

**NASMHPD Medical Directors Council
2001 Best Practices Symposium**

PROCEEDINGS

**October 8 - 9, 2001
Orlando, Florida**

*Transforming Knowledge and Research into Practice in the Public Mental Health Sector:
Focus on Computerized Performance Measurement Systems, Children's Psychopharmacy,
Continuity of Care from the Hospital to the Community and Practice Guidelines Update*

Monday, October 8, 2001

Welcome, Introductions, Symposium Overview

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Dr. Glover welcomed the Symposium participants and thanked them for their attendance, particularly given the September 11th terrorist attacks and the resulting toll on the nation's psyche. He noted that recent events and the travel bans instituted by some states facing revenue shortfalls resulted in a decrease in this year's Symposium's attendance.

Dr. Glover gave a preview of the upcoming Winter Commissioners Meeting. Surgeon General David Satcher, M.D. will be honored at the December meeting. It is expected that, with the change in administration, a new Surgeon General will be appointed in the months ahead. Dr. Glover urged participants to review the latest supplemental report to the Surgeon General's Report on Mental Health. The supplemental report focused on race, ethnicity and disparities, important issues for state systems, facilities and community programs.

Finally, Dr. Glover highlighted the upcoming Technical Report on seclusion and restraint for with people who are deaf and hard of hearing. This topic was selected as a result of discussions at a national meeting of state cultural and deaf/hard-of-hearing coordinators. The following comments illustrated how the unique experience of people who are deaf affects their reaction to coercive

measures like seclusion and restraint:

“When I am picked up by police and they handcuff me, it’s like putting a gag in my mouth and I can’t communicate my needs.”

“Staff frequently use my family as interpreters and they’re part of the problem.”

“Sometimes people think I’m really anxious and when I sign real vigorously they think that I’m agitated and I want to attack someone because they don’t know the difference.”

The Technical Report will focus on the impact of seclusion and restraint on this population and strategies for minimizing its use. A workgroup will meet in January 2002 to begin drafting the report.

John Kretschmann, Director of Continuing Education, explained the process for receiving Continuing Medical Education (CME) credits through the Missouri Institute of Mental Health. He also pointed out the brochure for a program on APA’s new practice guidelines for treatment of people with borderline personality disorders, a program that has generated tremendous interest in the psychiatric community. The Missouri Institute of Mental Health is interested in bringing this and other CME programs to different states. Anyone interested should contact Mr. Kretschmann at (314) 644-8803.

Dr. Glover offered thanks to Janssen Pharmaceutica, Inc. and Eli Lilly and Company for their unrestricted educational grants which helped fund the Medical Directors Council’s Symposium. Janssen also underwrote the distribution of a videotape produced by the Texas Department of Mental Health on dealing with disasters. Medical Directors will receive their own copy during the Symposium.

Dr. Hester welcomed the group and expressed his pleasure at being part of the Medical Director community, particularly given recent world events.

Children’s Psychopharmacy

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Maryland*

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Dr. Hepburn introduced the panel and provided a context for Maryland's strong interest in children's issues. In July 1997, Maryland adopted a new statewide mental health system involving a single stream of financing to cover people who were uninsured or on Medicaid. As result of that change, the public mental health system has gone from covering 50,000 individuals to 80,000 individuals, about 20,000 of whom are children. Given the increased number of children receiving treatment, about 18 months ago, a group of people interested in children's issues began meeting every Thursday morning from 7:30-9:00 a.m.. Over a dozen individuals from the public sector and academia meet to discuss issues, policies and projects that can improve mental health treatment, including psychopharmacology, for children.

Dr. Riddle reviewed the current data available on psychopharmacy for children. A quarter of the U.S. population is under age 18 while a third of the world's population is under age 18. According to the literature, the prevalence rates of psychiatric disorders for youngsters are as follows:

Anxiety	3-13%
ADHD	3-5%
Depression	1-5%
OCD	1-2%
Psychotic	1-2%
Bipolar	less than 1%

Children's epidemiology studies on major psychiatric disorders are not nearly as well developed as studies for adults. However, by adding even the lower estimates above, one can discern that the rate for major psychiatric disorders in children is around 10%.

In the past, psychopharmacological treatment for children consisted of mostly stimulants for ADHD and sometimes antipsychotics or antidepressants. Medications were rarely used because, until a decade ago, pediatric psychopharmacology was not viewed as part of the public health mission.

During the past decade, several trends have altered the use of psychopharmacological treatment with children. More clinical models have been introduced that rely on different treatment modalities. Psychological models rely on psychodynamic treatment; behavioral models turn to behavioral interventions; social models utilize family and social interventions; and more recent disease model relies on medication for treatment.

Another trend has been the pattern of increased prescribing. Use of stimulants has more than tripled over the last decade while physicians have written prescriptions for SSRI's, atypicals and mood stabilizers more frequently for younger patients, including preschool age.

Surrounding these trends has been a changing public debate. The media, professional societies, industry and the federal government (e.g., FDA, NIMH) have all weighed in on the debate over medication use with children. Some advocacy organizations have promoted the use of medication (e.g., NAMI and CHADD) while other advocacy organizations have argued against its use (e.g., Scientology).

While the FDA has approved close to 70 different psychotropics for adults, Dr. Riddle explained that very few medications have received FDA approval for use with children. Indeed, the total list of FDA-approved medication for children includes:

<u>Drug</u>	<u>Indication</u>	<u>Age (years)</u>
Methylphenidate	ADHD	6 and older
Dextroamphetamine	ADHD	3 and older
Pemoline	ADHD	6 and older
Clomipramine	OCD	10 and older
Fluvoxamine	OCD	8 and older
Sertraline	OCD	6 and older
Pimozide	tics	12 and older

Surprisingly, this list includes no medications for depression, anxiety, psychotic disorders or mood disorders. Without making a judgment about whether it is positive or negative, Dr. Riddle explained that the reality is physicians prescribe many more than the above medications for children and are prescribing off-label. Except for stimulants, there is no data to differentiate among the different age groups of preschoolers (3-5 years), school-age (6-12 years) and adolescents (13-17 years).

Ideally, studies on psychotropics would demonstrate placebo-controlled efficacy, include comparisons with current treatment standards, recommend sequencing of therapies, indicate stopping time and long-term efficacy, establish long-term safety, address effectiveness (on quality of life, academics and non-symptom issues) and indicate whether the medication is effective with other populations and in other settings. Except for stimulants, the existing medication data for children only demonstrate short-term placebo-controlled efficacy.

For stimulants (e.g., MPH, DEX), the following results have been demonstrated:

- short-term efficacy Some work has been done.
- long-term efficacy NIMH multi modal treatment study of ADHD demonstrated efficacy up to 14 months. Results were published 18 months ago and papers are still coming out.
- long-term safety A study has shown safety up to 24 months including good data on growth and weight gain.
- effectiveness There has been minimal data.

For the new long-acting stimulants which require once per day dosing (Adderall, Concerta, Metadate), the potential advantages have not been studied. Dr. Riddle stated that research will eventually provide the data; it is just not available yet.

There have been few studies to document stimulants' effectiveness with different populations. These understudied populations include children with tics, children with mental retardation, children with medical conditions (e.g., how stimulants affect seizures), girls with ADHD and preschoolers.

The next most studied group of drugs are the SSRI's. Data exists demonstrating short-term efficacy for two SSRI's used with children who have OCD: Sertraline and Fluvoxamine. There has been no data generated for long-term efficacy, long-term safety, and effectiveness.

For SSRI's used with children who have depression, Fluoxetine and Paroxetine have short-term efficacy data. Similarly, they do not have long-term efficacy, long-term safety, and effectiveness data.

For SSRI's used with children who have anxiety, one study published recently indicated short-term efficacy for Fluvoxamine (RUPP).

For the TCA's, there is short-term efficacy data for Clomipramine to treat OCD and Desipramine to treat ADHD. However, the TCA's are not used frequently with children.

Neuroleptics are used with youngsters who have schizophrenia spectrums, bipolar disorder, aggression, behavioral problems in autism/pervasive developmental disorder (PDD) and tics. Thus, neuroleptics are being used to treat children with the major disorders, the types of children who often show up in the public sector and may require major treatment interventions.

The efficacy of neuroleptics has been demonstrated in controlled clinical studies for the following:

tics Haloperidol, Pimozide

aggression	Haloperidol, Risperidone
schizophrenia	Haloperidol, Clozapine
autism	Risperidone to treat other problematic symptoms not the core features. It's expected a study will be presented later in October that shows efficacy.

There has been only one study on any of the atypicals to treat children with major mental disorders, except for studies on aggression. Yet, many children are coming into hospital units already on atypicals.

There has been some data on the uses of Alpha-2 Agonists for children with ADHD, tics and initial insomnia. Some of this data is considered controversial and may not be convincing. The Neurology Institute is expected to report soon on a major study of outpatient children who had comorbid ADHD and tics.

Clonidine has demonstrated short-term efficacy in a NINDS-sponsored study for children with ADHD plus tics. Guanfacine has also been used for children with ADHD and tics and is less sedating than Clonidine because the half life is twice as long and requires less frequent doses. Dr. Riddle relayed that Guanfacine looks effective and has a favorable side effects profile according to one study that has been presented but not yet published.

