Force is charged with developing.

The options for financing acute mental health care are complicated by provisions of the Medicare all-payer waiver, the uncompensated care fund, and the Medicaid program. Providing for the care of uninsured Marylanders is always a fundamental concern. Currently, uncompensated care provided to uninsured individuals can be funded in two ways: through the uncompensated care fund or through taxes.

If the uninsured individual is evaluated at a general hospital with a psychiatric unit that has an available bed, funding is provided through the uncompensated care fund.

If the hospital has no unit or no available bed, funding is through tax revenue, either through a purchase of care bed at a private psychiatric hospital or through admission to the State hospital.

Several of the options below explore ways in which funding streams might be changed to address different policy goals. The options also address, albeit indirectly, one of the concerns that led to the establishment of the Task Force: psychiatric patients who spent many hours or days in emergency departments awaiting appropriate disposition. From this single observation, key questions arise:

Does the high demand for inpatient services arise in part because outpatient services are inadequate to care for these patients in the community and to divert patients from inpatient hospitalization into other services, in spite of relatively high levels of funding for outpatient care relative to other comparison states?

Does the difficulty finding appropriate inpatient dispositions suggest that there are not enough inpatient beds in Maryland?

When inpatient care is necessary, do we care whether the care is provided in a specialty unit of a general hospital, in a private psychiatric hospital, or in a state hospital? Is there evidence of substantial differences in quality, outcomes, or cost? Are there policy reasons for preferring one setting over another?

Does the difficulty finding placements in other general hospital settings, particularly for uninsured individuals, reflect characteristics of the patients (higher acuity, fewer community supports, longer lengths of stay), characteristics of the inpatient system (simply inadequate numbers of staffed beds), or characteristics of the funding

(inadequate rates of reimbursement for care of these transferred patients under the all-payer system)?

If reimbursement through the uncompensated care system is reasonable and demand for more capacity is present, why don't general hospitals expand their beds devoted to mental health?

These questions have no easy answers. It is, however, possible to outline the fundamental policy options available as we move forward in planning the continuum of care models. In each option, the rationale is set forth first, followed by a series of bulleted concerns raised by the option.

OPTION 1: Eliminate State-Operated Acute Inpatient Treatment. Maryland operates acute care beds in the public sector, unlike many States in which acute inpatient treatment is the sole purview (or predominately the purview) of the private hospital sector and the State limits its role to the provision of intermediate, forensic and long-term inpatient treatment. In these States, an explicit policy delegating acute inpatient treatment to the community general hospital sector was established because Medicaid reimbursement is not available to State hospitals or freestanding psychiatric facilities, given their classification as Institutions for Mental Disease (IMD). Even in States where some acute inpatient treatment is provided in State facilities, it is typical to find the State attempting to primarily utilize the general hospital psychiatric unit setting, so that Medicaid financing is available to support the cost of care for indigent patients.

A possible option for Maryland would be to establish the policy that State hospitals provide intermediate, long-term and forensic treatment, but not acute care. All acute care would occur in general hospital psychiatric units or private psychiatric facilities. Because they are privately operated, both general hospitals and freestanding psychiatric hospitals have potentially greater access to capital and more modern technology than do state hospitals. These facilities have more flexibility in service provision, staffing, and hiring practices than the State. They can forge stronger connections to their communities through community boards and can be seen as less stigmatizing sites for treatment. Finally, in the case of general hospitals, they have the potential to integrate, or at least coordinate, general health care and mental health treatment.

If the policy decision is made to restrict State hospitals to intermediate, forensic, and long-term treatment, no general hospital or private psychiatric facility will be able to make referrals to the Mental Hygiene Administration for persons who require acute inpatient care. In fact, the practice would be to always initiate inpatient treatment in one of these community settings, providing acute stabilization in order to either successfully discharge or determine the medical necessity for longer-term inpatient treatment. This option would set the stage for realizing the all payer system's objective of 'seamless' coverage and equal responsibility for uncompensated care.

This option has three alternatives:

OPTION 1A: All acute inpatient care should be provided in psychiatric units of general hospitals. This option has the advantage of treatment in a medical setting in the local community, where medical consultation is readily available during the evaluation and where family members and other community supports may be more readily engaged in treatment. It also has the substantial policy advantage of putting acute care of mental illness on a par with the acute care of other physical illnesses. The option poses several challenges:

Responsibility for funding of uncompensated acute care previously provided in the state hospital or in purchase of care beds in private psychiatric hospitals would be shifted from the state budget to the all-payer system, raising hospital rates but reducing taxes;

Funding for general hospital admissions through hospital rates would likely exceed the tax savings from contraction of the State hospital patient census and elimination of the Purchase of Care program;

Any increase in hospital rates poses a challenge to maintaining a safe margin for the Medicare waiver test;

If there is no parallel expansion of effective outpatient care and diversion programs, the bed capacity in general hospital units would have to be substantially expanded;

Private psychiatric hospitals would lose the revenue from the Purchase of Care program.

To the extent that patients previously hospitalized for acute care in the state hospitals are more expensive to treat, the HSCRC might need to either revise the DRG system to capture this difference in resource intensity or increase the reimbursement rates for the four current DRGs;

Given the lack of facilities expansion in recent years, in spite of increased demand, all-payer reimbursement rates might need to be increased to stimulate hospitals to develop additional capacity; and

Since MHA would no longer be responsible for acute inpatient services for persons who are uninsured, there might be a reduced incentive to develop intensive community programs to avert acute hospitalization. Alternatively, budget savings might be applied in part to improve community-based treatments.

OPTION 1B: All acute inpatient care should be provided either in psychiatric units of general hospitals or in private psychiatric hospitals. This model shares some of the virtues of the first model, and would rely on excess physical capacity that may exist in specialty psychiatric hospitals for the admission of adults not covered by Medicaid. Less expansion of general hospital mental health units would be necessary.

The Purchase of Care program would have to be substantially expanded. Public funding would shift from State hospitals to the purchase of care program. It is unlikely that savings from the reduction in State hospital services would fully fund the expansion of the Purchase of Care program;

Responsibility for funding uncompensated acute care previously provided in the State hospital would be shifted either to the Purchase of Care program (remaining a taxpayer responsibility), or to the all-payer system, raising hospital rates but reducing the need for tax revenues;

Funding for general hospital admissions through hospital rates coupled with the cost of Purchase of Care beds would likely exceed the tax savings from reducing the State hospital patient census;

Any increase in hospital rates poses a challenge to maintaining a safe margin for the Medicare waiver test.

Since MHA would only be responsible for acute inpatient services provided in private psychiatric hospitals for persons who are uninsured, there might be a reduced incentive to develop intensive community programs to avert acute hospitalization. Alternatively, budget savings might be applied in part to improve community-based treatments.

OPTION 1C: All acute inpatient care should be provided either in psychiatric units of general hospitals or in private psychiatric hospitals, but funding of uncompensated care in both settings would be through Purchase of Care beds.

This option retains the advantage of using both general hospital and specialty psychiatric hospital beds, but funds all uncompensated care for the uninsured through the State budget rather than the uncompensated care fund. The MHA retains strong incentives to develop community support programs and diversion/intervention programs.

Funding through appropriations is fundamentally less reliable than funding through the uncompensated care fund; and

Increased funding responsibility for inpatient stays would require either tax increases (offset by some reductions in hospital rates) or damaging reductions in community programs meant to reduce the need for hospitalization.

OPTION 2: Generate increased inpatient capacity in acute general hospitals through rate increases. This option allows part of the problem of emergency department disposition to be solved in isolation, simply by increasing the reimbursement for mental illness DRGs, without regard to underlying costs of providing the service. To the extent that the all-payer system substitutes for a market in which scarcity of a resource would lead to higher prices, the system might raise reimbursement in order to increase supply when there is good evidence for inadequate capacity at current prices. The need to increase prices above reasonable return on costs might suggest that there are other factors at work influencing the willingness of the hospital to increase psychiatric bed capacity. A drawback to this option is that rate increases decrease the margin of protection for the waiver test and increase insurance premiums.

OPTION 3: Restrict emergency receiving facilities to acute general hospitals with psychiatric units. This would minimize or eliminate patient transfers, unless the hospital's psychiatric unit were full, and would align psychiatric emergency evaluation and inpatient treatment. Patients would have easier access to inpatient treatment since the receiving facility was 'psychiatrically equipped'. Referral sources would know that emergency receiving facilities had the ability to provide acute treatment. However, unless combined with Option 2, inpatient bed capacity at these receiving facilities would not necessarily increase sufficiently. The result may only be an increase in transfers from the emergency departments of hospitals with psychiatric units to either Purchase of Care beds or to State hospitals.

OPTION 4: Maximize Federal Financial Participation. In order to maximize Federal Financial Participation under Medical Assistance, Maryland could establish a policy that adult Medicaid beneficiaries would not be referred to private psychiatric facilities. General hospital psychiatric units would provide the majority of acute inpatient treatment and private psychiatric hospitals would provide inpatient treatment only for those under twenty-two (22) years of age or over sixty-four (64).

While this is a financially sound option, it would steer the public market in a clear direction and restrict business opportunities for private psychiatric facilities; and

Unless there is a commensurate increase in utilization of freestanding psychiatric inpatient treatment by individuals with commercial insurance or those who are on Medicare due to disability, these facilities may experience a substantial deterioration in their revenue base.

OPTION 5: Under a new federal administration, Maryland would seek reinstatement of the previous IMD waiver. Allowing Medicaid eligible individuals to be treated in private psychiatric hospitals with Federal cost sharing would provide a cost-effective alternative to hospitalization in general hospital units and remove some of the pressure to expand inpatient bed capacity in general hospitals. The principle concern with this option is the low likelihood of success, given the prominent concerns about the expanding costs of Federal entitlement programs.

OPTION 6: Include private psychiatric facilities in the uncompensated care fund but not in the Medicaid waiver test. This option provides a way to fund uncompensated care for mental illnesses in the same way as physical illnesses, without endangering the all-payer waiver.

Although appealing, implementation would probably require capturing the uncompensated care from private payers only, not from Medicare or Medicaid, which would in turn result in different rates, violating one of the fundamental principles of the all-payer system; and

The State has generally avoided opening any detail of the waiver to negotiation or legislation, since there is some danger that critical provisions of the waiver – or the waiver itself – might be lost in the process.

VIII. TASK FORCE DISCUSSION QUESTIONS

1. Do you think the role of the State, general, and private psychiatric hospitals should be changed? If yes, how?
2. Should the State establish a policy that all acute inpatient treatment occurs in general hospitals psychiatric units and private psychiatric facilities?
 - a. If yes, which patients should be considered acute?
 - b. Are there any significant barriers to adopting this policy?
 - c. If there are barriers, how can those barriers be addressed?
3. Should general hospitals' referral practices be aligned with the State's objective of having all payers share the burden of uncompensated care?
4. Should efforts be made to determine whether general hospital psychiatric units and private psychiatric facilities could create additional inpatient psychiatric capacity?
5. Should changes be made in the criteria used to designate emergency receiving facilities so that only general hospitals with psychiatric units have this status?
6. Should incentives and disincentives be created to encourage general hospitals and private psychiatric facilities to accommodate all patients requiring acute inpatient admission?
7. For emergency departments whose hospitals don't have psychiatric units, should transfers be made to other psychiatric units regardless of ability to pay and be covered under the all payer system?
8. Are there any states that you regard as having a good model in terms of the role of the state, general, and private psychiatric hospitals?



White Paper

**BEST PRACTICES: CRISIS RESPONSE AND
DIVERSION STRATEGIES**

Prepared for the

**Task Force on the Plan to Guide the Future
Mental Health Service Continuum**

**For Review and Discussion at the
May 27, 2008 Task Force Meeting**

MARYLAND HEALTH CARE COMMISSION

Plan to Guide the Future Mental Health Services Continuum in Maryland

White Paper Best Practices: Crisis Response and Diversion Strategies

Table of Contents

- I. Introduction**
 - Joint Chairman’s Direction
 - Plan to Guide the Future Mental Health Services Continuum
 - Purpose of the White Paper

- II. Effective Crisis Response And Diversion Strategies**
 - Introduction
 - Components of a Crisis Response System
 - Role of Emergency Departments
 - Diversion Services

- III. Relevant Research and Literature**
 - Crisis Research and Literature
 - Mobile team based approaches
 - ACT
 - Partial hospital
 - Outpatient Commitment
 - Law Enforcement Models
 - Urgent Care
 - ED Diversion
 - Detoxification

- IV. Description of Crisis and Diversion Services in Maryland**
 - Crisis Services
 - Hospital Diversion Programs
 - Pathways to Crisis and Diversion Services
 - Crisis Expenditures
 - Diversion Services
 - Emergency Department Models

- V. Data on the number of individuals needing/seeking crisis or diversion services**

- VI. Areas of Concern**

- VII. Policy Options**

- VIII. Task Force Discussion Questions**

I. INTRODUCTION

A. Joint Chairmen's Direction

The 2007 Joint Chairmen's Report¹ (JCR) directed the Maryland Health Care Commission (MHCC or Commission) to work with the Department of Health and Mental Hygiene and Maryland's Mental Health Transformation State Incentive Grant (MHT-SIG) to develop a plan to guide the future mental health service continuum needed in Maryland. The report recommended that the Maryland Health Care Commission develop projections of future bed need for acute inpatient psychiatric services (in State-run psychiatric, private psychiatric and acute general hospitals) and community-based services and programs needed to prevent or divert patients from requiring inpatient mental health services, including services provided in hospital emergency departments. To guide the development of the plan, the JCR identified key stakeholder organizations to be included on a Task Force to provide assistance to the Commission in the development of the plan.

B. Plan to Guide the Future Mental Health Service Continuum

The Plan to Guide the Future Mental Health Service Continuum is intended to address a number of key questions, including:

- What are the service components of the crisis emergency system (including acute inpatient treatment)?
- How will the components differ across urban, suburban and rural areas?
- Which crisis response services should be generally available and which should be targeted to specific and/or enrolled clients?
- Who is expected to access the services?
- Where are the services needed? What service components should be available in urban, suburban and rural areas?
- What will the service components cost?
- What are the roles of the private, and public sectors-local government and state government?
- What financial base is available to support service development and use? Will existing dollars be diverted to these services or will the services only be created through new funding?
- How will the plan be implemented?

Plans should guide the development of effective crisis and diversion strategies to inpatient psychiatric admissions. A plan should be developed and structured so that those persons and agencies responsible for mental health service policy development, facilities regulation, and service funding recognize its practical value in their work. To ensure that the plan has lasting value, it must be linked to resource allocation, either through regulatory processes such as CON or legal requirements such as parity legislation, or as a template used in driving public appropriations or influencing private sector spending decisions.

¹ Chairmen of the Senate Budget and Taxation Committee and House Committee on Appropriations, *Report on the State Operating Budget (HB50) and the State Capital Budget (HB51) and Related Recommendations*, Joint Chairmen's Report, Annapolis, Maryland, 2007 Session, p. 97-98.

C. Purpose and Scope of the White Paper

This White Paper is the third in a series that will support the development of the *Plan to Guide the Future Mental Health Service Continuum*. The White Paper provides a template for a “good” system of crisis and diversion services. It also provides relevant research and literature regarding the effectiveness of various crisis and diversion services, including the use of outpatient commitment to divert individuals from inpatient services. The paper also provides an overview of the various crisis and diversion services offered in Maryland, including a description, location, utilization and expenditures for these services. It provides an overview of the various pathways for access to crisis and diversion services. Finally, the paper discusses options Maryland may use to improve its diversion and crisis services and questions for Task Force discussion.

II. EFFECTIVE CRISIS AND DIVERSION STRATEGIES

A. Introduction

The President’s New Freedom Commission on Mental Health in 2003 called for the use of evidenced-based practices in the delivery of mental health services.² These evidenced based practices have focused on various services for adults and children who have significant mental health needs. In some instances, these services include interventions that prevent or divert an individual from an emergency department and/or an inpatient psychiatric setting. For instance, programs of Assertive Community Treatment are available 24/7 to individuals who may experience a psychiatric crisis.

Crisis services, while not technically an evidenced based practice, are an important part of the continuum of publicly funded mental health services. Over the past several decades they have played an important role in providing immediate access to critical psychiatric services (e.g. evaluations, psychotropic medications and supportive counseling) as well as basic services such as emergency housing, food and clothing. The primary purpose of crisis services is to determine the individual’s risk for hospitalization and/or the ability to use community services to stabilize the individual. Crisis services also provide various post stabilization activities including referral and linkage to intensive outpatient services and supports.

Crisis service providers are generally available 24 hours a day, 7 days a week. They work closely with other community resources including police departments and other social service agencies to respond to the needs of the individual in crisis and their caregiver. They also work closely with hospital emergency departments (ED) to assist the individual to gain access to needed inpatient care or to divert the individual to other services. The crisis providers may provide transport for the individual to or from the ED.

In many instances, crisis providers respond to individuals who are current consumers of mental health services. For these individuals, crisis providers provide same day or next day triaging and communication to ensure the “treating” provider provides the necessary follow-up care.

² The President’s New Freedom Commission on Mental Health, July 2003, p 67

B. Components of a Crisis Response System

A well functioning crisis response system is comprised of several critical functions. These functions include: telephone crisis and triage; face to face crisis response; crisis residential services; urgent care; and, transportation. In some jurisdictions, these functions are performed by one organization often in a centralized location³. Each of these functions is discussed in more detail below.

- ***Telephone Crisis and Triage***

Organizations that provide telephone crisis and triage perform these functions 24 hours a day, 7 days a week. These organizations often have a "call center" where clinicians and other well trained staff are available to callers who are seeking immediate assistance in an emergent situation. These organizations often have toll-free numbers for their call centers. In some instances, a state may have a statewide toll free number that routes a caller to a local call center based on the area code and or prefix of the caller's phone number. Staff at a call center will assess each caller's risk and determine if a crisis team should be dispatched, contact law enforcement or refer and/or make a same or next day appointment for individuals that have urgent and not emergent mental health needs.

- ***Face to Face Crisis Response***

Staff at the call center may dispatch a crisis worker (or team) to offer an immediate face to face response to an individual in acute psychiatric crisis. This face to face response often includes an assessment of the crisis and determination whether to transport to the individual to the ED, contact law enforcement or provide stabilization services. Stabilization services can include a variety of interventions including an assessment, psychiatric consultation, medication administration, supportive counseling or referral to other services including crisis residential. Crisis response can occur at multiple locations including homes, emergency rooms, police stations, outpatient mental health settings, schools, etc.).

Face to face assessments can also occur at sites that deliver mental health outpatient services. In some instances, outpatient providers schedule a practitioner to be available to respond to individuals that present at their agency with a psychiatric emergency.

Organizations that provide face to face crisis response may also perform other critical functions for the mental health system. In some jurisdictions, including Maryland, mobile crisis workers or teams provide a "gatekeeping" function for admissions to inpatient hospitals. They may also be responsible for managing access to other intensive services including crisis residential beds.

- ***Urgent Care Centers***

Urgent care centers provide fast access to an initial assessment and brief treatment to address the immediate illness. Generally, urgent care services are available to individuals on the same or next day—usually within 24 hours of the request for services. Urgent care centers have extended hours, operating during the evenings and on weekends. These facilities are staffed by medical and other professionals that can render the needed services.

³ The Technical Assistance Collaborative, A Community-based Comprehensive Psychiatric Crisis Response Service and Informational and Instructional Manual, April 2005, page 8-12.

- ***Crisis Residential Services***

In some instances, individuals who do not need inpatient psychiatric care may benefit from a short term supervised environment. This environment provides services that support their stabilization including some level of medical oversight. These services can be provided in a small group home (less than 6 beds) that is specifically for individual in crisis or it may be offered in a facility that has a bed(s) earmarked specifically for emergency use. The average length of stay for crisis residential services varies among states. The range is 3-7 days for both adults and children.

- ***23-Hour Beds***

Twenty-three hour beds offer more brief and intensive medical services and oversight than crisis residential programs. Twenty-three hour beds are often operated by inpatient facilities (general hospitals with acute care capacity and private psychiatric facilities). Twenty-three hour beds may be appropriate for individuals who have acute symptoms that can be treated and released within 24 hours.

- ***Transportation***

Individuals may often need transportation when experiencing a psychiatric crisis. Transportation services are generally provided by mobile crisis workers or a combination of crisis workers and law enforcement. Transportation may be provided to various locations including home, emergency departments, crisis residential services and to urgent care services.

- ***Medically Monitored Detoxification***

As previously indicated, individuals who seek crisis services often have significant substance use or abuse histories. Medically monitored detoxification is for individuals who are experiencing signs and symptoms of severe withdrawal of alcohol or drugs. These individuals can benefit from medically monitored detoxification. Medically monitored detoxification provides for 24-hour medically supervised evaluation and withdrawal management. Services are delivered under a defined set of physician-approved policies and physician-monitored procedures and are delivered by medical and nursing professionals.

C. Role of Emergency Department in Crisis and Diversion

Individuals with psychiatric conditions often seek services at hospital emergency departments (ED). For a range of reasons related to quality of care, bed and other resource management, EDs have re-thought their strategies for delivering treatment for persons with psychiatric emergencies. Care management strategies may include the creation of a separate service space proximate to, but separate from the frenetic pace of the main emergency department. Most models include specialized and sometimes multi-disciplinary staffing—a mix of psychiatrists, psychiatric nurses, psychologists, clinical social workers or counselors with expertise in assessing and treating psychiatric emergencies. In this “carved out” setting, the course of care can often result in considerable clinical improvement, reducing the need for inpatient hospitalization. The level of effectiveness in inpatient diversion is further enhanced if there is routine communication and coordination of care with providers of Mobile Crisis Teams, Urgent outpatient services, Crisis Residential, Detoxification and other crisis system services described above.

In many emergency departments, the clinical pathway for persons with psychiatric presentation is no different than for any other patient. It typically starts with an initial screening by a triage nurse, assessment in the general ED bay followed by either admission to an inpatient unit or discharge.

However, Emergency Departments may employ a mix of strategies in managing the care and safety of patients presenting with psychiatric conditions to the emergency department of hospitals. The nature of the strategies is likely influenced by overall bed demand in the emergency department, availability of psychiatrists and other specialists, and the level of competence in psychiatric care management. Strategies commonly employed are related to:

- **Physical Space**—Strategies can range from assigning permanent rooms/beds within the ED proper to creating an area outside of, though often adjacent to, the ED. Most effective are strategies that reduce the pressure on staff to rush to a disposition in order to free beds or focus on acute medical emergencies.
- **Staffing**—The on-site or on-call availability of psychiatrists or properly trained psychologists, nurses, social workers or professional counselors to provide specialized assessment, treatment and discharge planning services.
- **Course of Treatment**—Different protocols related to the length or course of treatment for persons with a psychiatric presentation allow greater opportunity for the delivery of brief treatment and stabilization of symptoms, reducing the need for admission. In some instances planned observation of up to 24 hours is possible without the need for admission.
- **Community Collaboration**—The most effective, available and broadly affordable community-based treatment resources are often provided outside of traditional medical networks of care. Knowing how to access a range of time-sensitive, clinically appropriate services including urgent appointments and crisis residential services on behalf of patients can reduce the need for inpatient care. MCT or PACT team members will often respond to hospitals to assist in accessing these services.

D. Diversion Services

In addition to the various crisis intervention services described above, there are several interventions that either have crisis services imbedded as part of their approach or can be effective in preventing or diverting individuals for inpatient psychiatric care. These include: assertive community treatment and other mobile team based approaches, and partial hospitalization. In addition, some states have attempted to use outpatient commitment to address individuals that are frequent users of inpatient psychiatric services or have frequent contact with law enforcement due to their mental illness. Each of these services is described in brief.

- **Mobile Crisis Teams**

Mobile Crisis Teams offer time-limited, on-demand services generally in a natural environment. Mobile Teams can be designed to serve a defined and known age group (children or adults), target population (e.g. individuals who are homeless) or risk group (children at risk of an out-of-home placement). The target of the mobile service, service demand, geographic considerations, and the available array of crisis service influence decisions about the makeup of the team (may be single-clinician response), hours and days of availability (many teams are 24/7/365) and response timeframes. Often provided in homes, schools, nursing homes and group home settings, mobile crisis services can eliminate the need for transportation (many times by law enforcement officers or emergency squads) to a hospital emergency department or community crisis site. The effectiveness of a mobile crisis service in de-escalating a crisis and diverting hospitalization is enhanced by team members who are competent in performing an assessment and delivering an effective course of intervention and having access to a multi-disciplinary support team, ready resources such as access to urgent appointments, brief respite services (either in or out of home) and the ability to provide brief follow up care if indicated.

In addition, the Crisis Intervention Team (CIT) is another mobile team based approach staffed with specially trained police officers who serve as first responders to mental health crisis situations and maintain safety in these encounters.

- ***Partial Hospitalization***

Partial hospitalization programs are time limited, medically supervised programs that offer comprehensive, therapeutically intensive, coordinated, and structured clinical services. Partial hospitalization programs are available at least five days per week but may also offer half-day, weekend, or evening hours. Partial hospitalization programs may be freestanding or part of a broader system but should be identifiable as a distinct and separately organized unit. A partial hospitalization program consists of a series of structured, face-to-face therapeutic sessions organized at various levels of intensity and frequency. Partial hospitalization programs are typically designed for persons who are experiencing increased symptomatology, disturbances in behavior, or other conditions that negatively impact the mental or behavioral health of the person served. The persons served in partial hospitalization do not pose an immediate risk to themselves or others. Partial hospital programs offer an alternative to inpatient care or can be used following an inpatient stay in lieu of continued hospitalization.

- ***Outpatient Commitment***

Outpatient commitment involves a court order mandating a person to follow a treatment plan or risk sanctions for non-compliance, such as potential involuntary hospitalization and treatment. More than one-half of the states give courts the authority to order a person with mental illness to comply with either inpatient or outpatient treatment⁴.

- ***Walk-in/Same Day Clinic Models***

A considerable factor in the heavy use of hospital emergency departments by persons experiencing a psychiatric crisis is the absence of accessible, timely alternatives. Even persons who have an ongoing service provider may find it difficult to access a rapid appointment in the early stages of a crisis. Issues related to worsening symptoms, thoughts of self-harm, lost prescriptions, medication side effects, or psychosocial stressors are generally easily managed in the early stage, but if not addressed in a timely fashion can escalate into a full-blown and high risk crisis that threatens recovery and can be quite debilitating. Virtually every treatment agency has the ability to carve out a portion of time each day or week to create urgent treatment slots—greatly contributing to a community's supply of crisis resources.

- ***Peer-Operated Centers***

Peer-Operated Centers that offer crisis support can be a viable place to turn both in the early phase of a crisis and following discharge from intensive services. Some peer operated centers are specifically equipped to offer crisis support and even brief respite care. Some staff at peer centers accompany the individual to the emergency department. These individuals perform a variety of functions ranging from supportive counseling to ensuring a consumer's pets are attended to if hospitalization is necessary. Symptoms such as loneliness, isolation, fear and anxiety can escalate to a crisis level, particularly on evenings and weekends, when traditional services are less available. Peer-Operated Centers typically

⁴ The Bazelon Center for Mental Health Law, *Studies of Outpatient Commitment are Misused*, July, 3, 2001

offer an array of structured and unstructured opportunities to interact with others. Services are voluntary, non-traditional, and delivered by persons with first-hand knowledge of mental illness and the periods of crisis that sometimes accompanies it.

- ***Assertive Community Treatment***

Assertive Community Treatment is an intervention that is designed to provide multidisciplinary psychosocial treatment in a community-based setting to individuals who have a severe and persistent mental illness. This service is provided by a team comprised of a psychiatrist, nurse, peer specialist and other staff that offer addiction treatment, supported employment and case management.

- Multidisciplinary treatment teams with a low client to case manager ratio (e.g., 10 to 1 rather than 30 to 1 or more)
- Shared caseloads among clinicians (rather than individual caseloads)
- Direct provision of services, rather than brokering services to other providers
- 24-hour coverage, including emergencies
- Close attention to illness management
- Most services provided in the community, rather than at the clinic
- High frequency of contact with consumers

III. BACKGROUND ON CRISIS SERVICES AND LITERATURE REVIEW

There is a considerable body of evidence suggesting that crisis and diversion services can improve outcomes for consumers, reduce inpatient hospital stays and costs, and facilitate access to other necessary mental health services and supports. In many communities, crisis response services also perform important public health, public safety, and community well-being functions. A brief review of the literature on crisis and diversion services is presented below.

A. Crisis Services

Over the past forty years, the reduction of state hospital beds impacted the use of emergency departments and private inpatient psychiatric facilities. From 1950 to 2000, the number of state-operated psychiatric beds fell to 59,403 from xxx, while the number of state hospitals declined from 322 to 272.⁵ During the same time, shorter admissions to private inpatient facilities increased.⁶ Hospital emergency departments often became the default location of psychiatric crisis management⁷. The use of emergency departments to manage psychiatric crisis had several unintended consequences. EDs provided immediate access to care but did not provide or coordinate the necessary aftercare support to individuals who were released. In some instances, the use of EDs resulted in unnecessary hospitalization—especially when limited or no crisis stabilization or ongoing treatment and supports were available in the local community.^{8,9}

⁵ Geller, J.L., 2000

⁶ Geller, J.L., 2000

⁷ TAC, 2005

⁸ Clarke Institute of Psychiatry. Health Systems Research Unit. Best Practices in Mental Health Reform: Crisis Response Systems/Psychiatric Emergency Services.

⁹ Cesnik, B.I. & Stevenson, K..H. (1979).

There have been a number of studies that have focused on efficacy of crisis services. A 1999 study reviewed and compared the outcomes of individuals that were admitted to crisis residential programs versus those individuals that were admitted to inpatient psychiatric care. The results of the study indicated that short term residential treatment was less expensive and as effective as inpatient psychiatric treatment¹⁰.

A 1996 review of twelve studies indicated that crisis and emergency department services demonstrated the capacity to prevent institutionalization and provided better behavioral outcomes for children and youth¹¹. In addition several studies examined the effectiveness of various crisis models: a mobile crisis team, short-term residential services, and intensive in-home service. The data from these studies showed that mobile crisis interventions prevented emergency department visits and out-of-home placements. Another study reviewed a crisis program, in Suffolk County, New York, that provided short-term residential services to youth. In this study most children were diverted from inpatient hospitalization. In addition inpatient admissions to the state children's psychiatric center were reduced by 20 percent¹².

