STATE PRACTICES
36 State Practices to Improve Antipsychotic Medication Safety and Quality

Measuring Antipsychotic Medication Use in Medicaid Children and Adolescents: 2004–2007

Medicaid Medical Directors Learning Network (MMDLN)/Rutgers CERTs

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Introduction

This attachment previews 36 specific practices/programs that encourage appropriate prescribing of antipsychotic (AP) medication for children and adolescents. Practices are categorized as policy, stakeholder engagement, education/marketing, patient-provider feedback, and system interventions. Each practice was rated by the contributing State based on a State Implementation Strategies Classification Matrix that was developed specifically for this project (see the Matrix below in Table 1 and the description in Section 4 of the Resource Guide). Each State wrote these short summaries based on this matrix and the summaries have not been edited for content.

These detailed descriptions use a standard template that includes: background, development timeline, program cost/funding source, how measured, outcomes, and lessons learned. In addition, practices were classified by the contributing State as mature, promising, emerging, or unclassified. A “mature” practice was defined as one with methods and data showing measured and validated results implemented across multiple sites—often statewide. “Promising” practices have been implemented at one or a few sites and have some data showing results. “Emerging” practices have been implemented in at least one site with only preliminary data available. “Unclassified” programs lack several elements or were too new at the time of this writing to classify.

While local statutes, codes, communities and other variables that influence programs, readers are encouraged to review each practice and determine whether or not it may be a fit based on their AP and mental health issues as well as unique State characteristics. Contact information is provided for each State practice.
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Missouri: Treatment Adherence Program (TAP)  
Promising Practice

Background

The main objective of Treatment Adherence Program (TAP) is to improve medication adherence for patients being treated in CMHCs for severe and persistent illnesses. It is an enhancement of Missouri’s implementation of CNS’ BPM program. It consists of an early alert system when patients fail to refill essential prescriptions in a timely manner and as an educational resource for providers on best practices in improving treatment adherence.

Design

Missouri Medicaid patients who were prescribed at least one of nine orally-administered antipsychotic medications and who had at least one Medication Possession Ratio (MPR) score below 0.8 were included in the adherence intervention group. The MPR is a measure of the percentage of compliance derived from claims data that calculates to percentage of time without medications (i.e., days from a lapse of a prescription refill). The prescribing clinicians and case managers were messaged electronically two times per week at the point that failure to refill the targeted prescription was identified. Notification occurred when the prescription had lapsed at 7 days, 30 days, and 45 days, and occurred in real time. In addition, MPR scores were provided monthly for the most recent six-month period. MPR scores were calculated as the ratio of days of drug in the patient’s possession divided by the days of drug prescribed by the clinician and were based on Medicaid claims data. Case managers received educational training sessions focused on antipsychotic prescribing, implications of medication side effects, reasons for medication discontinuation and key messages that case managers can share with their patients to motivate them to maintain treatment. Physicians received a concise brochure with current best practice guidelines on partial compliance, medication discontinuation, medication adherence tactics, patient motivation methods and an adherence algorithm that physicians may utilize during a prescription refill visit.

Development Timeline

It took one year to bring the project from initial concept to first intervention. Approximately four months each to develop the concept and obtain funding, develop data analytics and educational material, and finally recruit and train the initial sites.

Program Cost

Overall cost of the first year is approximately $250,000.

Measured Results

Change in MPR scores was measured for both the intervention group and a matched control group. Trends in MPR scores were analyzed for both groups pre-, during, and post-intervention.
Outcomes

During the pre-intervention period, the intervention group had a lower mean MPR score than the control group. In both the intervention and post-intervention periods, however, the MPR difference between the two groups was no longer statistically significant. The intervention group had a significantly greater increase in MPR score between pre-intervention and intervention periods. After the conclusion of the TAP intervention, the MPR score decreased somewhat but was still higher than the pre-intervention period. The change in MPR score in the intervention group is no longer statistically significant compared to the comparison group. For more information please contact the resource below.

Lessons Learned

Both case managers and psychiatrists were appreciative and found the reports and warnings useful. They reported that the intervention identified an actual previously unknown gap in care approximately half of the time. The remaining gaps were planned medication changes, delayed refill due to dosing changes, or use of samples to reduce co-pay obligations.

Promising Practice

This practice has only been implemented at one site (Missouri). However, its outcomes have been evaluated using a pre-post design with a control group and demonstrated statistically significant improvements in quality.

For More Information

Visit http://www.dmh.mo.gov/MHMPP/MHMPP.htm or e-mail Joe Parks at Joe.Parks@dmh.mo.gov.
**Washington: Mental Health Law and Confidentiality**

**Emerging Practice**

**Background**

As part of a new emphasis on antipsychotics (AP) and mental health safety, Washington (WA) Medicaid developed a poly-pharmacy/poly-prescribing notification service. However, in 2006 it became apparent that State law precluded sharing of prescription information between prescribers of APs to a single client. The mental health confidentiality statutes and rules gave an AP prescription the same status as a mental health treatment record. Additionally, mental health diagnosis in the medical claims was thought to constitute a mental health treatment record. In consultation with the mental health division, attorneys general (AG), and Medicaid, a statute change was put forward as agency requested legislation.