Mood Stabilizers are used more frequently with youngsters who have bipolar depression, aggression and behavioral problems related to autism and PDD. However, no data exists for these medications for the treatment of bipolar disorders.

For Mood Stabilizers, a few studies have demonstrated the short-term efficacy:

bipolar	For lithium, one study examined 21 youngsters and placed half on a placebo and half on lithium. All but five of the children had comorbid substance abuse disorders. There is not sufficient data.
aggression	Lithium Valproic acids used with children in inpatient services was shown to have advantages.
ADHD	Bupropion
Autism	Naltrexone

And that, Dr. Riddle observed, is the extent of the data available on psychopharmacy for children.

Dr. Riddle shared his expectations for the field's future directions. He outlined the need for:

- *new medications.* Pharmaceutical Research and Manufacturers of America (see www.phrma.org) publishes a series on medications every two years. These excellent resources include *New Medicines in Development for Children - 2001 survey* and *New Medicines in Development for Mental Illnesses: 2000 Survey*. As of January 2001, the FDA has required the pharmaceutical industry to do safety/efficacy studies involving children if they think the drug will be prescribed to children. Thus, in the future, the field will have a lot more data on children. The FDA rule also gives companies an incentive (extra 6 months of marketing exclusivity) if they complete two FDA- approved studies in youngsters.
- *data-based treatment algorithms.* While good algorithms have been developed for adults (e.g., Texas algorithms), treatment algorithms have yet to be developed for children. However, it is difficult to develop algorithms when there is so little data on best practices, efficacy and effectiveness. Mental health systems need to address the following issues for treatment of children: standards of care, practice parameters, “best” practice, efficacy, effectiveness and algorithms.
- *inclusion of more children.* Research needs to include children with developmental disabilities, medical illnesses, preschoolers and those who are disadvantaged. Studies also need to move into the school system and examine whether the same medicines will work in cross- over settings.
- *long-term adverse event monitoring.* Studies need to use valid, reliable and efficient methodologies to examine long-term adverse events. This type of monitoring is particularly important for antipsychotics and mood stabilizers, medications that children may be on for a long time.

In conclusion, Dr. Riddle believed that the accomplishments of the past decade have built the basic foundation for a productive next decade. If government, industry and academia work together, they can play important and synergistic roles. And, as the use of psychopharmacy with children continues to increase, government oversight likely will increase.

Dr. Love described the function and accomplishments of Maryland’s ‘Thursday morning club.’ Initially founded by Drs. Hepburn and Al Zachik and now run by Drs. Riddle and Pruitt, the gathering began in June 2000. The Maryland Mental Hygiene Administration (MHA) invited the university community to help some child psychiatrists educate themselves about good treatment. The group consisted of representatives from the three regional institutes for children and adolescents, two state hospital adolescent inpatient units, MHA staff, faculty from the Johns Hopkins and University of Maryland Departments of Psychiatry and School of Pharmacy, consumers, and Baltimore Mental Health Systems.

The group’s initial charge was to look at evidenced-based practices. Participants developed a vision of trying to improve practice by bringing academic, clinical and administrative individuals together to do education, consultation, identification of ongoing research needs and evaluation of new tools

and new paradigms. The Thursday morning group named itself Maryland Youth Practice Improvement Committee (MYPIC) and set the following goals:

- evaluate existing ‘evidence-based practices’ and treatment algorithms
- develop recommendations for improving clinical practice
- focus on disseminating information and implementing recommendations throughout the Maryland system
- assist state with evaluating the outcomes of new programs.

MYPIC chose aggression as its first topic for intervention. A state task force had recently completed a successful training video on managing aggression. By targeting aggression, which cuts across multiple diagnostic categories, MYPIC could address the use of antipsychotics among children. Aggression also had been a focus with recent regulatory and accreditation activity on the use of seclusion and restraint.

Thus, the Committee adopted the following approach:

- survey facilities regarding their current practices around aggression. MYPIC distributed questionnaires with various case scenarios and asked facilities how they would handle the situations.
- review regulations and guidelines
- develop a guide on managing aggression. This guide would reflect a philosophy of patient management and not only be a guide to medication. The guide would include early preventive interventions and focus on rational decision-making processes.
- invite widespread review and input by stakeholders
- provide training and implement. MYPIC has formed subcommittees to examine this upcoming stage.

The guide draws from the Common Therapeutic Process which appears in clinical and pharmacological literature. This multi-step process involves:

- defining the problems including target symptoms, severity and timing (i.e., Why now? Was there a change in the milieu or other change that could be addressed during the acute episode or for future prevention?)
- selecting achievable goals. These goals take on different priorities at different times during

the event. These goals include:

- (1) maintain youth's autonomy to greatest degree possible
- (2) preserve integrity of milieu
- (3) deal with target symptoms exhibited
- (4) maintain everyone's safety involved with incident

- determining the variables that affect the choice of intervention. There are patient variables (e.g., deafness, medication allergies, psychiatric history which may be exacerbated by seclusion and restraint), intervention variables (including onset and duration of the intervention) and system variables (e.g., some systems support interventions based on staffing, availability of resources).
- determining which agent is the best intervention after considering the variables.
- implementing the intervention and monitoring. It is important to monitor the progress toward the therapeutic goal, adverse outcomes, and the level of acuity (i.e., Has the situation changed?).
- providing feedback. The feedback loop includes the treatment team, patient and parent/guardian to determine what can be learned from an episode.

Dr. Love proceeded to outline the various levels of aggressive behaviors and the corresponding goals and interventions. A consumer may start out at any level but staff need to reevaluate continually because the consumer's level may change as the situation progresses.

Level I

Target Sx: oppositional behavior, distress, anger/rage
Severity: not dangerous, disruptive
Goals: maintain patient's autonomy and milieu
Interventions: behavioral, milieu, communication to build trust

Level II:

Target Sx: anxiety, agitation, threatening property damage
Severity: potential (not imminent danger), disruptive
Goals: reduce target symptoms
Interventions: separation, staff, symptom specific medications

Level III:

Target Sx: physical aggression
Severity: imminent danger
Goals: maintain safety
Interventions: seclusion, restraint, sedative drug

For the implementation stage of its efforts, MYPIC has developed some training tools. Training addresses all levels of behaviors with a focus on Level I interventions to prevent situations from escalating. Documenting and providing continuous feedback to the treatment planning team also helps with prevention and discharge planning.

At first, as medical directors were bringing drafts of tools back to their staff, staff expressed concern over whether the algorithm would constrain their choices. Over time and with more involvement, core state-run facilities staff are supportive of the guide. Staff indicated they were particularly interested in Level I interventions given their desire to prevent problems rather than treat problems.

The MYPIC guide encourages development of Individualized Prevention Plans which include triggers for aggressive behaviors as reported by youth, parents and staff. MYPIC conducted a survey to develop an initial tickler list of factors which can cause or contribute to aggressive events. This list includes: transition times, quiet times, when limits set, when youth frustrated, when peers agitated, when youth has difficulty meeting expectations, when youth wants attention, when youth wants a reinforcer (food, privilege, etc), after a disappointment, during less structured periods and when a youth is sad.

The Individualized Prevention Plan also indicates the obvious physical symptoms and warning signs as observed and reported by youth, parents, staff: pacing, talking fast, approaching staff with increased frequency, talking loudly, increase in demanding behavior, fidgeting, clenched fists, slamming door, slamming objects, isolated and withdrawn.

The goal is to obtain this preventive information early on and incorporate it into the treatment plan. At admission time, staff can ask about successful approaches in the past. As treatment progresses, staff can report back what does and does not work with the person. It is important to obtain the input from the staff who are present during the episode, who may not be the same staff developing the treatment plan.

Thus, an Individualized Prevention Plan may involve some of the following interventions:

- decrease stimulation
- talking
- distraction
- physical activity
- relaxation techniques
- attention from staff
- reinforcers
- consequences

Dr. Love stressed the importance of not only selecting and documenting an intervention, but recording the resulting behavior. Simple questions may be sufficient: Did the patient improve as a

result? Was there no change? Or worsening?

Dr. Love gave an update on MYPIC's latest efforts. MYPIC has developed forms, tools, and the first edition of the guide. The current focus is on training and implementation with the Committee selecting sites and goals. Subsequently, MYPIC will evaluate the implementation and assess outcomes. Once this process is completed for aggression, the Committee will use this process with a new topic (e.g., condition, disease state, or aspect of treatment). For its next initiative, MYPIC is considering the topic of defining an adequate assessment and work up for children.

To obtain the guide or copies of tools, Medical Directors may contact Dr. Hepburn's assistant, Mary Kay Kierney at Mental Hygiene Administration, Department of Health and Mental Hygiene, State of Maryland, mkkierney@dmh.state.md.us.

Dr. Pruitt explained how his earlier training in pediatrics and family therapy were important influences on his view that clinicians should assess children within the context of their family and the system. Both the wide-angle and zoom lens are particularly important when considering polypharmacy.