B. Mobile Crisis Services

There are several documents that provide information and research on mobile crisis approaches. For instance, the SAMHSA in its 2002 guide "Promoting Older Adult Health: Aging Network Partnerships to Address Medication, Alcohol and Mental Health Problems" recognized a Kings County, Washington mobile crisis team as a promising practice that targets services to physically and medically compromised older adults who are at risk for involuntary hospitalization and in the process addresses other risks such as pending eviction, abuse, dementia, and social isolation.¹³

A study by Guo, Biegel, Johnsen and Dyches published in 2001 found that "a matched sample of consumers who used hospital-based crisis services were 51 percent more likely to be hospitalized after other variables had been controlled for, than users of community-based mobile crisis services."¹⁴ A study published in the Australian and New Zealand Journal of Psychiatry in August 2002 concluded that "[e]mergency psychiatric services which include a mobile component and provide a specialized multidisciplinary team approach appear to be most effective in providing services in the least restrictive environment and avoiding hospitalization." The study found that "[h]ospital-based emergency service contacts were found to be more than three times as likely to be admitted to a psychiatric inpatient unit when compared with those using a mobile community-based emergency service, regardless of their clinical characteristics. Those with severe mental health disorders such as schizophrenia and major affective disorder, and experiencing problems with aggression, non-accidental self-injury, hallucinations and delusions, problems

¹¹ Kutash, K., & Rivera, V. R. (1996). *What works in children's mental health services: Uncovering answers to critical questions*. Baltimore: Paul H. Brookes

¹² Shulman, D. A., & Athey, M. (1993). Youth emergency services: Total community effort, a multisystem approach. *Child Welfare*, 72, 171-179.

¹³ *Promoting Older Adult Health: Aging Network Partnerships to Address Medication, Alcohol and Mental Health Problems*, U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 5600 Fishers Lane, 2002.

¹⁴ Shenyang Guo, David E. Biegel, Jeffrey A. Johnsen, and Hayne Dyches, *Assessing the Impact of Community-Based Mobile Crisis Services on Preventing Hospitalization*, *Psychiatr Serv*, Feb 2001; 52: 223 - 228.

with occupation, activities of daily living, and living conditions were more likely to be admitted to hospital. Nevertheless, after controlling for clinical characteristics, site of initial assessment accounted for a substantial proportion of the variance in decisions to admit to hospital."¹⁵

Mobile crisis teams have an advantage over emergency departments. While emergency department staff, perhaps necessarily, focus on determining whether criteria for inpatient treatment is met, a Mobile Crisis Team has the potential to effectively intervene in early and acute stages of a crisis, offer an array of brief treatment services, facilitate movement to a higher level of care, including hospitalization if indicated, assure continuity of treatment and address any number of psycho-social risk factors.

C. Program of Assertive Community Treatment

Research on ACT has focused on several measures to determine the effects of the model. These measures include: reduction in hospital utilization, housing stability, diversion from jail, continued use of medication, costs and quality of life of ACT participants. There have been over 40 studies that reviewed ACT's efficacy¹⁶. Most of these studies have been conducted in urban areas and focused on individuals with a history of high inpatient use. Among the 23 studies that examined the effect of ACT on time in hospital, 14 or 61 percent reported positive effects on hospitalization¹⁷. The most comprehensive study analyzing ACT's impact on inpatient service utilization involved nearly 1,000 consumers in the Veteran's Administration. The study found that consumers who participated in ACT used approximately one-third less inpatient care than those in the control group¹⁸. An earlier study found that 167 consumers receiving assertive case management were hospitalized for an average of 9.2 days, in comparison to the control group who were hospitalized for an average of 30.8 days.¹⁹ Both of these studies cite the ability to monitor the consumers more closely and to deliver medications as a key contributor to the reduction of rehospitalization.

D. Partial Hospitalization

There have been several studies that reviewed the literature on the effectiveness of partial hospitalization as an alternative to inpatient care. Horvitz-Lennon, et al. (2001) reviewed the research that compared partial and full hospitalization across several domains. This study reviewed eighteen studies published between 1957 and 1997. The authors concluded that outcomes of individuals participating in partial hospitalization were no different from

¹⁵ Hugo, Malcolm; Smout, Matthew; Bannister, John, *A Comparison In Hospitalization Rates Between A Community-Based Mobile Emergency Service And A Hospital-Based Emergency Service*, Australian and New Zealand Journal of Psychiatry, Vol. 36 Issue 4 Page 504 August 2002

¹⁶ The Lewin Group, *Assertive Community Treatment Literature Review*, Prepared for HCFA and SAMHSA, April, 2000

¹⁷ Community Based Treatment of Schizophrenia, *Assertive Community Treatment*, *Medscape General Medicine*, 2001

¹⁸ Phillips, S., Burns, B. Edgar, E., Mueser, K., Linkins, K., Rosenheck R., Drake, R., McDonel Herr, E. (2001) Moving Assertive Community Treatment Into Standard Practice, *Psychiatric Services*. 52 (6): 771-779

¹⁹ Bond G., McGrew, J., Ward, R. (1988) Assertive Case Management in Three CMHCs: A Control Study, *Hospital and Community Psychiatry*. 39 (4): 411-418

those individuals receiving inpatient care²⁰. An earlier review of studies focusing on partial hospitalization also found that partial hospitalization produces outcomes equivalent to those of inpatient treatment in symptom improvement, relapse reduction and family adjustment²¹. This review also indicated that partial hospitalization treatment was superior to inpatient care in improving social functioning. Another review in 2003, reviewed admissions to inpatient care for their appropriateness for partial hospitalization. The review identified nine randomized controlled studies of acute day hospital treatment among 2,268 individuals. The studies were conducted between 1988 and 1997. This review indicated that between 23 to 38 percent of all consumers admitted for inpatient services could have been treated in partial hospitalization²². In addition the study found that those individuals showed a more rapid improvement in mental state than patients randomized to inpatient care. There was also evidence of increased satisfaction of patients.

It should be noted that several studies discussed the confusion caused by the breadth of the definition of partial hospitalization. Some partial hospital programs are intensive treatment settings designed to substitute for aspects of an inpatient episode, while other so-called partial hospital programs are also referred to as "day care" and serve as low intensity, drop-in centers for clients. This confusion has made it difficult to interpret the research results on evaluations of this service. In addition, these studies also indicate the decline in the use of partial hospital services over the past 25 years due to increases in various psychosocial rehabilitative services, including Assertive Community Treatment.

E. Outpatient Commitment

The literature on outpatient commitment indicates that it does not produce better outcomes and is no more effective at preventing hospitalization than evidence-based practices offered voluntarily. It is also not widely used or enforced, even where it is available. These were the conclusions of several studies and the Surgeon General in 1999. Some early non-experimental studies suggested that outpatient commitment might reduce the overall need for hospital care, but experimental studies did not confirm these earlier studies. More recently, a review performed by the Cochrane Collaborative identified 29 studies of mandated community treatment. The reviewers concluded that involuntary commitment resulted in no significant difference in service use, social functioning or quality of life compared with "standard care" such as routine outpatient care and assertive community treatment.²³

The Rand Health and Rand Institute for Civil Justice also did a review of eight states' involuntary outpatient commitment programs. The research team conducted interviews with 37 prosecuting and defense attorneys, psychiatrists, and local behavioral health officials to learn how involuntary outpatient treatment had been implemented in their states; how

²⁰ Horvitz-Lennon, M, Normand SL, Gaccione, P., Frank, R, Partial versus Full Hospitalization for Adults in Psychiatric Distress: A systematic Review of the Published Literature (1957-1997), *American Journal of Psychiatry*, May 2001, p 676-685

²¹ Hoge, M., Davidson, L., Hill, W.L., Turner, V, and Ameli, R, The Promise of Partial Hospitalization: A Reassessment, *Hospital and Community Psychiatry*, April 1992 43 (4) pp 345-354

²² Marshall, M., Crowthe, R, Almaraz-Serrano, AM, Creed F, Sledge WH, Kluiters H. Day Hospital versus admissions for psychiatric disorders, *Cochrane database Syst Rev*, 2003; (1):CD004026

²³ Kiskey, S., Campbell, LA, Preston, N. Compulsory Community and involuntary outpatient treatment for people with severe mental disorders. *The Cochrane Database of Systematic Reviews* 2005, Issue 3. Art No: CD004408 pub. 2

consistently it had been implemented across jurisdictions, judges, and providers; and how it had affected patients, providers, treatment resources, and care. The respondents from the Rand study felt that outpatient commitment is neither as effective a solution to the problem of compliance as its advocates claim nor, in its practical application. For example, a patient under outpatient commitment orders can be required to attend a program but cannot be forced to take medication unless found incapable of making such a decision. In addition, a patient who is under an outpatient commitment order cannot be committed to a hospital unless the criteria for admission are met at the time of refusing to cooperate with outpatient treatment. Police are often too busy with other matters to respond to a request by a clinician to enforce an outpatient commitment order by compelling a patient to attend a clinic or other program.

Only two studies of outpatient commitment used randomized clinical trials—one in New York and another in North Carolina. The investigators in New York compared outcomes such as rates of rehospitalization, arrests, quality of life, psychiatric symptoms, and homelessness for two groups: individuals with a mental illness subject to involuntary treatment and individuals receiving intensive services but without a commitment order. Comparing those subjected to outpatient commitment with those who were offered access to the same intensive services, the study found:

- no additional improvement in patient compliance with treatment;
- no additional increase in continuation of treatment;
- no differences in rates of hospitalization;
- no differences in lengths of hospital stay; and
- no difference in arrests or violent acts committed²⁴.

A Duke University Study was somewhat consistent with the New York findings. The experimental portion of this study found that hospital admissions and lengths of stay did not differ significantly for participants randomly assigned to outpatient commitment and those in a control group who were not under commitment²⁵. When the experiment was concluded, the investigators identified individuals who they felt would benefit from extended outpatient commitment. Those individuals tended to have better outcomes than individuals who were not subjected to outpatient commitment. These latter results are *not* considered experimental evidence and to a great extent reflect the skills of the investigators in selecting individuals for extended commitment.

The evidence suggests that outpatient commitment is unlikely to offer better outcomes than can be achieved with intensive treatment offered voluntarily. This was also the conclusion of the Surgeon General in the 1999 report on mental health.

F. Law Enforcement's Crisis Intervention Teams

Crisis response systems serve a variety of community stakeholders, with one important constituent being law enforcement. Given their responsibilities and interface with the public, law enforcement personnel have the greatest likelihood of encountering persons at some

²⁴ Final Report: Research Study of the New York City Involuntary Outpatient Commitment Pilot Program, (at Bellevue Hospital). Policy Research Associates, December 4, 1998

²⁵ Swartz, M.S. et al., Can Involuntary Commitment Reduce Hospital Recidivism? Findings From a Randomized Trial with Severely Mentally Ill Individuals. *American Journal of Psychiatry*, 12: 1968-1974 (1999).

level of psychiatric distress, as well as friends and family who may be intervening on their behalf. Since police officers are not mental health professionals, it's important to provide them with support and training that will allow them to interact effectively with individuals in psychiatric crisis.

One of the most widely used models of a collaborative partnership between law enforcement and mental health providers is the Memphis Police Department's Crisis Intervention Teams (CIT) which is part of their Community Policing Program. Operated as a partnership with local mental health providers, two universities and the local Alliance for the Mentally Ill, CIT utilizes specially trained, volunteer officers who serve as the front-line response to potential mental health crisis. These officers provide an immediate response to escalating situations and offer a calm approach that reduces the likelihood of physical confrontations and serves as an alternative to traditional policing methods. Today, the so-called "Memphis Model" has been adopted by hundreds of communities, including several in Maryland, and in more than 35 states. The CIT model is also being implemented statewide in Ohio, Georgia, Florida, Utah, and Kentucky²⁶. The CIT is a partnership with local mental health providers, the local chapter of the Alliance for the Mentally Ill, and the Universities of Memphis and Tennessee.²⁷

G. Urgent Care

As with all of health care, the common best practice belief is that a general emergency department should not be utilized for non-emergency situations that could be more effectively treated in a primary care or urgent care setting. Urgent care services are services which are required for an illness or injury that would not result in further disability or death if not treated immediately, but require professional attention and have the potential to develop such a threat if treatment is delayed longer than 24 hours. Industry standards expect that treatment is provided within 24 hours (generally the same or next day appointment) to address the illness. This compares to emergent services which often require immediate response—generally within one hour of the request for care). Urgent care centers can be free-standing facilities, located in local communities that provide immediate access to an initial assessment and brief treatment to address the immediate illness. Urgent care centers may also part of a hospital or an outpatient clinic. They generally have extended hours, operating during the evenings and on weekends. These facilities are staffed by medical and other professionals who can render the needed services.

Though research on psychiatric urgent care is limited, there is research available regarding the impact of medical treatment in a primary or urgent care setting versus emergency departments. The American Academy of Urgent Care Medicine (AAUCM) asserts that "[t]hrough the exact number of these patients is a subject of debate, reasonable estimates of the number of ED patients who could be safely and adequately cared for in a clinic type facility range between 10% and 50%."²⁸

H. Emergency Department Diversion

A review of patient demographics and presenting problems, and psychosocial variables will often lead to the identification of community-specific strategies in diverting the flow of persons with psychiatric presentation into emergency departments.

²⁶ CIT in Action - Vol. 3 Issue 1, Retrieved from the NAMI website at: www.nami.org

²⁷ Retrieved from the CIT website at: <http://www.memphispolice.org/communit.htm>.

²⁸ AAUCM 'viewpoints', www.aaucm.org

The American Hospital Association (AHA) developed a series of recommendations to assist general hospitals in improving their behavioral health services. With recognition that often associated factors such as poverty, homelessness, legal involvement, and other social issues add to the complexity of delivering effective treatment, AHA recommends community-wide coordination and collaboration. When an array of social services and resources “are available in a coordinated and collaborative network of services, patients with behavioral health needs have alternatives to the hospital’s emergency department. Where the services are a disorganized or fragmented patchwork, the hospital’s emergency department often becomes the default point of access. It is in the hospital’s own self-interest to help provide the leadership and initiative to develop a community-wide plan of services and for staff to be aware of behavioral resources in the community.”²⁹

A study of treatment patterns for Medicaid recipients with co-occurring mental health and substance abuse services was performed in 2007. This study indicated that these individuals were six times more likely than those with a mental health diagnosis to be hospitalized for psychiatric treatment.³⁰ In addition, this study indicated these individuals in all five states were also significantly more likely than those with a severe mental illness alone to receive treatment in an emergency department. Patients with 11 or more visits over a five year period at a hospital psychiatric emergency service in Montreal were more likely to fall in one or more of the following categories: diagnosis of schizophrenia, co-morbid diagnosis, younger in age, and/or more economically disadvantaged.³¹ “Homeless individuals with mental disorders accounted for a large proportion of persons who received psychiatric emergency services” in urban San Francisco.³²

Practices related to the issuance of emergency petitions can vary by community and are worthy of review. Maryland law permits “any interested person” to file a petition for emergency evaluation for review of a judge.³³ A 2006 retrospective review of 300 persons brought to Johns Hopkins Memorial Hospital on Emergency Petition found that 37% of persons were discharged from the emergency department. Of the persons admitted to an inpatient psychiatric unit, 67% were admitted voluntarily.³⁴ Given these numbers the potential exists to offer diversionary options upstream of the emergency petition, perhaps in conjunction with the courts issuing the petitions.

A pattern of very short stay admissions (less than 72 hours) suggests that less-restrictive, non-hospital services, had they been readily available, might work to reduce trips to the emergency department or admissions from the ED to an inpatient treatment unit. A 2000 study of 92 admissions to an observation unit at a Veterans Affairs Medical Center in lieu of

²⁹ AHA Task Force on Behavioral Health, *Behavioral Health Challenges in the General Hospital: Practical Help for Hospital Leaders*, 2007

³⁰ Robin E. Clark, Mihail Samnaliev, and Mark P. McGovern, Treatment for Co-occurring Mental and Substance Use Disorders in Five State Medicaid Programs, *Psychiatric Services*, Jul 2007; 58: 942 - 948.

³¹ Yves J. A. Chaput and Marie-Josée Lebel, Demographic and Clinical Profiles of Patients Who Make Multiple Visits to Psychiatric Emergency Services, *Psychiatric Services*, Mar 2007; 58: 335 - 341.

³² Dale E. McNeil and Renée L. Binder, Psychiatric Emergency Service Use and Homelessness, Mental Disorder, and Violence, *Psychiatric Services*, Jun 2005; 56: 699 - 704.

³³ Maryland Code Ann., Health-Gen. Section 10-620 through 10-626, 2002

³⁴ Janofsky, Jeffrey S., Tamburello, Anthony C., Diversion to the Mental Health System: Emergency Psychiatric Evaluations, *J Am Acad Psychiatry Law* 2006 34: 283-291

hospitalization found that 88% of persons admitted were successfully discharged the following day and referred to ongoing treatment

To a degree that varies by locale, there has been a shift in the delivery of behavioral health crisis services from hospital emergency rooms to the community. However, research suggests that the emergency room remains a pivotal component in the overall delivery system, and throughout the country demand for this service has increased. "From 1992 to 2001, there were 53 million mental health-related visits, representing an increase from 4.9 to 6.3 percent of all emergency department visits and an increase from 17.1 to 23.6 visits per 1,000 U.S. population across the decade." Of that number 22% of diagnoses were substance use related disorders.³⁵

I. Detoxification Services

Detoxification is only the first stage of treatment for withdrawal from alcohol or drugs. The primary purpose of medical detoxification is to manage the physical symptoms of withdrawal in a safe and secure environment. The available research regarding the benefits of medical detoxification indicate that short-term three-day inpatient medical detoxification can help decrease drug use during the next six months and improve psychosocial outcomes.³⁶ Detoxification is most useful when it incorporates formal processes of assessment and referral to subsequent drug addiction treatment³⁷.

IV. DESCRIPTION OF CRISIS AND DIVERSION SERVICES IN MARYLAND

A. Crisis Services

Crisis and diversion services exist throughout Maryland. These services include many of the components described in Section II of this White Paper. This section provides a summary of the publicly funded crisis and diversion services that are offered state-wide as well as these services that are locally funded and managed.

Over the past 20 years, Maryland has developed a comprehensive approach to suicide prevention for youth. The Maryland Suicide Prevention Program is based on a prevention model and the belief that suicide is a "complex problem that needs comprehensive solutions". The Maryland suicide hotline was the first statewide decentralized crisis hotline system in the country. The Maryland model has primarily targeted programs to youth 15 to 24 years of age—focusing on middle, high school, and college students. This program has also targeted "at risk" populations such as people who are gay and lesbian, those institutionalized, and African American youth. This project has been a ten-year partnership among the Mental Hygiene Administration, six local crisis centers, and the Center for Substance Abuse Research at the University of Maryland. According to a recent study conducted by the Big Horn Center for Public Policy (using data from the Federal Center for Disease Control and Prevention), Maryland's suicide rate declined in every age group, most significantly among 15-24 year olds targeted by the program. Youth suicide rates showed dramatic reductions, down 21.4 percent overall, while nationally rates increased 11 percent.

³⁵ Gregory Luke Larkin, Cynthia A. Claassen, Jennifer A. Emond, Andrea J. Pelletier, and Carlos A. Camargo, *Trends in U.S. Emergency Department Visits for Mental Health Conditions, 1992 to 2001*

Psychiatr Serv, Jun 2005; 56: 671 - 677.

³⁶ *Principles of Drug Addiction Treatment: A Research-Based Guide*, National Institute on Drug Abuse, NIH Publication No. 99-4180, Printed October 1999.

³⁷ Kleber, H.D. Outpatient detoxification from opiates. *Primary Psychiatry* 1: 42-52, 1996.

The Maryland Suicide Prevention Program has been a model for other states in developing prevention, intervention, and postvention service.

There is a similar statewide decentralized approach to other crisis and diversion services in Maryland. There are seven communities that receive funding by the Mental Hygiene Administration (MHA) to offer various components of the crisis system discussed in Section II. These communities include: Anne Arundel, Baltimore, Harford, Montgomery, Prince George's, Worcester Counties and Baltimore City. These services are expensive to operate and there needs to be a sufficient, concentrated population and consumer base to make them viable. In addition, the evidence about what works has been based on urban settings primarily. Due to the level, amount and cost of professional staff required, the service tends to be more clinically and cost effective in urban settings. In most of these communities the local Core Service Agency has developed and oversees the various components of the crisis program. These components include:

- Operation or Call Centers provide a 24/7 hotline for callers experiencing a psychiatric crisis. Staff at the call center assess, triage and refer callers to services based on the individual's acuity of symptoms. The operation center will dispatch a mobile crisis team for individuals who need an immediate response or can schedule an appointment at an urgent care center. Some call centers, such as Montgomery County have centralized all their crisis programs including their hotline functions (e.g. mental health crisis, domestic violence, sexual assault line). Others focus exclusively on acute mental health crisis for the general population.
- Mobile Crisis Teams (MCT) or Crisis Response Teams provide an immediate face-to-face response for individuals with acute symptoms. MCT can either be dispatched by the operations centers or in some jurisdictions directly by law enforcement. The MCTs have various practitioners and professionals that staff these teams, including clinicians and nurses. In some jurisdictions (Baltimore County, Montgomery County, Harford County and Worcester County) the mobile crisis teams include representatives from local law enforcement agencies when responding to a crisis. These teams provide crisis services in-vivo, at emergency departments and other community settings. Other than Baltimore City, the MCT serve children and adults. Baltimore City has MCTs that are specifically for children and families. Harford County's team is limited to responding to adolescents and adults. In some instances, these teams are the "gatekeepers" to their crisis residential services. They also provide an important linkage role—rapidly connecting individuals to community mental health and social services. Due to funding constraints almost all MCTs operate 16-18 hours per day. Worcester and Anne Arundel have developed 24/7 crisis response capacity. Montgomery County now has funding to increase its MCT hours to 24/7.
- Urgent Care Centers provide an immediate assessment, medication evaluation and administration and brief treatment (4-8 follow-up visits). Urgent Care generally operates within a centrally located facility and is available in the evenings on each weekday and on weekend days. Not all crisis providers have a formal "urgent care" capacity. Montgomery and Baltimore Counties have this capacity. Montgomery's service functions on 24/7 basis. Other crisis programs refer to outpatient providers for next day appointments.
- Transportation—this is either provided by the mobile crisis teams or by staff of the urgent care center. Individuals are transported to various settings. More acute individuals may be transported from their home or another community setting to an emergency department or to the state hospital. Individuals may also be transported from urgent care to the next service needed or home when no other resources exist to provide transportation.

- Residential crisis services (RCS) in Maryland are designed to prevent an inpatient psychiatric admission, provide an alternative to psychiatric inpatient admissions, shorten the length of an inpatient stay, or reduce the pressure on general hospital emergency departments³⁸. RCS may be provided to both adults and children and operate 24 hours/7 days per week. Services provided in a RCS include: evaluation, treatment and discharge planning, counseling, training and support for crisis prevention, identification and intervention for individuals, and their family, if appropriate. RCS for children may occur at either a licensed facility or a licensed treatment foster home. In some jurisdictions, the MCT provides a gatekeeping function for RCS services. For instance, in Baltimore City, requests for a crisis bed must be reviewed and approved by one of their 8 teams.
- Twenty-three hour observation beds are available on a very limited basis. Baltimore City and Prince George’s County have one hospital each that has developed this capacity.

In many of these jurisdictions crisis functions are co-located. The operations center, urgent care staff, MCT, and the crisis residential program are in the same building or location (Baltimore City and Montgomery County). In other jurisdictions, these functions are performed by separate contractors (e.g. Worcester County). The following chart provides information regarding the jurisdictions that comprise the crisis delivered services purchased by the MHA. The data was from the period 10/1-12/31/2007³⁹.

**Table 1. Crisis Services in Selected Maryland Jurisdictions:
10/1/2007-12/31/2007**

Service	Jurisdiction							Total
	Montgomery	Balt. City	Balt. County	Anne Arundel	Worcester	Harford	Prince George	
Crisis Response Telephone Calls	13,027	6,809	3,628	3,718	N/A	485	1,810	29,477
MCT Responses	194	1028	295	450	134	315	208	2,624
MCT Teams	1	8	8	6	1	1	2	27
% Individuals Diverted from ED by MCTs	78.9%	75%	N/A	96.7%	75.37%	72%	N/A	79.59%

According to the MHA data, there were almost 30,000 crisis response calls to the operations centers in these seven jurisdictions. Mobile crisis teams provided a face-to-face response to over 2,600 of these callers (8.79% of all callers). There are 27 teams operating in these jurisdictions. During this period, almost eighty percent (79.59) were diverted from an emergency department by a mobile crisis team.

Data were also available on publicly funded psychiatric urgent care visits for the same reporting period. As indicated in Table 2, there were a total of 2,055 urgent care appointments across jurisdictions. As indicated above, urgent care centers generally

³⁸ Title 10 Department of Health and Mental Hygiene, Subtitle 21, Chapter 26 Community Mental Health Programs—Residential Crisis Services, page 1

³⁹ In 2008, the Mental Hygiene Administration implemented a new process for CSAs to report crisis services. The period used for this briefing paper represented the most complete data for the seven jurisdictions using the new reporting forms.

operate within a centrally located facility and the service is available in the evenings on each weekday and on weekend days. In most locations, the urgent care center is co-located with the call center and the mobile crisis team. The number of people treated through urgent care visits varied significantly across jurisdictions. For example, Worcester and Harford counties have limited capacity to provide urgent care. Currently these counties have limited funding to provide this service.

**Table 2. Urgent Care Visits in Selected Maryland Jurisdictions:
10/1/2007-12/31/2007⁴⁰**

Service	Jurisdiction							Total
	Montgomery	Baltimore City ⁴¹	Baltimore County	Anne Arundel	Worcester	Harford	Prince George	
Urgent Care Appointments	1,329	N/A	274	251	112	21	68	2,055

Data were also collected on individuals that received residential crisis services. Information regarding these services was available from the PMHS service utilization reporting system. Table 3 provides data on RCS from the most recent fiscal year, FY 2007. Over 59% of the total crisis bed days were provided in Central Maryland. The fewest bed days for FY 2007 were in Somerset County in the Eastern Shore Region.

Table 3. Residential Crisis Services in Selected Maryland Jurisdictions: Fiscal Year 2007⁴²

Region	Days
<i>Western Region</i>	
Frederick	1,357
Garrett	520
<i>Region Subtotal</i>	1,877
Montgomery	1,807
<i>Southern Maryland</i>	
Charles	86
Prince George's	2,703
<i>Region Subtotal</i>	2,789
<i>Central Maryland</i>	
Baltimore County	5,846
Baltimore City	3,737
<i>Region Subtotal</i>	9,583
<i>Eastern Shore</i>	
Somerset	70
<i>Region Subtotal</i>	70
Total Bed Days	16,126

⁴⁰ Data was provided by the Mental Hygiene Administration

⁴¹ Urgent care data was only available for adult crisis services in Baltimore City.

⁴² Source: Claims and Provider data from Maryland's Public Mental Health system.

As indicated in the prior sections, local police departments are often dependent on crisis services to address the needs of individuals that are in acute psychiatric crisis. The CSAs that were contacted by the University of Maryland for this white paper have partnered closely with the various law enforcement officials in their area to respond to individuals in crisis. The partnership varies across CSAs. For instance:

- Several CSAs have implemented Crisis Intervention Teams (CIT) following either the Memphis model⁴³ model (Baltimore City, Harford, Worcester and Montgomery Counties) or comparable extensive training program (Worcester) in their jurisdiction.
- In Baltimore City and Harford County, law enforcement can contact the Mobile Crisis Team (MCT) directly to make a referral rather than calling the operation center.
- In Baltimore County, police are partnered directly with a mental health clinician.
- In Montgomery County the MCT is on the police radio allowing rapid communication and dispatch by law enforcement of the MCT and or CIT.
- In Anne Arundel County, police contact the mobile crisis team through the operation center and on a police radio.
- In Prince George's County the local law enforcement agencies provide funding for MCT capacity. In Montgomery County, the MCT is funded locally and is part of local government.

In addition, some CSAs as part of their crisis response provide Critical Incident Stress Management (CISM) activities. These CSAs provide CISM related trainings to County staff and volunteers that respond to local disasters. The CSA crisis programs also respond to community traumatic incident and countywide disasters. CSAs providing CISM activities include Anne Arundel, Baltimore, Harford and Prince George counties. The Crisis Center in Montgomery County has provided CISM services for 20 years.

The CSAs surveyed indicated their MCTs serve individuals of all ages, conditions and disabilities. However, there were a few population specific teams. For instance the MHA provides funding to the city of Baltimore for their Children and Adolescent Response System (B-CARS). B-CARS provides telephone triage/consultation with a legal guardian and/or a mobile team assessment which determines the need for either the development of a B-CARS treatment plan for the full array of B-CARS services, referral to the hospital, referral to appropriate outpatient service and/or successful resolution of a crisis situation. In addition, B-CARS may assess and refer a child to a RCS to prevent or as an alternative to hospitalization either at a facility staffed 24 hours a day and seven (7) days a week, or a licensed treatment foster care home, to accommodate youth that cannot be maintained in their homes during the crisis period. A variety of services including in-home intervention, behavioral aide services, residential crisis services, clinic-based psychotherapy services and psychiatric services will be provided for up to two weeks, to support children who have received a B-CARS Mobile Team assessment and have been determined to need the B-CARS array of services.

The Community Outreach Team Anne Arundel (COTAA) targets homeless or treatment resistant persons with severe mental illness. The COTAA team operates 6 days per week, one shift per day. The COTAA team provides services to approximately 40 clients per year. The COTAA team consists of a 0.5 FTE therapist, 1 FTE team leader, and 1 FTE staff.

Individuals with co-occurring mental health and addictive disorders represent a large portion of individuals that use various crisis services. Information regarding the proportion of

⁴³ www.memphispolice.org/Crisis%20Intervention.htm

individuals that have a co-occurring disorder is collected differently across the CSAs. Those interviewed indicated that between 25 and 75% of individuals seeking crisis services had both disorders. Most of the CSAs indicated that approximately 45-50% of individuals receiving MCT services had a co-occurring disorder. The proportion of individuals with these disorders have required the teams to be more competent in the assessment and triaging of individuals in crisis that have used or abused alcohol or drugs and are experiencing acute psychiatric crisis. Unfortunately, many MCTs have limited ability to treat or refer individuals to detoxification. Initially these individuals will need immediate detoxification from alcohol or drugs to relieve the physical symptoms of withdrawal. Depending on the severity of symptoms, an individual may be able to be detoxed within 24 hours or may take several days (or longer). Detoxification is required prior to addressing an individual's psychiatric symptoms. Only one CSA (Baltimore City) had funding to purchase residential detoxification beds.