**Development Timeline**

Three to four months of meetings and information sharing between Medicaid and Mental Health laid the groundwork for request of legislation in the fall before a January legislative session. Prior to the legislative session, Medicaid and Mental Health had numerous communications and conferencing with stakeholder groups explaining the safety issues involved in the potential of too many prescribers giving drugs to a single client without sharing the drug and rationale. Final legislation was posted and implemented in July of 2007.

**Program Cost**

No cost other than staff time, AG billings, and meeting time.

**Measured Results**

The agency obtained letters of support from the mental health community, advocates (e.g., the National Alliance on Mental Illness [NAMI]) and provider societies allowing the State to change the current statute.

**Outcomes**

The bill was passed allowing the sharing of prescription information and diagnosis.

**Language From the New Law (SB5773)**

Sec 1 2(m): For purposes of coordinating health care, the department may release without informed written consent of the patient, information acquired for billing and collection purposes as described in (b) of this subsection to all current treating providers of the patient with prescriptive authority who have written a prescription for the patient within the last twelve months. The department shall notify the patient that billing and collection information has been released to named providers, and provides the substance of the information released and the dates of such release. The department shall not release counseling, inpatient psychiatric hospitalization, or drug and alcohol treatment information without a signed, written release from the client.
Sec 2 (35): “Treatment records” include registration and all other records concerning persons who are receiving or who at any time have received services for mental illness, which are maintained by the department, by regional support networks and their staffs, and by treatment facilities. Treatment records include mental health information contained in a medical bill including but not limited to mental health drugs, a mental health diagnosis, provider name, and dates of service stemming from a medical service.

**Lessons Learned**

Groundwork should included examples of harm and potential client risk without good prescriber communication. Presenting these examples to the community helps to make for a common dialogue. Also, working closely with the Mental Health Department is crucial for a good outcome.

**Emerging Practice**

This new statute has not yet been challenged but it is only two years since its passage. It applies to all Medicaid clients and has very broad acceptance in the community.

**For More Information**

**Washington: Generics First**

**Promising Practice**

**Background**

The appropriate use of psychotropic medications in youth is an important public health concern. Several statutes have been enacted emphasizing the importance of evidence-based medicine (SB 6088—PDL, HB 1088—improving access to mental health treatments, and HB 2575—health technology assessments). In 2009, the legislature passed SB 5892 authorizing five tools for Medicaid to use to better control pharmacy costs and improve quality:

- Authorizing prescriber feedback reports using peer-to-peer statistical comparisons with removal of dispense as written (DAW) privileges with aberrant prescribing practices
- Introducing generic onto the PDL without P&T review
- Authorizing a generic first program for all new starts (mental health drugs and PDL drugs)
- Introducing over the counter (OTC) drugs onto the PDL without P&T review
- Introducing means to control off label use

**Development Timeline**

The statute and program was developed over approximately three to six months in discussions with the community. Implementation was approximately three to six months and included authorizing administrative codes and feedback reports. Generic first for antipsychotics in children was discussed in the community mental work group, the P&T/DUR and incorporated into the existing second opinion program.

**Program Cost**

The statute and policies were part of a savings package to improve generic performance from 62 percent generic fill rates to 82 percent. Each one percent represents a ~$4 million savings in the overall pharmacy program.

**Measured Results**

~350 AP second opinions have been conducted over the last year. At this time, we have not reviewed the AP second opinion program for reduction differentiating the dose and age from generic first (i.e., generic risperidone first) based on the agreed to criteria below.

Provider feedback reports were given to ~900 prescribers who had generic rates <80 percent, use of DAW >25 percent or who were statistically aberrant from peers (PCP, mental health, pediatrics and other). Prescriber were compared to other peers and best practices (top quartiles). Claims from the pharmacy system were used to monitor trends. Two newsletters and one set of reports were sent to prescribers. After providing 824 prescribers with their baseline measures in six therapeutic classes the following results were noted:

- One hundred and twelve prescribers (112) are now above 80 percent generic prescribing and below 25 percent DAW in six therapeutic classes
- Of the other 712 prescribers, for at least one therapeutic class:
29 percent improved both generic and DAW
54 percent improved generic only
45 percent improved DAW and
18 percent had no change

- The best practice group (top quartile): 47 percent improved both generic and DAW, 85 percent improved generic only, 49 percent improved DAW, and 13 percent had no change.
- One hundred and sixty (160) providers have moved up to best practice group.
- Comparing the best practice group to the peer group, there were no differences on average with long acting narcotics and as high as 185 percent better in ADHD drugs.
- In the provider peers, we noted an improvement of 21 percent in pediatrics, three percent in primary care, five percent in mental health and no change in other providers

Lessons Learned

A statewide second opinion process for generic new starts with mental health drugs is possible (AP, ADHD, and antidepressants). Using a community work group State providers, advocates and State officials can agree on generic programs. The following principles were agreed to:

The criteria for a brand rather than a new start are:
- Use of another brand name atypical antipsychotic is actually continuation therapy of what is a currently stable regimen.
- There has been a past trial of risperidone that resulted in discontinuation due to side effects.
- There has been a past trial of risperidone that resulted in discontinuation due to lack of benefits.
- There is a history of hyper-prolactinemia.
- When there are FDA indications not covered by risperidone or another generic.
- Exceptions are made through a peer-to-peer second opinion when a brand is requested.

Promising Practice

The policy and process was not only enacted into statute but had broad community agreement (Pediatric and Mental Health Associations, Mental Health Community Clinic Association and WA State Medical Association). Provider feedback reports appear to be effective in changing prescriber prescribing behaviors.