Given the different terms and definitions for describing the use of multiple medications (co-pharmacy, combined pharmacotherapy, polypharmacy), it is challenging to determine appropriate estimates on the extent of polypharmacy. The prevalence of polypharmacy seems to depend extensively on where the children is being seen. A 1997 study indicated a 60% prevalence rate in residential treatment centers. Despite the lack of hard numbers, everybody believes the polypharmacy prevalence rate has been growing over recent years.

Dr. Pruitt mentioned an interesting study that appeared in *Pediatrics* in April 2001. The study examined the prescribing practice in Netherlands and found monotherapy was used almost exclusively. This study raised several questions. Does the pattern of polypharmacy vary country to country? In the United States, does the pattern vary region to region? Physician to physician? Why? What are the patient variables affecting the use of polypharmacy? What is the impact of physician training? These are just some of the questions which demonstrate how much is still unknown about polypharmacy use.

Dr. Pruitt began by offering the 'zoom lens' perspective and addressing the factors related to increased polypharmacy use. These factors include increased severity of comorbid disorders, more severe symptoms and an increase in children in foster care, residential treatment and other placements which may lead to a greater likelihood of using multiple medications.

Polypharmacy use with children usually targets the symptoms of aggression and intermittent impulsive behavior. These symptoms seem to drive the use of neuroleptics and other medications (e.g., anitconvulsants, SSRI's).

There are rational ways to use polypharmacy, including treating side effects (e.g., Cogentin with

Haldol) or augmenting Lithium with an antidepressant when there is a partial response. However, the irrational use of polypharmacy also occurs. These instances may be due to:

- fear of decompensation. A child may be on four or five medications and doing fairly well; thus, the treatment team keeps him on those medications not wanting to “rock the boat.”
- sloppy diagnosis (e.g., inpatient children with “NOS” diagnosis or children with conduct disorders diagnoses who really have PTSD that is unnoticed)
- interrupted cross-titration (e.g., The child gets better midstream so s/he ends up on two medications instead of one.)
- blind adherence to the Physician Desk Reference’s specifications. Thus, physicians begin a second medication after reaching the top level of the first medication instead of going higher with the first medication.
- lack of appropriate combinations of medication and psychotherapy.
- pressures by family members
- pressures by insurance companies (to use more medications and in a shorter period)
- inadequate knowledge of pharmacodynamics and pharmacokinetic interaction
- inadequate time given to patient to respond/improve (particularly during a 10-day hospitalization)
- magical thinking
- medical community rumors about medications when not supported by evidence.

The issue of ‘sloppy diagnosis’ resulted into a broader discussion about the diagnostic dilemma physicians face. Diagnoses such as mood disorder NOS, psychotic disorder NOS, intermittent explosive disorder and organic brain syndrome are commonly given to children. However, the lack of diagnostic specificity is worrisome. Yet, due to stigma concerns, physicians are also reluctant to label children with schizophrenia or other major psychiatric disorders, the diagnoses more commonly associated with some of the medicines given to children.

The risks from polypharmacy include:

- increase risk of side effects
- increase risk of morbidity and mortality. For example, the adult literature indicates if one

additional medicine is added to Valproic acid, there is almost four times increased risk of patic failure/

- increase risk of drug interaction
- increase risk of patient noncompliance
- increase risk of medication errors

In addition, polypharmacy use may be expensive and ineffective.

Dr. Pruitt outlined key principles for physicians prescribing multiple medications:

- Trials of single agents with optimal dosage should be used for sufficient duration.
- Physicians should target symptoms and use structured ratings to look at treatment response.
- Ineffective/minimally effective medications should be discontinued.
- Research strategies for polypharmacies should be tried first.
- Physicians should consider the pharmacodynamic and pharmacokinetics interaction when prescribing.

Dr. Pruitt also addressed the 'wide angle lens' and discussed the need to create clinical systems that support children, adolescents and their families. These systems would feature:

- decreased fragmentation. Perhaps the prescribing physician would follow the child across the system.
- develop more evidenced-based practices for all the therapies. Research would determine which combination of therapies are most beneficial.
- promote concepts that allow such issues to be viewed as public health problems not just medical problems.

One of Maryland's approaches to improve the clinical system is to develop a tool that looks at optimizing psychotropic resumes for children who are on multiple medicines. They are developing a reverse algorithm for children who are on four or five medications to help physicians discontinue some medicines while optimizing the medication protocol. MYPIC is in the process of piloting the reverse algorithm and received a grant to develop a national consensus panel on the algorithm. While there will likely many more versions of the algorithm before it is finalized, Dr. Pruitt said it was helpful to just have a structured way to consider reducing the number of medications.

During the question and answer period, Drs. Riddle, Love and Pruitt expanded upon their thoughts and addressed participants specific concerns.

Dr. Love indicated that Maryland is encouraging universities to utilize modern technology to facilitate active psychiatric consults with facilities. The state recently invested in state-of-the-art audiovisual equipment to be installed at universities, inpatient, residential treatment centers and juvenile justice sites. By the end of 2002, Maryland will have connected 11 sites who work with children who are high-end service users. The goal for using the technology is to facilitate 1) consultations 2) live real-time case conferences and 3) more traditional educational activities.

Dr. Pruitt suggested that psychopharmacotherapy is more often used with children because of their behaviors (versus their psychotic thinking). Many of the medicines prescribed are sedatives which result in the child not causing trouble and the caretakers being satisfied. Pulling medicine away may cause rebound problems that create waves for the family or hospital system.

One participant commented that polypharmacy may be increasing because it is easier to provide good medication services than almost any other psychiatric service. For example, medication services are easier to institute than behavioral programs across the family, school and provider systems. Dr. Riddle responded that, while it may be easier to provide medication treatment for children, it is not easier to provide “really good” medication treatment for children, particularly for those who are high-end service users. Dr. Love added that the necessary monitoring, assessment and feedback too often do not occur after the medication is prescribed.

One participant questioned whether the algorithm addressed the lack of trained child psychiatrists which results in pediatricians or family physicians diagnosing and prescribing. Dr. Riddle gave a perspective to this national problem by providing some rough calculations. Of the estimated 50 million children in the United States, if 10 percent had problems that potentially were medication responsive, there would be 5 million children to be treated by only 5,000 child psychiatrists. This ratio would result in each psychiatrist seeing each youngster for two hours per year.

Thus, child psychiatrists may have to serve as consultants if the system moves toward a public health model. Pediatricians and family physicians would need to take care of the children with lower level problems, child psychiatrists would focus on children with higher level problems and everyone would share those children who were in the middle of the continuum. Another participant pointed out that the need for consultation services is not just related to child psychiatry. The public sector has not figured out ways to provide ongoing consultation to the private sector on relevant issues (e.g., Clozapine).

One Symposium participant hypothesized that it is easier to achieve change through interventions across systems (e.g., introducing an algorithm) than to request individual doctors to change their individual behavior. It is also important to address the infrastructure to implement systemic changes. A 2001 study on implementation of an asthma algorithm revealed that, despite a great deal of up-front education, at six months only about 40 percent of doctors were actually following the

algorithm. Over time, the algorithm compliance rate leveled off at 25-30 percent. The study points out the need to invest in infrastructure so that the algorithm will continue to be used.

Dr. Pruitt added that implementation training needs to follow a modeling/mentoring format rather than show-and-tell format. For example, aggression training needs to demonstrate specific methods for deescalating tension and helping a consumer feel more trusting.

The lack of specialty psychiatrists willing to work in the public sector was a common concern. As one participant pointed out, only when the state increased salaries were they able to recruit good adult psychiatrists. Maryland has been able to attract quality child psychiatrists through its close connections to universities and recruitment of J-1 psychiatrists to work in rural areas.

Computerized Performance Measurement Systems

*Section Moderator/Chair: Daniel Luchins, M.D.
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*Presenter: Robert Littrell, Pharm.D.
Director, NASMHPD Research Institute, Inc. Performance
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Dr. Littrell gave participants an update on the NASMHPD Research Institute's (NRI) Performance Measurement System. While the system is often referred to as ORYX, that term refers only to those initial elements that respond to JCAHO's reporting requirements, a small component of the overall system. In fact, the Performance Measurement System has a great deal more capacity. Currently, the Performance Measurement System includes 48 states and territories and 238 hospitals. The system incorporates data from 95 percent of all state psychiatric hospitals.

Hospitals select which measures they will report on from a menu of predefined measures. In addition, hospitals are requesting that the Performance Measurement System develop measures tailored for their own needs. The predefined measures include:

- readmission rate
- rate of restraint
- rate of seclusion
- elopement rate
- client injury rate
- medication errors
- utilization of new generation antipsychotics

- global assessment of functioning
- new pharmacotherapy measures
- medication changes made near discharge
- concurrent antipsychotic therapy
- total number of scheduled medications active at discharge

The Performance Measurement System is overseen by a Commissioners Steering Committee. Eight Commissioners meet once or twice per year to provide guidance. During the winter 2001 meeting, the Steering Committee developed a strategic plan to provide priorities for the technical work group (i.e., the group that defines measure and data standards).