B. Hospital Diversion Projects

The Mental Hygiene Administration provided funding to three CSAs to develop and implement a Hospital Diversion Project (HDP). CSAs that have a HDP program are: Baltimore City, Montgomery and Anne Arundel Counties. The purpose of the HDP is to divert uninsured persons from inpatient psychiatric admission. When needed the HDP arranges for inpatient psychiatric care in private facilities. These HDPs are available 24 hours a day, 7 days a week and provide mobile crisis evaluation and triage. The HDP programs screen and triage all requests for inpatient psychiatric care for uninsured individuals. They perform the level of care evaluations, on site, at the Emergency Departments (ED), within one hour of request by the hospital. The HDP uses the Maryland Public Mental Health System's medical necessity criteria for reviewing and authorizing psychiatric inpatient level of care. Once the assessment is completed the HDP staff:

- Authorize inpatient level of care when clinically indicated; or
- Refer, obtain, or purchase community based behavioral health services including;
 - Residential Crisis Services,
 - Licensed Residential Addiction Program services,
 - Residential or crisis support services for children and adolescents in appropriately licensed programs,
 - Transportation for consumers from EDs to recommended levels of care,
 - Outpatient Mental Health Treatment,
 - Addictions treatment, and
 - Urgent Care

If the HDP evaluates an individual and determines that he or she needs hospital level of care, then the CSA authorizes the initial admission and continued stay for the uninsured individual. The CSA also assists the hospital with discharge planning in order to refer the individual to community based services. The CSAs that have a HDP use their MCT to perform the diversion functions.

Data were available on the three Hospital Diversion Projects for the period of 10/1-12/31/2007. Table 4 provides an overview of these data.

**Table 4.a Data on Hospital Diversion Programs by Location
10/1/2007-12/31/2007⁴⁴**

Service	Montgomery		Baltimore City		Anne Arundel		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Screening in Emergency Room	153		92		86		331	
Request for IP Care	153	100.00%	92	100.00%	86	100.00%	315	100.00%
Requests Granted for IP Care	96	62.75%	24	26.09%	53	61.63%	173	52.27%
State Hospital Care	4	4.17%	0	0.00%	1	1.89%	5	2.89%
General/Private Hospital Psych Bed	90	93.75%	24	100.00%	52	98.11%	166	95.95%
General Hospital Medical Bed	2	2.08%	5	20.83%	0	0.00%	7	4.05%

As Table 4 suggests almost all individuals that are seen by the hospital diversion team are requesting an inpatient level of care. Of those individuals, approximately 48% are diverted from inpatient care.

Of those individuals that are determined to need inpatient care, most are referred to a private psychiatric purchase-of-care bed. Approximately 3% are referred to the state hospital. Seven individuals (4.29%) needed a medical bed rather than an inpatient psychiatric bed. In some instances, individuals are referred to inpatient psychiatric beds even when the HDP determined they did not need that level of care. For instance, the HDP in Anne Arundel determined that only 43 individuals needed inpatient care, yet 53 were referred to a state or private inpatient psychiatric bed. In some of these instances, the hospital and not the diversion team make the final recommendation for inpatient level of care.

Table 4b provides information regarding discharges between FY 2005 and 2007 for locations with HDPs compared to other regions and statewide. The HDP program was initiated in these jurisdictions in FY 2007. This data would indicate that jurisdictions with a HDP had a greater decrease in state hospital utilization than most regions (with the exception of Southern Maryland) and compared to other counties within their regions. They also had a greater decrease in hospital discharges when compared to statewide data. While this data could support the effectiveness of the current HDP programs, it may not be the only reason for this change.

⁴⁴ Data provided by the Mental Hygiene Administration

Table 4.b
Trends in Discharges from State Psychiatric Facilities
Comparison of HPD Programs and Regions
FY 2005-2007⁴⁵

Region	2007	2006	2005	% Change 2005-2007
<i>Western Maryland</i>	111	65	88	26%
<i>Montgomery</i>	122	178	186	-34%
<i>Southern Maryland</i>	115	115	198	-42%
<i>Central Maryland</i>				
Anne Arundel	126	234	315	-60%
Balto City	355	425	548	-35%
<i>Other Central Maryland</i>	333	414	446	-25%
<i>Eastern Shore</i>	280	177	156	79%
Other/Unk.	24	187	59	-59%
Statewide Total	2,305	2,566	2,884	-20%

C. Pathways to Crisis Services

Given the patchwork of crisis and diversion services in Maryland, individuals experiencing acute psychiatric symptoms may have several pathways to access care. Diagram 1 provides an overview of the possible "paths" an individual follows to access crisis services.

Individuals that are *not known* to the public mental health system and reside in a jurisdiction with some crisis capacity may utilize a jurisdiction's call center and may either receive an immediate face-to-face assessment by the mobile crisis team or be scheduled for a next day appointment at the urgent care center. In addition, these individuals may also go directly to an emergency department to seek services. Once these individuals present at an emergency department, they may be admitted or transferred to an inpatient psychiatric bed or diverted to various options in the community depending on their needs, location and payer source. For instance, individuals that are uninsured and live in Anne Arundel County, Montgomery County or Baltimore City may be referred to a Hospital Diversion Program. For individuals who do not need inpatient level of care, the HDP may schedule an appointment with an urgent care provider. In addition, individuals that are indigent or have Medicaid and meet the PMHS eligibility criteria may be referred to ACT, Crisis Residential, Mobile Treatment Team Services or an intensive home based treatment team (for children and their families).

⁴⁵ Source: Maryland Health Care Commission files

Individuals that are not known to the system and reside in jurisdictions with little or no crisis capacity have fewer options. They may attempt to seek assistance at a local outpatient mental health provider or they may be more likely to present directly at an ED.

Individuals that are *currently receiving* publicly funded mental health services may have several additional pathways to access crisis services. They may access crisis services (assuming they reside in one of the seven jurisdictions with crisis capacity) and receive an MCT response or urgent care appointment. They may also receive crisis services from their current provider. For instance, individuals that are participating in ACT or receiving services from a Mobile Treatment Team may have their crisis needs addressed by these teams as an alternative to the formal crisis service system or ED. In addition, these individuals can present directly to a hospital ED where they may be admitted to an inpatient bed, referred to a HDP (depending on the jurisdiction) or referred for an urgent care appointment the following day.

Individuals that have significant drug and/or alcohol issues that impact the ability to accurately assess and provide acute psychiatric services may be referred to a facility for detoxification.

D. Crisis Expenditures

Information regarding proposed Crisis Expenditures was collected for most of the larger jurisdictions offering the full complement of crisis services. There were several sources of this information. The MHA provided information for their current contracts (FY 2008) with these jurisdictions. Each jurisdiction was requested to provide 2008 budgets for crisis services. This information was used to calculate projected revenues from other sources (e.g. county funds, award from foundations). "State" revenue was payments made directly to CSAs by the Mental Hygiene Administration for crisis services. This included federal block grant funding and state appropriations. "Other" revenue was funding received by the CSA from PMHS payments (including Medicaid), county funding, foundation payments and third party payments from private insurers.

The crisis spending in the following chart is specifically for call centers, mobile crisis teams, hospital diversion programs and crisis residential services. It does not include ACT, partial hospitalization or other mobile teams.

**Table 5. Proposed Crisis Spending in Selected Maryland Jurisdictions
FY 2008⁴⁶**

Source	Montgomery	Baltimore City	Baltimore County	Anne Arundel	Worcester	Harford	Prince George	Total
State	\$1,115,003	\$2,294,982	\$407,600	\$ 1,736,662	\$335,338	\$678,000	\$1,194,094	\$7,761,679
Other	\$3,604,877	\$1,554,453		\$609,129	0	0	0	\$5,768,459
Total	\$4,719,880	\$3,849,435	\$407,600	\$2,345,791	\$335,338	\$678,000	\$1,194,094	\$13,530,138

E. Diversion Services

The Maryland Public Mental Health System offers several services that can prevent an inpatient psychiatric admission or provide an alternative to psychiatric inpatient admissions. These services include: Mobile Treatment Services, Assertive Community Treatment (ACT), and Partial Hospitalization.

Since 1988, mobile treatment services (MTS) have been available in Maryland. These services were designed to provide intensive, assertive mental health treatment and support services delivered by a multidisciplinary treatment team to an adult or a minor whose mental health treatment needs have not been met through routine, traditional outpatient mental health programs. The purpose of mobile treatment services (MTS) is to enable the individual to remain in the community, thus reducing the individual's admissions to emergency rooms, inpatient facilities, or detention centers. A goal of MTS was to transition individuals from more intensive services to less intensive outpatient services. MTS services include medication administration, monitoring and education services, independent living skills assessment and training, health promotion and training (including illness and substance abuse prevention and wellness training), individual therapies and support, linkage and advocacy. Although similar to assertive community treatment, mobile treatment programs do not necessarily adhere to the fidelity standards of ACT. In 2007, approximately 1,200 individuals received mobile treatment services.

⁴⁶ Revenue data was provided by Core Service Agencies through a May, 2008 survey

Since 2005 the PMHS has offered evidenced-based ACT to adults with significant mental health needs. These ACT teams provides intensive, mobile, assertive mental health treatment and support services delivered by a multidisciplinary treatment and support team to an adult whose mental health treatment needs have not been met through routine, traditional outpatient mental health programs. In FY 2007 532 adults received Assertive Community Treatment from these teams. The PMHS also purchases partial hospitalization services. PHP is an alternative to inpatient care when the consumer can safely reside in the community This service provides outpatient, short-term, intensive, psychiatric treatment service that parallels the intensity of services provided in a hospital, including medical and nursing supervision and interventions. This level of service is a benefit for children, adolescents, and adults. In Maryland partial hospitalization services must provide four hours of treatment per day. Over 3,400 individual were served by these programs. Table 6.a provides more detailed information regarding the expenditures and number of individuals receiving these services by county.

**Table 6.a Diversion Services
Total Expenditures and Persons Served: FY 2007⁴⁷**

Region	Partial Hospitalization		Mobile Treatment		ACT	
	Expenditures	Persons Served	Expenditures	Persons Served	Expenditures	Persons Served
<i>Western Maryland</i>						
Allegany	\$583,325	147	\$141,320	36	\$0	0
Frederick	\$243,425	87	\$109,018	22	\$0	0
Garrett	\$164,792	49	\$19,476	10	\$12,100	5
<i>Region Subtotal</i>	\$991,541	283	\$269,814	68	\$12,100	5
<i>Montgomery County</i>						
Montgomery County	\$408,498	170	\$114,399	83	\$509,900	71
<i>Region Subtotal</i>	\$408,498	170	\$114,399	83	\$509,900	71
<i>Southern Maryland</i>						
Calvert	\$97,693	45	\$5,980	2	\$1,100	1
Charles	\$40,031	21	\$7,020	3	\$0	0
Prin. Geo.	\$289,047	114	\$1,206,441	292	\$410,450	79
St. Mary	\$79,422	31	\$0	0	\$0	0
<i>Region Subtotal</i>	\$506,193	211	\$1,219,441	297	\$411,550	80
<i>Central Maryland</i>						
Anne Arundel	\$484,904	153	\$2,461	88	\$1,048,925	122
Balto Co	\$2,002,883	488	\$1,438,619	320	\$247,075	34
Balto City	\$13,061,082	2,779	\$2,612,047	729	\$2,588,025	374
Carroll	\$104,749	35	\$250,484	39	\$6,600	1
Harford	\$46,609	29	\$258,064	43	\$1,100	1
Howard	\$2,416	2	\$0	0	\$0	0

⁴⁷ Expenditures and persons served based on claims data from the Maryland fee-for-service public mental health system; 2007 population estimates from the Maryland Department of Planning.

<i>Region Subtotal</i>	\$15,702,642	\$3,486	\$4,561,675	\$1,219	\$3,891,725	\$532
<i>Eastern Shore</i>						
Caroline	\$32,598	14	\$0	0	\$0	0
Cecil	\$96,131	48	\$7,020	1	\$13,050	2
Dorchester	\$131,376	32	\$0	0	\$0	0
Kent	\$14,763	5	\$0	0	\$0	0
Queen Anne's	\$13,956	7		1	\$2,200	1
Somerset	\$18,808	4	\$0	0	\$0	0
Talbot	\$44,290	10	\$0	0	\$0	0
Washington	\$171,692	122	\$1,114,007	183		
Wicomico	\$207,791	56			\$2,200	1
Worcester	\$17,726	8	\$0	0	\$0	0
<i>Region Subtotal</i>	\$749,129	\$306	\$1,121,027	\$185	\$17,450	\$4
Out of St/Unk	\$6,193	3	\$12,489	3		
<i>State Totals</i>	\$18,364,196	4,084	\$14,585,201	1817	\$9,685,450	683

Table 6.b provides regional information regarding the cost per person and per capita expenditures by diversion service. The average statewide cost per person for partial hospitalization was \$4,497 in FY 2007. Only Somerset County and Baltimore City exceeded this statewide cost per person. The average statewide cost per person for mobile treatment was \$4,017 in FY 2007. Seven counties exceeded this statewide cost per person. The average statewide cost per person for ACT was \$7,090 in FY 2007. Three counties (Baltimore, Anne Arundel and Montgomery) exceeded this statewide cost per person.

The per capita expenditures also varied across services and regions. The statewide average per capita expenditure for partial hospitalization was \$3.27 in FY 2007. Three counties and Baltimore City exceeded this statewide cost per person. Baltimore City per capita expenditures for partial hospitalization was almost five times the statewide average. The statewide average per capita expenditure for mobile treatment was \$1.30 in FY 2007. Six counties exceeded this statewide average. The statewide average per capita expenditure for ACT was \$.86 in FY 2007. Anne Arundel County and Baltimore City exceeded this statewide average.

**Table 6.b Diversion Services
Cost Per Persons and Per Capita Expenditures
By Region FY 2007⁴⁸**

Region	Partial Hosp.		Mobile Treatment		A.C.T.	
	Cost per Person	Cost per Capita	Cost per Person	Cost per Capita	Cost per Person	Cost per Capita
<i>Western Maryland</i>						
Allegany	\$3,968	\$8.04	\$3,926	\$1.95	\$0	0
Frederick	\$2,798	\$1.08	\$4,955	\$0.49	\$0	0
Garrett	\$3,363	\$5.56	\$1,948	\$0.66	\$2,420	\$0.41
Washington	\$1,407	\$1.18	\$6,087	\$7.68	\$0	0
<i>Montgomery</i>						
	\$2,403	\$0.44	\$1,378	\$0.12	\$7,182	\$0.55
<i>Southern Maryland Totals</i>						
Calvert	\$2,171	\$1.11	\$2,990	\$0.07	\$1,100	\$0.01
Charles	\$1,906	\$0.29	\$2,340	\$0.05	\$0	0
Prin. Geo.	\$2,535	\$0.35	\$4,132	\$1.46	\$5,196	\$0.50
St. Mary	\$2,562	\$0.79	\$0	0	\$0	0
<i>Central Maryland</i>						
Anne Arundel	\$3,169	\$0.95	\$28	\$0.00	\$8,598	\$2.05
Balto Co	\$4,104	\$2.54	\$4,496	\$1.82	\$7,267	\$0.31
Balto City	\$4,700	\$20.49	\$3,583	\$4.10	\$6,920	\$4.06
Carroll	\$2,993	\$0.62	\$6,423	\$1.48	\$6,600	\$0.04
Harford	\$1,607	\$0.19	\$6,001	\$1.08	\$1,100	\$0.00
Howard	\$1,208	\$0.01	\$0	0	\$0	0
<i>Eastern Shore</i>						
Caroline	\$2,328	\$0.99	\$0	0	\$0	0
Cecil	\$2,003	\$0.96	\$7,020	\$0.07	\$6,525	\$0.13
Dorchester	\$4,105	\$4.13	\$0	0	\$0	0
Kent	\$2,953	\$0.74	\$0	0	\$0	0
Queen Anne's	\$1,994	\$0.30	\$0	\$0.00	\$2,200	\$0.05
Somerset	\$4,702	\$0.72	\$0	0	\$0	0
Talbot	\$4,429	\$1.22	\$0	0	\$0	0
Wicomico	\$3,711	\$2.22	\$0	0	\$2,200	\$0.02
Worcester	\$2,216	\$0.36	\$0	0	\$0	0
Out of St/Unk	\$2,064	N/A	\$4,163	N/A	\$0.00	N/A
Total	\$4,497	\$3.27	\$4,017	\$1.30	\$7,090	\$0.86

⁴⁸ Ibid 58

F. Management of Patients with a Psychiatric Presentation in Emergency Departments

Interviews of staff from CSA's and some emergency departments, and review of hospital websites allows a cursory look at the array of emergency department practices in Maryland as detailed in Table 7.

Table 7: Specialized Approaches to Psychiatric Care in Hospital Emergency Departments⁴⁹

CSA	Hospital	Physical Space	Specialized Staffing	HDP Targeted Hospital
Anne Arundel	Baltimore Washington Medical Center	Yes	No	No
	Anne Arundel Medical Center	Yes	No	Yes
Baltimore City	University of Maryland	Yes	Yes	No
	Johns Hopkins Hospital	Limited	Yes	No
	Johns Hopkins Bayview Medical Center	No	No	No
	Bons Secours Hospital	No	No	No
	Sinai Hospital of Baltimore	No	No	No
	Good Samaritan Hospital	No	No	Yes
	Mercy Medical Center	No	No	Yes
	Harbor Hospital Center	No	No	Yes
	Saint Agnes Hospital	No	No	Yes
Baltimore Co.	Greater Baltimore Medical Center	No	Y-Contract	No
	Franklin Square Hospital	Y-post-med clearance	Yes	No
	Northwest Hospital Center	No	No	No
Harford	Upper Chesapeake Medical Center	No	No	No
	Harford Memorial Hospital	No	No	No
Montgomery	Holy Cross Hospital	No	No	Yes--not started
	Shady Grove Adventist Hospital	Yes	Y-Contract	Yes
	Montgomery General Hospital	No	No	No
	Washington Adventist Hospital	No	No	No
	Suburban Hospital Health Care System	No	Yes	No
Prince Georges	Laurel Regional Hospital	No	No	No
	Prince George's Hospital Center	23 hour obs. bed	Yes	No
	Southern Maryland Hospital Center	No	No	No
Worcester	Atlantic General Emergency Room	No	No	No

Review of Select Hospital Emergency Department Strategies in Maryland

There are a number of hospitals that have various unique practices to treat individuals with a psychiatric emergency in their emergency departments. In some instances, these facilities have a separate physical space for individuals with psychiatric emergencies. In other instances, these emergency departments have specialized staffing (individuals with specific

⁴⁹ Survey by the University of Maryland of the Core Service Agencies, 2007

credentials (psychiatrist, licensed mental health clinician) or have specific training or history in serving this population. As Table 7 indicates, 9 hospitals were identified in the University of Maryland's survey with CSAs as having specialized approaches to psychiatric care. Three hospitals who have taken steps to manage psychiatric care differently are described below.

- ***The University of Maryland Medical Center***

The University of Maryland Medical Center opened its Psychiatric Emergency Services (PES) program in 2006. With exceptions for those with a co-morbid acute medical condition, adults with a psychiatric presentation are directed following an initial triage to the PES treatment area. Co-located in the PES treatment area is a Psychiatric Urgent Care (PUC) service for less-acute walk-in services and the Psychiatric Assessment and Referral Center (PARC) that provides admission and scheduling for the full range of inpatient and outpatient services provided within the university psychiatric care network. The physical space of the program is a mix of locked and unlocked areas with a reception area, three examination rooms, two team rooms, three large patient areas with reclining geri-chairs and a shared workspace. There is also physical space for use by community providers, such as MCT or PACT team members who are called to the hospital to assist in disposition. The staffing consists of 24 hour nursing, social work and psychiatric resident coverage. A psychiatrist is on site for 12 hours each day and on call after hours. The course of treatment is variable and far more flexible, when there is space away from the pace of the general ED. Following a thorough assessment and engagement of the outpatient treatment provider, if applicable and possible, a decision is made. The decision may be to discharge to a lower level of care, to admit to an inpatient unit, or to provide a period of observation and treatment on the PES unit for up to 23 hours. In the case of someone who is intoxicated at admission, this allows for a necessary period of sobering before a complete assessment and decision about the need for inpatient admission. The interdisciplinary team in the PES program has made a concerted effort to maximize community collaboration. There is high regard for the Mobile Crisis Team that responds to the hospital (BCRI out of Baltimore City) and the array of resources that they can access (such as a residential crisis bed). PES maintains a list of persons served through the PACT team operated by UMMS so that the team can have very early involvement in hopes of preventing an inpatient admission.

- ***Shady Grove Adventist Hospital***

Shady Grove Adventist Hospital, part of Adventist Healthcare, is a 250-bed acute care community hospital without an inpatient psychiatric unit. Separate treatment space that is adjacent to the emergency department is reserved for use by psychiatric patients. Though the beds are staffed with the general emergency department team, mental health evaluators from Potomac Ridge Hospital (also part of Adventist Healthcare) are available in the emergency department for consultation on a 24/7 basis. Shady Grove is one of the targeted facilities in the Hospital Diversion (HDP) project. The Montgomery County MCT serves Shady Grove and has had considerable success in diverting individuals who would otherwise have met the criteria for admission.

- ***Franklin Square Hospital***

Franklin Square is a 329 bed general acute care hospital that does have an inpatient psychiatric unit. The high demand for psychiatric services through the emergency department and often significant delays in discharge—reported to be as long as three to six days—while attempting to locate a treatment bed (inpatient psychiatric or detoxification service) led to the development of a "Psychiatric Annex" that is adjacent to the emergency department. The course of treatment starts with a triage assessment and then admission to

a general emergency department bed for medical treatment. Once medically stabilized (including lowered blood alcohol level) the patient can be moved to the annex. The physical space includes three large dorm-like rooms two of which have 6-8 mattresses on the floor. The third is for persons who might be violent. The Annex is staffed by Masters-prepared social workers or counselors who provide some intervention, but primarily focus on discharge planning. There is no psychiatric coverage in the emergency department or in the Annex. The local MCT is not called into the hospital; however the staff may request that the MCT provide next day follow-up care.

V. Data on Individuals Needing Crisis and Diversion Services

In an effort to identify trends in admission and possible strategies to circumvent hospitalization in favor of less-restrictive, community-based alternatives, summary data was provided about persons who received inpatient treatment.

Table 8.a provides information by diagnosis and emergency department visit. It also provides the number and percent of individuals admitted from the emergency department. As this table indicates the most frequent mental health diagnoses are "other" PMHS diagnosis and substance abuse.

**Table 8.a
Emergency Department Visits and Hospital
Admission By Diagnosis: 2006⁵⁰**

Diagnosis	Total ED Visits	Admitted ED Visits	Percent Admitted ED Visits
Other PMHS Diag.	30,365	3,990	13.1%
Substance Abuse	28,175	4,718	16.7%
Major Affective Disorders	24,108	12,855	53.3%
SCHIZOPHRENIA	8,449	5,079	60.1%
Other Psychotic Dis.	4,015	1,090	27.1%
Other Mental Health	3,433	898	26.2%
Devel. Disabilities	66	8	12.1%
Total	98,611	28,638	29.0%

Table 8.b provides emergency department visits and hospital admission by age. The most frequent ED visits were for adults between the ages of 22 and 64 years old. The age group with the highest percentage of admissions from emergency departments is older adults over the age of 65.

⁵⁰ Source: Maryland Health Care Commission data.

Table 8.b
Emergency Department Visits and Hospital Admission
By Age: 2006⁵¹

Age	Total ED Visits	Admitted ED Visits	Percent Admitted ED Visits
> 12 years old	2,835	316	11.1%
13 – 17	8,243	839	10.2%
18 – 21	7,419	1,672	22.5%
22 – 64	73,828	23,259	31.5%
Age 65+	6,282	2,552	40.6%
Age Unknown	4		0.0%
All Ages	98,611	28,638	29.0%

Table 8.c provides emergency ED visits and subsequent admissions by region. The statewide average for FY 2007 ED visits that resulted in an admission was approximately 29%. These admissions varied among regions ranging from 21 percent in the Eastern Shore and approximately 35% in Montgomery County.

Table 8.c
Emergency Department Visits and Hospital Admission
By Region: 2006⁵²

Age	Total ED Visits	ED Visits Admitted	Percent Admitted ED Visits
<i>Western Maryland</i>			
Allegany	2,413	1,051	43.6%
Frederick	3,077	798	25.9%
Garrett	363	56	15.4%
Regional Subtotals	5,853	1,905	32.5%
<i>Montgomery</i>			
	12,151	4,241	34.9%
<i>Southern Maryland</i>			
Calvert	1,435	450	31.4%
Charles	816	53	6.5%
Prin. Geo.	5,630	1,596	28.3%
St. Mary	3,591	1,738	48.4%
Regional Subtotals	11,472	3,837	33.4%
<i>Central Maryland</i>			
Anne Arun	6,427	1,002	15.6%
Balto Co	11,331	2,293	20.2%

⁵¹ Source: Maryland Health Care Commission data.

⁵² Source: Maryland Health Care Commission data.

Balto City	32,020	9,797	30.6%
Carroll	2,731	1,430	52.4%
Harford	2,979	909	30.5%
Howard	3,163	971	30.7%
Regional Subtotals	58,651	16,402	28.0%
<i>Eastern Shore</i>			
Cecil	1,508	536	35.5%
Dorchester	1,167	278	23.8%
Kent	464	27	5.8%
Somerset	87	5	5.7%
Talbot	1,116	52	4.7%
Washington	3,235	795	24.6%
Wicomico	2,359	535	22.7%
Worcester	548	25	4.6%
Regional Subtotals	10,484	2,253	21.5%
<i>Statewide</i>			
	98,611	28,638	29.0%

Table 8.d identifies the percent of persons discharged with a length of stay of fewer than three days from Public Mental Health System-Funded Hospital Stays at either a Maryland Acute General Hospital or a Private Psychiatric Hospital. Counties with higher percentages of very short stays might be good candidates for implementation of emergency department diversion strategies.

Table 8.d: All Discharges and Discharges with Lengths of Stay Less than Three Days: 2006⁵³

	Acute General Hospitals			Private Psychiatric Hospitals		
	All Discharges	LOS < 3 Days	Per Cent	All Discharges	LOS < 3 Days	Per Cent
<i>Western Maryland</i>						
Allegany	1,675	793	47.3%	476	60	12.6%
Frederick	1,882	672	35.7%	438	61	13.9%
Garrett	2,338	713	30.5%	322	42	13.0%
Montgomery	5,049	1,783	35.3%	4,446	371	8.3%
<i>Southern Maryland</i>						
Calvert	803	305	38.0%	69	14	20.3%
Charles	547	195	35.6%	95	4	4.2%
Prin. Geo.	4,722	1,477	31.3%	1,903	191	10.0%
St. Mary	760	259	34.1%	47	7	14.9%
<i>Central Maryland</i>						

⁵³ Maryland Health Care Commission data

Anne Arundel	2,625	650	24.8%	946	120	12.7%
Balto Co	10,282	2,214	21.5%	1,672	190	11.4%
Balto City	42,255	9,282	22.0%	2,550	295	11.6%
Carroll	4,616	2,517	54.5%	230	29	12.6%
Harford	1,324	525	39.7%	594	79	13.3%
Howard	302	114	37.7%	92	7	7.6%
<i>Eastern Shore</i>						
Caroline	176	65	36.9%	120	4	3.3%
Cecil	670	420	62.7%	358	41	11.5%
Dorchester	508	112	22.0%	100	5	5.0%
Kent	43	5	11.6%	36	1	2.8%
Queen Anne's	166	35	21.1%	73	15	20.5%
Somerset	171	43	25.1%	21	2	9.5%
Talbot	269	125	46.5%	78	11	14.1%
Washington	1,318	503	38.2%	1,135	131	11.5%
Wicomico	948	244	25.7%	74	15	20.3%
Worcester	190	17	8.9%	56	6	10.7%
Other/Unk	67	17	25.4%	68	0	0.0%
Total	83,706	23,085	27.6%	15,999	1,701	10.6%

While the percentage of persons with very short stays is small, additional characteristics yield opportunities for 'upstream' targeted solutions to divert crises and subsequent emergency department visits perhaps particularly for persons with co-occurring disorders. This could include both a review of options such as 23 hour observation and detoxification services on the front end of a crisis and linkage to dually trained treatment teams on the back end to prevent readmission. Prioritizing housing/supported housing for persons leaving an inpatient level of stay is another risk reduction strategy that could be explored.

The data indicate that 18.4% of persons discharged are homeless at admission. This is a significant finding as homelessness is a factor that increases the likelihood of re-hospitalization, is a barrier to continuity of treatment and is generally associated with an absence of financial resources. Specific investments to consider for persons who are mentally ill and homeless include mobile treatment services, supported housing, supported employment, and access to primary care services.

Very low rates of admission for persons with developmental disabilities suggest effective diversion strategies are in place for this population at least in terms of state-operated hospitals⁵⁴. Evaluation of this data for persons with developmental disabilities admitted to general hospitals (who have less ability to control entry through the emergency department) may yield additional information about the need to identify crisis intervention strategies. Strategies for persons with developmental disabilities are often geared toward

⁵⁴ Data for state hospital admissions was only on primary diagnosis, therefore the number of individuals with a secondary diagnosis of developmental disabilities or addictive disorders may be more significant than indicated by this data.

the use of behavioral specialists, in-home crisis response, and/or brief respite for the identified person or the caregiver.

Finally, data were provided on persons "new to the system" at the time of admission to a State Hospital, acute general hospital psychiatric unit, or PMHS paid private psychiatric admission which indicates that 31% of persons hospitalized in FY 2007 were unknown to the system at the time of admission to any of these facilities. Strategies to prevent unnecessary use of the emergency department should consider the pathway to services for this group so that the highest level of care is not the route of first choice.

VI. Areas of Concern

In May of 2008, the University of Maryland interviewed Core Service Agencies and the Mental Hygiene Administration and identified several areas that present challenges to the current crisis and diversion efforts in Maryland. The specific areas include: the timeliness and thoroughness of the psychiatric evaluations performed in Emergency Departments, the lack of crisis response in most areas of the state, and the limited capacity of current crisis providers to offer crisis and diversion services.

As indicated in the previous section, many hospitals in Maryland are enhancing their capacity to effectively respond to individuals in psychiatric crisis that present in their EDs. Yet there are still many EDs that could improve their response to these individuals. Specific concerns cited included the EDs ability to assess and address somatic and psychiatric issues. In addition, EDs may not have staff with mental health experience to perform quality evaluations. EDs may not be familiar with the community alternatives that can be used to divert individuals. Even when they are knowledgeable of these alternatives, EDs may have limited experience or little confidence that these alternatives can adequately and safely treat the individual in the community.