For More Information

E-mail Jeff Thompson at ThompJ@dshs.wa.gov
**California: Medication Therapy Management Services (MTMS) Emerging Practice**

**Background**

“Medication Therapy Management Services (MTMS) to Ensure Safe and Appropriate Use of Psychotropic Medications for Mental Health Patients in San Diego County: A Pilot” is a pilot program that has been developed by investigators at the University of California, San Diego (UCSD) in collaboration with CalMEND of the California Department of Health Care and San Diego County Mental Health Services. The pilot program site is a single outpatient clinic where clinical pharmacists trained in psychiatric pharmacy are an integral part of the multidisciplinary care team. The pharmacists provide direct patient care for chronic medication management under a Collaborative Practice Protocol. Pharmacists also provide drug information and education to patients and other providers at the clinic.

In the treatment of mental health care, it is often necessary to combine a full range of services, including psychosocial, pharmacotherapy and rehabilitative services. A multidisciplinary approach must be taken to provide effective care that is patient-centered and well coordinated. Mental health often co-exists with other medical conditions such as heart disease and diabetes; coordination of care that addresses these medical comorbidities is crucial for patients’ overall health. MTMS utilizes highly trained psychiatric pharmacists to provide medication education and management.

**Development Timeline**

From conception to start date of the pilot program, the duration was 18 months. Phase 1 of the development was conducted over a one-year time period beginning in the fall of 2007 and included:

1. Conducting literature review of MTMS best practices
2. Identifying a clinic site within San Diego County Mental Health Services
3. Integrating CalMEND initiatives into pilot project scope

Phase 2 of the development was initiated in early 2008 and is ongoing. It includes:

1. Developing a psychiatric MTMS program provided by pharmacists by:
   a. Designing MTMS based upon best practices and current literature
   b. Determining feasibility of integration into a county system based upon client, providers and clinic characteristics

   Evaluating availability of clinical pharmacy expertise for implementation
   1. Creating an experimental research for program evaluation:
      b. Exploring funding sources to support pilot program.
   2. Developing a Collaborative Practice Protocol for psychiatric pharmacists to provide chronic medication management at UCSD Outpatient Psychiatric Services (clinic site).
   3. Conducting a 12-month MTMS program at designated clinic site.
   4. Evaluating by using the following data:
      a. Patient level data (pre-and post-intervention quality improvement indicators);
      b. Program level data (operations);
c. Clinic level data (e.g. feasibility, scheduling, staffing); and
d. Client satisfaction.

**Funding Source**

1. No CalMEND/DHCS funding resource was allocated for the pilot program. Once data is collected at the completion of the pilot, funding will be determined.
2. UCSD investigators have secured additional funding from external sources. Initial start-up and implementation is funded through in-kind contributions from UCSD.

**Measured Results**

The following hypothesis will be tested:

1. Increased proportion of patients will be adherent to laboratory monitoring orders after the MTMS intervention compared to proportion of patients before the MTMS intervention.
2. MTMS intervention will increase the number of patients seen for medication management at the county site.
3. Clients in the MTMS intervention group will be satisfied with the pharmacy-provided services.

**Outcomes**

Results will be available at the completion of pilot.

**Lessons Learned**

1. Funding for MTMS will remain a challenge. Our approach is to begin with a pilot study to collect data for evaluation, while continue to seek additional funding to support a large-scale demonstration project.
2. In fiscal year 2009, Veterans Health Affairs Mental Health Services is funding expansion of hiring clinical pharmacists and incorporating their roles in the care team. Providing MTMS to mental health care clients is becoming the standard and best practice.
3. Limitations in electronic medical record system can be challenging for data abstraction (for example, the absence of medication refill data at this particular pilot program site).
4. Reimbursement issues for pharmacists may limit the ability to generalize of the program.

**For More Information**

E-mail Penny Knapp at Penny.Knapp@dmh.ca.gov.
California: CalMEND Collaborative Performance Improvement Project
Promising Practice

Background

CalMEND initiated the development of a Program Improvement Plan (PIP) in the fall of 2006 as a pilot with four county mental health services. The goal is to form a learning collaborative that brings together the stakeholders, including payers, providers, and consumers to study quality improvement. Participants meet monthly by conference calls and quarterly by in-person meetings.

The California External Quality Review Organization (EQRO) assisted the group in the development of a formal quality improvement plan that meets EQRO standards. The first study chosen by the learning collaborative was “Concurrent Use of Antipsychotics for Medi-Cal Beneficiaries.”

Development Timeline

The pilot was initiated in fall of 2006. Baseline measurement collected in January 2007 includes statewide and county specific rates of poly-pharmacy. Each participating county developed specific interventions, which were approved by the county quality improvement team as well as EQRO. Each county began implementation of interventions in the fall of 2007. The pilot study time period is 18 months.

Program Cost

Each participating county is required to commit monetary resources to cover travel expenses for in person meetings by their county staff. The learning collaborative recommends a county team to have following members as representatives: quality improvement manager, medical/pharmacy director, data analysts and other QA staff or clinicians. There was also the cost of CalMEND consultant time for two years. Medi-Cal Pharmacy Benefits Division data analysis group staff time and pharmacy policy branch provided dedicated staff time as part of routine work with no extra cost.