Having achieved facility-level reporting, the System's next priority is reporting at the client-level. This data would include rates for forensic clients, different age groups and acuity levels (e.g., acute, intermediate, long-term and residential care). NRI is working with state representatives to help define and rebuild some of the data building blocks which will accommodate more specific reporting. In addition to pharmacotherapy measures, the Commissioners have asked for two new measures: staff injury and substance abuse. The technical work group is currently working on those measures.

Until recently, the Performance Measurement System has been extremely closed. Commissioners have indicated that they now want the System to produce rates for a more public audience. Thus, NRI drafted and sent a revised contract to every participating organization to request permission to present aggregate data that did not identify a specific hospital or state. To date, 92 percent of participating hospitals have given permission and 4 percent have not. The remaining percentage have not returned the forms. Ultimately, NRI expects 95 or 96 percent of hospitals to participate in the aggregate data calculations

Other changes to the Performance Measurement System over the next few months will allow for more precise data. The changes include different forensic labels (e.g., voluntary self, voluntary other, involuntary civil and involuntary criminal), two codes to break out juvenile justice and sexual offenders that fall under state statute and a category for people who are NGRI/GBRI.

The Performance Measurement System will soon conform to the standards developed by the National Coordinating Council on Medication Error Reporting Program. As of July 2001, hospitals have been reporting how many treatment variances occur as a result of each medication error and the number of misdoses to determine the extent medication errors interrupted treatment.

Given the importance of diagnostic groupings for risk adjustment calculations, the Performance Measurement System will focus on diagnosis during upcoming months. Each year NRI staff randomly visit 10 percent of participating hospitals to review charts and check compliance. For most data fields, compliance between the reported data and the medical records is better than 95 percent. For the medical diagnosis field, the compliance rate drops to 60 percent. Thus, the annual visits will tighten up this review and may result in further changes to the system.

To obtain access to their state reports on the secure web site, Medical Directors need a letter from the Commissioner or Hospital Director authorizing access. After that point, users can select facilities that they have access to and generate the report of their choice. Two types of report can be produced: HCO-level reports with data specific to the health care organization (e.g., state hospital) and aggregate reports. The current system can generate comparison charts, control charts and risk adjusted comparison chart for readmission rates. Dr. Littrell displayed one example of a comparison chart on restraint hours (per 1,000 inpatient hours per month from July 1999 to June 2001) comparing the national rate and the facility rate at 99 and 95 percent confidence intervals.

A control chart looks at variability on a particular measure within a hospital from month to month and includes a mean, upper control limit and lower control limit. If one month's data point is outside of the control limits, something is different that month. There are many ways to interpret control charts but they mainly serve as a mechanism to detect change. Dr. Littrell cautioned that these reports should be seen as red flags and calls to 'dig a little deeper' to determine reasons for variability. The reports do not solve problems but point out opportunities for quality improvement.

Soon the system will be able to produce a restraint report, a risk adjusted seclusion and restraint report, hospital rank by measure report, a forensic comparison at the HCO- level (for hospitals that have more than 50 percent of beds designated as forensic), regional comparisons, report stratified by forensic status and age, psychotropic dosing trends, TMAP dosing compliance report and regional hospital reports.

The Performance Measurement System includes four predefined pharmacotherapy measures for hospitals to choose. Currently, all New York hospitals and facilities in Massachusetts, Ohio and Washington are participating with more hospitals expressing interest. After submitting detailed pharmacotherapy information every month, these facilities are receiving powerful data in return. The hospitals can choose any drug and find out the mean daily dose, standard deviation, and how that dose compares with state, regional and national aggregate dosing trends. Dr. Littrell encouraged states to consider participating in any of the pharmacotherapy measure and indicated a willingness to work with interested states and hospitals.

The National Performance System is moving in the direction of having the user define and build his or her own report based on the data of interest and available. One participant if System data had indicated any national trend around the decreased use of seclusion and restraint. Dr. Littrell remarked that relevant indicators would only go back to July 2000 when there was a large influx of hospitals participating in those measures. Another measure that might indicate a trend would be the percent of clients that experienced an episode of restraint. NRI would be willing to work with NASMHPD members to determine if the practice pattern had changed significantly.

Dr. Glover asked the group how NASMHPD and NRI could make the data more useful to Medical Directors in their roles. Participants suggested making it easier to gain access on the web, alerting Medical Directors via email when enhancements come out and demonstrating how to run a report by an authorized user.

Dr. Luchins addressed computerized performance system from an administrator's perspective. As a Medical Director, Dr. Luchins current focus is using data to improve clinical care. Given his twenty years as a researcher, Dr. Luchins also expressed appreciation for all the interesting data generated by systems. However, he cautioned, these indicators do not measure good or bad; at best, they are proxy measures. Administrators need to be concerned about decisions that others might make with computerized data.

Illinois developed its own performance measuring system that linked together demographic, pharmacy and laboratory systems. In 1997 the state began generating system reports on thirty indicators and sending the reports to medical directors. Dr. Luchins used the story of one indicator (whether physicians ordered appropriate lab tests when a medication was started or dose raised) to illustrate the advantages and pitfalls of using data in a vacuum.

In Dr. Luchins' experience, some of the technical problems of systematized data include:

- *There does not have to be relationship throughout the entire continuum between a particular indicator and what the system really cares about (the real value).* If one brings a variable to a certain level, the system may not achieve the desired outcomes. For example, the regular reports sent to medical directors indicated whether physicians ordered a thyroid screen within 6 months of starting Lithium or ordered a Lithium level within 5-10 days of changing a dose. The reports included averages for the state, each facility and each physician. The report also listed the specific patients and dates the doctors failed to order tests. The averages for most physicians were in the 80-90 percent range. The outliers were physicians in the 40-50 percent range and those who were close to 100 percent. Some of the worst physicians were in the 90-100 percent range. At some point, this indicator is not an indicator of a physician's skill.
- *One can change an indicator a great deal and might not have anything comparable related to effect to the underlying value the system seeks.* For example, after a physician ordered a lab test and it came back abnormal, did the physician do the right thing? If the lithium level was low, did s/he raise the dosage? To find out, staff went to one hospital and reviewed all the cases where the physician did not respond appropriately and there was clinical significance. Generally, physicians responded to high level tests and were less responsive to tests that revealed low levels. In 249 cases of failure to respond to low levels of Depakote (compared to 226 cases where there were appropriate responses), patients in the 'failure to respond' group stayed on average 96 days while patients who had an appropriate response stayed 57 days. The system responded by instituting an education program for physicians on how to tritate up Depakote. Across other medications, the data showed that the failure of physicians to respond appropriately to abnormal lab tests resulted in longer stays across systems.

The state then ranked physicians for correctly/incorrectly responding to lab tests and found that physicians who had the lowest rates for responding correctly to abnormal tests also had

patients that stayed the longest. With the new education program, the state hoped to dramatically decrease hospital stays.

However, when they looked at the same physician ranking and considered the doctors' other patients who had no abnormal lab tests, there was a strong negative correlation between this indicator and how long their patients stayed. About half of the variance of the first correlation could be explained even when there was no abnormal lab test. Thus, the ranking and length of stays were not due to a specific failure (e.g., ordering or responding to lab tests), but were more a general measure of a physician's pattern of practice. Even if the data system would allow one to track down every lab test and ensure it was handled correctly, the hospital would still have negative outcomes (e.g., long stays).

- *Depending on the context, a given indicator's valence or meaning (good or bad) can be changed.* For example, one could view a physician's incorrect response to a lab test as a measure of poor physician practice resulting in increased lengths of stay. However, that view might only be true in a public mental health system where the physicians are on salary and the average patient stay is a few months. Looking at a for-profit managed care system where doctors are penalized if patients stay too long in the hospital, one would probably find the doctors with the highest rates of failure to respond correctly to lab tests would have the shortest lengths of stay, not the longest. Thus, the context may create a disassociation between what is really cared about and what is measured.
- *The very act of measuring can change the meaning of an indicator to good or bad when it is fed back into the system.* In Illinois, after six months of ordering tests and providing reports as feedback, the physicians who had lower rates now had the highest rates. The better physicians were in the 85 percent range while those at 100 percent were among the worse.

Dr. Luchins suggested several solutions to address these real world problems

- *Combine 2 indicators.* One indicator would be directly under the clinician's control and serve as a process measure. If frequent feedback occurred, the indicator would likely change significantly. The other outcome measure would relate to an underlying value and be less able to be directly manipulated by the clinician. Feedback would not be as frequent. One example of linking indicators together is using the restraint and seclusion rate with the patient/staff injury rate. This combination addresses the underlying value for the system: reducing violence in facilities.
- *Acknowledge that the choice of indicators and the valence on direction they should move is not determined by science but political forces.* Measuring data and outcomes is not simply a technical question. The direction these indicators are supposed to move is obvious.
- *Be sensitive to this tension between politics and science.* As an administrator, one must be aware of the dissociation between indicator and value. Quality performance indicators can

take on good or bad meanings. Measures become benchmarks. Benchmarks become quotas. Performing in the average range does not have statistical meaning but acquires a judgmental meaning; facilities and physicians fear appearing below average. In Illinois, facilities ordered all physician to order lab tests in an effort to not appear below average on this indicator even though 100 percent compliance was probably not needed.