As indicated in the previous section, all regions in Maryland have some components of a crisis system. Some counties within these regions have more robust components. Other counties have some crisis capacity (e.g. a local crisis hotline) but have no real capacity to provide mobile crisis teams. When the utilization for these services is reviewed some counties have few or no individuals receiving various crisis and diversion services. This indicates that individuals in these counties may be seeking these services in neighboring counties. In addition, individuals in these counties have limited access to other crisis and diversion services such as crisis residential, ACT or mobile crisis teams. For instance, 99% of the individuals that received ACT were only in the 5 larger counties. Approximately 97% of the individuals that received crisis services were in these same counties. The availability of partial hospitalization and mobile treatment teams was slightly better for individuals in other counties. Approximately 8% of the individuals receiving partial hospitalization services and 14% of individuals receiving MTT in FY2007 were not from the five largest counties.

Although the array of crisis and diversion services is fairly robust in seven jurisdictions, the capacity is limited. For instance:

- Most crisis programs have limited or no funding for 24/7 coverage for mobile crisis teams. This gap in coverage is filled by law enforcement and emergency departments when a crisis team can not be dispatched.
- Two CSAs have limited or no capacity for crisis residential services. This impedes the ability of the MCT to effectively divert individuals from inpatient care when they need 24 hour supervision but do not need the intensive medical oversight offered in a medical facility.

- All of the CSAs interviewed stated that a significant number of individuals who present for crisis services have a co-occurring mental health and addictive disorder. Data available from the Hospital Diversion Program indicates that 26% of individuals were diverted to a substance abuse residential treatment program.

There is limited urgent care capacity throughout the state and even within some of the larger counties. Unlike mobile crisis teams, crisis residential services or diversion services there is no urgent care model for individuals experiencing an acute mental health crisis. Some jurisdictions, Baltimore County and Anne Arundel, have an identified urgent care program that operates during the week, evening and on weekends. Other jurisdictions have to “cobble” together an urgent care team with their MCT or through small contracts with psychiatrists and other treatment staff.

Creating additional crisis and diversion capacity will be a significant cost to the Public Mental Health System. Third party payers, including Medicaid, do not cover some of these services or reimburse when an intervention by other than a licensed professional provides the service or when they are provided outside of a traditional office setting. Even then, the demand for service is unpredictable and therefore it is difficult to accurately project annual revenues from these payers. This problem is exacerbated in rural areas where there is less demand for the service. Therefore, much of the responsibility to fund crisis services to be available on an as needed basis is the responsibility of the PMHS. In some instances, obtaining payer information in a crisis situation is challenging. Individuals and families may not be able to identify or remember their insurance coverage when under duress.

In addition, the crisis system does not operate in a vacuum. Crisis providers rely on the availability of other services (e.g. acute detoxification) or temporary and more permanent housing. In some jurisdictions individuals who are homeless account for 30% of the referrals to MCT. The extent to which other public payers have the ability and willingness to develop these resources is critical to the success and mission of the crisis and diversion efforts.

VII. Policy Options Based on Concerns Identified

Concern: The capability of current Emergency Departments within the all-payer system to more effectively assess patients for I/P or alternative care

Regardless of growth in community-based alternatives, Emergency Departments will continue to see persons experiencing psychiatric and or/substance use crises. There are a number of strategies to consider in increasing the capability and competence of hospital-based emergency psychiatric care.

Options:

- 1) An analysis of hospital-specific service demand, patient demographics, physical space and throughput for psychiatric patients could identify hospitals where an alternate protocol might enhance services for the patients and benefit the emergency department as well. The protocol might address the triage function, physical space of service delivery, use of psychiatrically trained staff, order of service delivery, management of co-morbid general medical conditions, training in and use of clinical protocols, a continuum of brief treatment options, interface with ongoing treatment provider, interface with community resources and discharge planning.

In order to maximize the benefits of changes in Emergency Departments, it is important that hospitals are fully aware of the full array and availability of community resources and that some portion of these services be reserved for primary use by persons in crisis upon referral from an emergency department. This means making transparent to the hospitals real-time capacity for services such as: new/follow-up urgent appointments, crisis residential care, detoxification services, in-home supports, transitional housing, homelessness resources, case management of complex cases. A lack of confidence in the availability of services will not have the expected impact on streamlining emergency department services and reducing unnecessary admissions.

2) Another consideration that would maximize the benefit of specialized services by reducing length of stay in the emergency department would be a state-wide strategy to expedite the search for an inpatient psychiatric bed when it is needed. The use of a secure server based tool with real-time updates from each of the hospitals could accomplish this.

3) The use of 23-hour observation or similar beds in an area adjacent to the emergency department could reduce the use of hospitalization for persons who, though they meet the criteria for hospitalization during the initial assessment are thought likely to "clear" within a short period of time. This preserves the inpatient bed for a patient needing a longer stay and does not unduly burden the inpatient unit with an inefficient, rapid turnover in patient beds.

Concern: Lack of diversion and I/P alternatives currently offered.

There are several strategies that should be considered to expand and improve the array of crisis and diversion services. One strategy that was unanimously identified by CSAs was expanding the coverage of current MCT teams to ensure 24/7 availability. In addition, the two CSAs without existing residential crisis capacity prioritized this service for their area.

In addition, the Hospital Diversion Programs could be expanded to other areas of the state and to Medicaid recipients. The initial focus for this expansion could be those jurisdictions that have the highest admission by uninsured individuals and Medicaid recipients to inpatient psychiatric beds including state and private psychiatric facilities. The HDP program in existing areas could be expanded to include other hospitals that do not currently participate in the HDP.

Access to medical or residential detoxification beds should also be a priority. The CSAs interviewed by the University of Maryland indicated that between 25 and 75% of individuals seeking crisis services had both disorders. Four CSAs indicated that approximately 45-50% of their MCTs served individuals who had significant alcohol or drug histories. The high proportion of individuals with co-occurring mental

health conditions and addiction disorders would indicate the need for MCTs to have immediate access to these services. This effort would have to be well coordinated with the Alcohol and Drug Abuse Administration, the Single State Agency for substance abuse services.

Concern 3: Development of New Services—focus on Urgent Care

The January 2007 report, *Use of Maryland Hospitals Emergency Departments*, indicated that “more than one-third (35.4 percent) of all emergency department visits in Maryland were classified as non-emergent or emergent but primary care treatable in 2005—an increase over experience in 2001.”⁵⁵ This finding would indicate the need to explore the potential for developing additional urgent care and outpatient capacity.

This direction was supported by the CSAs and MHA. In these discussions, expansion of formal urgent care programs was also identified as a priority. Several jurisdictions had developed unique urgent care models for diverting individuals from both EDs as well as MCTs. These individuals indicated that the development of additional urgent care capacity would:

- Reduce the unnecessary use of the emergency departments.
- Provide another point of entry for individuals that were seeking treatment. The urgent care center could provide the necessary linkages and transition to ongoing outpatient care that are beyond the purview of EDs.
- Provides a “safe” place for individuals to obtain immediate crisis services. The model also allows individuals to access services who may not want an MCT (especially a team that included law enforcement) to perform a home visit.

While there is limited research regarding the effectiveness of this approach, the Task Force may want to consider the expansion of urgent care in Maryland using existing models. Some of these models were hospital-based (e.g. University of Maryland), and others were part of their comprehensive crisis program (Anne Arundel County). These models would indicate that an urgent care approach should include immediate access to psychiatric assessment, including an evaluation of the need for medication and prescription drugs (either having a pharmacy on-site or a close working relationship with a nearby pharmacy). The urgent care centers should also have the ability to provide brief treatment for a short period of time (up to 4 visits over a two week period). Finally the urgent care centers should have the capacity to identify and plan for follow-up treatment and have staff that will ensure transition from urgent care to the next course of treatment.

⁵⁵ Maryland Health Care Commission, *Use of Maryland Hospitals Emergency Departments: An Update and Recommended Strategies to Reduce Crowding*, Jan 2007

VIII. Summary and Task Force Discussion Questions

Does the Task Force wish to recommend that EDs develop specialized psychiatric ED services to be paid under the all-payor system?

Should Maryland expand the following services in an effort to reduce the use of inpatient psychiatric care:

- Various residential alternatives to the hospital?
- Hospital Diversion Programs?
- Urgent Care?
- Assertive Community Treatment and Mobile treatment?

How can Maryland pay for these intensive non-hospital services?

Where should new services be located? How should those decisions be made?

How shall we interpret the data on differences in length of stay distributions for the three different hospital settings – state hospitals, private psychiatric hospitals, and acute general hospital units?

Psychiatric Hospital Admissions

The following table shows the number of admissions to psychiatric hospitals in the United States from 1950 to 1960.

The data shows a steady increase in admissions over the period, with a significant rise in the number of admissions in 1960.

The following table shows the number of admissions to psychiatric hospitals in the United States from 1950 to 1960.

The data shows a steady increase in admissions over the period, with a significant rise in the number of admissions in 1960.

The data shows a steady increase in admissions over the period, with a significant rise in the number of admissions in 1960.

The data shows a steady increase in admissions over the period, with a significant rise in the number of admissions in 1960.

The data shows a steady increase in admissions over the period, with a significant rise in the number of admissions in 1960.

White Paper

**GAPS IN DATA AVAILABLE TO ASSESS NEED FOR SERVICES, TO
UNDERSTAND USE OF SERVICES ACROSS SETTINGS AND TO PLAN
FOR AN INTEGRATED MENTAL HEALTH SYSTEM**

Prepared for the

**Task Force on the Plan to Guide the Future
Mental Health Service Continuum**

**For Review and Distribution at the
September 23, 2008 Task Force Meeting**

MARYLAND HEALTH CARE COMMISSION

Plan to Guide the Future Mental Health Service Continuum in Maryland

Gaps in data available to assess need for services, to understand use of services across settings and to plan for an integrated mental health system

Table of Contents

I.	Introduction	
	A. Purpose of the Plan.....	3
	B. Purpose and Scope of the White Paper.....	3
II.	Background	
	A. Reasons for Collecting, Analyzing and Publishing Data	4
	1. Planning	4
	2. Utilization Management/Utilization Review	6
	3. Quality Improvement	7
	B. Data Typically Used for Quality Improvement.....	8
III.	Overview of Maryland’s Mental Health Data and Reporting Systems	
	A. Data Collection Related to the Demand for Mental Health Services.....	11
	B. Data Collection and Analysis Regarding Capacity for Mental Health Services.....	16
	C. Data Collection and Analysis Related to Quality of Patient Care.....	18
	D. Public Data Reporting in Maryland	19
IV.	Summary	28
	Appendix 1: Examples of Reports from the MAPS-MD Data Warehouse	30
	Appendix 2: Washington, Oklahoma and New York Performance Measures.....	32

I. Introduction

A. Purpose of the Plan

The 2007 Joint Chairmen's Report¹ (JCR) directed the Maryland Health Care Commission (MHCC or Commission) to work with the Department of Health and Mental Hygiene (DHMH) and Maryland's Mental Health Transformation State Incentive Grant (MHT-SIG) to develop a plan to guide the future mental health service continuum needed in Maryland. The report recommended that the Maryland Health Care Commission develop projections of future bed need for acute inpatient psychiatric services (in State-run psychiatric, private psychiatric and acute general hospitals) and community-based services and programs needed to prevent or divert patients from requiring inpatient mental health services, including services provided in hospital emergency departments. To guide the development of the plan, the JCR identified key stakeholder organizations to be included on a Task Force to provide assistance to the Commission in the development of the plan.

The Plan to Guide the Future Mental Health Service Continuum is intended to address a number of key questions, including:

- What are the service components of the crisis emergency system (including acute inpatient treatment)? How will the components differ across urban, suburban and rural areas?
- Which crisis response services should be generally available and which should be targeted to specific and/or enrolled clients?
- Who is expected to access the services (public consumers, privately insured individuals or both)?
- Where are the services needed? What service components should be available in urban, suburban and rural areas?
- What will the service components cost?
- Who will purchase the services (public payers, commercial carriers or both)?
- What financial base is available to support service development and use? Will existing dollars be diverted to these services or will the services only be created through new funding?
- How will the plan be implemented?

B. Purpose and Scope of the White Paper

This White Paper identifies gaps in the collection, analysis, and public reporting of data necessary to support and manage an integrated mental health system. The paper discusses reasons for data collection and includes a review of state-level data collection, analysis, and public reporting with respect to mental health. In addition, this paper includes recommendations for improving Maryland's ability to effectively plan for mental health services.

II. Background

¹ Chairmen of the Senate Budget and Taxation Committee and House Committee on Appropriations, Report on the State Operating Budget (HB50) and the State Capital Budget (HB51) and Related Recommendations, Joint Chairmen's Report, Annapolis, Maryland, 2007 Session, p. 97-98.

A. Reasons for Collecting, Analyzing and Publishing Data

Operating an effective mental health system requires three sets of activities that are heavily dependent on data collection, analysis, and dissemination: planning, utilization management/utilization review, and quality improvement. Further discussion of each of these sets of activities follows.

1. Planning

Most healthcare systems use a population-based approach to system planning. They also typically use historical, prevalence, and prospective data to answer two sets of questions:

Demand/Capacity Planning

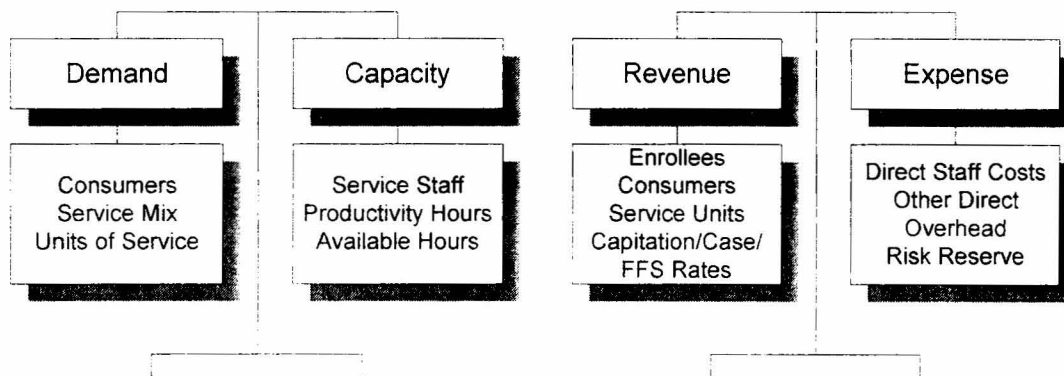
- What is the population the healthcare system is responsible for serving?
- What types of healthcare services are necessary to meet the needs of the population?
- How much of each type of service is needed and how does this translate into the number of clinician full-time equivalents, hospital beds, etc.?
- What is the supply/availability of resources?
- What are the current service levels and system expenditures?
- What gaps exist between current capacity and projected demand?

Revenue/Expense

- What is the cost of meeting the projected demand?
- What overhead and risk reserve requirements must be covered to support the system?
- What revenues are available to meet the needs of the population and different categories of services?
- What restrictions exist with available revenues?
- What gaps exist between current revenues and projected expenditures?
- What additional sources of revenue may be available to address the projected demand and cost?

Figure 1 illustrates the planning process through the view of two balances: demand needs to balance with capacity and revenue needs to balance with expense.

Figure 1: Demand/Capacity, Revenue/Expense Balances



Population-based planning became a formal requirement in August 2003 for states operating Medicaid managed care programs such as Maryland's Health Choice 1115 waiver. Two excerpts from federal regulations pertaining to Managed Care Organizations (MCOs), Pre-paid Inpatient Health Plans (PIHPs) and Pre-paid Ambulatory Health Plans (PAHPs), in particular, provide guidance in this area.

42 CFR 438.206(b)(1): Delivery Network²

The State must ensure, through its contracts, that each MCO, and each PIHP and PAHP consistent with the scope of the PIHP's or PAHP's contracted services, meets the following requirements:

(1) Maintains and monitors a network of appropriate providers that is supported by written agreements and is sufficient to provide adequate access to all services covered under the contract. In establishing and maintaining the network, each MCO, PIHP, and PAHP must consider the following:

(i) The anticipated Medicaid enrollment.

(ii) The expected utilization of services, taking into consideration the characteristics and health care needs of specific Medicaid populations represented in the particular MCO, PIHP, and PAHP.

(iii) The numbers and types (in terms of training, experience, and specialization) of providers required to furnish the contracted Medicaid services.

(iv) The numbers of network providers who are not accepting new Medicaid patients.

(v) The geographic location of providers and Medicaid enrollees, considering distance, travel time, the means of transportation ordinarily used by Medicaid enrollees, and whether the location provides physical access for Medicaid enrollees with disabilities.

42 CFR 438.207(b) Assurance of adequate capacity and services

The State must ensure, through its contracts, that each MCO, PIHP, and PAHP gives assurances to the State and provides supporting documentation that demonstrates that it has the capacity to serve the expected enrollment in its service area in accordance with the State's standards for access to care under this subpart.

(b) Nature of supporting documentation. Each MCO, PIHP, and PAHP must submit documentation to the State, in a format specified by the State to demonstrate that it complies with the following requirements:

(1) Offers an appropriate range of preventive, primary care and specialty services that is adequate for the anticipated number of enrollees for the service area.

(2) Maintains a network of providers that is sufficient in number, mix, and geographic distribution to meet the needs of the anticipated number of enrollees in the service area.

In order to meet these federal requirements, states must design and complete a population-based study for projecting the service needs of the Medicaid enrollees, compare those needs against the capacity of the provider network, and take steps to fill the gaps.

This type of population-based planning approach, while well established in general health care and public health, is relatively new to mental health. A number of states have worked with the federal government, the National Association of State Mental Health Program Directors (NASMHPD), and academic researchers to compile and analyze portions of a demand/capacity, revenue/expense planning model. This has focused primarily on the following:

² Code of Federal Regulations, <http://www.gpoaccess.gov/CFR/retrieve.html>

- National prevalence methodologies, similar to demand planning, have been developed at the federal level and refined in some states. Dr. Charles Holzer at the University of Texas Medical Branch in Galveston is the leading expert in this area and is in the process of attempting to obtain support to develop a prevalence model for every county in the United States.
- The National Research Institute (NRI), a branch of NASMHPD, has compiled information since 1981 on revenue and expenditures that are controlled by state mental health agencies.³ The NRI has also been funded for a pilot to compile mental health revenue and expenditures for all publicly funded mental health consumers in a small number of states; unfortunately the funder, the Substance Abuse and Mental Health Services Administration (SAMHSA), has discontinued the project.
- Some states have begun to address the capacity/demand issue, primarily through their federal Transformation Grants. Washington State has worked with Dr. Joseph Morrissey from the University of North Carolina at Chapel Hill to study mental health workforce shortage among the state's mental health workers.⁴

To date we have not seen a study that combines the study of capacity and demand with revenue and expense to produce a statewide planning analysis.

In a state such as Maryland that is working to create an integrated mental health system, it is important to identify the different state systems serving persons with mental disorders and complete a planning process that includes all "publicly funded" consumers and all available state and federal resources.

2. Utilization Management/Utilization Review

The National Committee for Quality Assurance defines Utilization Management as the processes that "ensure that enrollees have equitable access to care across the delivery system."⁵ To accomplish this, Utilization Management processes focus on defining and regulating the provision of services in relation to overall capacity and the needs of patients. Goals of mental health Utilization Management programs often include ensuring that *consumers receive care in the least restrictive environment* and ensuring *services provided are effective and appropriate*.

Among Utilization Management processes, Utilization Review is often employed. Utilization Review is the systematic review of case records to assess service delivery appropriateness and to assess the existence of decision and documentation practices required by the provider, delivery system and/or payor.

A Utilization Management Program ensures oversight of the utilization of services at multiple levels of the delivery system:

³ National Research Institute, Revenues and Expenditures Study, <http://www.nri-inc.org/projects/Profiles/RevenuesExpenditures.cfm>

⁴ Geographic Disparities in Washington State's Mental Health Workforce, Joseph P. Morrissey, Ph.D., Kathleen C. Thomas, Ph.D., Alan R. Ellis, MSW, T. Robert Konrad, Ph.D., Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, 2007

⁵ Standards for Accreditation of Managed Behavioral Healthcare Organizations. National Committee for Quality Assurance, 1997.

- Individual consumers of all ages
- Provider organizations
- County-wide patterns of care
- Statewide patterns of care

This oversight is accomplished through specific activities at each stage in the delivery of services:

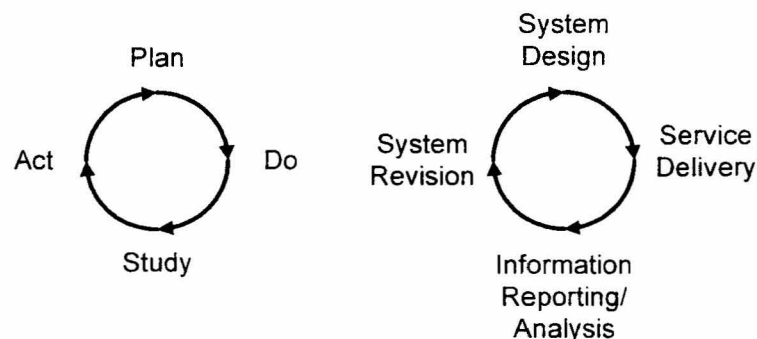
- *Initial authorization*: the review and documentation of medical necessity for a specific type or level of service prior to or at the initiation of the service (also called certification, payment authorization);
- *Concurrent review*: the review and documentation of medical necessity for continued stay in a specific type or level of service; and,
- *Retrospective review*: the review of data, clinical charting and other documentation following an episode of care to identify patterns of practice related to medical necessity, continued stay, appropriateness of services and clinical documentation.

Initial authorization and concurrent review often target high risk, high cost cases, while retrospective review samples all cases. All three activities rely on written criteria for determining clinical appropriateness. This is done through matching the type, frequency, amount, duration and intensity of services with patient characteristics (diagnosis, level of functioning, acuity, history, mental status, age, gender) to achieve outcomes. For Maryland, utilization management and review are carried out by an Administrative Services Organization (ASO), MAPS-MD.

3. Quality Improvement

Quality Improvement requires pulling together *data-driven* activities into the *Plan, Do, Study, Act*⁶ logic model that provides the basis for managing mental health systems. **Figure 3**, also known as the Quality Improvement Cycle, illustrates this logic model.

Figure 3: Quality Improvement Cycle



Understanding and improving the Information Reporting/Analysis step in the Maryland Mental Health System is one important goal of this White Paper. As described in the prior planning section, the federal quality improvement rules for managed care plans such as Maryland's Health Choice 1115 waiver were further clarified in the Code of Federal Regulations released in August 2003. Another

⁶ The PDSA Cycle was popularized by Dr. W. Edwards Deming in the 1980s, based on the work of Walter Shewhart in the 1930s.

excerpt from the Code of Federal Regulations, describing the standards for states' performance improvement programs follows.

Quality Assessment and Performance Improvement Program⁷

42 CFR 438.240 Quality assessment and performance improvement program

- (a) General rules. (1) The State must require, through its contracts, that each MCO and PIHP have an ongoing quality assessment and performance improvement program for the services it furnishes to its enrollees.*
- (2) CMS, in consultation with States and other stakeholders, may specify performance measures and topics for performance improvement projects to be required by States in their contracts with MCOs and PIHPs.*
- (b) Basic elements of MCO and PIHP quality assessment and performance improvement programs. At a minimum, the State must require that each MCO and PIHP comply with the following requirements:*
- (1) Conduct performance improvement projects as described in paragraph (d) of this section. These projects must be designed to achieve, through ongoing measurements and intervention, significant improvement, sustained over time, in clinical care and nonclinical care areas that are expected to have a favorable effect on health outcomes and enrollee satisfaction.*
- (2) Submit performance measurement data as described in paragraph (c) of this section.*
- (3) Have in effect mechanisms to detect both underutilization and overutilization of services.*
- (4) Have in effect mechanisms to assess the quality and appropriateness of care furnished to enrollees with special health care needs.*

Measures used by Maryland to show compliance with the 1115 waiver cover a broad range of areas, including a few specifically related to mental health. These measures include time to a follow-up mental health visit after hospitalization for mental illness and number of visits within 84 days following diagnosis of depression and a prescription for it).⁸ These two measures are useful, but only cover a segment of the population in need of mental health services. Measures are also needed for assessing the use of mental health services outside the public mental health system.

B. Data Typically Used for Quality Improvement

There have been a number of national efforts by the federal government and accreditation bodies to develop healthcare and behavioral health performance measures. The Substance Abuse and Mental Health Services Administration (SAMHSA) and SAMHSA's Center for Mental Health Services (CMHS) have been the main governmental entities involved in mental health performance measures. Their efforts include:

- **Uniform Reporting System (URS):** This project has been underway since 1997. The URS is organized into four Domains: Access, Appropriateness, Outcomes and Structures.⁹ Reports are generated annually for the 50 states. The most recent published report is for fiscal year 2006.

⁷ Code of Federal Regulations, <http://www.gpoaccess.gov/CFR/retrieve.html>

⁸ Department of Health and Mental Hygiene. "Maryland HealthChoice Program 1115 Waiver Renewal Application." http://www.dhmf.state.md.us/mma/healthchoice/pdf/Waiver_Renewal_Application.pdf

⁹ SAMHSA's Center for Mental Health Services Mental Health Statistics, <http://mentalhealth.samhsa.gov/cmhs/MentalHealthStatistics/>

- **National Outcome Measures (NOMs):** NOMs, which should be considered a work in progress, are focused on what SAMHSA describes as “meaningful, real life outcomes for people who are striving to attain and sustain recovery; build resilience; and work, learn, live and participate fully in their communities.” SAMHSA has identified ten mental health NOMs that loosely crosswalk to the URS taxonomy—eight Outcome measures, one Access measure and one Structure measure.¹⁰

In the non-governmental sector, five accreditation bodies have provided leadership in the area of performance measurement.

- The Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- The National Committee for Quality Assurance (NCQA)
- The Commission on Accreditation of Rehabilitation Facilities (CARF)
- The Council on Accreditation for Children and Family Services (COA)
- The Council on Quality and Leadership in Support of Persons with Disabilities (The Council)

In 2001, the American College of Mental Health Administration (ACMHA) released a report: "A Proposed Consensus Set of Indicators for Behavioral Health" that represented a four-year collaborative effort by the five accreditation bodies. Similar to the URS, the Consensus Set contains 35 measures in three domains: Access, Process and Outcomes. **Table 1** provides a crosswalk matrix of the URS and ACMHA performance measure sets.

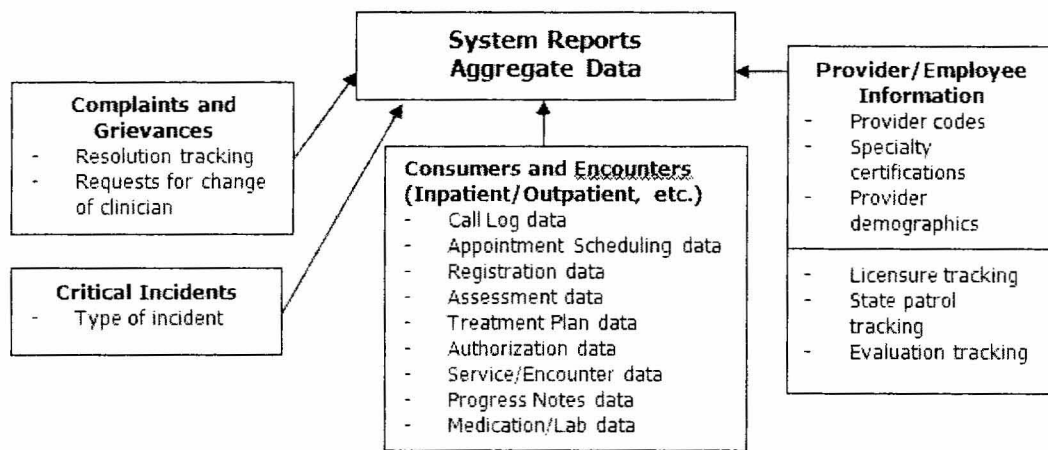
¹⁰ SAMHSA's National Outcome Measures, <http://www.nationaloutcomemeasures.samhsa.gov/>

Table 1: ACMHA and URS Domains, Topics and Tables

Domain	ACMHA Topic	URS Table
Access	<ol style="list-style-type: none"> 1. Services are available 2. Services are convenient 3. Services are timely 4. Services are provided 	<p>Table 1: Demographic Characteristics Of Persons Served By The State Mental Health Authority</p> <p>Table 2: Persons Served In Community Mental Health Programs By Age And Gender</p> <p>Table 3: Persons Served In State Psychiatric Hospitals By Age And Gender</p> <p>Table 4: Persons Served SMHA Systems With Medicaid And Other Funding Sources By Race And Gender</p>
Process/ Appropriateness	<ol style="list-style-type: none"> 1. Treatment decisions 2. Responsiveness 3. Non-coercive treatment 4. Experience of care 5. Cross system needs 6. Safe treatment 	<p>Table 1: Homeless Persons Served By Community Mental Health Programs By Age And Gender</p> <p>Table 2: Number Of Admissions During The Year To State Hospital Inpatient And Community-Based</p> <p>Table 3: Mean Length Of Stays Of Adults And Children In State Psychiatric Hospitals</p> <p>Table 4: Percent Of Adults with SMI and Children with SED And Percent Of Adults And Children Served Who Have Co-Occurring Mental Health/Alcohol and Other Drug Abuse Disorders</p>
Outcome	<ol style="list-style-type: none"> 1. Well being 2. Work and school 3. Safety 4. Legal involvement 5. Housing 	<p>Table 1: Employment Status Of Adult Mental Health Consumers Served In The Community By Age And Gender</p> <p>Table 2: Consumer Survey Results</p> <p>Table 3: Consumer Survey Results by Race</p>
Structure	N/A	<p>Table 1: State Mental Health Agency Controlled Expenditures For Mental Health</p> <p>Table 2: State Mental Health Agency Controlled Revenues By Funding Source</p> <p>Table 3: Federal Mental Health Block Grant Expenditures For Non-Direct Service Activities</p>

Both data sets draw on the two types of methods for gathering performance measure data—surveys of consumers or their families and mental health information system transaction data. Mental health information system transaction data include details captured through data entry screens as part of the regular clinical and administrative workflows and which are loaded in the system’s data tables for later retrieval and analysis. **Figure 3** provides examples of these types of data.

Figure 3: Mental Health Information System Data Components



Although national standards provide a good model of the kinds of information to collect, national standards generally are not very useful for creating benchmarks and comparing across states. In some cases, this stems from the differences in how states finance their mental health systems and in others in stems from differences in data collection. For example, as noted in White Paper #2, the data collected for the URS system is not readily comparable across states because in some states mental health services through Medicaid may not be included in statistics.