Funding Source

The Mental Health Service Act (MHSA) funded CalMEND consultant time. County Mental Health Services funded the travel time and expenses for each county and Medi-Cal Pharmacy Benefits funded the staffing allocation.

Measured Results

The performance metrics include the rates of poly-pharmacy (as defined by the learning collaborative).
Measure an Effect Using Data Elements from the Data Dictionary

Data elements include demographic data (eligibility, age, gender, ethnicity, geographic location by county); prescribers (multiple prescriber per beneficiary, prescribing patterns, drug, dose, concurrent use of antipsychotics or poly-pharmacy), data on medication procession ratios or gap in prescription fills.

Trending data is available quarterly from July 2006 through current quarter ending September 2008. The rates of poly-pharmacy is holding steady.

Outcomes

Each of the four participating counties developed an individual intervention plan aimed at improving the use of antipsychotics, including reducing poly-pharmacy and improving adherence through client education in shared decision making. A full report was issued in 2009 and can be obtained by contacting resource below.

Lessons Learned

- Learning collaborative that involves stakeholders with shared common interest helps to build consensus leading to more effective problem solving.
- The collective wisdom of the pilot group can be shared with others to facilitate rapid learning and spread.

For More Information

E-mail Penny Knapp at Penny.Knapp@dmh.ca.gov.
California: Stakeholders (Client & Family) Engagement in the Development and Implementation of CalMEND Clinically Informed Outcome Measurement
Emerging Practice

Background

CalMEND was established in 2005 as a quality improvement program to promote wellness and recovery for individuals with mental illness. Supported by funds from MHSA, CalMEND operates under the sponsorship of the Pharmacy Benefits Division of DHCS in collaboration with the California Department of Mental Health.

CalMEND’s mission is to develop and support publicly funded mental health services and supports in California that are person-centered, safe, effective, efficient, timely and equitable, that are supported by friends and community, that promotes wellness/recovery, and that fully incorporate shared-decision making between consumers, family members and providers. CalMEND believes that client and family members must be an integral part of the development of services and supports to achieve success. All committees, subcommittees, and their work groups have client and family member participants who consistently provided input and influence in CalMEND projects, workgroups and collaborations. One example of the success of engaging client and family members into CalMEND is the development of the CalMEND Clinically Informed Outcomes Management (CIOM) system.

CIOM, a consumer self-report survey that provides feedback and recommendations to the treatment team to optimize care outcomes, was developed and implemented by Dr. Ann Doucette. To achieve these goals, CalMEND CIOM is designed as Web-based and provides real time feedback by electronically generating a report based on the client’s input. Clients fill out the Web-based questionnaire at the clinic visit, and by eliminating turnaround time, clinicians, care takers and clients can monitor and adjust treatment using the client feedback before the end of the clinic session. Reports are retained for continuous assessment and monitoring throughout the length of the treatment.

Development Timeline

The first phase of the development was the design of CalMEND CIOM feedback form, which took nine months. The second phase was to make this form Web-based. This phase of development is ongoing and includes expanding the range of reports available for individual clients, providers, clinics, and agencies. There is a plan to develop translations into select languages. The third phase of the development is to pilot in clinics. The pilot will be in collaboration with Los Angeles County Department of Mental Health (LACDMH) and the Mental Health Alliance-Los Angeles (MHA-LA).

Program Cost

Funding for CalMEND consultants are from MHSA, other staffing support from the Department of Health Care Services and the Department of Mental Health.
Measured Results

CIOM measures client feedback in the following modalities: symptoms, functioning, including physical health, co-occurring substance abuse, therapeutic alliance, and social support/connectedness and recovery, including recovery from substance abuse.

Outcomes

Not yet implemented; not available at this time.

Lessons Learned

- Client and family members are integral part of the team in the development of services and supports that are client-centered
- The essence of a person-centered approach—especially as compared to a program-centered approach—is that clients receive the services and supports that they want and need and are not simply matched with and provided a pre-determined menu or program of services.
- To effectively promote a client’s recovery progress, a variable range of clinical services and service intensity will likely be required over time. The use of CIOM will continue to support development of future client-centered services and supports with recovery as goal.

For More Information

E-mail Penny Knapp at Penny.Knapp@dmh.ca.gov
Indiana: Mental Health Quality Advisory Committee
Promising Practice

**Background**

During the 2005 Indiana General Assembly, the legislature passed the House Enrolled Act (HEA) 1325 and the Governor subsequently signed it into law. This model legislation essentially requires open access to mental health medications provided by managed care organizations (MCOs) operating in the Indiana Medicaid program. The Medicaid fee-for-service (FFS) plan had already been providing open access as a result of previous legislation.

The legislation created the Mental Health Quality Advisory Committee (MHQAC) to provide advice as to its implementation. Pursuant to the statute, the MHQAC is comprised of the Medicaid Director or their designee (who chairs the committee); the Medical Director of the Division of Mental Health and Addictions (DMHA), Family and Social Services Administration (FSSA); a representative of a statewide mental health advocacy organization; a representative of a statewide mental health provider organization; a representative from an MCO that participates in the State’s Medicaid program; a member with expertise in psychiatric research representing an academic institution; and, a pharmacist licensed under Indiana law. The purpose of the committee is to develop guidelines and programs to allow open and appropriate access to mental health medications, educational materials to prescribers, and to promote appropriate use of mental health medications. All recommendations made by the MHQAC must be reviewed and approved by the Indiana Medicaid DUR Board prior to implementation. The DUR Board serves as an advisory body to the Office of Medicaid Policy and Planning (OMPP).