- *Political dynamics are necessary to affect change.* The very act of measuring is a proxy for showing that the system cares. If one tried to disassociate the technical acts of data collection, analysis and feedback with the political dimensions, a computerized performance measurement would lose its impact on quality improvement. In Illinois' example, the doctors with the lowest scores for ordering/responding to tests had the highest scores after six months. After a year this indicator was formally integrated into the evaluation system for physicians. At that point, the indicator lost some of its effect. After 18 months, the same doctors started to slip again. Once the indicator became part of the formal system, it lost some of its political steam and physicians grew less concerned.

Dr. Luchins reflected that, ultimately it is difficult to separate the specific effects of computerized monitoring from non-specific effects. By implementing a computerized measurement system and investing in the necessary resources (e.g., equipment, personnel), the mental health administration is demonstrating its care and concern.

Several Medical Directors added their perspectives to Dr. Luchins' presentation. One Medical Director underscored the point about political dimensions affecting indicator rates. In his state a hospital staff member was assaulted. During the subsequent debriefing, staff commented that they did not use seclusion and restraint with the patient due to their perception (driven by the hospital report card which included these rates) that seclusion and restraint was a 'bad' option. Administrators need to be careful to not get locked into making sure their indicators look good at the expense of appropriate action.

Another participant declared that when staff seize upon an indicator and believe their job is to push a number up or down, there is a failure of the management system to convey the meaning of the indicator and the quality improvement process. The challenge is to help managers understand the quality improvement process so that managers can translate that process to line staff.

Finally, a participant underscored the limits of 'managing by numbers.' Instead of simply relying on numbers, Medical Directors should go to the hospital to assess a situation. Computerized management systems are just a tool. Medical Directors are often in the strategic role of translating the data generated by those tools to set a context for both clinicians and administrators.

Tuesday, October 9, 2001

Continuity of Care from the Hospital to the Community including Risk Management Issues

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Translating and mediating between the different cultures within hospitals and the community are essential for developing continuity of care. Thus, Dr. Diamond explained a few myths and realities surrounding both settings:

Myth. The hospital is just another address in the community.

Reality. The hospital is really quite different. Both community agencies and hospitals do not really understand that they are different organisms that are trying to do somewhat different things. While both are treatment settings, they have different administrations, different staffing, different values, and different needs.

Myth. They are part of the same system.

Reality. In the hospital's culture, the client is not considered a problem until s/he's there in the hospital. And, once the person is in the hospital, the community case manager disappears. There is little shared responsibility between the two entities; the hospital does not feel responsible after discharge and the community does not feel responsible after admission. There are systemic disincentives reinforcing this division. Hospitals and the community typically have different budget lines and end up fighting each other over the same funding.

The traditional role of the hospital has been to provide an alternative society where client needs can be met in structured setting and where supervision is easily available. In the traditional system, the hospital was the central organizing hub and community agencies were outgrowths. The hospital was the administrative center of the mental health system and had the concentration of resources.

In the era of community treatment, the role of the hospital is unclear. The hospital is the setting for the most difficult patients yet the skills of hospital staff are often devalued. The hospital remains the largest part of the state budget and a major focus of attention. Hospitals and community agencies now fight over who should be providing vision and leadership for the system. Finally, in many states, administrators who run hospitals are no longer clinicians.

Other ways the hospital and community agency cultures differ include:

- *time frames.* The hospital is concerned about the current admission and thinks in terms of days to weeks while community agencies know that they will be with the client for months to years.
- *control.* The hospital operates a contained ward environment. The hospital must protect the milieu so that it does not become unsafe or chaotic for other people. Meanwhile, in the community, very few elements can be controlled. Community agencies feel less of a sense of responsibility as they learn to be selective about where they attempt to exert control.
- *different hierarchies.* In the hospital, the physician or nurse control the hierarchy, which is consistent with the medical model. Those in control are taught to demonstrate competence by providing a tight data stream about the client. In the community, social workers or case managers often exert control. These professionals are taught to demonstrate their competence by showing how much they know about the client. Given these different hierarchies and communication styles, there can be confusion when representatives talk to the other system. A hospital representative may say “I want to talk to doctor” in the community agency when really the case manager and social worker know the most and have the authority. When the community representative reaches out to the hospital, s/he contacts the social worker and this process happens in reverse. They look to their counterpart in the other system for authority and as a spokesperson for the team. However, given the different cultures, they encounter frustration.
- *different customer base.* Community agencies’ customer base includes ongoing clients, clinical staff, mobile crisis services, police, employers (if there are supported employment services) and the media. The hospital tends to its customer base of community mental health centers with whom it interacts, other hospitals that feed patients back and forth, unions, courts, politicians and political executive staff.
- *same consumers but at different stages.* Both settings work with people who are equally ill but they are in different degrees of distress for themselves and others. Hospitals see people at their worst stages of distress while the community sees people at all stages, including their better stages.
- *protections.* Hospital and community agencies have different ways of protecting themselves. Community agencies usually have the option to extrude or exclude difficult patients.

Hospitals rely on behavioral programs and seclusion and restraints to protect themselves. Certainly, protection is a human need and not considered ‘bad.’ However, between these two cultures, there is often a view that ‘your’ way of protecting is bad and ‘my’ way is good. The community agencies view the hospitals as too controlling while the hospital view the community as letting the patient fall through the cracks.

- *personal safety.* In the community, staff often work with clients in more isolated community settings (e.g., staff do home visits, go to job sites). However, the ongoing and longstanding relationships between client and staff usually present a lower risk of violence. When clients become manic, the staff can let them go and do not have to lay hands on them. In a hospital, there is more need for control in order to maintain a safe milieu. Staff have ongoing contact with people who are angry, psychotic, impulsive and confined. At times, staff may lay hands on clients, which are the times when staff get hurt most often.
- *language.* Hospitals and community agencies come from different historical and cultural traditions and their language reflects those differences. The language used to refer to people receiving services (e.g., patients, clients, consumers) can be a divisive issue.
- *different treatment modalities.* While both settings may use the same medications, everything else about the modality is different. The amount of control/supervision varies (more present in the hospital setting); the structure of the day’s activities is different (community programs focus more on socialization, skill training and teaching self-soothing/coping mechanisms). Even if the two settings use similar terms, the treatment activity looks differently. In the community, treatment often addresses a person’s housing, jobs and friends. The hospital’s focus is helping the person reestablish control.
- *medical treatment.* A hospital can provide integrated medical treatment much more easily than community agencies. In the community, availability of medical treatment is often limited, particularly if clients do not have insurance.
- *different treatment preferences.* Hospitals may favor injectable medications while community agencies rely on oral medications. And a person’s medication may be changed upon admission or at discharge more due to the personal preference of the prescribing physician rather than the ongoing needs of the client.
- *definition of “getting better.”* In the hospital, a person shows improvement by having decreased symptoms, being less disruptive on the unit, being more socially appropriate, following ward rules and routines, experiencing less distress and complying with medications and other treatment. In the community, consumers are doing better when they care for themselves, function with neighbors and at work, engage in normal activities, and experience less distress. Community treatment has an increasing emphasis on recovery and focuses on a client’s own life goals.

- *different problems.* For community agencies, the most pressing problems are substance use, non-compliance, and social issues such as housing. Hospital problems include doing rapid assessments, controlling out-of-control people, maintaining a safe milieu, and managing the contagion between patients (when one person sets off another)

The varying cultures also bring different approaches to risk management. Each culture must wrestle with the questions: How much risk can be tolerated? What kind of risk and to whom? Who makes the decision? What happens if it goes wrong?

Hospitals end up worrying about legal issues around the use of seclusion and restraint and law suits over confinement. The community has legal concerns about suicide events and a person's danger to others. Both entities try to balance treatment needs with a desire to decrease risk. Both entities struggle with the law's requirements and good risk management practices versus what is good treatment.

Given the differences in culture within the service continuum, Dr. Diamond laid out some ideas to help systems strive for some continuity of care. As Dr. Diamond stated, true continuity requires a cultural shift of significant proportions.

First, all aspects of the system should focus on information sharing. Instead of sharing information the traditional way (i.e., staff send information without real regard to the other's need and there is no interaction), there needs to be a shift toward two-way communication with an eye toward the needs of the client and the other system. Thus, community agencies would no longer send hospitals stacks of paper with the vital information on medication buried in the notes and the hospitals would no longer send community agencies medication information but nothing about housing efforts in the discharge notes.

Even the phrase 'discharge planning' assumes discontinuity in the system as discharge connotes the person is no longer one system's responsibility. More integrated planning efforts would answer the questions: Who is responsible for what? Who is involved and at what point? Who decides on goals for the hospital? Who decides when those goals are met?