III. Overview of Maryland’s Mental Health Data Collection, Analysis, and Public Reporting Systems¹¹

As previously noted, one of the key reasons for collecting mental health data is to plan for the demand for mental health services and to determine the capacity for delivering such services. The Maryland Mental Hygiene Administration has primary responsibility for organizing and managing Maryland’s public mental health system, and it largely collects and uses information from eight databases. This section describes the utility of this data in measuring the demand for mental health services and recommends ways to improve forecasting the demand for such services. This is followed by a brief discussion of the ways in which data is collected on the existing capacity for provision of mental health services and recommendations for improving capacity measures. Lastly, public reporting of mental health service use is described, along with recommendations regarding additional reporting.

A. Data Collection and Analysis Related to the Demand for Mental Health Services

Maryland collects a large amount of information on the use of certain mental health services and the characteristics of users through eight data systems. Maryland largely relies on the historical use of services for planning purposes. As noted in the first White paper, it is very difficult to measure the

¹¹ Material for this section was based on phone interviews and documents supplied by the Maryland Mental Hygiene Administration, Tim Santoni of the University of Maryland’s Systems Evaluation Center, and Roger Lippman from MAPS-MD (unless otherwise noted).

demand for acute or other psychiatric services because there are multiple ways to meet an individual's need for mental health care and assumptions about needs cannot be readily made based simply on a diagnosis. Therefore, use rates often become the default measure of demand for planning purposes. Below is a description of the main sources of data on mental health services in the public and private sectors, followed by a discussion of the additional data collection and analysis which may be useful for evaluating the demand for acute mental health services.

Maryland Public Mental Health System (PMHS) Data System: The primary community-based mental health data and reporting system is managed by an Administrative Services Organization (ASO), MAPS-MD (*APS Healthcare*). The data system collects information for Medicaid and uninsured individuals who receive services in the mental health fee-for-service system. The system contains data on providers, eligibility, authorizations and claims. Medicare services, crisis services and some hospital-based services are not in this data system. Primarily, the services not collected in the system are the contractual services provided by core service agencies. Examples of specific services include non-residential crisis services and in-home interventions for children in some counties. Each CSA collects its own data without coordination through the State.

All non-emergency services are tracked through an authorization system that is structured around episodes of care. Medicaid client information is accumulated through the Medical Assistance (MA) eligibility file. Unduplicated counts are calculated by using unique identifiers. Provider data come from provider enrollment files, which are used both for referral and for payment of claims. Finally, event and cost data are derived from claims files. Emergency services do not require prior authorization. Medicaid eligible individuals receiving emergency services are tracked through the same system that captures claims data for non-emergency services.

Maryland State Psychiatric Hospital Data Base: The Mental Hygiene Administration (MHA) uses a Hospital Management Information System (HMIS) to track admission, discharge, census and other related information for all of the State psychiatric hospitals and residential treatment centers. It is also used by another division of the Department of Health and Mental Hygiene (DHMH) to bill for services provided in these settings. The system has a pharmacy component and many hospitals have added additional data elements. While this system does not use the same consumer identifiers as the ASO data system, there are elements common to both which MHA has used to establish a nearly unique identifier based on demographic variables. This identifier has been used to link data from the two systems. This system, which has been in place since 1986, is scheduled for replacement.

Core Service Agency Crisis Databases: A small number of mental health services are provided under contracts with local mental health authorities which Maryland designates Core Service Agencies (CSA). Many CSAs operate crisis services in conjunction with law enforcement or emergency medical personnel. A number of CSAs also offer special assistance to individuals who have just been released from the hospital or from jail. Most non-crisis-only individuals who receive such supports from the CSAs are also active in the fee for service system. Many, but not all, CSA-funded services are tracked through local databases.

Maryland Acute Care Hospital Discharge Database: The State maintains a data system that collects data from acute general hospitals including psychiatric service discharges, patient days, age group, principal and other diagnoses, jurisdiction of patient residence, payer source and selected other data elements.

Maryland Hospital Ambulatory Care Database: The State maintains a second data system for acute general hospitals in order to collect information on emergency department and clinic visits, age group, principal and other diagnoses, jurisdiction of patient residence, payer source, and other data elements.

Maryland Private Psychiatric Hospital Discharge Database: The State also maintains a data system that collects data for four of the five freestanding psychiatric hospitals including, discharges, patient days, age group, principal and other diagnoses, jurisdiction of patient residence, payer source, hospital and selected other data elements.

Medicare Outpatient Standard Analytical File (SAF): The Medicare Outpatient SAF contains final action claims data submitted by institutional and outpatient providers including hospital outpatient departments and community mental health centers. Some of the information contained in this file includes diagnosis and procedure (ICD-9 diagnosis, ICD-9 procedure code, CMS Common Procedure Coding System (HCPCS) codes), dates of service, reimbursement amount, outpatient provider number, revenue center codes and beneficiary demographic information.

Diversion Programs: Information is collected from three hospital diversion programs (Baltimore City, Anne Arundel County, and Montgomery County). Some of the data collected from these programs was presented at the second meeting of the Taskforce. These data may provide a basis for estimating the extent to which inpatient psychiatric services may be reduced through hospital diversion programs.

Discharge Barriers: Staff from MHA have indicated that there is not a tracking system for patients in State hospitals, but it frequently surveys hospitals and CSAs to determine the needs of individuals in State hospitals. MHA staff reported that affordable housing is a frequently a barrier, and finding residential services for individuals with complicated medical, psychiatric, and forensic issues was also reported as a barrier. Data regarding barriers for patients at other locations (private psychiatric hospitals and general hospitals) would be helpful for providing a more comprehensive analysis of the needs of patients.

Data Analysis of MAPS-MD Data: Currently more than 50 standard reports are generated with data from MAPS-MD to assist in general planning, policy and decision making.

Staff at MAPS-MD prepare a Quarterly PMHS Report that contains more than 30 exhibits, covering measures in the following eight areas:

- Number of Consumers Served
- Penetration Rates
- Claims Expenditures
- Cost per Consumer
- Average Number of Services per Consumer
- Units of Service
- Number of Providers
- Claims Processing Performance

The reports generated from the PMHS/MAPS-MD Data Warehouse provide useful information for

planning purposes, such as the average amount of resources required per consumer and the types of services most frequently needed. The ability to group data by consumers' counties of origin and to display data across multiple years further enhances the utility of the data. Examples of reports generated from the system are included in Appendix 1. These reports illustrate some of the ways in which data may be displayed graphically, such as line and bar graphs.

MAPS-MD data for at least a few specific subgroups of users has been analyzed. For example, high intensity users with Medicaid insurance were examined, in order to evaluate a specific pilot program, intensive care management (ICM). The number of inpatient admissions per consumer was compared before and after the program. Costs per consumer before and after participation in the program were also compared. Results showed that ICM was successful in reducing the use of acute inpatient bed days and costs per consumer.¹² Other new types of analyses are regularly considered during bi-weekly meetings between MHA and MPAPS-MD and SEC staff. Another group of users that MHA has focused on is those with high costs over several years. Other groups examined are those with serious mental illness or a serious emotional disorder and those with a dual diagnosis.

Analysis of Diversion Programs: Data was collected on the number of consumers at hospitals' emergency departments who were determined to be in need of hospital-level care. Uninsured consumers with psychiatric diagnoses were those considered eligible for diversion services, and the location of care following their disposition was tracked. Those that received community-based alternatives to acute psychiatric care were counted as patients who had been diverted. By comparing the number of bed days and discharges for hospitals before and after the implementation of the diversion programs, it's possible to measure the impact of the program on inpatient hospital use.

Mental Health Systems Improvement Collaborative: For several years, MHA has partnered with the Mental Health Systems Improvement Collaborative. The Collaborative is a unit in the University of Maryland School of Medicine, Department of Psychiatry, Division of Services Research. The Collaborative includes three Centers, a Training Center, an Evidenced Based Practices Center and a Systems Evaluation Center (SEC). Approximately five years ago, MHA asked the SEC to expand its role and provide assistance and staff to its data infrastructure efforts. Since that time, the SEC has established a data base maintaining the historical and current PMHS data and it has developed capacity to assist MHA in data maintenance, analysis and reporting.

Currently the SEC is preparing a Statistical Profile of Maryland Mental Health Systems in support of the Plan to Guide the Future Mental Health Service Continuum in Maryland. Data analysis for the Statistical Profile will include use of emergency departments by individuals with psychiatric diagnoses, use of state hospitals, use of acute general hospitals, and use of private psychiatric hospitals. The Statistical Profile will be the first effort to consolidate and report on data from the systems described above along with data from US Census and SAMHSA data sources.

Additional Need for Data Collection and Analysis:

- Analysis of emergency department decisions regarding consumers with psychiatric diagnoses may be useful. Some members of the Taskforce have expressed concerns about these

¹² http://www.nri-inc.org/conferences/Presentations/2008/24_Hadley.pdf

decisions. If persons are being admitted to acute inpatient psychiatric care, when they could be served through community alternatives, then the need for inpatient services may be lower than suggested by discharge data.

- Collection and analysis of wait times in emergency departments for consumers with mental health diagnoses may be useful for identifying areas where there are shortages of psychiatric beds or shortages of other mental health services.
- Data from other states on the use of acute psychiatric services and services that may substitute for acute inpatient care, or substantially reduce the need for inpatient care would be useful in defining the minimum level of acute inpatient care that should be regarded as necessary. It could also provide some guidance as to the level of community services necessary to reduce the use of acute inpatient psychiatric care.
- Data from localities on mental health services that are funded locally is currently not collected and may be useful for analyzing the demand for some services. Ideally, the data should be collected in a way that allows for integration with other data systems.
- Data from general hospitals, private psychiatric hospitals, and State hospitals on discharge barriers for patients. A survey of hospitals for a brief period, such as a month, may be sufficient to estimate the extent to which discharge barriers result in longer inpatient care, as well as, the types of services missing. These data may provide a basis for estimating the extent to which inpatient psychiatric services may be reduced through the elimination of discharge barriers.
- Analysis of data to evaluate whether there may be unmet demand among Medicaid recipients may be useful, based on the results of a study published in 2003 by the Research and Analysis Division of the Washington State Department of Social and Health Services. The study, *Cost Offsets and Client Outcomes Technical Report*,¹³ examined the effects of publicly funded mental health care on medical costs and mortality for aged, blind or disabled Medicaid clients who had a mental illness diagnosis in their medical records at some point between July 1998 and June 2002. The study's major finding was that adult aged, blind, or disabled clients on Medicaid who received publicly funded mental health treatment had lower subsequent medical costs and a reduced risk of death compared to clients diagnosed with mental illness who did not receive mental health treatment.

Other key sub-findings included:

- Cost for clients receiving outpatient mental health treatment were reduced by about \$105 per member per month (PMPM) in the first follow-up year and \$126 PMPM in the second year
- Outpatient therapy and psychotropic medication was found to be more effective in reducing medical care costs than medication alone

¹³ Washington State Department of Social and Health Services Research and Data Analysis Division, <http://www1.dshs.wa.gov/pdf/ms/rda/research/3/29.pdf>

- The odds of dying were 23 percent lower in a two-year period for Medicaid clients who received outpatient mental health treatment

B. Data Collection and Analysis Regarding Inpatient Capacity for Mental Health Services

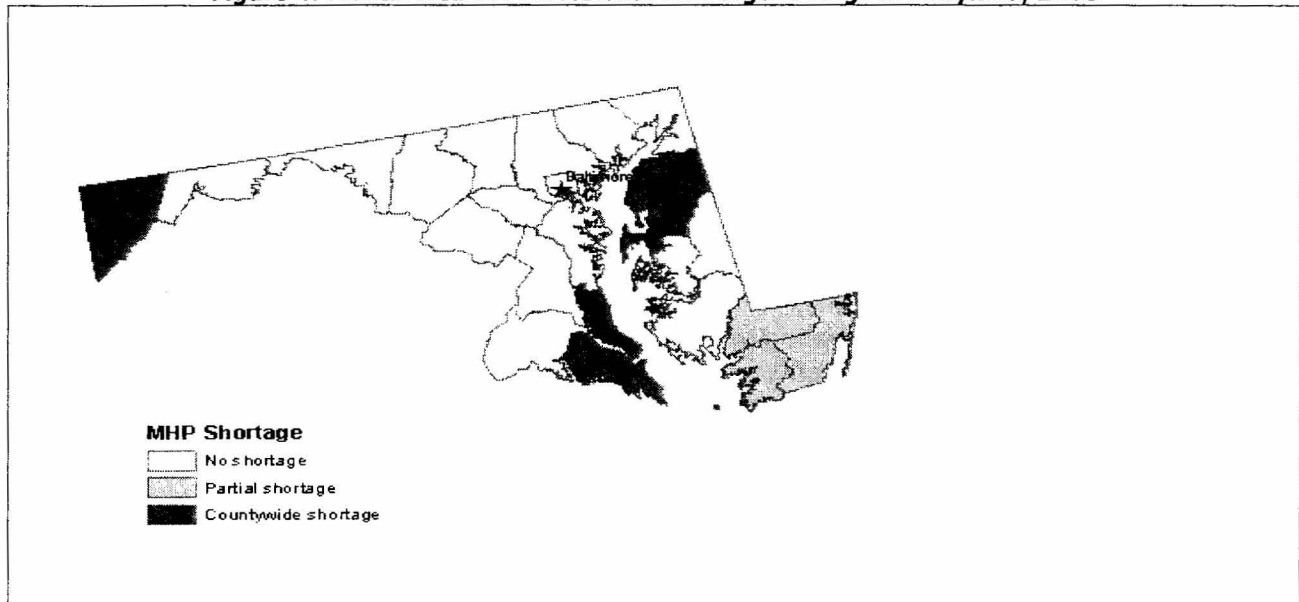
The available capacity for mental health services has at least two dimensions, the physical bed or program space and staffing of the bed or program. Recently, information has been collected by MHCC and DHMH related to inpatient capacity and the staffing of State hospital beds. However, there is not routine annual data collection of the physical psychiatric bed capacity for all hospitals in the State or of programs that may reduce the use of psychiatric beds, such as crisis services, intensive outpatient services, and partial hospitalization programs. A description of recent data collection activities follows, along with recommendations for future data collection.

Psychiatric Hospital Beds and Programs: The Maryland Health Care Commission (MHCC) produces an annual report on acute care hospital services and licensed bed capacity. However, licensed bed capacity is not an accurate indicator of the number of available beds because of the method for determining licensed capacity, as discussed in the second White Paper. In order to more accurately determine the inpatient psychiatric bed capacity at the state and local level, MHCC staff conducted a survey in June 2008, requesting information on the physical capacity of hospitals (general, private, & State) as well as the staffed capacity. Hospitals were also asked to report on the slots available in their intensive outpatient programs and partial hospitalization programs, if applicable, as well as the number of seclusion spaces available for psychiatric patients.

With regard to State hospitals, MHA's longstanding practice has been to track the average daily population and operated capacity. However, in looking at the mental health system as a whole, it is necessary to consider another factor, the number of forensic patients served. To the extent that State beds are used for forensic patients who cannot be served elsewhere, there may effectively be fewer beds available for civil patients who after being served at a general hospital or private psychiatric hospital require transfer to a State hospital for longer-term care.

Health Care Workforce: Data collected through the Health Resources and Services Administration (HRSA)/Bureau of Health Professions (BHP) for Maryland includes counts of mental health providers. It appears there may be a shortage of mental health professionals in a few areas of the state, based on the most recent HRSA/BHP report for Maryland. The report includes a map with areas labeled as having a shortage of mental health professionals county-wide, in part of a county, or no shortage at all, as shown in **Figure 4** below. The mental health professionals included in the measure are psychiatrists, psychologists, clinical social workers, psychiatric nurses, and therapists with a specialization in marriage and family therapy. Only those who are providing mental health patient care in an ambulatory or short term care setting for a particular geographic area are included, and FTEs are used. As a result, if a provider's time is split by location or setting, it will be counted accurately.

Figure 4: Mental Health Professional Shortage Ratings in Maryland, 2008



Source: U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. "State Profiles and Maps." <http://www.nationaloutcomemeasures.samhsa.gov>.

With regard to State hospitals, a 2007 DHMH report on staffing at State hospitals concluded that there is significant understaffing at some locations, in particular for the patients in Perkins and residential treatment centers (RTCs). The findings of the report suggest that there is less capacity in State hospitals than it appears.

Additional Need for Data Collection:

- It would be useful to have an inventory of crisis services available in each locality. At least a couple states, Virginia and North Carolina, have conducted an inventory of the crisis services available in each locality, as part of evaluating and improving their mental health systems.
- It would also be useful to measure the capacity of other services that could service as an alternative to acute inpatient psychiatric care, besides crisis services, such as intensive outpatient (IOP) and partial hospitalization (PHP) programs. As noted earlier, information on IOPs and PHPs was collected for 2008 on an MHCC survey for the first time. This information should continue to be collected in future years.
- The information collected by MHCC for 2008 on physical and staffed capacity for psychiatric beds at general, private, and State hospitals should continue to be collected in future years.
- In terms of the impact of a shortage of mental health professionals for particular service areas, it would be helpful to investigate how shortages may be affecting the use of psychiatric beds and services, in order to accurately plan for the future. A shortage of mental health professionals may hinder the ability of some locations to staff all their beds or may negatively impact patient care. Shortages may also affect the availability of outpatient care which could then affect the utilization of acute psychiatric care.

C. Data Collection and Analysis Related to Quality of Patient Care

MHA has taken steps to improve the quality of patient care through improvements in the coordination of care, the development of an outcomes measurement system, and a focus on high-intensity users. Each of these programs is described in greater detail below.

Access to Prescription Information: In July 2007, information on Medicaid drug prescriptions filled by consumers in the PMHS became available through CareConnections®. These prescriptions are for all medications other than HIV medications regardless of prescriber. This information is accessible to providers of mental health services. It is available to those providers with existing open authorizations to treat the consumer. The pharmacy data is refreshed monthly and includes prescriptions filled during the 12 months prior to the refresh date. Information is made available to Managed Care Organizations, who can then communicate it to their primary care physicians. This program helps to improve the coordination of patient care and potentially will improve the quality of clinical care.

Outcomes Measurement System (OMS): In Fiscal Year 2007, MHA, in collaboration with the University of Maryland's Systems Evaluation Center (SEC) and Administrative Service Organization (ASO), instituted an Outcomes Measurement System (OMS) statewide for individuals ages six to sixty-four who receive outpatient mental health services in Outpatient Mental Health Clinics (OMHCs), Federally Qualified Health Centers (FQHC's) and hospital-based outpatient mental health clinics. Five outcome domains are being implemented for adults: psychiatric signs and symptoms and symptom distress; functioning, including employment; living situation; criminal justice system/legal involvement; and alcohol and substance use. Six outcome domains are being implemented for children, adolescents and their caregivers: psychiatric signs and symptoms and symptom distress; functioning, including school performance and employment; living situation; social connectedness of the caregiver; juvenile justice system/legal involvement; and alcohol and substance use. In FY 2008, MHA concentrated on developing a structure for outcomes reporting. In early 2008, OMS data was available for 28,809 adults (unduplicated, ages 18-64) who had completed the adult OMS questionnaire and 28,358 children/adolescents (unduplicated, ages 6-17) who had completed the child questionnaire.¹⁴ **Figure 5** contains a sample screen shot from the Adult instrument.

¹⁴ Information supplied by the Maryland Mental Hygiene Administration.

Figure 5: Adult OMS Questionnaire Sample

SYMPTOMS, FUNCTIONING AND ALCOHOL/SUBSTANCE USE

Now, I am going to read a series of statements. For each of these statements, please indicate whether you strongly agree, agree, neither agree nor disagree (neutral), disagree, or strongly disagree with these statements. [CARD #1 with response options]

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
5. I do things that are meaningful to me.						ψ
6. I am able to take care of my needs.						ψ
7. I am able to handle things when they go wrong.						ψ
8. I am able to do things that I want to do.						ψ
9. My symptoms bother me.						ψ

The information collected through the OMS questionnaire is anonymous and confidential, so it cannot be used to assist in evaluating the quality of care provided to individual patients. However, it does provide a way of measuring outcomes for patients as a whole and for subgroups of patients, such as age, race, gender, and insurance status. Later this year the public will be able to access data collected through OMS via the internet to create reports of their choice. Reports may be generated based on each of four patient characteristics. Individuals may also create reports with the results of two questions in relation to each other.

Intensive Care Management: As previously discussed MHA decided to focus on high intensity users in the PMHS in order to evaluate a specific pilot program, intensive care management (ICM). MHA. The high intensity users identified were reported by MHA to have frequent or lengthy hospitalization and limited use of community based services. Reducing the use of hospital days and increasing the use of community resources may be regarded as enhancing the quality of patient care.

D. Public Data Reporting in Maryland

Using as a model the ACMHA data reporting previously discussed, there are at least three key areas on which to report information on the mental health system: access, appropriateness, and outcomes. There appear to be two main sources of routine public reporting of this information, the Uniform Reporting System and the Consumer Satisfaction and Outcomes Survey Findings (CSOSF) reports. The latter reports are a product of the Outcomes Measurement System described in the prior section. These two sources are described in greater detail below.

Consumer Satisfaction and Outcomes Survey Findings: The most recent CSOSF report (FY2007) is available on the web site for MAPS-MD. The report includes some information from the two prior years for comparative purposes. The primary focus of the survey is consumer outcomes, but there are some open-ended items on the survey that allow participants to note barriers to care, such as transportation or scheduling difficulties.

Maryland's Involvement in the Uniform Reporting System: Like the other 50 states, Maryland participates in SAMHSA's Center for Mental Health Services (CMHS) Uniform Reporting

System (URS) that was discussed in Section IIB above. Maryland has a strong track record of compiling and submitting data for the URS elements compiled by CMHS. Of the 25 tables submitted for the FY2006 Maryland URS report, 24 had complete data and one was partially complete. **Figures 6 and 7** provide a view of the types of data that are collected and reported.

Figure 6: URS Overview, Indicators 1 – 17

2006 CMHS Uniform Reporting System Output Table

8/19/2007



**STATE MENTAL HEALTH MEASURES:
CMHS Uniform Reporting System: Measures**



STATE Maryland		URS Year 5 Reporting				
Basic Measures		Number	Rate	US FY 2006	Rate	States
Indicator 1	Penetration Rate per 1,000 population	91,238	16.29	5,979,379	19.88	57
Indicator 2	Community Utilization per 1,000 population	89,972	16.07	5,264,674	18.58	55
Indicator 3	State Hospital Utilization per 1,000 population	3,386	0.60	171,125	18.58	52
Indicator 4	Medicaid Funding Status	76,972	84.4%	3,285,758	61.8%	47
Indicator 5	Employment Status (percent with employment data)	5,524	14%	622,219	22%	54
Indicator 6	State Hospital Admission Rate	2,622	0.77	169,299	1.00	49
Indicator 7	Community Admission Rate	32,800	0.36	2,840,575	0.62	46
Indicator 8	State Hospital LOS Discharged Adult Patients		26 days		121 days	44
Indicator 9	State Hospital LOS Resident Adult Patients		1205 days		869 days	44
Indicator 10	Percent of Client who meet SMI definition		64.4%		73.1%	55
Indicator 11	Adults with Co-occurring MH/SA Disorders		24.0%		22.7%	47
Indicator 12	Children with Co-occurring MH/SA Disorders		3.0%		6.2%	44
Adult Consumer Survey measures						
Indicator 13	Positive About Access		79%		85%	51
Indicator 14	Positive About Quality and Appropriateness		82%		87%	51
Indicator 15	Positive About Outcomes		66%		71%	51
Indicator 16	Positive on Participation in Treatment Planning		77%		82%	50
Indicator 17	Positive General Satisfaction with Services		81%		88%	51

Figure 7: Persons Receiving ACT

2006 CMHS Uniform Reporting System Output Table

**APPROPRIATENESS DOMAIN: EVIDENCE-BASED PRACTICES 1:
TABLE 9: ASSERTIVE COMMUNITY TREATMENT, BY AGE, GENDER AND RACE, FY 2006**

STATE Maryland		Assertive Community Treatment				Adults with SMI in States Reporting EBP		Penetration Rate: % of Consumers Receiving EBP/Estimated SMI		States Reporting
	State		US		State	US	MD	US		
	n	%	n	%						
Age										
18 to 20	40	3%	1,103	2%	1,717	75,050	2.3%	1.5%	42	
21 to 64	1,085	91%	42,500	88%	28,797	1,382,943	3.8%	3.1%	42	
65 to 74	45	4%	1,458	3%	617	57,493	7.3%	2.5%	41	
75 and Over	23	2%	368	1%	177	33,639	13.0%	1.1%	39	
Not Available	-	-	3,023	6%	-	184,093	-	1.6%	19	
TOTAL	1,193	100%	48,491	100%	31,308	1,744,901	3.8%	2.8%	45	
Gender										
Female	640	54%	21,787	45%	17,302	888,503	3.7%	2.5%	42	
Male	553	46%	25,512	53%	14,000	693,067	4.0%	3.7%	42	
Not Available	-	-	984	2%	6	187,175	-	0.5%	27	
TOTAL	1,193	100%	48,491	100%	31,308	1,744,901	3.8%	2.8%	45	

Data from the psychiatric inpatient and emergency care databases maintained by the Hospital Services Cost Review Commission are currently not routinely reported to the public. Information may be periodically incorporated into public documents, for example, the 2007 MHCC report on emergency department use or other special studies. However, the lack of complete, routine reporting makes it very difficult for those outside the core of the mental health system to participate in data-driven discussions in an informed and constructive manner.

DHMH has reported that it intends to increase the amount of public reporting on mental health data from PMHS. It has already posted quarterly reports on the MHA web site for FY2002-2008 with statewide data on: consumers by age and Medicaid eligibility, Medicaid penetration by age group, claim expenditures, average annual costs per consumer, average number of services by consumer, and service units by service type.

Additional Public Reporting Needed: It may be useful to consider increasing the amount of data publically reported, beyond the planned expansion, based on the reporting provided in some other states, which is described in the next section. Specific examples of additional reporting to consider include the following:

- Reporting on the use of State hospital beds by civil and forensic patients would be useful. As previously noted, to the extent that beds are increasingly used for forensic patients, beds are effectively less available to private and general hospitals that may have patients that require continuing care in a State psychiatric bed. Increased public reporting would foster greater communication and collaboration with community providers of mental health services.
- Comparisons with other states, ideally peer states or states that appear to be ahead of Maryland with regard to minimizing the use of acute inpatient psychiatric beds through the use of alternative community resources are essential for evaluating the mental health system in Maryland would be useful.
- Regional or county-level data are essential because there are significant geographic differences in the availability and use of resources around the State.
- Where possible, there should be performance measures that include target values to inform public expectations and to evaluate performance.

IV. Other States' Approaches to Public Data Reporting

This section discusses the mental health reporting systems in three states—Washington, Oklahoma and New York. These states have been selected because all represent exemplary reporting systems, and each has taken a different approach to publishing mental health data. Together, they provide a concise set of ideas that can assist the Maryland system in moving to the next level of mental health data management.

Washington

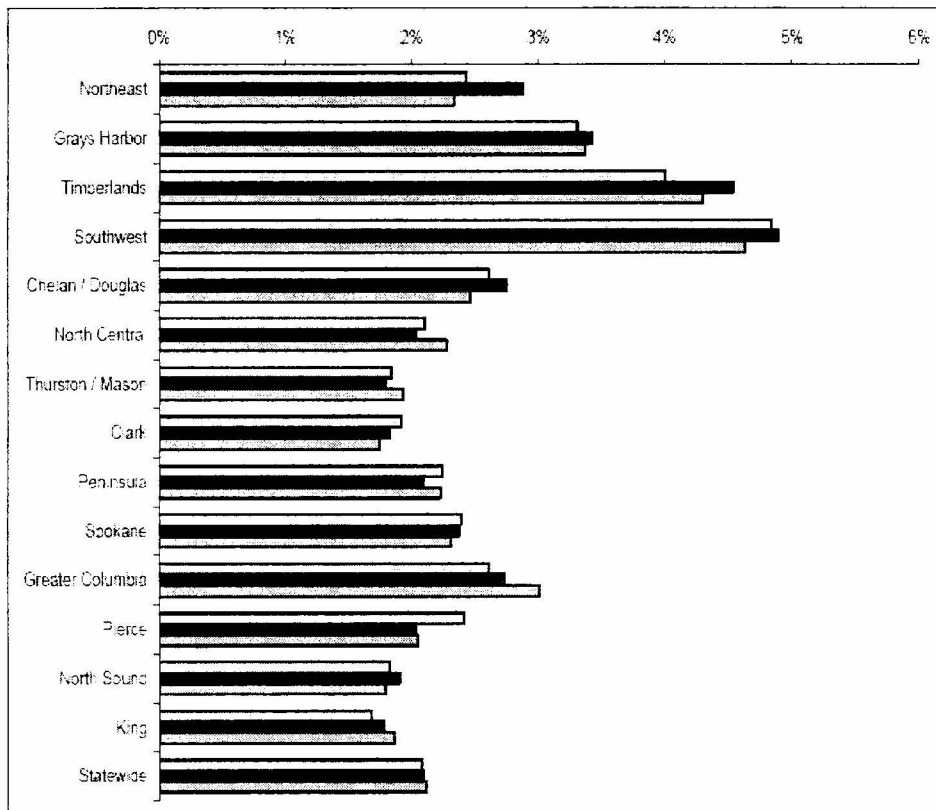
In 2002, Washington State rolled out a *Statewide Publicly Funded Mental Health Performance Indicators*¹⁵ report that has been published annually since that time. This report addresses indicators in the domains of Access, Quality, Client Status and Expenditures, for each of 13 Regional Support Networks (RSNs) that serve as Medicaid managed care plans and management entities for non-Medicaid mental health funds. The reports also include a statewide average and report on the prior three years, to show trends. Reports are placed on the Mental Health Division's website and can be easily accessed and downloaded in Adobe PDF format by the general public. **Figure 8** provides an example of a typical report and **Appendix 2A** contains a full list of performance measures used in this report.

Figure 8: Washington State Performance Indicator Report Measure I.A.