The committee and pharmacy staff from FFS and MCOs subsequently proposed and developed sophisticated, customized poly-pharmacy claim editing algorithms that were integrated into each of the respective claims processing systems. The initial set of edits were based on collective review of data and focused on outlier prescribing patterns. For purposes of this summary, the MHQAC activities have been listed below in the various phases of implementation.

**Phase I: Initial Poly-Pharmacy Editing Algorithms**

On January 1, 2007, six initial mental health quality edits were implemented in the pharmacy claims processing systems of both FFS and MCO plans. These edits, which when encountered by the dispensing pharmacy, will require a medical necessity review via the existing prior authorization systems, and apply to the following clinical situations:

- Patient receiving two or more tricyclic antidepressant medications
- Patient receiving two or more typical antipsychotic medications
- Patient receiving three or more atypical antipsychotic medications
- Patient receiving three or more antipsychotic medications
- Patient receiving three or more benzodiazepine medications
- Patient receiving three or more any antidepressant medications, excluding trazodone
Paid pharmacy claims from the most recent 45 days, where the days’ supply is greater than 14 days, are reviewed during the editing process. Medications with identical ingredients but different salts (such as oral risperidone and injectable risperidone) were only counted one time for the purpose of counting medication experiences. Claims with days’ supply of 14 days or less are excluded from the edits to allow for tapering. Customized pharmacy messaging was developed in order to communicate the nature of the edit to the dispensing pharmacy.

**Phase II: Dose Optimization Editing**

On June 19, 2007, the DUR Board and the MHQAC implemented dose optimization edits for mental health medications. These quantity per day limits were developed for all mental health medications and are reviewed quarterly for new drugs and clinical updates. The edits were developed to enhance quality and appropriateness in mental health prescribing practices. The edits were implemented consistently across the MCO and FFS programs. When a provider submits any claim that is not within the recommended edit criteria, the claim denies and is subject to the PA process.

**Phase III: Additional Poly-pharmacy, Dosing and Trial Fill Edits**

The following, additional quality edits were developed and approved by the DUR Board and the MHQAC. Implementation dates are listed where applicable. Certain edits have not yet been implemented due to claims processing limitations or anticipated high incidence of false positives.

- 15 day trial fill for new atypical antipsychotic medications (variable implementation dates)
- Patient receiving two or more sedative-hypnotics, including trazodone (March 3, 2008)
- Patient receiving two or more SSRI and/or serotonin–norepinephrine reuptake inhibitors (SNRI) antidepressants, excluding bupropion and mirtazapine (March 3, 2008)
- Patient receiving two or more stimulants having different core ingredients (TBD)
- Patient receiving three or more of any anticonvulsant/mood stabilizer (TBD)
- Patient receiving two or more atypical antipsychotics (TBD)
- Patient, ages 18-64, receiving the following low dose atypical antipsychotics:
  - aripiprazole < 10mg/day (TBD)
  - olanzapine < 5mg/day (TBD)
  - quetiapine < 300mg/day (TBD)
  - risperidone < 1mg/day (TBD)
  - ziprasidone < 40mg/day (TBD)
  - quetiapine: claims for 25 or 50 mg doses for patients ages 18-64 require PA; use for sleep induction is not an approvable diagnosis (March 3, 2008)

**Phase IV: SmartPA Implementation for the FFS Medicaid Program**

OMPP, through an optional service provision in the existing contract with ACS State Healthcare, is in the process of implementing SmartPA, a real-time solution comprised of highly sophisticated clinical PA rules that utilize integrated Indiana-specific evidence-based criteria. SmartPA uses clinical rule sets that incorporate member medical and pharmacy claims history to determine the appropriateness of the prescribed therapy. The solution will be implemented into the FFS pharmacy claims processing system and has clear advantages for assuring appropriate use of mental health drugs:
• Aggregates multiple pharmacy claims within each clinical rule to determine total daily dose and the existence of poly-pharmacy
• Utilizes medical claim information within the clinical rule to screen for procedure codes and/or appropriate diagnosis
• Prescribers can be included or excluded from the clinical editing and prior authorization requirements based on the National Provider Identifier (NPI) of the prescriber
• Automates 60-90 percent of prior authorization requests that would have traditionally required a phone call or completion of a prior authorization form

The implementation timeframe for SmartPA is scheduled for the fall of 2009. The following clinical rules are in development or are being revised from the previous approval/implementation:
• Patient receiving two or more SSRI and/or SNRI antidepressants, excluding bupropion and mirtazapine
• Patient receiving two or more stimulants
• Patient receiving three or more of any anticonvulsant/mood stabilizer
• Patient receiving two or more sedative-hypnotics, including trazodone
• Patient receiving two or more atypical antipsychotics
• Patient receiving two or more typical antipsychotics
• Patient 18 and over receiving the following low dose atypical antipsychotics:
  o aripiprazole < 10mg/day (TBD)
  o olanzapine < 5mg/day (TBD)
  o quetiapine < 300mg/day (TBD)
  o risperidone < 1mg/day (TBD)
  o ziprasidone < 40mg/day (TBD)
• OMPP is also evaluating the use of the SmartPA tool for ensuring adherence to the prescribed therapy. Adherence would be measured in real-time using the proportion of days covered methodology. Non-adherence thresholds would be established. When the allowable threshold is exceeded, one or more of the following interventions would be triggered:
  o Level 1: The dispensing pharmacist would be required to obtain PA
  o Level 2: A letter or phone call to the prescriber would be initiated
  o Level 3: The prescriber would be required to obtain PA

Development Timeline

Implementation dates for each of the respective edits are noted in the background section.