Medical Directors can encourage integrated treatment by reaching high level agreements with their counterparts and modeling the cooperation so that front line staff can also bridge the cultural gaps. Dr. Diamond explained how he and his colleague at the state hospital would visit each other's setting once per month and invite others to accompany them for lunch. Establishing a regular process for informal problem solving is important. Dr. Diamond noted that, when the lunches stopped, problems flared up. Administrators also should assume that developing the relationships and bridging the cultural gap requires ongoing attention.

A more integrated and continuous system also needs to decrease the bureaucratic barriers that deter good care. Traditionally, the state mental health budget is divided up among community programs and hospitals separately, resulting in wrangling over responsibilities and concerns about budget

impact. A single budget that follows the patient would minimize these concerns. In Dane County, the state mental health funding goes to the local authority which then divides the funding among hospitals, outpatient clinics, rehabilitation programs, crisis resolution programs and residential programs.

Thus, Medical Directors can address cultural problems and promote continuity of care by focusing on the following steps:

- *Have more staff interact with their counterparts in the other setting.* Assign staff to monitor the interface between community agencies and the hospital. Conduct meetings that include staff from both settings.
- *Encourage joint problem-solving.* To improve communication, investigate the “small” communication problems which escalate into major tensions between the settings. Establish the information the counterpart system needs to know and when and change the information sharing protocol accordingly. As clients transfer from outpatient to inpatient, monitor their progress throughout the hospitalization and decide who is responsible for what as part of the discharge plan.
- *Improve the information sharing process.* Review how immediately information becomes available. Is it in a useful form? What is available? What would make it more useful? Work through issues of confidentiality so information can flow across settings. Use speaker phones to conference in staff from another setting.
- *Encourage joint training.* Some training topics are equally applicable to hospital and community staff. Help staff learn more about the world of the other setting. Use video conferencing.
- *Cross-hire staff psychiatrists.* Hiring psychiatrists to work in both settings is a worthwhile effort, despite the difficult bureaucratic rules.

A shared sense of responsibility among the different components of the system results in better continuity for clients and helps the “system” become more accountable. As a concept, continuity of care does not simply mean sharing information and budgets. Continuity of care means crossing cultural boundaries to enhance outcomes for the client.

During the discussion period, several Medical Directors spoke of the additional challenges and benefits of continuity of care. One participant pointed out that many communities do not have case management teams and there is no warm body with whom the hospital can collaborate. Or, when there are case management teams, the outpatient psychiatrist may be disconnected from the process. In these instances, community services need to be better organized and enhanced.

Another participant applauded providing a cultural context to the dissonance between community

programs and hospitals. As in the business world, a good fit occurs when high socialization (staff are familiar with and socialized to one another) and high solidarity (i.e., their goals are aligned) occurs. Systems of care need to pay attention to both factors; yet most organizations attend to one or the other factor.

In one state with great staff turnover, administrators have established structures and processes for codifying relationships between hospitals and the community. If one relies too much on personal relationships, a barrier can occur when personnel move on. Thus, the state used its policies to design more permanent institutional, relationships.

Another participant asked if any state has hospital medical staff carry a case load in the community. Or, are there any states where community psychiatrists follows the client into the hospital? South Carolina just began a model with the Columbia mental health center and a nearby acute hospital. A community psychiatrist now joins the inpatient treatment team for patients who have had multiple hospitalizations. Several participants commented that fewer psychiatrists want to work on inpatient units. Also, it is difficult for community mental health centers to assign psychiatrists to hospitals because they cannot generate revenue there. It is easier to have hospital psychiatrists work with people in the community because their salary is not dependent on Medicaid reimbursement. Another financial disincentive occurs in states with union; if hospital staff work part-time in the community, they would face a financial loss.

Dr. Lawlor addressed the issues surrounding risk management. He elaborated upon the need to drive risk management processes through administrative protocol to ensure that the appropriate risk management steps would be followed.

Dr. Lawlor presented the traditional definition of risk management: “Systematic organized efforts to reduce the likelihood of harm to individuals and the potential for fiscal liability.” (Reed and Swain) In the public mental health sector, risk management also incorporates the concept of accountability. As Dr. Lawlor expressed, “You may be held responsible for any issue that arises related to mental health in your state. As a result, censure (and for that matter praise) may accrue to your agency whether deserved or not.”

Each program in a service system should plan for risk issues at three critical junctures: admission, during the stay, and at discharge.

General risk areas include the following: advanced directives; a person leaving treatment (e.g., AMA, refuses treatment in community, or person went AWOL or escaped); commitment criteria; communication, competence, confidentiality, consumer rights, conservatorship, contingency management; documentation process; evaluation; critical incidents and deaths; appropriate level of care; process for mandatory clinical or forensic review; mandatory reporting; medication; no-shows in the community; precautions and privileges; risk screen and assessment; seclusion and restraint; special conditions (infectious medical conditions, legal history); treatment plans and visitor policies.

Dr. Lawlor detailed the risks that occur at the time of hospital discharge: AMA/refuse (Are commitment criteria met? Is lack of competence an issue? Is the desire to leave AMA? Is there an involuntary outpatient commitment option?); commitment criteria (Is lack of competence an issue? Are commitment criteria still met? What supports are in place? Have premonitory signs of decompensation been identified?); communication (Is appropriate information arriving at the community program in a timely fashion? Is specific risk-related info being made available?); confidentiality (Are releases of information obtained routinely? If leaving AMA and/or a treatment refuser and/or dangerous or unsafe, is this transmitted to the community agency under a “best interest” interpretation?); conservatorship (Has one been obtained during the hospitalization? Does the community have a copy of the papers? What are the stipulations?); consumer rights (Are discharge protocols being followed? Are discharge instructions clearly explained and in writing? Does the person know when and where their follow-up appointment is?); documentation (Are discharge summary, treatment plan, significant consults and lab values going from agency to agency at time of change? Is there court paperwork that community agency need to know?); appropriate level of care (Has the individual been referred to the appropriate level of care? Does the individual have a H/O rapid decompensation? Are there remonitory signs and symptoms of decompensation that portend a change in level of care needs?); mandatory reporting (Is a review called for prior to discharge? If previous reviews have occurred during the hospitalization, have all stipulations prior to discharge been met?); mandatory clinical and/or forensic review (What does the state have in statute, regulation or DMH policy and procedures?); risk screens and assessments (Are copies in all discharge papers? Have any expert risk assessments been conducted and communicated to the community agency?); special conditions (Have you provided information relative to legal status, Tarasoff status, active and historical medical conditions, allergies, trauma, history, homelessness, involuntary treatment status, etc.?); and treatment plans (Have they been sent? Is there a special behavioral component that should be emphasized?).

Dr. Lawlor shared a tool used by the University of Connecticut to assess risk. This Risk Screen Assessment requires checking off boxes and takes less than a minute to complete. At the time of admission, the instrument is completed by a licensed clinician and establishes a risk baseline. The Risk Screen is placed behind the evaluation in a person’s chart and travels from site to site with the chart. The document is updated in case of an event like an assault or arrest.

The instrument requests information about outwardly-directed violence (actual, threatened, others and property); self-directed violence (actual, threatened, suicide attempt and self injury); fire setting (carelessness or purposeful); sexually aggressive/deviant behavior (youth under age 15 or adults without consent); and non-compliance with treatment (refusing treatment, no show, AWOL/Escape).

Dr. Lawlor outlined the admission risks for community mental health centers. These risks include: communication (Is the hospital part of the system that includes the CMHC? Has all the appropriate information arrived from the hospital in a timely fashion? Is the hospital risk information available?); competence (Does the individual seem to be competent to make treatment decisions? Can the individual understand her/his rights? Is there an obligation to seek guardianship?); confidentiality (Are there confidentiality issues between the hospital and the CMHC? Are ROI’s routinely obtained?

If the individual has left the hospital AMA or AWOL, is information transmitted to the CMHC?); conservatorship (Has the hospital put one in place? Has a copy of it been sent? Is it clear when the conservator should be involved? Does one need to be pursued in the community?); consumer rights (Is there a notice or booklet of consumer rights? Does the person understand that treatment involves informed consent and the right to refuse? Is the person aware of consequences if s/he chooses to refuse treatment?); documentation (Has all the pertinent documentation arrived from the hospital? Is all the pertinent intake documentation completed at the CMHC?); evaluations (Have all appropriate evaluations occurred as part of the intake? Have old records been reviewed? Is there an intake review process that must be followed?); level of care (Is the individual referred to the appropriate level of care? If not, what must be done to provide the appropriate level of care? If there is a history of decompensating quickly, are the premonitory signs and symptoms known and is there a plan for rapid response?); mandatory reporting (Are there any mandatory reports that must be made per statute, regulation or policy and procedure? Did the hospital file any mandatory reports?); risk screen and assessment (Has a risk screen been done? Is there any new information, either from that screen or from the hospital? Is the risk information from the hospital available? Should the individual be placed in the CMHC's high risk protocol group?); special conditions (Has information been provided relative to legal status, Tarasoff status, active and historical medical conditions, allergies, trauma history, involuntary treatment status)? Does the person have a primary care physician?); treatment plans (Has the inpatient treatment plan been sent? What modifications need to occur to incorporate useful parts into the outpatient treatment plan? Does the outpatient treatment plan indicate when caregivers should become concerned with high risk individuals?)