Community Outpatient Penetration Rates - General Population									
Access I. A. Calc. SAS 05/26/05									
	FY02			FY03			FY04		
	Served	Population	Rate	Served	Population	Rate	Served	Population	Rate
Northeast	1,696	69,700	2.4%	2,006	69,800	2.9%	1,637	70,100	2.3%
Grays Harbor	2,263	66,400	3.3%	2,364	68,800	3.4%	2,335	69,200	3.4%
Timberlands	3,809	95,000	4.0%	4,318	95,100	4.5%	4,110	95,500	4.3%
Southwest	4,574	94,400	4.8%	4,653	94,900	4.9%	4,420	95,300	4.6%
Cnelan / Douglas	2,630	100,700	2.6%	2,796	101,500	2.8%	2,534	102,600	2.5%
North Central	2,810	132,800	2.1%	2,722	133,300	2.0%	3,067	134,600	2.3%
Thurston / Mason	4,845	262,100	1.8%	4,768	265,000	1.8%	5,212	269,300	1.9%
Clark	7,015	363,400	1.9%	6,841	372,300	1.8%	6,725	383,300	1.8%
Peninsula	7,343	326,200	2.3%	6,921	329,000	2.1%	7,422	332,400	2.2%
Spokane	10,191	425,600	2.4%	10,202	426,600	2.4%	10,011	432,000	2.3%
Greater Columbia	15,982	611,100	2.6%	16,985	619,500	2.7%	19,046	630,400	3.0%
Pierce	17,569	725,000	2.4%	14,936	733,700	2.0%	15,288	744,000	2.1%
North Sound	18,206	993,000	1.8%	19,246	1,007,500	1.9%	18,379	1,020,800	1.8%
King	29,981	1,774,300	1.7%	31,861	1,779,300	1.8%	33,405	1,788,300	1.9%
Total	126,346	6,041,700	2.1%	128,054	6,098,300	2.1%	128,077	6,057,300	2.1%

¹⁵ Washington State Mental Health Division, <http://www.dshs.wa.gov/mentalhealth/mhpireports.shtml>

Figure 8: Washington State Performance Indicator Report Measure I.A. (continued)



Source: Washington State 2004 Publicly Funded Mental Health Performance Indicators, Page 15

Strengths of the Washington data reporting system include:

- Reports allow for comparison of the performance across the 13 regions with statewide averages
- Performance Management Reports are graphical and include narrative comments
- Reports are placed on the website and can be easily accessed and downloaded by the general public

Drawbacks to the Washington State Performance Indicator reports include:

- Reports are not timely; they are not produced until 12 months after the end of the fiscal year
- There are no monthly or quarterly versions that would allow for better identification of positive or negative trends
- Reports do not contain comparisons with identified *Targets for Access, Quality, Client Status and Expenditure* (internal benchmarks)
- Reports do not contain comparisons with other states (external benchmarks)

Oklahoma

The Oklahoma Department of Mental Health and Substance Abuse Services has developed two noteworthy reporting efforts—a quarterly *Regional Performance Management Report* and an online *Health Information Integrated Query System*.¹⁶

The *Regional Performance Management Report*, which has been produced since 2003, contains four *focus* indicators and 16 *additional* indicators. This structure eschews an organized taxonomy in favor of highlighting the *focus* indicators and presenting the *additional* indicators in six categories:

- All Adults (5 measures)
- Adults with Major Mental Illness (2 measures)
- Adult Select Priority Group (1 measure)
- Evidence-Based Practices (3 measures)
- Children’s Services (1 measure)
- Substance Abuse (4 measures)

Each focus indicator includes a graph that compares each regional provider across multiple quarters, a rationale for the measurement, the goal for the indicator, the current status in relation to the goal, identification of which agencies met the goal, trends and improvement strategies suggested or actions taken by providers. The following excerpts illustrate this thoughtful approach.

Mental Health Measure MH4: Adult Inpatient Follow-up in Outpatient Care Within 7 Days After Discharge

Rationale for measurement: Persons leaving inpatient care who get involved in community-based services in a timely manner are more likely to have the resources to maintain their community tenure.

Goal: The goal for this indicator has been established at 1/2 the standard deviation above the state average for the last eight quarters; i.e., a follow-up rate of 54%.

Current Status: Statewide average: 48.5%.

Met Goal of 54%: CACMHC, FCS, HOPE, North Care and NCBH.

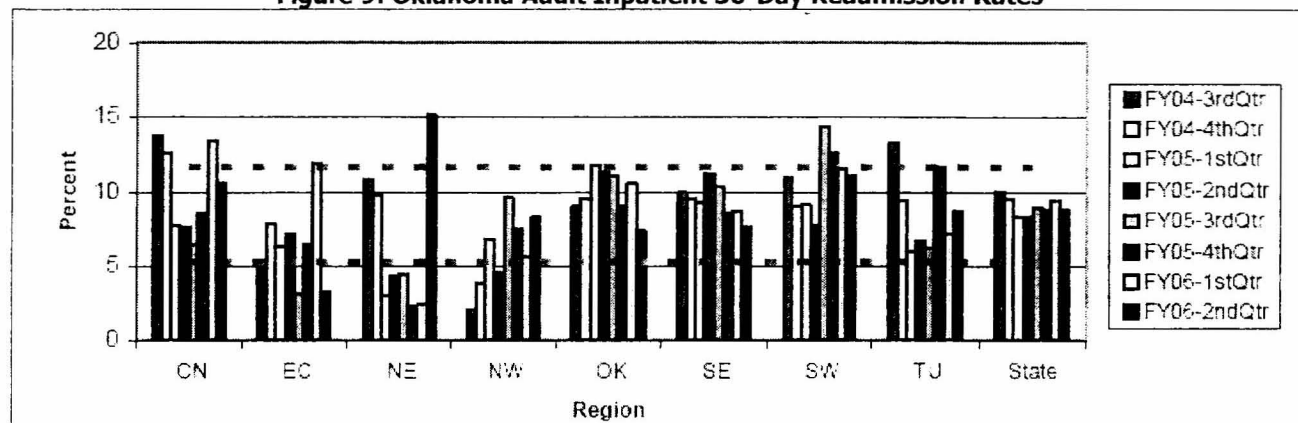
Trends: The state average rate of follow-up rose from 44% in the 4th Quarter of FY05 to 48.5% in the 2nd Quarter of FY06. Six of the fourteen of the agencies saw an increase in the rate of follow-up from the previous quarter; eight showed a decrease...

Improvement Strategies: JTCMHC will utilize two part-time Recovery Support Specialists to make contact with clients discharged from inpatient within one to two days.

Each *additional* indicator includes a graph of regional performance and a brief description of the results. **Figure 9** is the graph for Mental Health Measure 5: Adult Inpatient Readmission within 30 Days after Discharge. **Appendix 2B** contains a full list of performance measures used in this report.

¹⁶ Oklahoma Department of Mental Health and Substance Abuse Services, <http://www.odmhsas.org/eda/statistics/other.htm>

Figure 9: Oklahoma Adult Inpatient 30-Day Readmission Rates



Source: Oklahoma Second Quarter FY2006 Regional Performance Management Report, Page 17

The Oklahoma online *Health Information Integrated Query System* is available to the public and allows any individual with internet access to query a statewide mental health and substance abuse database and create reports on a variety of topics. **Figure 9** shows a screen shot of a query, and **Figure 10** is a portion of the resulting report.

Figure 9: Query - Mental Health Clients for the Tulsa Region

To choose a simple report, select which population you wish to query in Step 1. Subsequent steps will appear, narrowing your search. When you have finished, click on the "Get Report" button.

Note: The responsibility for domestic violence sexual assault services was transferred to the ...
 in FY06. Reports are available for Fiscal Years 2000 to 2009 on this website.

Step 1 of 3

Mental Health:

Counts of Admitted Clients Served:

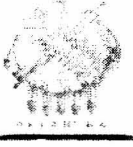
All Clients:

Region:

Tulsa Metro:

Source: <http://www.odmhsas.org/eda/basicquery/basicquery.htm>

Figure 10: Report - Mental Health Clients for the Tulsa Region

 State of Oklahoma Department of Mental Health & Substance Abuse Services <i>The mission of DMHSAS is to promote healthy communities and provide the highest quality care to enhance the well-being of all Oklahomans.</i>		Persons Receiving DMHSAS-funded Mental Health Services Living in the Tulsa Metro Region FY 2002 - FY 2007					
Counts of Persons Served		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Total							
Unduplicated Count:		7,452	6,632	6,837	8,242	9,508	9,508
Sex							
Female		3,702	3,313	3,515	4,287	5,091	5,091
Male		3,750	3,319	3,322	3,955	4,417	4,417
Age							
0-6		23	21	32	145	212	212
7-12		96	119	151	409	529	529
13-17		130	141	156	292	452	452
18-25		1,124	1,062	1,060	1,190	1,272	1,272
25-64		5,948	5,215	5,376	6,122	6,946	6,946
65+		131	74	62	84	97	97

Strengths of the Oklahoma data reporting system include:

- Reports are produced quarterly on a pre-determined timeline
- Performance Management Reports compare the performance across the eight regions to the statewide average
- Performance Management Reports are graphical and include narrative comments
- The *focus* indicators on the Performance Management Reports contain goals and comparisons against those targets (internal benchmarks)
- Reports provide eight quarters or four years of trend data, depending on the report
- Reports are placed on the website and can be easily accessed and downloaded by the general public
- The public can customize the type and scope of information they want to view through the online query system

Drawbacks of the Oklahoma reporting system include:

- There is no set of overview reports that provide the broad picture of the system (e.g., Who gets What from Whom at what Cost?)
- The reporting system lacks a well-organized taxonomy to provide an ACMHA-like framework for understanding the system
- Reports do not contain comparisons with other states (external benchmarks)

New York

The New York Office of Mental Health uses a Balanced Scorecard approach to measure and report on “outcomes experienced by individuals served in our public mental health system, results of public mental health efforts undertaken by OMH, and critical indicators of organizational performance.”¹⁷

The Balanced Scorecard was developed in the 1990s as a performance management tool to help focus stakeholders' attention on strategic issues in an organization or system. Typically Balanced Scorecards work with four performance measurement groups—Financial, Customer, Internal Business Processes and Learning & Growth—identifying a handful of measures in each group and identifying the relationships between groups.

New York has created a Balance Scorecard with three domains:

- Mental Health Services (17 measures)
- Outcomes (10 measures)
- System Management (5 measures)

The annual edition of the Balanced Scorecard lists the measure, the target, the current value, the percent of target achieved and a link to historical performance for the measure. **Figure 11** provides an excerpt of the March 2008 edition and **Figure 12** shows a detail of historical data for the measure *Develop and license additional Personalized Recovery Oriented Services (PROS) programs*. **Appendix 2C** contains a full list of performance measures used in this report.

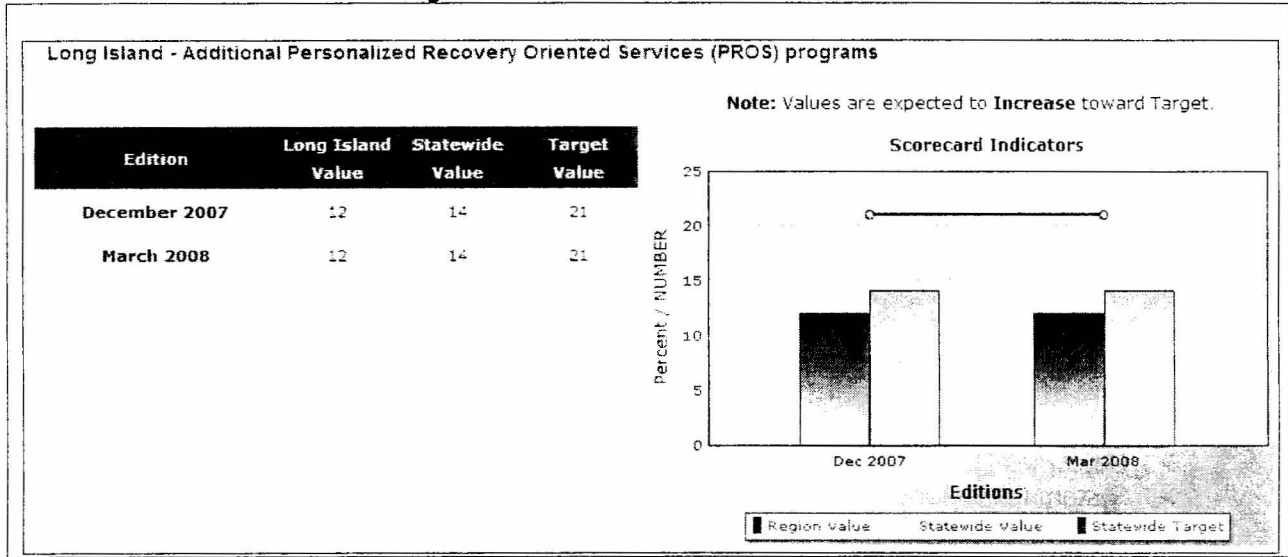
Figure 11: New York Balance Scorecard Example

Mental Health Services						
Definition	Management Objective (Program Area)	Target Value (Target Date)	Current Value (As of Date)	Past Values	% Target Achieved	
1	Develop and license additional Personalized Recovery Oriented Services (PROS) programs. Personalized Recovery Oriented Services	21 Dec 31, 08	14 Feb 25, 08			67%
2	Increase the percentage of clinic services delivered on weekends and during the evening to children. Clinic	20% Mar 31, 08	19% Sep 30, 07			95%
3	Increase the number of children receiving home and community-based services waiver. Home and Community-Based Services Waiver	1,990 Dec 31, 08	1,796 Sep 30, 07			90%

Source: <http://bi.omh.state.ny.us/scorecard/view>

¹⁷ New York Office of Mental Health Balanced Scorecard, <http://bi.omh.state.ny.us/scorecard/index>

Figure 12: Balance Scorecard Drill-Down



Strengths of the New York data and reporting system include:

- The Balanced Report Card approach brings a coherent structure to the reporting system
- The system uses a taxonomy similar to the URS and ACMHA models
- The system is web-based, provides detailed data and is available to the public
- Reports compare the performance across regions with statewide averages
- Performance Management Reports are graphical and include narrative comments

Drawbacks of the New York reporting system include:

- The Balanced Report Card initiative is one of several analysis and reporting efforts and there does not appear to be an overall reporting and analysis framework to connect the pieces
- There is no set of overview reports to provide the broad picture of the system (e.g., Who gets What from Whom at what Cost?)
- Reports do not contain comparisons with other states (external benchmarks)

IV. Summary

The effective delivery of mental health services requires the collection, analysis, and dissemination of data for systems and service planning, managing utilization of services, and assuring quality of patient care. Maryland collects a large amount of mental health data. However, there is still a need for additional data collection and analysis:

- *Information on the appropriateness of care decisions in the mental health care system.* For example, decisions about which patients are admitted for inpatient psychiatric care from hospital emergency departments should be examined. If patients are being admitted who could be served through other community resources, then the use of inpatient bed days could potentially be reduced. By evaluating the decisions made at emergency departs, it

may also be possible to identify particular community resources which are needed. In order to accurately evaluate the adequacy of community resources, it is critical to understand the decision processes at multiple stages of care. Therefore, it would also be useful to examine barriers to patient discharges that may result in extra days of inpatient care, for all types of hospital settings (private hospitals, general hospitals, State hospitals). By examining barrier to discharge, it may be possible to identify particular community resources needed to reduce the use of acute care.

- *Information on the supply and capacity of mental health facilities and services.* In particular, inventories of mental health crisis services need to be available at the local and regional level. Information on the capacity of intensive outpatient and partial hospitalization programs and on both physical and staffed psychiatric hospital bed capacity should be routinely collected and integrated with utilization data. In addition, in order effectively plan for addressing personnel shortages, additional information on the supply and distribution of mental health professionals needs to be developed and analysis undertaken of the impact of this supply and distribution on use of facilities and services. It may be possible to compare counties with different levels of resources and patterns of inpatient acute care to draw conclusions about the level of resources necessary to minimize the use of inpatient psychiatric beds.
- *Information disseminated to the public.* There should be greater dissemination of information on the mental health care system, to encourage and improve communication among stakeholders. A key component of future reports should be performance measures that provide a basis for public discussions of the effectiveness of the mental health system.

Appendix 1: Examples of Reports from the MAPS-MD Data Warehouse

Figure 1: Service Units Trend Report

Service Type	2002	2003	2004	2005	2006	2007
Case Management	25,505	28,647	29,030	30,312	34,501	34,169
Crisis	17,949	15,917	13,571	14,504	15,070	16,113
Inpatient	103,006	101,457	90,767	81,531	83,637	80,681
Mobile Treatment	7,150	7,911	9,043	9,856	11,699	14,631
Outpatient	1,408,456	1,583,263	1,657,717	1,828,908	2,261,306	2,452,583
Partial Hospitalization	48,400	61,283	49,494	56,774	66,198	76,036
Psychiatric Rehabilitation	2,086,027	2,180,497	1,798,309	1,338,987	1,450,515	1,502,167
Residential Rehabilitation	1,038,479	1,028,999	1,054,832	1,067,566	828,545	825,800
Residential Treatment	180,247	196,124	204,496	192,498	186,629	173,613
Respite Care	3,612	5,352	5,016	9,375	25,679	16,971
Supported Employment	7,318	8,107	8,114	8,152	11,754	17,904
Baltimore Group (Capitation)			3,675	3,945	4,000	4,006
Purchase of Care	2,273	3,189	3,963	5,275	5,177	6,024
Total	4,928,422	5,220,746	4,928,027	4,647,683	4,984,710	5,220,698

Figure 2: Medicaid Inpatient Expenditures

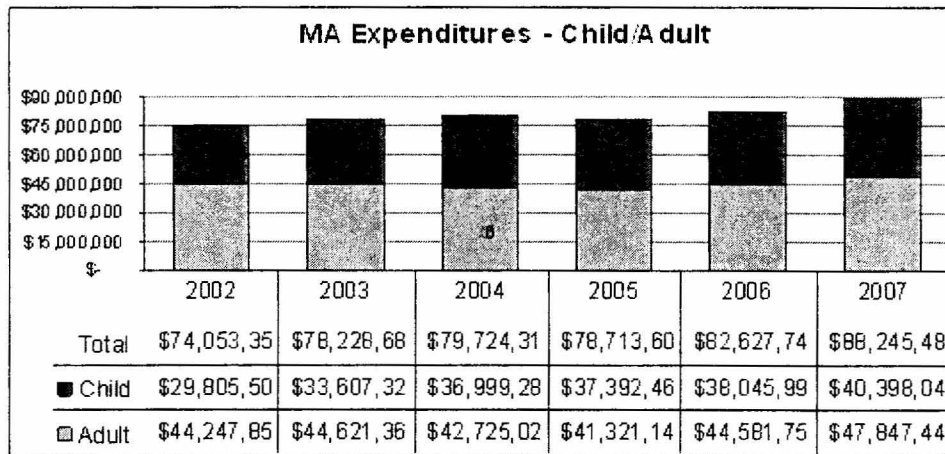


Figure 3: Uninsured Consumer Overview

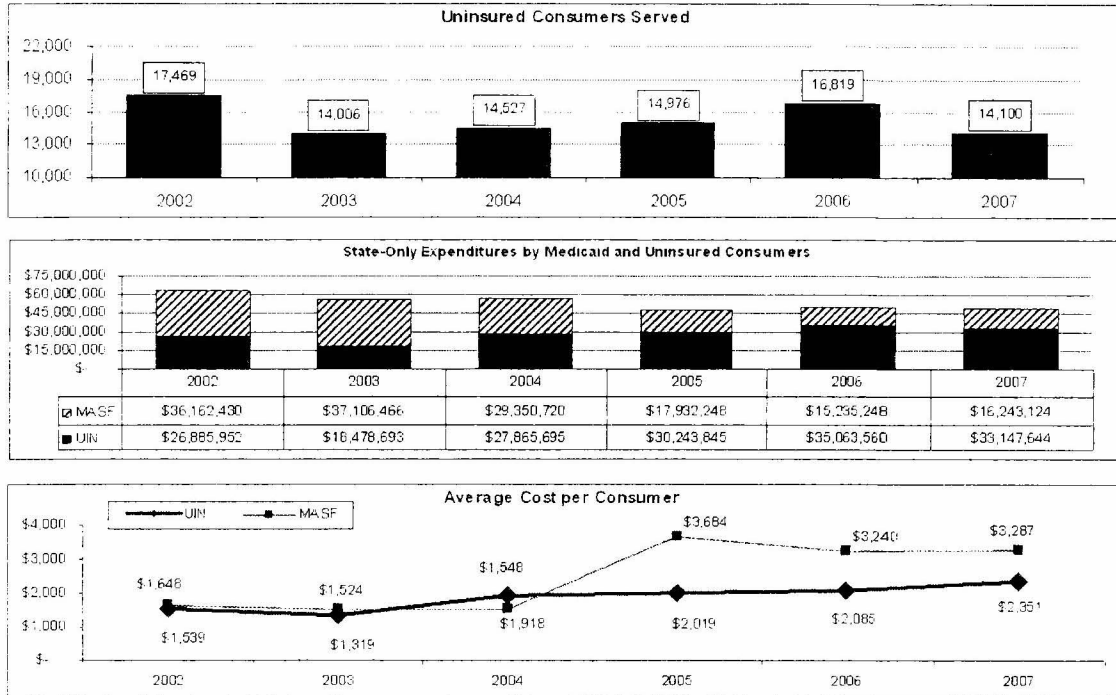
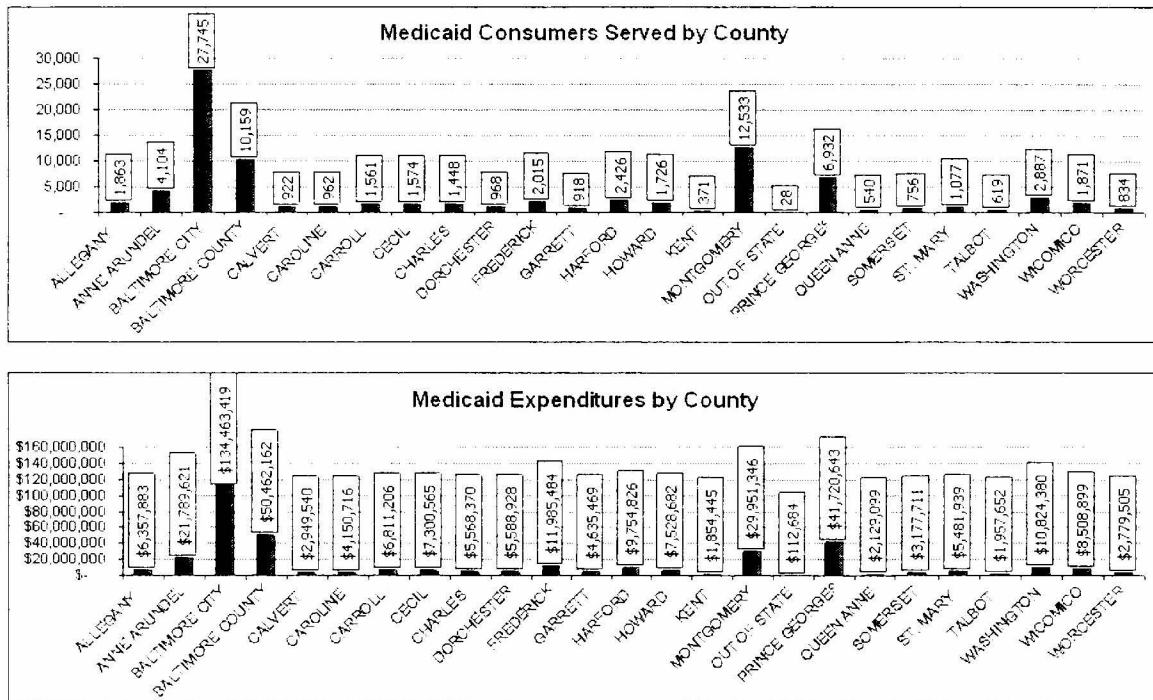


Figure 4: Medicaid Consumers and Expenditures by County



Appendix 2: Washington, Oklahoma and New York Mental Health Data Collected and Publically Reported

Appendix 1 lists the Performance Measures used in the Washington, Oklahoma and New York reports described in this white paper.

A. Washington

Access to Services

ACCESS I. A. Community Outpatient Penetration Rates (percent of population served)
ACCESS I. B. Community Outpatient Utilization Rates (hours per person served)
ACCESS II. A. Community Outpatient Penetration Rates for Medicaid Population
ACCESS II. B. Community Outpatient Utilization Rates for Medicaid Population
ACCESS III. A. Community Inpatient Penetration Rates (admissions per 1,000)
ACCESS III. B. Community Inpatient Utilization Rates (days per 1,000)
ACCESS IV. A. State Hospital Penetration Rates by Age
ACCESS IV. B. State Hospital Utilization Rates by Age
ACCESS V. A. Youth & Parent Perception of Access
ACCESS V. B. Adults' Perception of Access

Quality & Services

QUALITY VI. A. Youth and Parent Perception of Quality and Appropriateness
QUALITY VI. B. Adults' Perception of Quality and Appropriateness
QUALITY VI. C. Youth and Parent Perception of Participation in Treatment
QUALITY VI. D. Adults' Perception of Participation in Treatment Planning
QUALITY VII. A. Children/Youth Treatment Settings
QUALITY VII. B. Outpatient Clients who Received DASA and MHD Services
QUALITY VII. D. Clients with Mental Illness & Substance Abuse Disorder
QUALITY VII. F. Adult Outpatient Clients who Reported that they Received Physical Healthcare
QUALITY VII. G. Community Clients Received Services 7 & 30 Days After Being Discharged
QUALITY VII. H. Community Clients Readmitted 30 Days of Being Discharged From the Hospital
QUALITY VII. I. Community Outpatient Clients Not Hospitalized by RSN

Client Status

CLIENT STATUS VIII. A. Employment Status for Adults
CLIENT STATUS VIII. B. Volunteer Work for Adults
CLIENT STATUS IX. A. Living Situation: Adults Homeless
CLIENT STATUS IX. B. Living Situation: Adults Independent Living
CLIENT STATUS IX. C. Living Situation: Children & Youth
CLIENT STATUS IX. D. Living Situation: Children Homeless

Expenditures

EXPENDITURES X. A. Expenditures per Consumer for Community Outpatient Services
EXPENDITURES X. B. Expenditures per Hour of Community Outpatient Service
EXPENDITURES XI. A. Expenditures per Consumer for Community Inpatient
EXPENDITURES XI. B. Expenditure per Day of Community Inpatient
EXPENDITURES XII. A. Percent of Expenditures Spent on Direct Service Costs

B. Oklahoma

Section I—Focus Indicators

Mental Health

Measure MH4: Adult Inpatient Follow-up in Outpatient Care within 7 Days after Discharge

Measure MH11: Adults with MMI Receiving Case Management or Individual Rehabilitation Services

Substance Abuse

Measure SA2b: Initiation Following Detox Services

Measure SA3c: Engagement Following Residential Treatment

Section II—Additional Indicators

Mental Health—All Adults

Measure MH1: Adults Receiving Any DMHSAS-funded Mental Health Service

Measure MH3: Adult Inpatient Services

Measure MH5: Adult Inpatient Re-admissions within 30 Days

Measure MH6: Adult Mental Health Face-to-Face Crisis Events

Measure MH7: Adult Crisis Follow-up in Outpatient Care within 7 Days

Mental Health—Adults with a Major Mental Illness (MMI)

Measure MH9: Adults with MMI Core Outpatient Mental Health Services

Measure MH10: Adults with MMI Inpatient Services

Mental Health—Adult Select Priority Group

Measure MH13: Adult Select Priority Group Medication Visit

Mental Health—Evidence-Based Practices

Measure MH14: Illness Self-Management Training

Measure MH15: Family-To-Family Training

Measure MH16: Program of Assertive Community Treatment (PACT)

Mental Health—Children's Services

Measure MH17: Systems of Care (SOC)

Substance Abuse

Measure SA1: Identification

Measure SA2a: Initiation into Outpatient

Measure SA3a: Engagement In Outpatient

Measure SA3b: Engagement Following Detox

C. New York

Mental Health Services

1. Develop and license additional Personalized Recovery Oriented Services (PROS) programs
2. Increase the percentage of clinic services delivered on weekends and during the evening to children
3. Increase the number of children receiving home and community-based services waiver
4. Increase the number of clinicians who are trained in evidence-based treatments for trauma and depression in children
5. Increase the percentage of families who indicated global satisfaction with the mental health services they received for their child
6. Increase the percentage of families who indicated satisfaction with their child's functioning as a result of the mental health services their child received
7. Increase the percentage of youth who indicated global satisfaction with the mental services they received
8. Increase the percentage of youth who indicated satisfaction with their functioning as a result of the mental health services they received
9. Establish new collaborations with schools, preventive services agencies, primary care practices and early childhood programs as Clinic-Plus is implemented
10. Increase the occupancy rate for the Supported Housing program
11. Increase the percentage of priority populations admitted to voluntary residential programs funded by OMH
12. Decrease the percentage of program recipients who have been in residence for over two consecutive years at a single, voluntary residential program funded by OMH
13. Develop scattered site Supported Housing beds based upon the development schedule in the NY/NY III agreement
14. RFP & allocate 575 scattered site Supported Housing beds based upon development schedule in the NY/NY III agreement
15. Procure and award operating contracts for 1,125 efficiency apartments (congregate units) for priority populations (set-asides) based upon development schedule in the NY/NY III Agreement
16. Increase percentage of adults receiving OMH operated outpatient services who rate service quality as good to excellent
17. Increase the percentage of OMH licensed facilities enrolled in the NYS Incident Management and Reporting System (NIMRS)

Outcomes

1. Reduce percentage of recipients who had psychiatric hospitalizations while receiving ACT services
2. Reduce percentage of ACT enrollees with episodes of homelessness while receiving ACT services
3. Increase the number of suicide prevention, education and awareness materials disseminated
4. Increase percentage of adults receiving OMH operated outpatient services who rate their overall quality of life as good to excellent
5. Reduce the number of completed suicides during inpatient psychiatric hospitalizations and within 72 hours of discharge from such hospitalizations
6. Reduce the total number of patient hours in restraint per 1,000 patient hours in State-operated children's psychiatric facilities
7. Reduce the total number of patient hours in restraint per 1,000 patient hours in State-operated forensic psychiatric facilities

8. Reduce the total number of patient hours in seclusion per 1,000 patient hours in State-operated adult psychiatric facilities
9. Reduce the total number of patient hours in seclusion per 1,000 patient hours in State-operated children's psychiatric facilities
10. Reduce the total number of patient hours in seclusion per 1,000 patient hours in State-operated forensic psychiatric facilities

System Management

1. Reduce percentage of individuals with a diagnosis of schizophrenia on 3 or more antipsychotic medications (oral = depot) at the same time
2. Increase the percentage of individuals with a diagnosis of schizophrenia who are eligible for clozapine and received it
3. Increase the number of licensed programs with current licenses
4. Increase the timeliness of response to applicants requesting OMH prior approval to operate or expand licensed programs
5. Maintain appropriate accreditation from The Joint Commission (TJC) and certification from the Centers for Medicare and Medicaid Services (CMS) for all state-operated mental health programs



MHCC WHITE PAPER

TOOLS FOR MEASURING AND IMPROVING THE QUALITY OF MENTAL HEALTH CARE

TABLE OF CONTENTS

- I. Introduction
- II. The Elements of Quality
 - A. The Patient's Experience
 - B. Effective Practices
 - C. Reasonable Costs
 - D. Evident Outcomes
- III. Measuring the Quality of Mental Health Care
 - A. Dimensions of Quality
 - Safety
 - Effectiveness
 - Patient-centeredness
 - Timeliness
 - Efficiency
 - Equity
 - B. Performance Measurement and Indicators
- IV. Tools for Improving the Quality of Mental Health Care
 - A. Quality Management Systems
 - B. External Quality Review
 - C. Standards of Care
 - D. Process Improvement
 - E. Client Empowerment
- V. Current Efforts in Maryland for Measuring and Improving the Quality of Mental Health Care
- VI. Areas for Improvement
- VII. Summary/Conclusion

I. INTRODUCTION

This paper will begin with a general discussion of the elements of quality mental health care, followed by a discussion of various tools for improving the quality of mental health care. The current efforts underway in Maryland for improving the quality of mental health care will be described, and specific suggestions for improving the quality of mental health care in Maryland will be discussed. This paper is intended to assist the Taskforce in answering the question—what performance measures or other means should be used to evaluate and improve the quality of mental health care in Maryland?