Program Cost

• Initial poly-pharmacy editing: $63,000 in FFS pharmacy claims processing systems changes. MCO costs are not available.
• SmartPA—one time implementation fee of $740,000, annual licensing fee $425,000
• What was the funding source? (e.g., Administrative, Medicaid State funds, other)
• State and Federal Medicaid funds, enhanced Federal match for SmartPA implementation obtained through the use of an Advanced Planning Document (APD)
**Measured Results**

A preliminary analysis was conducted comparing atypical poly-pharmacy trends before and after the implementation of the three or more APs edit. In the FFS Medicaid program, a 32 percent reduction in the use of two or more APs was experienced across the population.

**Outcomes**

- A comprehensive outcomes analysis has yet to be performed. An initial savings analysis for each MCO and the FFS program was conducted in January of 2008 and can be found at [http://www.indianamedicaid.com/ihcp/PharmacyServices/MentalHealthInfo.asp?comm=qac](http://www.indianamedicaid.com/ihcp/PharmacyServices/MentalHealthInfo.asp?comm=qac).
- Significant savings were experienced with the implementation of dose optimization editing. Reductions in poly-pharmacy and associated expenditures were also experienced in certain therapeutic classes. It should be noted that, on average, prices for single-source brand drugs increased at a rate of eight to nine percent per year, which makes an accurate determination of savings difficult to ascertain. In addition, Indiana’s best in class State Maximum Allowable Cost program (SMAC) for generic drugs was identified as a primary driver for a portion of the savings. Further information on the SMAC program can be found at: [http://in.mslc.com/StateMacServices.aspx](http://in.mslc.com/StateMacServices.aspx)
- Consistent claims editing and prior authorization criteria across MCO and FFS programs.
- A preliminary analysis was conducted comparing atypical poly-pharmacy trends before and after the implementation of the three or more APs edit. In the FFS Medicaid program, a 32 percent reduction in the use of two or more atypical antipsychotics was experienced across the population.

**Lessons Learned**

- Consistent application of criteria and standards across all Medicaid benefit plans (FFS and MCO) is crucial for successful implementation and acceptance.
- If you could initiate the program again, what would you do differently? Clearly identify quality measures that could be utilized to measure the success of each implemented edit.

**Promising Practice**

The practice has consistency of criteria across all Medicaid benefit programs, use of customized claims editing technology and participation of all interested stakeholders. Practice is based upon reasonable evidence, is relatively mature, cost-effective, generally accepted by the provider community and has resulted in utilization shifts in the desired direction that do not appear to impact the quality of overall care. This is a promising practice because outcomes and comprehensive analysis have not yet been measured or performed.

**For More Information**

E-mail Medina Lee at [medina.lee@fssa.IN.gov](mailto:medina.lee@fssa.IN.gov).
**Massachusetts: Working Group on Psychoactive Medication for Children**  
**Emerging Practice**

**Background**

The increase in the use of psychoactive medication in children, including prescriptions of antipsychotic medication, has led to public and government concern about the clinical and financial implications of these drugs. In response, the Massachusetts Department of Mental Health (MDMH) and the MassHealth Office of Clinical Affairs convened a Working Group on Psychoactive Medication for Children.

**Development Timeline**

In 2007, the Working Group, with representatives from Pharmacy and Clinical Services from all the managed care entities (MCEs) serving publically insured children in Massachusetts, was formed.

The Working Group defined problems in care including:

- Even in the absence of consensus guidelines, some providers have been outliers as to choice of agent and doses prescribed.
- Some providers have practiced in isolation, for instance, without the benefit of collateral data from other child-serving agencies.
- Some children have received interventions limited to pharmacotherapy, when comprehensive care was needed.
- Some providers have prescribed medication based on reports from only one source (parents) and one setting (home).

In meetings during 2008, the Working Group:

- Noted a lack of consensus as to the data needed to follow and manage trends in psychoactive medication use in children;
- Noted a lack of consensus as to how to monitor such care, both in the aggregate (quantitative) and on the individual level (clinical);
- Noted a lack of consensus as to how to support those providing care; and
- Decided to gather data from all members, convene clinical review teams within each MCE, and to share data and findings from clinical reviews.

The Group then identified the following objectives:

- To develop consensus as to the data needed to track patterns of use of psychoactive (PsA) medication for children and collect such data;
- To develop, for the MCEs to implement, procedures for within-plan surveys in the aggregate and for second-level (clinical) reviews of selected children; and
- To share findings with other members of the Working Group when conducting the surveys and reviews.
Program Cost
Participation time of members; data processing time within each MCE.

Measured Results
Quantitative data as to medication use; clinical data from clinical reviews of outliers.

Outcomes
Date is being gathered and will be shared when the review is completed.

Lessons Learned
That all MCEs, along with State Departments, want to respond more affirmatively to changing prescription practices.
That most providers identified as outliers are glad to be contacted by their MCEs.
It remains to be seen whether these strategies will affect practices throughout the State.