Risk management is a subcomponent of quality management and should be part of the quality management system that presides over whole system. Risk management should not occur in isolation, either in or between institutions. There should be an overarching system to support the risk management structure. In small states, that structure might occur at the provider and state levels. In larger states, there may be regions that have a regional clinical review committee and a regional quality council that report up to the state quality council.

At the provider-level, an individual provider must have a risk management plan that it faithfully follows and that mirrors its clinical and administrative capabilities. The plan should address all risk areas of the statewide risk management plan relevant to the provider's participating program type. The provider must adhere to the SMHA reporting requirements. Providers must report on complaints/and or incidents that entail a risk of harm and all critical incidents. Provider management options should include immediate corrective action, investigative activities, clinical/peer review processes, changing implementing policies and procedures and implementing QI activities. This reporting requirement applies not only to the time period during which an individual receives services but also to a length of time after the individual has been discharged (if the incident becomes known).

A key component at the regional level the Clinical Review Committee. The Clinical Review Committee, comprised of members who should be independently licensed clinicians, receives reports of critical incidents and responds within established timeframes. The Committee's function is

reactive (not proactive) and it should have the capacity to immediately respond to compelling incidents. The Committee reviews complaints and other incidents with clinical ramifications. Ideally, the Committee utilizes an IT system capable of profiling individuals and providers and that data is available for critical incidents and long-term planning. This clinical review function is of considerable value even if peer review protection does not apply; clinical review may not be covered by the statute for peer review.

The Clinical Review Committee's clinical review involves the following initial steps:

- assess the information provided in the critical incident report
- request additional information
- ensure that any questions, issues or concerns are transmitted to the provider's clinical peer review committee
- make recommendations to provider clinicians/administrators as appropriate
- directly intervene when/if appropriate
- request additional information even if do not end up getting it
- ensure provider clinical/peer review is completed in a timely fashion
- request the brief summary of findings produced by the provider's clinical peer review committees.

As follow-up to the incident, the Clinical Review Committee should:

- monitor whether changes in provider policy and procedure occur
- ascertain whether provider QI studies begin
- note whether similar or related incidents continue to occur
- if problems continue, ask the provider's administration to review the effectiveness of its clinical/peer review and/or QI processes
- report problems to the provider's state licensing agency for review/investigations
- send a redacted/summarized report of clinical risk management activities to the Quality Council
- identify systemic impediments to good risk management practice and disseminate this information appropriately.

The Regional Quality Council is responsible for the following actions:

- ensure that each provider has an RM plan that is implemented and carried out
- review and evaluate all administrative RM issues (those 26 areas) reported directly by providers
- review redacted/summarized clinical RM information reported from the CRC
- recommend RM/QI projects and monitor the results of these efforts
- report to each provider how it is doing relative to the statewide RM plan
- When necessary, work collaboratively across regions on RM efforts for services that are shared between regions

- sequester its analysis of RM data as a discrete subpart of its overall QM report

Finally, the Statewide Quality Council has the following functions:

- review and evaluate the RM reports it receives
- recommend successful and/or innovative RM/QI efforts to other regions
- oversee that each regional QC ensures their providers follow their RM plans
- ensure that any agency/facility that does not report to a region has an RM plan
- periodically review the statewide RM plan and make recommendations for updates/modifications
- report its evaluation of all RM activities to the SMHA executive committee and appropriate stakeholders.

After Dr. Lawlor’s presentation, one participant observed that the eventual goal is to align clinical issues and systems with legal responsibilities and structures. If one begins with that purpose and designs a system accordingly, the system will be able to prevent incidents rather than just account for them. Similarly, if the system is only tracking outcomes for people attached to the formal service system, there is a whole group of people outside the system who are being overlooked.

Another Medical Director spoke of the Inspector General’s office and other investigative arms that have a responsibility to investigate deaths and find blame. This approach is corrosive to clinical care. As a result, the state mental health system is trying to move away from being reactive to incidents and thinking long-term. Dr. Lawlor agreed that states must be proactive in their risk management approaches.

Practice Guidelines Update

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Dr. Shon explained that since 1995, ten states have begun using the TMAP algorithm while four or five more states have indicated they want training in the model. The Texas Department of Mental Health and Mental Retardation received grants from SAMHSA and RWJ to do training with these state teams. As demonstrated in the literature for other medical fields, the real challenge is sustaining adherence to the algorithm. Every state mental health system has its own nuances that require adaptations during the implementation and sustaining stages.

There has been a great deal of interest in the Texas research studies using these algorithms. A 1996 open study measured outcomes for 16 Texas sites using the algorithms for patients with major depression disorder, schizophrenia and bipolar disorder. The treatment interventions consisted:

- evidenced-based/consensus medication algorithm process
- clinical and technical assistance to help staff implement and monitor the process
- patient/family education program
- uniform documentation system so that information is provided to the next doctor or provider.

Texas also conducted a more recent comparison study utilizing the three different algorithms. The hypothesis of the new study was that, over time when there is improvement, clients who improved and whose treatment did not include the algorithm would take longer to improve and their improvement would be less substantial than those improving clients whose treatment did involve the algorithm. All study groups had unrestricted access to new generation medications. The study's design included:

- intervention group where clinics used the bipolar, depression and schizophrenia algorithms, education and documentation
- one comparison group where clinics provided treatment as usual and did not use any algorithm processes in any of these areas
- another comparison group where clinics used an algorithm for a different target diagnosis and otherwise provided treatment as usual.

The project was designed with the two comparison groups due to the literature on other medical conditions (e.g., asthma and hypertension) which revealed a 'bleed-over effect.' Doctors who used an algorithm process to treat a disease ended up talking to colleagues who did not; eventually the non-algorithm colleagues began to use the same techniques. The Texas study found the same dynamic.

The comprehensive \$6 million study was primarily funded by private foundations and the state. The study enrolled over 1,400 patients for up to one year and most were followed with quarterly assessments for a year to 18 months. Trained research coordinators worked with every patient and spent up to five hours conducting a battery of assessments, paying patients for their time. The outcome measures included indicators for symptomology, satisfaction, functioning, side effects, health service utilization and criminal justice contact. The specific outcome measures included BPRS for schizophrenia and bipolar disorder; Inventory for Depressive Disorders (long form) for major depression; Short Form Health Function; and Patient Satisfaction Survey (developed by the national SAMHSA group).

Researchers collected data on patients' age, ethnicity and length of illness. The population treated in the study was a typical state public mental health population, having been in the mental health system an average of 16 years. Compared to the general population, the treatment group had more medical issues, histories of substance abuse and involvement with other public system.

Dr. Shon highlighted some of the early results. The bottom line was treatment as usual clinics showed a positive impact on both symptoms and functioning while the algorithm clinics achieved even better results.

For patients with schizophrenia, the study focused on their positive symptoms, negative symptoms, and cognitive deficits. Using the BPRS, there was a drop in positive symptoms for the algorithm group but the treatment as usual group gradually caught up with the algorithm group over 18 months. Thus, the positive symptom data was less dramatic.

More dramatic differences occurred in the results for cognitive functioning. The graphs demonstrated a fairly substantial separation between the treatment as usual clinics and algorithm clinics, particularly in verbal fluency.

For patients with bipolar disorder, over 80 percent had mania when they entered the algorithm treatment. The study revealed substantial separation on the CARSM on the manic symptom side. Texas has since revised the bipolar algorithm with guidance from a national consensus panel. These study results do not reflect the newest iteration of the algorithm which is available on the web site.

The most impressive study results occurred for patients with major depressive disorder. According to the Inventory for Depressive Disorders, the data showed an immediate separation between the two groups in the first quarter of treatment and the separation continued over time. Physicians hypothesized that this great difference may be due to the fact that depression is under-treated and not treated well even when it is recognized. Thus, algorithms seem to work better when there is more confusion and complication in assessment and treatment.

Dr. Shon also mentioned some other patterns in the data. With the depression data, there appeared to be inadequate treatment, under dosing, and medications being switched with out patients receiving the full dose and duration. The algorithms emphasized monotherapy and sticking with the dose. The

literature indicates that even after month or so people will respond to the medication. There seemed to be confusion about treating mania with mood stabilizers as physicians made decisions based on time rather than outcomes. The study showed better medication management for people with schizophrenia.

The study included a large educational component and physicians, particularly those using the schizophrenia algorithm, considered the education to be important. However, as with any bundle of interventions, it is hard to tease out the separate impact of the algorithm and educational components.

Texas is now analyzing the data to determine whether the group that improved their cognitive functioning also improved their life functioning. Researchers are examining the economic impact, quality of life issues, criminal justice data and emergency room data.

Dr. Svendsen provided the background and an overview for the Ohio Medication Algorithm Project (OMAP), an algorithm initiative in a non-research setting. The Ohio Department of Mental Health's Clinical Quality Agenda provides the context for OMAP and includes efforts around best practices, quality improvement and outcomes. These activities are being done through university-affiliated Coordinating Centers for Excellence, regulations, certifications, community mental health center boards and a Quality Council. This push for quality is derived from best practice efforts, the Surgeon General's report on mental health and its identified best practices, NASMHPD NRI's evidence-based practice initiative and the RWJ Evidenced-Based Practices Project Team. For the RWJ project, Ohio, New Hampshire and Maryland will be demonstration sites beginning in January 2002 to develop tool kits and then study implementation of the tool kits.