II. THE ELEMENTS OF QUALITY

There are four main elements of quality mental health care. The first is based on the patient's subjective experience of encounters with the health care system, and the second is based in the orientation of the clinician to use evidence about effective practices to guide treatment and recovery. The third element of quality mental health care is focused on reasonable costs, and the fourth is on the ultimate goal of treatment positive outcomes and recovery. These four elements combine to create quality mental healthcare and treatment.

A. The Patient's Experience

In the end, quality of care is measured by the patient first and the purchaser second. From a patient's perspective, the *experience* of care itself is the first point at which he or she makes a judgment about quality. Consumers and their families who seek treatment should find easy access and a welcoming environment. Intake and assessment processes are streamlined and encourage engagement through every interaction. Paperwork is minimal and only covers the information essential for initiating services. Treating practitioners educate consumers about what to expect from treatment, what the course of treatment will be, and the recommended length of the treatment regimen. During treatment, the consumer and his or her family are educated about the recovery supports that are available post treatment, including periodic 'check ins' with a practitioner that serve as a wellness management strategy. If a consumer does experience a relapse, his or her re-entry to treatment should involve only a minimal intake process.

B. Effective Practices

Equally important to clients is the knowledge that his or her mental health practitioner is grounded in current knowledge about treatment and recovery and what facilitates it. When evidence-based practices are not available, the client-centered practitioner creates practice-based evidence. For example, even when research evidence may not be available to guide treatment for a specific condition, the client-centered clinician will monitor the client's symptoms and functional capacity over time to decide a course of further treatment together with the client.

Treatment is most effective if provided within a psychosocial framework, with an understanding that people with serious mental illness require biomedical, psychological and social interventions. Recovery-oriented treatment and support should address all three critical domains and be offered through a team providing integrated treatment and services—across clinical regimens and among recovery, clinical and support activities. Services and support should be structured in a way that facilitates resilience and recovery over time, based on an understanding that persons with serious mental illness may require long term supports; their needs may wax and wane with their illness and life circumstances; recovery is not linear. Families of children with serious emotional disturbance may also need continuing support from the mental health system. Therefore, it is essential to use a collaborative care model.

'Collaborative care' models are used in which practitioners present menus of reasonable choices from evidence-based practices and then negotiate with clients in order to increase concordance between client and clinician on which treatment is most appropriate¹. There is also growing interest in a "primary practitioner model" for consumers who use high levels of service. This reflects a return to the previously recognized power of the "therapeutic alliance" between clients and the practitioners who treat and support them. With the emphasis on integrated treatment for co-occurring psychiatric and addictive disorders, the mental health field is realizing that "stages of change"², engagement, and motivation are as important for persons with serious mental illness as they are for persons with addictive disorders. More and more, services are being configured and delivered to empower consumers to help themselves, to encourage consumers to define their own resilience and recovery goals, and to encourage consumers to rely on peers who demonstrate recovery's possibilities.

C. Reasonable Costs

If a satisfying patient experience is combined with effective practices but results in exorbitant costs, the combination does not pass the quality test. Services must be affordable and value-laden for both the client in a first party payment system and, if applicable, the purchaser as third party payer. Smart purchasers use the power of their contracts to advance clinical and recovery objectives and establish clear expectations. Costs are managed through fair pricing and through market forces, e.g. competition among providers for clients' business. Clients are offered choices that are informed by data on providers' quality and costs. Performance contracts that require standards of care and efficient operations shape providers' performance in the direction of quality and value.

D. Evident Outcomes

The final measure of quality in our formulation is the outcome that treatment produces; structure and process are important but outcomes trump both. Whether measured by a client's view of their progress or the attainment of specific societal goals, e.g. employment, mental health services must produce results in order to be considered of value. Processes of care that support client well-being are one thing but accomplishing results is quite another. Outcomes measurement and management remains a critical challenge for the public mental health system with most efforts to measure outcomes centering on the client's perception of results, a necessary but not sufficient ingredient of outcomes.

III. MEASURING THE QUALITY OF MENTAL HEALTH CARE

A. Dimensions of Quality

During the last ten years, the most important articulation of health care quality was produced by the Institute of Medicine in its seminal work, *Crossing the Quality Chasm*.³ With attention to all aspects of health care delivery (clinical, administrative, technological), the IOM laid out some dramatic challenges for the health system and its participants, with the first being the six aims it advanced. According to the Institute on Medicine, health care should be:

- Safe—avoiding injuries to patients from the care that is intended to help them;
- Effective—providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding under-use and over-use, respectively);

¹ See the work of Gary Sachs, M.D. through the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD).

² Prochaska, J.O. and DiClemente, C.C. (1982), *Transtheoretical Therapy: Toward a More Integrative Model of Change*, Psychotherapy Theory, Research and Practice, Vol. 19.

³ *Crossing the Quality Chasm: A New Health System for the 21st Century*, Institute of Medicine, 2001.

- Patient-centered—providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions;
- Timely—reducing waits and sometimes harmful delays for both those who receive and those who give care;
- Efficient—avoiding waste, including waste of equipment, supplies, ideas, and energy; and
- Equitable: providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socio-economic means.

In its subsequent work on mental and substance use conditions, the IOM concluded that these same aims should be applied to mental health and substance use conditions, with tailoring as needed to reflect special conditions in behavioral health.⁴

In a health or behavioral health care system that's safe, adverse incidents/sentinel events and medication errors would be unlikely. Incorrect diagnoses and interventions would rarely occur. Clients would be informed about all aspects of their treatment and would fully participate in tracking treatment and its progress; as the IOM says, "an informed patient is a safer patient".⁵ Attention to effectiveness requires that health care practitioners integrate the best research evidence with his/her clinical expertise and patient values.⁶ Similarly, providers continuously evaluate the results of the care they deliver and use this evaluation to improve treatment. Patient-centeredness is not only about consumer satisfaction with the results of treatment but also with the process of care and whether he/she plays a pivotal role in it. Communicating with and informing clients at every step in the treatment process are critical so they know about their healthcare conditions and how they can be treated.

Timeliness is an important aim both from the perspective of the patient's experience as well as effectiveness; treatment must be delivered when it's needed. Long waits in emergency departments can exacerbate a patient's illness and result in negative outcomes. Treatment that is delayed can produce additional complications. Difficulties in timely delivery of service are not always attributable to lack of capacity or resources but can also be due to badly designed systems for delivering care within the provider organization. Similarly, inefficient systems reduce available capacity. Streamlining intake and assessment systems, reducing paperwork burden, and increasing staff productivity can all add capacity to a service, without requiring additional resources. A health care system with equitable distribution of resources reduces disparities and provides equal access to effective treatment.

According to the IOM, healthcare systems that can achieve these aims must be organized and driven by a new set of rules:

- Care based on a continuous health relationship
- Customization based on patient needs and values
- The patient as the source of control
- Shared knowledge and free flow of information
- Evidence-based decision making
- Safety as a system property
- The need for transparency
- Anticipation of needs
- Continuous decrease in waste
- Cooperation among clinicians

⁴ *Improving the Quality of Health Care for Mental and Substance-Use Conditions*, 2006.

⁵ Op cit.

⁶ Sackett, D I., et al., *Evidence-based Medicine: What It Is and What It Isn't*. BMJ 320:898-902, 2000.

For mental health services, the application of these rules would require that a consumer and his/her primary practitioner would have a continuing relationship across services and time. This relationship would provide overarching coordination, regardless of the site of intervention. The primary practitioner would intervene on the consumer's behalf in emergency departments, provide consultation to treating physicians in inpatient settings, and create links between inpatient and outpatient treatment and to social networks and peer supports. Services and resilience/recovery support would be individualized and the consumer would be the 'managing partner' of his/her treatment. Information on mental health conditions, treatment effectiveness and options would be provided to each consumer in order to support informed decisions. Likewise, the consumer's view of treatment effectiveness would be elicited regularly during treatment so services could be modified to meet the consumer's needs and create positive outcomes. Crisis prevention plans would allow the consumer and practitioner to anticipate future needs based on previous experience. The primary practitioner and consumer would function as a team to empower the consumer to move toward health and wellness.

B. Quality and Performance Measurements

In order to evaluate the quality of care and performance of the mental health system, consumers, providers and purchasers must agree on the standards that will drive performance and the metrics that will be used to assess it. There have been various efforts to develop performance measures for the public mental health system during the last ten years. Some of the field's earliest efforts were driven by the initiation of risk-based managed behavioral health and concomitant concerns that access to care would be restricted and quality would be jeopardized in the interest of cost containment. Typical managed mental health standards addressed access, availability, appropriateness, member satisfaction, provider satisfaction, and outcomes.

As one of the earliest efforts, in 1997 the Mental Health Statistics Program (MHSIP) unveiled its *Consumer-Oriented Mental Health Report Card*⁷ that contained the following types of system goals and indicators:

Concern	Indicator
<i>ACCESS</i>	•
Entry into mental health services is quick, easy and convenient	<ul style="list-style-type: none"> • Average length of time from request for service to the first face-to-face meeting with a clinician • % consumers who report that appointment time is convenient • % consumers who report that practitioners can be reached easily
A full range of service options is available	<ul style="list-style-type: none"> • average resources per enrollee expended on mental health • % consumers who report that services are readily available
Enrollees have access to a primary mental health provider who meets their needs in terms of ethnicity, language, culture, age and disability	<ul style="list-style-type: none"> • % consumers who report that staff are sensitive to their ethnicity, language, culture and age •
<i>APPROPRIATENESS</i>	
People using mental health services do so voluntarily. The use of involuntary intervention is minimized	<ul style="list-style-type: none"> • % consumers who report that they actively participate in decisions concerning treatment • % consumers who feel coerced into treatment

⁷ Center for Mental Health Services (1997). *The Consumer-Oriented Mental Health Report Card*, Rockville, MD.

	<ul style="list-style-type: none"> options % admissions for inpatient treatment that are voluntary
The mental health system offers services that promote the process of recovery	<ul style="list-style-type: none"> proportion of resources expended on services that promote recovery % consumers who report that they receive services that support recovery
The mental health system maximizes continuity of care	<ul style="list-style-type: none"> % people discharged from inpatient services who receive ambulatory services within 7 days % people discharged from emergency services who receive ambulatory services within 3 days % service recipients who had a change in principal provider during the year or term of treatment
Service recipients receive information that enables them to make informed choices about services	<ul style="list-style-type: none"> % consumers who report that they receive adequate information to make informed choices
Services are delivered, when possible, in accordance with known and accepted best practice guidelines	<ul style="list-style-type: none"> % of service recipients whose treatment follows accepted, best-practice guidelines
Service recipients experience minimal, adverse iatrogenic effects	<ul style="list-style-type: none"> Average level of involuntary movements resulting from the use of psychotropic medications (AIMS)
The level of distress from symptoms is minimized	<ul style="list-style-type: none"> % consumers who report that they've experienced a decreased level of psychological distress
Enrollees experience minimal impairment from the use of substances	<ul style="list-style-type: none"> Average level of impairment in service recipients with substance abuse problems
Enrollees experience minimal interference with productive activity, such as work, school or volunteer activities	<ul style="list-style-type: none"> Proportion of adults with serious mental illness involved in competitive employment Increase in the level of school performance for children

During the years since the report card's development, MHSIP has concentrated on developing various consumer surveys for adults, families and youth and did not develop any performance measures that can be derived from those surveys. In 2005, however the MHSIP Quality Report⁸ proposed a consensus-driven universal set of "performance indicators" addressing the following areas:

- Consumer perception of outcomes/improvement
- Active participation in treatment planning and decisions
- Recovery orientation of system
- Quality of interaction between clinicians and consumers
- Perception of overall quality of treatment
- Safety
- Availability of services
- Availability of information/education
- Initiation of treatment
- Cultural competence
- Co-occurring problems/screening
- Reduction of symptoms

⁸ *The MHSIP Quality Report: The Next Generation of Mental Health Performance Measures*, Rockville, MD: Center for Mental Health Services, Mental Health Statistics Improvement Program, May 2005.

- Social support/connectedness

Although the report describes its content as performance indicators, only statements of concern are addressed for many of the thirteen areas. These statements of concern have not been translated into either measures or indicators with standards.

In the late 1990s, the American College of Mental Health Administration (ACMHA) convened the major mental health accreditation organizations and developed a set of consensus performance indicators covering access, process and outcome.⁹ The College's interest stemmed from the growing use of risk contracts for managed mental health care and the need for increased accountability for mental health services. ACMHA and the accrediting bodies worked for several years to gain consensus on a set of measures that would represent "good thinking" about performance measurement, with the resulting measures recommended.

Topic	Measure
<i>ACCESS</i>	
Services are available	<ul style="list-style-type: none"> • Rate of persons served reporting that they receive the services they need • Rate of utilization of services compared to community need
Services are convenient	<ul style="list-style-type: none"> • Rate of persons served reporting that transportation is not a barrier to recovery • Geographic analysis of population-to-provider rates and travel times
Services are Timely	<ul style="list-style-type: none"> • Rate of persons served reporting timely response from first request for service to first face-to-face meeting • Rate of persons reporting timeliness from a first appointment to a second appointment • Average number of days from first request for service to first face-to-face meeting • Average number of days from a first appointment to a second appointment
Services are provided	<ul style="list-style-type: none"> • Rate of utilization of services at each available level of care
<i>PROCESS</i>	
Treatment Decisions	<ul style="list-style-type: none"> • Rate at which persons served reported they received useful information to make informed choices • Rate of participation in decisions regarding treatment • Rate of participation in decisions regarding treatment by families of children and adolescents
Responsiveness	<ul style="list-style-type: none"> • Rate of persons served who received timely face-to-face follow-up care after leaving a 24-hour care setting • Rate of persons served who receive a timely course of treatment following a diagnosis of a behavioral health disorder
Non-coercive treatment	<ul style="list-style-type: none"> • Rate of persons served who report experiencing treatment as non-coercive • Rate of involuntary treatments • Rate of seclusion and restraint
Experience of Care	<ul style="list-style-type: none"> • Rate at which persons served report they were treated with respect • Rate at which persons served report feeling hopeful about their recovery

⁹ American College of Mental Health Administration (2001). *A Consensus Set of Indicators for Behavioral Health*, www.acmha.org/publications/acmha_20.pdf

	<ul style="list-style-type: none"> Rate at which persons served report they were treated with cultural sensitivity
Co-Occurring illness	<ul style="list-style-type: none"> Rate of persons served diagnosed with co-occurring mental illness and substance abuse disorders
Safe treatment	<ul style="list-style-type: none"> Rate at which persons served report that they feel safe in treatment Rate at which person served report that they feel safe in the community Rate of suicide, homicide and unexpected deaths
OUTCOMES	
Well being	<ul style="list-style-type: none"> Rate of persons served who are better, worse or unchanged at the termination of treatment
Work and school	<ul style="list-style-type: none"> Rate of employed/unemployed adults counted at the termination of treatment and at a standard interval following treatment Average number of missed class days for children counted at a standard interval following the termination of treatment
Safety	<ul style="list-style-type: none"> Rate of episodes of victimization reported at a standard interval following termination of treatment
Legal involvement	<ul style="list-style-type: none"> Rate of arrests, detentions and/or incarcerations counted at a standard interval following the termination of treatment
Housing	<ul style="list-style-type: none"> Rate of domiciled/homeless persons at the termination of treatment and at a standard interval following termination of treatment Rate of children at home at the termination of treatment and at a standard interval following termination of treatment

In 2003, the National Association of State Mental Health Program Directors Research Institute, Inc. (NRI) published the results of its pilot project with sixteen states to use consistent definitions of performance measures and collect comparable indicator data.¹⁰ In selecting the performance measures, NRI chose indicators that were considered to be important to evaluating the public mental health system and for which "at least some States could report data during the study period".¹¹ Working from the framework for performance measurement developed by NASMHPD's *President's Task Force on Performance and Outcomes Measures*, the sixteen state study evaluated performance across the five domains of access, quality/appropriateness, outcomes, structure/plan management and prevention/early intervention. Although thirty-eight measures were reviewed, all sixteen states were able to report on only four; twenty-eight measures were reported on by more than half of the States. In the end, not all States were able to report using a standard definition and methodology.

Performance Indicators	States Reporting		
	100%	75%	50%
ACCESS			
Rate of community mental health service utilization per 100,000 population		X	
Rate of state-operated inpatient mental health service utilization per 100,000 population		X	
Percent of consumers reporting satisfaction with access to services			X
APPROPRIATENESS/QUALITY			
Percent of consumers agreeing they participated in treatment planning		X	

¹⁰ Center for Mental Health Services (2003). *Sixteen State Study on Mental Health Performance Measures*. (DHHS Publication No. 03-3835.) Rockville, MD.

¹¹ Ibid.

Percent of consumers linked to primary health services (from MHSIP)			X
Percent of consumers contacted within 7 days of hospital discharge			X
Percent of consumers receiving atypical medications in state hospitals			X
Percent of parents involved in treatment for their children			X
Percent of consumers readmitted within 30 days to any state psychiatric hospital	X		
Percent of consumers readmitted within 180 days to any state psychiatric hospital	X		
Hours in seclusion per 1000 patient hours		X	
Percent of clients secluded		X	
Hours in restraint per 1000 patient hours			X
Percent of clients restrained			X
<i>OUTCOMES</i>			
Percent of consumers reporting improved outcomes from services		X	
Percent of parents agreeing that outcomes were good			X
Percent clients employed (full or part time)			X
Patient injuries per 1000 patient days			X
Patient elopements per 1000 patient days		X	
Standardized mortality ratio			X
Average years of life lost			X
Percent clients living independently: private residences			X
Percent clients living in 24 hour residential			X
Percent clients living in institutional settings			X
Percent clients homeless			X
<i>STRUCTURE/PLAN MANAGEMENT</i>			
Average resources expended on all clients			X
Average resources expended per inpatient clients			X
Average resources expended per outpatient clients			X

Across the various national efforts, some top candidates for performance measures emerge across access, quality/appropriateness and outcome:

- Penetration rates
- Time to urgent, emergent and routine appointments
- Utilization rates for inpatient and outpatient services
- 30-day readmission rates
- 7-day post inpatient discharge outpatient connection rate
- Emergency department utilization rates
- Consumer and family satisfaction with treatment and results
- Rate of children successfully attending school and rate of adults gainfully employed

As states and other purchasers establish expectations for mental health services, they have a wide variety of performance measures from which to choose; the challenge lies in defining the measures, creating methodologies to produce them, in developing reporting systems that track them and creating a quality framework that allow them to be used to improve care.

IV. TOOLS FOR IMPROVING THE QUALITY OF MENTAL HEALTH SERVICES

At the micro- and macro-level, across clients, practitioners, providers and purchasers, there are a variety of methods for advancing quality goals. From approaches to empowering clients, through standards of

care, to state level quality improvement processes, the public and private sectors are using multi-faceted plans for improving the quality of care and benefits to consumers.

A. Quality Management Systems

The most robust, recent analysis of states’ use of behavioral health performance indicators was conducted in 2007 by the University of Massachusetts’ Center for Health Policy and Research (CHPR) in order to advise the Massachusetts Department of Mental Health on best practices in behavioral health quality improvement.¹² The CHPR developed a working definition of a Quality Measurement and Reporting System (QMRS) as “a system that *measures* the quality of behavioral health care, inclusive of its structures, processes and outcomes, which *reports* its results to consumers, providers and oversight organizations with the goals of quality *improvement*, management and decision support”.¹³

Based on interviews with national experts, review of each states quality reporting capabilities and NAMI’s Annual Report Card results, CHPR identified four states as best practice states: Connecticut, Ohio, Oklahoma, and Washington and two best practices organizations (VHA and PacificCare Behavioral Health). Best practice states used similar domains of appropriateness of care, and outcomes but employed different measures to evaluate each of those. These states communicated data results using multiple methods, e.g. web site, newsletters, etc. and are moving from measurement alone to using data to improve practice. Interviews with experts identified this as the major challenge for states—turning data into information and then using that information to change practice and improve care.

Quality measures used by at least three of the four states include the following:

	CT	OH	OK	WA
<i>Access</i>	% adults report positive access	Penetration rate	Penetration rate	Penetration rate
<i>Appropriateness</i>	30-day readmission rate		30-day readmission rate	30-day readmission rate
<i>Outcomes</i>	% adults competitively employed in the last year	% adults with SMI who are employed	Change in employment from admission to discharge	% adults employed during the last year by service area and statewide
	% consumers who were homeless in the last year		Change in current residence from admission to discharge	% adult outpatient recipients who were homeless during the year by service area and statewide
	% adults who were arrested during the past year		Recidivism rate of persons linked through the Community Linkage Program	Change in number of arrests in 30 days from admission to discharge

A detailed review of the Quality Management System for two of the ‘best practice’ states provides a thorough description of the structures and processes used at the state level.

¹² *Promising Practices in Behavioral Health Quality Improvement: Summary of Key Findings and Lessons Learned*, Center for Health Policy and Research, March 2007.

¹³ Ibid.

The **Oklahoma** Department of Mental Health and Substance Abuse Services (ODMHSAS) uses an Integrated Client Information System (ICIS) as the foundation of its quality improvement program.¹⁴ All services funded entirely or in part by ODMHSAS are connected to ICIS. The system captures demographic and encounter data at the unique client level. Department analysts then extract data from ICIS to understand service utilization and performance outcomes.

Information from ICIS is used to produce Regional Performance Management (RPM) Reports. These reports provide up-to-date information to guide system performance efforts. Key indicators of performance are reported for substance abuse and mental health treatment providers funded by ODMHSAS. The indicators for the report were planned with federally-funded technical assistance. To create the report, staff members of DMHSAS Decision Support Services compile data for the quarterly report, from which the narrative is produced. Following compilation of the draft report, it is circulated among ODMHSAS Central Office staff members to get their comments. Any changes that they recommend are incorporated into the draft, which is then distributed to all substance abuse and mental health providers for their input. This last step of the process has begun to stimulate an informative exchange of ideas to explain regional differences. Finally, the process also spurs follow-up actions and specific system improvement activities.

ODMHSAS is also using the ICIS system to generate Provider Performance Management Reports (PPMR).¹⁵ These reports allow agencies to measure their performance and their consumer's outcomes. The measures include consumer's level of functioning, reductions in arrests, homelessness, substance use and unemployment, and readmission and follow-up rates.

ODMHSAS uses these performance and outcome measures to understand the extent to which improvements are being made within important target groups, such as persons with serious mental illness, substance abusing women with children, or persons in rural service areas. The information allows administrators to plan for new services and or re-allocate existing resources. The Department also uses the information to review individual agency performance as it relates to system goals and service targets. Service providers use performance and outcome data to make their own agency resource allocation decisions and to improve service delivery. The information is also shared with consumers and their families so they may use the information to make better choices about their treatment options. While much data is shared, there is no overarching quality improvement framework for using it to change practice. Oklahoma believes they have developed excellent reporting systems and now must turn their attention to using the data in a systematic way to improve quality of care.

Unique to the Oklahoma quality management program is their children's "System of Care" initiative.¹⁶ The Oklahoma Systems of Care (OSOC) initiative is a "wraparound" service model for children with serious emotional disturbance. Under the system of care model, mental health providers, working with the child and his or her family, develop a tailored set of services to meet the child's physical, emotional, social, educational, and family needs. The goal of the Systems of Care Team is to help these children get all the services they need in or near their own communities. The Systems of Care's quality improvement initiative is focused on three primary goals:

1. Providing families and community stakeholders with information about the efforts and efficacy of their local SOC, in order to provide accountability and to answer local needs related to education and sustainability;

¹⁴ OK Department of Mental Health and Substance Abuse Services, Uniform Application FY2007 Mental Health Block Grant, September 2006.

¹⁵ OK Department of Mental Health and Substance Abuse Services, Decision Support Services, Provider Performance Management Reports, Second Quarter FY2006, May 2006.

¹⁶ OK Department of Mental Health and Substance Abuse Services, Oklahoma Partnership for Children's Behavioral Health, Transforming the Children's Behavioral Health System – Implementation Plan, undated.

2. Providing the state management team with outcomes and data to promote sustainability of SOC and broadening support among legislators and other state-level stakeholders; and,
3. Providing data to the governing bodies and management teams associated with SOC for quality improvement and fidelity monitoring.

Supporting this quality improvement program is the OSOC Youth Information Systems (YIS). The data in YIS have been designed with input from families, communities, site staff and state management, and are intended to provide reliable outcome and quality improvement measures while keeping the data collection effort imposed on families and staff at an acceptable level.

The YIS has a variety of outcome measures including access and capacity measures, use of inpatient beds, mental health symptomatology, social connectedness and use of evidence based practices. The program also tracks cost data for measuring the cost effectiveness of various interventions. The YIS provides monthly management reports for project sites, clinical teams, and state managers. These reports are used for decision support and to monitor fidelity of system of care development and implementation.

The Mental Health Division (MHD) within the **Washington** State Department of Social and Health Services has developed a unique multi-layer structure for managing its quality improvement process.¹⁷ A Quality Council made up of MHD senior managers serves as the lead for initiatives to improve performance of the state's Medicaid mental health managed care program, as well as for state funded mental health services. Their function is to evaluate, prioritize and support statewide quality initiatives as recommended by either the Performance Data Group (PDG) or the Implementation and Design Group (IDG). This group also has responsibility for the review of all quality of care reports issued by the state's External Quality Review Organization (EQRO) and those received from the Centers for Medicare and Medicaid (CMS).

The Performance Data Group has responsibility for reviewing system-wide performance data, as well as data collected from other performance measure and quality improvement protocols, including EQRO and CMS reviews, and make recommendations to the MHD Quality Council on how data is captured and used. The PDG also develops new performance indicators to be used throughout the mental health system. PDG membership includes consumers, family members, representatives from consumer advocacy groups, staff from the prepaid health plans and community mental health agencies, and quality managers from MHD and its two state hospitals.

The Implementation and Design Group serves as the central quality improvement committee to design, implement and monitor implementation of the Mental Health System's Quality Strategy and Strategic Plan.¹⁸ The Group meets monthly for the purpose of designing and implementing all of the Division's quality improvement efforts based on the system-wide priorities set by the Quality Council. This group identifies potential areas for quality improvement, and monitors current quality improvement efforts. It also has responsibility for establishing timelines and outcome measures to be used to drive the quality management process, and communicating quality improvement project information to key constituency groups within the state's mental health system. Membership on the IDG includes a mix of MHD staff, PDG members, consumers and stakeholders. Most recently IDG members conducted a thorough review of the mental health access to care standards, making numerous recommendations to the MHD Quality Council. IDG has also developed a proposal form and process for fostering locally driven quality improvement initiatives that can be brought to scale statewide.

¹⁷ WA Department of Social and Health Services, Uniform Application FY 2008 Mental Health Block Grant, August 2007.

¹⁸ WA Department of Social and Health Services, Division of Mental Health Strategic Plan 2006 – 2011.

The MHD does publish an annual Performance Indicator Report on the State's Publicly Funded Mental Health System.¹⁹ This report is circulated to a broad audience including consumers, providers, Regional Support Networks, advocacy organizations, and the state legislature. The Performance Indicator Report provides information on how well a system is doing by examining who receives services (Penetration Rates and Client Characteristic); what types of services are delivered (Community Outpatient, Community Inpatient, Crisis Only, Types of Services), what happens to people in services (Outcomes, Client Perceptions of Care) and how much services cost (Expenditures). The Report is designed to assist system managers and system payers in understanding trends in service delivery systems and making improvements in the quality of services.

MHD has also created a web-based consumer outcome measurement system that provides real-time feedback to clinicians and consumers. These measures are also rolled up to both the agency and state levels to produce statewide indicator reports. The Division is also integrated with the state's data warehouse which enables it to integrate and analyze its data with that derived from other sources such as the state hospitals and other state agencies such as the Medical Assistance Administration, the Division of Alcohol and Substance Abuse, the Division of Developmental Disabilities, and Corrections.

MHD has also developed a detailed Quality Strategy that is codified in its waiver request to CMS for the operation of the prepaid mental health managed care plan.²⁰ The Quality Strategy is meant to be a coordinated, systematic approach to the planning, implementation and management of the state's quality assessment and improvement strategy. This strategy is expected to continuously and consistently monitor the appropriateness and quality of the consumer care delivery system in the prepaid plans. The Quality Strategy details the internal quality management processes that each plan must follow, plans for remedial or corrective actions, and the use of the external quality review organization to verify the data and quality improvement efforts of the prepaid plans.

B. External Quality Review

The Centers for Medicare and Medicaid (CMS) promulgated federal quality improvement rules for managed care plans such as Maryland's Health Choice 1115 waiver 2003. Those rules require that each MCO and PIHP (Pre-paid Inpatient Health Plan) have an ongoing quality assessment and performance improvement program for the services it furnishes to its enrollees. At a minimum, the State must require that each MCO and PIHP comply with the following requirements:

- (1) Conduct performance improvement projects as described in paragraph (d) of this section. These projects must be designed to achieve, through ongoing measurements and intervention, significant improvement, sustained over time, in clinical care and non-clinical care areas that are expected to have a favorable effect on health outcomes and enrollee satisfaction.
- (2) Submit performance measurement data as described in paragraph (c) of this section.
- (3) Have in effect mechanisms to detect both underutilization and over utilization of services.
- (4) Have in effect mechanisms to assess the quality and appropriateness of care furnished to enrollees with special health care needs.