Emerging Practice
Engaging the clinical community in understanding aggregate data, changing policy and procedures, and building trust so that variations in care can be understood meets some but not all of the mature practices criteria. It is difficult to measure the effectiveness of this practice and therefore is classified as emerging.

For More Information
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**New York: PSYCKES, Clinic-Based Continuous Quality Improvement and Drug Utilization Review**  
**Promising Practice**

**Background**

The New York OMH partnered with the Department of Health (DOH) to develop a clinic based drug utilization review program using continuous quality improvement (CQI) to improve prescribing practices. OMH adapted PSYCKES for the Medicaid population as a tool to support CQI-focused DUR activities first in mental health clinics and then more generally for all physician prescribers in the State. PSYCKES is a portfolio of Web-based tools that provides access to administrative data such as Medicaid claims. PSYCKES measures adherence to best practices at the State, region, county, provider, clinic/program, and prescriber levels. It also provides secure, HIPAA compliant access to client level claims data to support and improve clinical decisionmaking.

OMH had previously established a voluntary multi-year initiative with licensed mental health clinics where an increase of seven percent over the Medicaid base rate was tied to participation and performance in a Statewide quality improvement initiative.

**Development Timeline**

Year 1: Building Readiness (July 2007–June 2008)
- OMH is funded by DOH for a four year project to adapt and implement PSYCKES for the Medicaid population.
- Questionable psychotropic prescribing practices were established by a Scientific Advisory Committee of national experts who identified 79 potential quality targets.
- Two sets of quality indicators for youth and adults were developed as the focus of the year one DUR intervention: (1) poly-pharmacy, and (2) the use of antipsychotics with high/moderate risk for cardiometabolic abnormalities among individuals with existing cardiometabolic conditions (e.g. diabetes and hyperlipidemia).
- Built consensus for an integrated State and city CQI initiative, obtaining agreement on DUR focus, aligning goals and requirements, and developing an approach that used lessons learned from each government agency.
- Engaging stakeholders: worked with statewide provider coalitions and mental health advocacy organizations to educate them about the project goals.
- Adapted the PSYCKES platform for Medicaid data and developed policies, procedures and an interface for secure access.
- Signed a DOH-OMH Memorandum of Understanding for release of Medicaid data to treating clinics via PSYCKES.

Year Two: Implementation
- Kick off for New York City was July 1, 2008, and January 1, 2009 for rest of the State.
• Provide mandatory CQI team training for participating clinics, and voluntary technical assistance Webinars.
• Implement PSYCKES security procedures and access in participating clinics.
• Monitor progress on project requirements (e.g., participation in training, PSYCKES access, change of practice) and provide outreach and technical assistance for programs that are falling behind.
• Develop additional DUR indicators for year three interventions.
• Further PSYCKES-Medicaid development, including: (1) additional DUR indicators, and (2) adapt for use by consumers allowing access by Medicaid enrollees to their own Medicaid claims data.

Program Cost

Project Director: One FTE psychiatrist
PSYCKES application development:
• $800,000 to develop PSYCKES-Medicaid application
• One FTE and reallocation of existing resources to support database and security management
• Scientific advisory meeting and consultation—$30,000
• Two FTE SAS programmers
• Implementation Team (345 clinics statewide)
• One FTE Implementation Director
• One FTE: Medical Field Officer—Clinical training and consultation, development of clinical materials, CME
• Two FTE implementation support staff for ongoing monitoring and communications with sites
• Trainings (materials, support, food)—$50,000 for 39 trainings
• QI consultants: Four retired State QI directors hired back part time, each assigned a region of the State

Measured Results

The measures used to evaluate the impact and success of the project include:
• Percentage of eligible clinics participating in the project
• Use of training and technical assistance: (1) participation and evaluation of CQI training by participants, (2) CME participation and post test, and (3) technical assistance Webinars attendance and participation
• Rates of use: number of DUR outliers flagged for review that have their records reviewed (assessed via PSYCKES use logs)
• Changes in prescribing practices in two focus areas
• Cost savings

Outcomes

• Participation rates: 92 percent of eligible mental health clinics are participating in the project (337 clinics statewide).
• CQI Training: 100 percent of participating providers attended CQI training with average training evaluation score of 3.5 on a four point scale (1-4).
• All clinics were able to complete the online PSYCKES security management process.
• Voluntary use of technical assistance resources included 21 Webinars that had 986 participants, 129 prescriber Web-based CMEs were completed, three psychiatric in-services, and one psychiatric consultation.
• Preliminary results from the first four month Interim reports (120 of 129 NYC clinics reporting):
  o Project selection: Polypharmacy Indicators (PPI) was selected by 76 (63 percent), Cardiometabolic Indicators (CMI) 40 (33 percent), both 4 (3 percent).
  o Clinical reviews and practice change: For PPI, 1,919 individuals met the criteria, 872 reviews were conducted, and of those 141 (16.1 percent) changed status. For CMI, 940 met criteria, 499 were reviewed, and of those 90 (18 percent) changed status.