Best practices align with many of the principles surrounding recovery. These principles include good clinical care, peer support and relationships, family support, work/meaningful activity, power and control, addressing stigma, community involvement, access to resources and education.

Dr. Svendsen described the components of Ohio's best practices:

- engagement (e.g., listening and establishing relationship)
- practices which are measured, evaluated, and improved
- evidence-based practices. Ohio is using New Hampshire's substance abuse and mental illness integrated treatment model, multisystemic therapy and PORT findings
- consensus of experts
- research supported practices (not yet at the level of evidence-based practices)
- quality improvement.

The Coordinating Centers of Excellence (CCOE) are key in the quality assurance efforts. CCOEs are outsourced agents that promote a specific model of treatment across the state. Specifically, Case Western Reserve University promotes the substance abuse/mental illness (SAMI) model; the Stark County mental health board focuses on multisystemic therapy; and Northeast Ohio University College of Medicine targets criminal justice/mental health efforts including police education, diversion programs and mental health courts. Ohio uses \$1.5 million dollars of its block grant money to do fund the CCOE's and tries to leverage these dollars to obtain other monies.

Dr. Svendsen outlined the steps for installing best mental health practices in a decentralized system:

- require and regulate (e.g., outcomes). An Ohio Task Force has focused on outcomes for a few years and has implemented four measurement systems: clinical outcomes, level of functioning, quality of life, and general health and safety.
- encourage improvement (e.g., through quality improvement seminars)
- provide incentives by giving funding, removing/reducing barriers and providing excellent learning resources (e.g., CCOEs).

The Ohio Medication Algorithm Project (OMAP) is a quality improvement initiative to help translate the latest available knowledge about medications into daily practice and promote optimal recovery. OMAP only uses the algorithm and does not include the consumer and family educational component. After a 1999 visit from Dr. Shon, Butler County (near Cincinnati) was interested in implementing an algorithm project and approached the state, pharmaceutical companies and a local foundation to fund a 150-day pilot. As OMAP Executive Director, Naakesh A. Dewan, M.D. followed Texas' guidelines for setting up the project, including involving all stakeholders (e.g., consumers, family members, doctors, system leadership) and developing structures to enable the project to continue (e.g., steering committee, leadership, accountability, project team).

The pilot project included an evaluation component. These evaluation results indicated that physician satisfaction with the algorithm was high; physician adherence was fair; and patient satisfaction initially was good. The consumer survey results (only for consumers with schizophrenia, N =9) revealed that 55.56 percent of consumers strongly agreed and 33.33 percent agreed with the statement, "I felt confidence in my psychiatrist's ability." Other consumer results included:

- "Understand and concern was shown to me by my psychiatrist" 88.89% strongly agreed.
- "My doctor told me what medication side effects to watch for." 33.3% strongly agreed and 55.56% agreed.
- "I felt I have improved due to medication." 22.22% strongly agreed, 44.44% agreed and 11.11% were neutral.

In 2000, the County obtained a planning grant from the Ohio Department of Mental Health and pharmaceutical companies to enhance and expand the pilot project. By the end of 2000, forty-one physicians were using the algorithm. Statewide roll-out occurred in 2001. State mental health and foundation funding continued with pharmaceutical companies providing in-kind samples and other sources of free medicines/education/grants. In 2002, OMAP will pursue funding from other foundations including RWJ, NIMH and/or SAMHSA. OMAP's current target is to engage 100 physicians and enroll 1000 patients

Dr. Parks gave a presentation on the different uses of practice guidelines. One use is when a system has a big vision and uses practice guidelines as one of several tools to strategically move toward that vision. Another use for practice guidelines is to respond to unexpected issues that arise. He shared an example of how Missouri used practice guidelines to respond to a pressing issue.

Missouri's Medicaid agency decided to only cover Clozapine and abruptly announced this decision, stating that after a certain date, no one could obtain Clozaril. At the time, Clozaril was taken by about 80 of the public sector patients. While Medicaid eventually grand-fathered current Clozaril users, the policy remained and ultimately everyone would have to switch to Clozapine.

In response, Dr. Parks initiated a process to draft practice guidelines which would guide physicians, consumers and their families with this switch. Dr. Parks consulted with several experts who had their Doctorates in Pharmacology and asked them to review available data and produce an initial draft. Dr. Parks reworked this first technical draft into information that could be given directly to physicians and families. He then sent this second version to another Pharm. D. colleague for review and circulated several more drafts. When the document was in an understandable and accurate format, Dr. Parks gave the document to some hospital and community medical directors and local respected faculty. This process was accomplished through an exchange of documents, prompt reviews, and feedback; no actual meetings occurred. The information for families was produced into a pamphlet to address many of the complaints and misinformation that had been circulating about the change. The pamphlet advised families that the same ingredients were used in both medicines and included a brief primer on drug absorption. While consumers and families were still not pleased with the switch, their immediate pressing concerns were allayed. The physician-oriented information stressed the need for doctors to check serum levels before and after the switch.

In this situation, people were ripe for guidance and very receptive to the practice guidelines. Thus, practice guidelines are especially useful and easier to implement for areas where people are confused. The downside to those areas is that there may be less evidence is available to produce the guidelines.

“Hope & Remembrance/Ritual & Recovery”

Produced by the Texas Department of Mental Health & Mental Retardation and funded by the Federal Emergency Management Agency and Center for Mental Health Services

*Moderated by: Robert W. Glover, Ph.D.
NASMHPD*

*Steven P. Shon, M.D.
State of Texas*

Medical Directors watched the video “Hope & Remembrance/Ritual and Recovery” to provide a context for the discussion on state mental health system’s response to terrorist events and other disasters. Janssen Pharmaceutica supported the reproduction costs so that each state could receive a copy of the video.

Dr. Glover explained NASMHPD’s role in responding to the recent terrorism events. New York asked NASMHPD to screen the many state offers to help because New York was absorbed with the immediate crisis response. NASMHPD compiled a roster of over 1,200 disaster-trained professionals from 38 states. The list included staff who had special expertise, including multilingual skills and experience with first responders. NASMHPD provided the roster to New York, which determine how to use the contacts.

Dr. Glover also outlined the federal funding authorized to address post-September 11th behavioral health needs. For immediate behavioral health needs (up to 60 days) SAMHSA allotted \$6.8 million for immediate awards. For the following phase (up to one year), \$21.2 million was allocated for recovery and intermediate behavioral health needs. Funding for long term behavioral health needs had not been authorized as of yet. Currently, NASMHPD is helping states put together requests for the second phase of federal funding.

In late September, NASMHPD convened a conference call for Commissioners of impacted states as well as Colorado and Oklahoma who shared their experience with major violent events. Commissioners were asked to address: (1) anticipated number of people who may require disaster-related mental health services; (2) types of services which need to be expanded or established; and (3) recommendations for how financial resources should be allocated for immediate, intermediate and long term responses.

Along with distributing a summary of the teleconference, Dr. Glover highlighted some of the common themes and concerns expressed in the call:

- Lack of communication capacity. While planning for Y2K assisted many departments in their emergency response, most states did not have emergency plans for scenarios where the communication infrastructure was destroyed or evacuation of public buildings was necessary.
- Concerns over post traumatic stress, particularly for children. D.C. reported efforts aimed at the city’s children who were locked in their classrooms amidst misinformation that the city was being bombed and a heavy military presence on the streets.

- Patient flow. At least one state reported clearing out waiting rooms anticipating an influx of admission but ambulances went elsewhere. Another state reported a spike in inpatient census.
- State coordination efforts with localities. Some states faced the challenge of pulling together an emergency response involving local authorities without line authority over the local entities.
- questions about the role of public mental health in counseling and being sensitive to people of Middle Eastern descent
- inquiries from the private sector (business, churches, etc.) and how to provide guidance and leadership
- offers of assistance and the need to screen training and credentials
- needs of rescuers, first responders and other mental health providers given their unique vulnerabilities.

Dr. Glover summarized that these states can expect a three-year time frame for addressing the effects of September 11th, including a spike in demand around the anniversary date. One participant commented that FEMA's normal healing curve for a community may not apply in this situation where there is trauma after trauma (e.g., the subsequent War on Terrorism and anthrax scares). Medical Directors can anticipate the challenges of managing the chronic depression associated with repeated traumas.

Dr. Shon elaborated upon the videotape and spoke of his experience responding to disasters in California. Disasters highlight the assistance and leadership the mental health system can provide. People who normally would not seek out mental health (clergy, sheriffs, education professions) often turn to the system after earthquakes or tornados. At those times, the mental health system can be the lynch pin to intervene, guide victims and coordinate other systems who are trying to help.

The Symposium ended with a business meeting where Medical Directors discussed and planned future Council activities. (See separate Medical Directors Council Meeting minutes).