CMS also requires States that operate Medicaid managed care programs to provide for an "external, independent review of their managed care organizations".²¹ Most States contract with an External Quality

¹⁹ WA Department of Social and Health Services, Statewide Publicly-funded Mental Health Performance Indicators, Fiscal Year 2005, July 2007.

²⁰ WA Department of Social and Health Services, Division of Mental Health, Quality Strategy Report, Updated April 2007.

²¹ *External Quality Reviews in Medicaid Managed Care*, Department of Health and Human Services, Office of Inspector General, June 2008.

Review Organization (EQRO) to fulfill this requirement. Federal regulations require that external reviews of each health plan cover:

- Validation of performance improvement projects required by the State
- Validation of plan performance measures required by the State
- A review to determine the plan's compliance with the State standards for access to care, structure and operations, and quality measurement and improvement

Following the review, each EQRO must produce:

- A detailed technical report;
- An assessment of each plan's strengths and weaknesses with respect to quality, timeliness, and access to care;
- Methodologically appropriate, comparative information about all plans
- Recommendations for improving the quality of health care services furnished by the plans; and
- An assessment of the degree to which each plan has addressed effectively the quality improvement recommendations made by an EQRO during the prior year's review.²²

Some states that have managed behavioral health carve outs use their managed healthcare EQRO to evaluate behavioral health services, while others have separate EQROs just for behavioral health. EQROs that cover both health and behavioral health services often emphasize the health plans performance. Maryland's most recent EQRO report, for example, contained no measures of behavioral health performance.²³ States like California and Washington have well developed EQRO activities for mental health. California's EQRO (CAEQRO) works with the Mental Health Plans (MHP who are counties) to validate the Performance Improvement Projects (PIP) the Counties are required to undertake. CAEQRO uses a "Road Map to a PIP" that guides Counties through the selection of PIPs, root cause analysis, development of the study question, identification of performance indicators, analysis of interventions, data collection methodologies, and reporting of results.²⁴ The EQRO has worked with MHPs on PIPs covering improving identification and treatment outcomes for consumers with co-occurring disorders, reducing wait times at clinic location, and coordination between behavioral health and primary care.²⁵

Washington's EQRO plays a strong role in the State Mental Health Division's overall quality strategy. Driven by the performance measures and quality initiatives identified in the MHD's *Quality Strategy*²⁶, the EQRO validates Performance Improvement Projects, performance measures and encounter data for each of the fourteen Regional Support Networks (RSN). Washington chose this scope of work for its EQRO, given the great difficulty it has had receiving accurate and complete data from the RSNs. Due to the decentralized nature of Washington's managed mental health system, data integrity and consistency in operations is of paramount importance to the State. The WAEQRO reviews addressed enrollee rights and protections, quality assessment and performance improvement, grievance systems, adoptions of practice guidelines, and fraud and abuse. Performance measure validation covers Medicaid penetration rates, Medicaid utilization rates, and completeness and accuracy of encounter data.

C. Standards of Care

While a state level Quality Management System or an EQRO can certainly provide a framework for advancing quality strategies in pursuit of improved treatment and outcomes, the real 'work' of quality occurs at the practice level. The move to evidence-based practices reflects this in that fidelity measures,

²² 42 CFR, 438.364(b) and 438.350(f)

²³ *External Quality Review Organization Report, Final Report Calendar Year 2007*, Delmarva Foundation, July 2008

²⁴ www.caeqro.com

²⁵ *Ibid.*

²⁶ www.dshs.wa.gov/mentalhealth

while still focused on many structural aspects of the practice, also address some aspects of the process of care.

Currently, there are very few nationally recognized mental health standards of care. Several years ago SAMHSA issued toolkits for six evidence-based practices, covering Assertive Community Treatment, Illness Management and Recovery, Family Psycho-education, Medication Management, Supported Employment and Integrated Dual Disorders Treatment. (Note: Medication Management is no longer included in the SAMHSA Toolkits.²⁷) Maryland was one of the eight States participating in a demonstration program and used two of the SAMHSA toolkits; additional funding was later received to implement an additional toolkit. Although the five EBPs in SAMHSA's Toolkit can certainly be considered as "recommended" to the field, they have not been adopted as a standard of care. If they were, all mental health providers would adopt them as a matter of course. In fact, although every State is engaged in implementing one or more of these EBPs, no state has adopted them as standards of care that guide treatment and recovery support across all providers. There is only one state, Oregon, that has mandated that increasing shares of public mental health dollars must be spent on evidence-based practices, meeting a 75% target by the 2009-2011 budget period.²⁸ Oregon has an approved list of practices and a process for adding practices to the list; the current list for adult mental health goes beyond the SAMHSA EBPs to include cognitive behavioral therapy and motivational interviewing.

The Veterans Health Administration (VHA) has done some groundbreaking work in the creation of standards that require the use of evidence-based practices for specific clinical conditions. The VHA first identifies clinical conditions "associated with high risk of disease and/or burden of illness for veterans";²⁹ mental health is one of these conditions, with an initial focus on major depressive disorder and schizophrenia. For each of the selected conditions, the Quality Enhancement Research Initiative (QUERI) center identifies evidence-based best practices and analyzes existing practice patterns against these. When discrepancies are identified between best practice and VHA treatment, interventions are implemented to move clinical practice to the standard. The VHA goes on to evaluate whether best practices produce results and whether those results are associated with "improved health-related quality of life".³⁰

Healthcare has many more EBPs than behavioral health, and some have recently emerged or found new popularity that hold promise for persons with psychiatric disorders. While many of the evidence-based practices in mental health could be considered "specialty services," the healthcare field is currently experimenting with new approaches to primary care and chronic care management.

In recent years, a concept first developed in the late 1960s for pediatric care has been resurrected as a best practice for both children and adults and as a possible platform for chronic disease management—the patient-centered medical home. At its basic level, a medical home rejuvenates the definition of primary care as the site of first-contact, with responsibility for patients over time; providing comprehensive care that meets or arranges for most of a patient's healthcare needs; and coordinating care across a patient's conditions, care providers and settings.³¹ Others have added criteria that include the patient having a regular doctor or source of care; having no difficulty contacting them by phone;

²⁷ www.mentalhealth.samhsa.gov

²⁸ www.oregon.gov/DHS/mentalhealth/ebp.main.shtml

²⁹ McQueen, L., et al., *Overview of the Veterans Health Administration's Quality Enhancement Research Initiative*, *J Am Med Inform Assoc.*, 2004 Sep-Oct; 11 (5).

³⁰ Ibid.

³¹ B. Starfield and L. Shi, *The Medical Home, Access to Care, and Insurance: A Review of Evidence*, *Pediatrics*, 113, no 5 Supp. (2004).

having no difficulty getting care or medical advice on evenings and weekends; and experiencing office visits that were well organized and running on time.³²

There is also growing support for using the medical home as the location for managing chronic conditions, although some experts question whether primary care practices can be re-designed to support patients with chronic disease and adhere to the six components of the Group Health Cooperative's "Chronic Care Model". This model requires that healthcare organizations implement delivery system redesign, systematic decision support, linkage to community resources, self-management support and clinical information systems³³. Early work by Wagner and others identified three core components of chronic care management as targeted goal setting and planning, developing a continuum of self-management training, and sustained direct contact with patients at regular intervals, all organized by clinical care managers who function as health educators and navigators.^{34, 35} This more modest set of clinical activities may be realistic for medical homes who, with patient partnerships, would manage chronic conditions.

Each of these concepts, the medical home and chronic care management, may offer promising directions for mental health systems that want to address the fragmentation of care and believe that moving away from an acute care model makes sense for adults with serious mental illness and children with serious emotional disturbance.

D. Process Improvement

With "the triple aim" to improve population health, enhance the healthcare experience and reduce per capita costs, the Institute for Healthcare Improvement (IHI) has become one of the preeminent champions for enhanced quality in health services and institutions. Under Don Berwick's direction IHI has carried the mantra of continuous quality improvement, much of it focused on improving the processes of care. In contrast to many who argued for 'quality by inspection', Berwick argues that the "Theory of Bad Apples"³⁶ discourages innovation in the system, rather than increasing its likelihood.

As part of its continuous efforts to enhance the quality of healthcare, IHI developed its *Breakthrough Series* that combined a learning collaborative approach with tested methods for process improvement.³⁷ To apply changes in their local settings, Collaborative participants learn an approach for organizing and carrying out their improvement work, called the Model for Improvement, developed by Associates in Process Improvement (Langley & Nolan, *The Improvement Guide*, Jossey-Bass, 1996). This model identifies four key elements of successful process improvement:

- Selecting specific and measurable aims
- Creating measures of improvement that are tracked over time
- Identifying key changes that will result in improvement, and
- Using a series of small change, rapid cycles during which teams learn how to apply key change ideas to their organizations

³² *Closing the Divide: How Medical Homes Promote Equity in Health Care*, The Commonwealth Fund, June 2007.

³³ E. Wagner, et al., *Organizing Care for Patients with Chronic Conditions*, *Milbank Quarterly* 74, no. 4 (1996).

³⁴ M. Von Korff, et al., *Collaborative Management of Chronic Illness*, *Annals of Internal Medicine*, December 1997.

³⁵ E. Wagner, *More Than a Case Manager*, *Annals of Internal Medicine*, October 1998.

³⁶ Berwick, D., *Sounding Board: Continuous Improvement as an Ideal in Health Care*, *The New England Journal of Medicine*, January 5, 1989.

³⁷ *The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement*, Institute for Healthcare Improvement, 2003, Boston, MA.

The Model for Improvement requires teams to ask three questions:

- ❑ What are we trying to accomplish? (Aim) Participants determine which specific outcomes they are trying to change through their work
- ❑ How will we know that a change was an improvement? (Measures) Team members identify appropriate measure to track their success
- ❑ What changes can we make that will result in improvement? (Changes) Teams identify key changes that they will test.

Key changes are then implemented in a cyclical fashion:

- ❑ teams plan to test the change, taking into account organizational characteristics;
- ❑ they do the work to make the change in their standard procedures, tracking their progress using quantitative measures
- ❑ they closely study the results of their work for insight on how to do better; and
- ❑ they act to make the successful changes permanent or to adjust the changes that need more work ('adopt, adapt, abandon').

This model was designed to help organizations close the gap between "what we know and what we do" by creating a structure in which participants can learn from each other and from thought leaders in topic areas where they want to make improvements. Typically, a breakthrough series is a short-term (6- to 15-month) learning system that brings together teams from healthcare institutions to seek improvement in a focused topic area. Each team sends three of its members to attend Learning Sessions, with additional members working on improvements in the local organizations. Between Learning Sessions, the teams work on rapid cycle, small change projects within their agencies.

Teams in IHI's Collaboratives have achieved dramatic results, including reducing waiting times by 50%, reducing worker absenteeism by 25%, and reducing hospitalizations for patients with congestive heart failure by 50%. One initial Collaborative reduced repeat hospitalizations for asthma by 100% over a 12-month period; another reduced the number of patients treated in the emergency department (ED) for asthma who returned to the ED within seven days of treatment by 50%.³⁸ While the IHI outcomes have all related to physical health or medical/surgical services, this model has recently been applied in addictions treatment with similar dramatic results and is currently being introduced to mental health providers.

One IHI project focused on reducing length of stay in the Emergency Department for psychiatric patients and decreased the ED length of stay for patients requiring psychiatric admission from 18 hours to just over 6 hours within a 12 month period. In addition, as IHI reports "the overall need for security staff also decreased and compliance with JCAHO standards for restraint and seclusion increased dramatically".³⁹ During this same period of time the hospital experienced a 37% increase in psychiatric admissions from the ED.

Drawing from the work of IHI and process improvement, the University of Wisconsin created a similar model for addictions treatment, *the Network for Improvement in Addictions Treatment (NIATx)*, initiated as a partnership between the Robert Wood Johnson Foundation, the Center for Substance Abuse Treatment and the National Institute on Drug Abuse. That partnership has been enhanced through the Robert Wood Johnson Foundation's *Advancing Recovery* program in which States and providers are working together to implement evidence-based practices, using NIATx's process improvement system. NIATx is currently expanding into the mental health sector with support from the Center for Mental Health Services.

³⁸ Ibid.

³⁹ www.ihl.org/IHI/Topics/Flow/PatientFlow/ImprovementStories

Over the past five years, NIATx has utilized a learning collaborative approach and focused on five key principles that distinguish successful from unsuccessful organizational change. The five principles are: (1) understand and involve the customer, (2) fix key problems, (3) pick a powerful change leader, (4) seek ideas from outside the organization and (5) use rapid-cycle change to establish effective change. The first two principles seek to understand what it is like to be a customer of the organization and to identify key problems that, if addressed, will significantly impact the organization.

NIATx work is currently represented in forty-eight (48) states through eight hundred thirty-five (835) providers, twenty-four (24) states, one county (Los Angeles) and two cities (Philadelphia and Baltimore). Collectively, substance use treatment organizations have been able to improve both access and retention with the following results:

- reduced waiting times by twenty-four percent (24%);
- reduced no-shows by thirty-two percent (32%);
- increased admissions by twenty-five percent (25%); and
- increased continuations in treatment by fourteen percent (14%).

Purchasers and stakeholders are hopeful that NIATx can bring similar improvements to mental health systems, as IHI's *Breakthrough Series* has done for health.

E. Client Empowerment

Consumer empowerment and choice are considered to be important aspects of quality in mental health care and product purchasing overall. Public mental health systems are often hampered by the fact that provider organizations have franchise rights over specific geographic areas, thus eliminating client choice among providers and, often, practitioners. Clients can be empowered, however, even in systems that offer limited choices by informing and educating them about their illness, recovery pathways, and treatment effectiveness.

The President's New Freedom Commission featured a model program in the area of information technology that actually also supports consumer and family empowerment. The *Network of Care* (NOC), developed in California, is now used by eighteen states, including Maryland, as a platform for providing an interactive, 'single information source' where consumers and stakeholders can access a variety of resources. Structured as a 'virtual community', NOC includes service directories, a library, advocacy tools and message boards. Embedded in the *Network*, is a private "Personal Health Record" where consumers and families can store personal health and behavioral health information that is stored on a secure, encrypted server. Clients can also grant access to this section of NOC to families, caregivers, or friends. This can provide a powerful support to clients' efforts to manage their own healthcare and wellness.

Both the private and public sector are experimenting with models of self-directed care, either through models that utilize health savings accounts in commercial plans or special pilot projects in the public sector. In self-directed care, consumers are given control of purchasing some or all of their treatment or recovery supports, within the limits of an individual budget. Key components of self-directed care include person-centered planning, individual budgeting and support services, with a fiscal intermediary that assists with purchasing and money management. Most of the experience has been with persons who are elderly or disabled, with the "Cash and Counseling" program for Medicaid recipients the most prominent model used during the last decade. This program was found to reduce unmet needs and improve quality of life for both recipients and their caregivers.⁴⁰

⁴⁰ Robert Wood Johnson Foundation. *Choosing Independence: An Overview of the Cash and Counseling Model of Self-Directed Personal Assistance Services*, 2007.

In the public sector, there are currently five states with self-directed care pilots for adults with serious mental illness: Florida, Iowa, Maryland, Michigan and Oregon.⁴¹ Florida is the oldest, having been initiated in 2002 in one district of the state and expanded to a second district in 2005; 250 clients are involved. One program is managed by a behavioral health organization and the other by the local NAMI chapter. Medicaid funds are used to purchase Medicaid-covered services and State general revenue covers services that are not Medicaid-supported, including those outside the traditional mental health system. Iowa's program targets 15 clients of only one psychiatric rehabilitation provider and funds can be used to achieve one rehabilitation goal that's chosen by the clients; funds are allocated from contractually required reinvestment funds managed by the state's Managed Behavioral Healthcare Organization. Both Michigan and Oregon use a county-based approach, with Michigan operating under a Medicaid Section 1915(b) waiver and Oregon using both State and Medicaid funding. Maryland's program is available in one county, targeting 30 clients, with State funds used to purchase services not covered by Medicaid and/or supports available outside the traditional mental health system.

Self-directed care funds are spent on a variety of services and supports across the projects, ranging from medication, transportation, psychiatric and counseling visits, rent/utilities, personal appearance/physical fitness, education, and information technology. Evaluations have been positive, with consumers and case managers in Iowa expressing high satisfaction for SDC⁴² and consumers in Florida more positive about SDC than about community mental health services overall.⁴³ Consumers report that their increased satisfaction is related to the peer support they receive, the availability of person-centered planning, the flexibility in use of funds and the program's recovery orientation.⁴⁴

Evaluation of the Florida program indicates that SDC consumers are more likely to access routine care and early intervention and experience less use of crisis services.⁴⁵ This same evaluation showed improved outcomes as measured by significantly increased community tenure after program participation. An Oregon evaluation showed improvement in both employment rates and access to education, with employment increasing from 23% to 47% and education from 8% to 44%.⁴⁶

V. CURRENT EFFORTS IN MARYLAND FOR IMPROVING THE QUALITY OF MENTAL HEALTH SERVICES

Maryland currently uses a variety of quality assurance and improvement tools, including regulations, data collection on client outcomes, rewarding the use of evidence-based practices, surveys of clients, project evaluation, and performance measures. These tools are described in greater detail below.

All community mental health programs are approved under MHA regulations that include both administrative and program requirements. One of the administrative requirements is for programs to establish and implement a quality management plan that creates an internal, ongoing quality performance evaluation process. The plan must include the following elements:

- must be oriented to the individuals served and emphasize recovery, collaboration, continuity of care, accessibility, accountability, and efficiency;

⁴¹ US Department of Health and Human Services, *The Contribution of Self-Direction to Improving the Quality of Mental Health Services*, November 2007.

⁴² Joan Discher (2007). Presentation made at the National Home and Community-based Waiver Conference, Albuquerque, NM, October 2007.

⁴³ US DHHS, op cit.

⁴⁴ Ibid.

⁴⁵ Florida Department of Children and Families, Mental Health Program Office (2007). *Report on the Effectiveness of the Self-Directed Care Community Mental Health Treatment Program as required by s.392.9084, F.S.*

⁴⁶ Ami Sullivan (2006). *Empowerment Initiatives Brokerage: Service Quality and Outcome Evaluation*. Oregon Technical Assistance Corporation.

- a system to evaluate quality of care and services to individuals, staff performance and competencies;
- appropriateness of services, including accessibility;
- adequate data collection that allows for problem identification;
- review of program outcomes; and
- risk management, including review of unfavorable service-related outcomes and other serious incidents

Oversight of community mental health programs is provided by both the Office of Health Care Quality (OHCQ) and Core Service Agencies (CSAs). OHCQ is an Administration within DHMH that is responsible for monitoring community mental health program compliance with the applicable MHA regulations while MHA's Office of Compliance audits providers' compliance with MA billing requirements. CSAs are responsible for planning and coordinating mental health services at the local level. This includes monitoring compliance with contract award conditions. CSAs are also responsible for reviewing and monitoring program improvement plans that programs develop in response to OHCQ site visits. CSAs are responsible for inspecting and approving residences operated by Residential Rehabilitation Programs and are responsible for complaint investigation and resolution.

The Outcomes Measurement System (OMS) was developed to collect information on individuals, ages 6-64, who are receiving outpatient mental health clinic services (OMHC) from Maryland's Public Mental Health System (PMHS). Demographic information (e.g., age, race, gender), as well as information regarding several life domains (e.g., living situation, employment, school attendance, substance use, symptoms, and functioning), is collected. An OMS data mart, which includes aggregate information on individuals completing the OMS questionnaire, was launched in September 2008. The next phase of the OMS will be to report the change over time for measures that include information on the life domains listed above, as well as information on changes in symptoms and functioning over time. The OMS project is the result of the collaborative partnership among MHA, MAPS-MD (MHA's Administrative Service Organization), and the University of Maryland Systems Evaluation Center (SEC).

MHA monitors fidelity annually using the evidence-based practice standards for Assertive Community Treatment, Supported Employment Programs, and Family Psycho-education. Once fidelity to standards has been documented, MHA increases the rate paid to providers who meet the standards. MAPS-MD compiles and reviews quarterly reports (utilization, expenditures, etc.); MAPS-MD audits selected providers, including community programs, individual practitioners, hospitals, and RTCs for compliance with regulatory requirements and billing requirements. MHA and MAPS-MD provide feedback to providers whose service volume or expenditures are unusually high, requiring an explanation and, if that is not acceptable, a plan of correction.

An annual Consumer Perception of Care Survey, which is based on federal reporting requirements, is conducted through MAPS-MD. Survey findings are widely distributed in the form of summary reports and brochures. Consumer Quality Teams (CQT) have also been developed to conduct visits to community mental health programs and State hospitals. The focus of CQT site visits is on interviewing individual consumers and identifying individual problems and concerns, with an emphasis on rapid resolution of identified problems or issues. Feedback of the visits is given to programs, CSAs, and MHA. Generally, CSAs are responsible for any follow-up that is required. In the community, CQT has started with Psychiatric Rehabilitation Programs (PRP).

MHA contracts with the University of Maryland Systems Evaluation Center (SEC) for a variety of PMHS activities and projects, including development, implementation, and evaluation of the OMS; participation in implementation and evaluation of the MHT SIG; evaluation of EBP projects; and evaluation of the CQT initiative.

In the area of self-directed care, Maryland has a small SDC pilot in Washington County that began in March, 2007 and now serves forty participants. Funds are used for education, rent/utilities, and general wellness and recovery supports.⁴⁷ An evaluation of the demonstration has not yet been conducted.

MHA has recently adopted a set of performance measures that include the following targets for 2012⁴⁸:

- 85% adult consumers surveyed will report that receiving mental health services has allowed them to deal more effectively with daily problems;
- 60% of parents/caretakers surveyed will report that their child is better able to control his/her behavior as a result of receiving mental health services;
- Outcome data on 75% of individuals engaged in outpatient treatment over a six month period will be available;
- MHA will maintain access to public mental health services for 14% of the population of adults who have a serious mental illness;
- MHA will maintain access to public mental health services for 20% of the population of children who have serious emotional disturbance; and
- At least 75% of non-forensic patients in State and private hospitals funded through MHA purchase of care dollars will be discharged within 30 days

VI. Areas for Improvement

Maryland has many of the right ingredients to advance a quality improvement agenda. As the *Data Gaps* White Paper pointed out, Maryland has a wide variety of data sources at its disposal, and through MAPS-MD, it has the infrastructure capacity to collect timely provider and client level encounter data and to convert the data to information that could be used within a quality improvement framework. In addition, the Outcomes Measurement System is an important move into the process of understanding clinical quality at a deeper level. MHA is beginning to use these data to measure improvement over time and is completing a web-based reporting system that will allow reporting at the state, CSA, and provider levels.

What Maryland lacks is an overall Quality Management System (QMS) that provides an organizing framework and includes a variety of tools for improving the quality of mental health services. This system would employ a variety of methods to measure and enhance quality, such as data-driven analyses to evaluate provider and system performance, Learning Collaboratives around process improvement, and efforts that further spread evidence-based practice and practice-based evidence.

The overarching objective for a QMS system in Maryland should be to improve services in a way that increase the likelihood of positive outcomes for clients and that improves the client's experience. Goals and performance standards should be tailored to Maryland's system so that the QMS is a useful tool for system improvement. Development of a QMS should begin with MHA's assessment of the quality and performance of its services and system, including both identification of areas of strength and areas for improvement. Based on this assessment, the State should select goals and choose a method for reaching these goals. Methods could include the development or adoption of specific standards of care, initiation of process improvement projects, and adoption of performance standards and targets.

With regard to process improvement, there are at least two areas that merit consideration. As part of developing the QMS, Maryland should consider determining whether a mental health version of the "medical home" could play a role in enhancing quality of care. In addition, based on the origin of the MHCC Task Force's work around emergency department presentations by persons with psychiatric

⁴⁷ Brown, J. and Finkle, M., *Self-Directed Care: Changing People's Lives One Choice at a Time*, Consumer Network News, Volume 15, Number 3, Autumn 2008.

⁴⁸ www.dhmd.state.md.us/mha

disorders, early QMS work could focus on the flow of persons through emergency departments. The QMS could identify performance standards that may be useful and develop a process for creating new standards in order to measure progress. Emphasis in the early stages of the work could focus on existing data elements and data streams and integrate measures for crisis, diversion, inpatient and step-down services for persons being served by those systems.

In Maryland, the current public mental health system has only a limited number of identified performance standards. A performance standard can be defined as "a generally accepted, objective standard of measurement such as a rule or guideline against which an organization's level of performance can be compared."⁴⁹ Without performance standards, system stakeholders do not know how actual performance compares with where the system "should be." Possible 'first phase' performance measures could include the 'top candidates' itemized in Section III:

- Penetration rates
- Time to urgent, emergent and routine appointments
- Utilization rates for inpatient and outpatient services
- 30-day readmission rates
- 7-day post inpatient discharge outpatient connection rate
- Emergency department utilization rates
- Consumer and family satisfaction with treatment and results
- Rate of children successfully attending school and rate of adults gainfully employed

For each of the measures, standards, and goals, short-term targets should be set so that progress toward the goals can be measured. While the standards and goals would be based on best practices, the short-term targets would set realistic improvement levels, with the baseline measure taken into account. Using "access to service" as an example, the following metrics might apply:

Standard	Goal	Baseline	Target for 1 st Year
1 st clinical appointment occurs within 2 business days of request	95%	50%	70%

Similar metrics should be developed for each performance standards. In all cases, state level performance data should be tracked at the provider level so that individual organizations recognize whether their processes need to change in order to contribute to state level goals.

For whatever quality indicators MHA adopts, a publicly available reporting system should be established so that information on system performance is shared widely. The MAPS-MD Quarterly PMHS Report contains many of the characteristics of an exemplary report: reports are graphically oriented, containing both numbers and appropriate bar and line graphs; many of the reports have multi-year trends; the packet has a standard "look and feel" that promotes easier understanding; and many of the key planning elements are included—penetration, utilization, cost, and some capacity data. Re-structured to evaluate performance targets, a web-base version of this reporting system could form the basis for publishing quality improvement data.

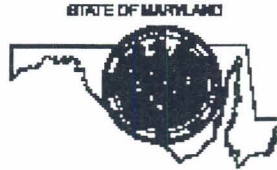
⁴⁹ The Turning Point Guidebook for Performance Measurement, Patricia Lichiello, University of Washington Health Policy Analysis Program, 1999, page 12.

VII. Summary/Conclusion

A variety of tools exist for improving the quality of mental health services, including quality management systems, external quality review organizations, standards of care, process improvement, and consumer empowerment. No one approach will work for all public systems, but some approach could assist most systems to improve the client experience and the outcomes of treatment.

Maryland has a rich set of databases, an extensive regulatory system, and a strong partnership with the University of Maryland's System Evaluation Center. These ingredients could serve the State well in the development of a robust Quality Management System.

Gail R. Wilensky, Ph.D.
VICE CHAIR



Rex W. Cowdry, M.D.
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE – BALTIMORE, MARYLAND 21215
TELEPHONE: 410-764-3460 FAX: 410-358-1236

September 24, 2007

The Honorable Ulysses Currie
Chairman, Senate Budget and Taxation Committee
Miller Senate Office Building, 3 West Wing
11 Bladen Street
Annapolis, Maryland 21401-1991

The Honorable Norman H. Conway
Chairman, House Appropriations Committee
House Office Building, Room 121
12 Bladen Street
Annapolis, Maryland 21401-1991

Dear Chairmen Currie and Conway:

I am writing to request an extension in the due date of a report. The Joint Chairmen's Report for the 2007 Session of the General Assembly requires the Maryland Health Care Commission to develop a plan to guide the future mental health service continuum needed in Maryland. The request appeared in the Joint Chairmen's Report- State Operating Budget (HB 50) and the State Capital Budget (HB 51) and Related Recommendations, 2007 Session (2007_p97-98_ Office of the Secretary_ M00A01.01 Executive Direction), with a due date of November 1, 2007. The Commission respectfully requests that the due date be extended to December 31, 2008.

The Joint Chairmen's Report requires that the mental health continuum plan be developed with the guidance of a large Task Force with specified representation and, by its nature, requires a collaborative effort of a number of different state agencies. An extended report date of December 31, 2008 will permit the Commission to develop a statewide plan for mental health services that provides a comprehensive description of the current mental health care system, describes a model mental health care system, identifies priority short and long-term needs for improving the current system, and maps an implementation strategy for addressing identified needs.

Thank you for considering this request.

Sincerely,

A handwritten signature in cursive script, appearing to read "Rex W. Cowdry".

Rex W. Cowdry, M.D.
Executive Director

cc: Secretary John M. Colmers, Department of Health and Mental Hygiene
Brian Hepburn, M.D., Director, Mental Hygiene Administration, DHMH
Simon G. Powell, Department of Legislative Services
Andrew Brecher, Department of Budget and Management
Cathy Kramer, Department of Legislative Services

NOV 21 2007
11:22



THE MARYLAND GENERAL ASSEMBLY
ANNAPOLIS, MARYLAND 21401-1991

November 19, 2007

Dr. Rex W. Cowdry
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: Item 2008-83-1

Dear Dr. Cowdry:

We are in receipt of your letter requesting an extension on the reporting deadline for the development of a plan for the continuum of mental health services in Maryland. We concur with your request to extend the deadline beyond the current November 1, 2007. However, in order to allow for adequate review, we would request that the report be submitted by December 1, 2008, rather than December 31, 2008, as you suggested.

In approving the extension request, the budget committees also authorize the release of funds, effective October 30, 2007, to the Department of Health and Mental Hygiene, Office of the Secretary under Item 2008-83-1 in the amount of \$100,000 in general funds. However, given the importance of this matter to the State's health infrastructure, the committees may adopt language in the fiscal 2009 budget bill withholding a similar amount until the plan is submitted.

Sincerely,

Ulysses Currie, Chairman
Senate Budget and Taxation Committee

Norman H. Conway, Chairman
House Committee on Appropriations

UC:NHC/SGP/kjl

cc: Senator Edward J. Kasemeyer
Senator Rona E. Kramer
Delegate James E. Proctor, Jr.
Delegate Mary-Dulany James
Secretary T. Eloise Foster
Secretary John M. Colmers
Dr. Brian Hepburn

Mr. Karl S. Aro
Mr. Warren G. Deschenaux

NOV 21 2007
11:22