Lessons Learned

The IT capacity of providers varies widely. At present, most community mental health centers in the State do not have electronic medical records (EMRs), nor do they use e-prescribing or other computer-based applications in routine practice. Mental health clinics face many challenges in implementing DUR including the limited role of the medical model; use of part-time psychiatrist staff that are not well integrated with other clinic staff and workflows; staffing shortages and over 30 percent staff turnover annually, with difficulty recruiting and retaining psychiatrists and other essential clinical staff. Despite these obstacles, providers can be engaged in a CQI project focused on improving prescribing practices. Preliminary results suggest the feasibility of conducting a large scale clinic based quality improvement initiative supported by Web-based data sharing.

Promising Practice

The project is less than one year old. Data are available for all participating clinics both through the interim reports and the PSYCKES application. Preliminary findings suggest improvements in quality and cost. It is a large-scale implementation, in 337 clinics this year. Acceptance is evidenced by high participation rates and increasing requests from providers from other treatment sectors for access.

For More Information

E-mail Molly Finnerty at COMDMTF@omh.State.ny.us.
Oregon: Psychotropic Medication Utilization Management
Unclassified Practice

Background

In December of 2007, the Oregon Department of Human Services (DHS) convened the Medication Management Workgroup to assess psychotropic drug use by foster children and to make recommendations to DHS. The workgroup reported to the Oregon legislature in April of 2008. In September of 2008, DHS requested the Oregon DUR Board provide recommendations on drug use in the population (see: http://pharmacy.oregonstate.edu/drug_policy/pages/dur_board/reviews/articles/PedPsychReview.pdf).

HB3114 was introduced during the 2009 legislative session (http://www.leg.State.or.us/09reg/measpdf/hb3100.dir/hb3114.en.pdf). The legislation requires mental health assessments be done prior to issuance of a second psychotropic drug to a foster child. The legislation also requires an annual review of medications for all foster children under 6 years old on one psychotropic or any foster child on more than two psychotropics. The annual reviews will be conducted under the Medicaid Retro DUR program.

Development Timeline

This legislation is effective on July 1, 2010.

Program Cost

No fiscal impact assigned to the legislation.

Measured Results

Undefined at this time.

Outcomes

Undefined at this time. Specific feedback reports to prescribers will be generated by the RetroDUR Clinical Review Program, which compares prescribing patterns relative to peers and includes specific recommendations for change. The Behavioral Health Team of DHS Child Welfare will review outlier cases.

Unclassified Practice

This is an unclassified practice because the program is not yet in effect; there thus has been no assessment of cost; no measured results and no outcomes.

For More Information

E-mail Walter Shaffer at walter.shaffer@State.or.us.
Texas: Psychotropic Medication Utilization Parameters
Promising Practice

Background.

In September 2004, the State Office of the Inspector General released a report raising concerns about the use of psychotropic medications by foster children in Texas. By February 2005, the Health and Human Services Commission (HHSC), Department of Family and Protective Services (DFPS), and the Department of State Health Services (DSHS) released the Psychotropic Medication Utilization Parameters for Foster Children. Details can be found at: http://www.dshs.State.tx.us/mhprograms/psychotropicMedicationFosterChildren.shtm. The Parameters were distributed to physicians providing care to Medicaid recipients throughout the State of Texas. The State medical professional organizations also circulated the Parameters among their membership. They were distributed to Child Protective Service staff and residential childcare providers as well as medical consenters and judges. By the fall of 2005, CPS regional nurses were hired to conduct training of staff and communicate with prescribing physicians.

In June 2006, HHSC, DSHS, and DFPS released a report (http://www.hhs.State.tx.us/news/release/Analysis_062306.pdf) that showed that during the five months after release of the Parameters there was a 7 percent decrease in the number of children prescribed psychotropic medications and a 29 percent decrease in those receiving two or more psychotropic medications. Each year since has demonstrated continued improvements with compliance with the Parameters. Details can be found at: http://www.hhsc.State.tx.us/medicaid/OCC/Psychoactive_Medications.html.

Senate Bill 6 (2005 Legislature) called for all foster children to receive their medical and behavioral care under a Medicaid-managed healthcare program. That program began in April 2008 as Star Health (Superior HealthPlan Network), which requires the implementation of the Parameters by the network providers. An online Health Passport is also part of this project which includes demographic data, a record of immunizations, prescription data, and Medicaid encounter data including provider and diagnoses, and medication allergies. Any individual involved with a foster child’s care can request a review of the psychotropic medication regimen by calling the Star Health Network service manager. If the child’s regimen is outside of the Parameters, the Star Health medical director or other qualified child psychiatrist reviews the case and consults with the prescribing physician as needed to achieve appropriate care. Star Health also receives real time prescription data that indicates if a child’s psychotropic medication regimen is outside the Parameters and this triggers a review of the case. Psychotropic Medication Utilization Review reports are then sent to the appropriate parties. Aggregate reports from Star Health regarding these reviews are still in development but will soon be available on a monthly basis.

Development Timeline

The Parameters were developed over a six-month period and were shown to have positive impact within a few months after release. The fuller implementation of formal reviews and monitoring by the Star Health Network has taken several years and is still in development.
**Program Cost**

No estimate available at this time.

**Measured Results**

We used Medicaid prescription data and medical provider billing data that included psychiatric diagnoses and medical specialty of the prescriber.

**Outcomes**

It appears that the prescribing patterns have improved over the last four years but we do not have formal outcomes regarding the behavioral health status of the foster children.

**Lessons Learned**

It appears to have been beneficial to address psychotropic prescribing patterns with the foster care population with whom the State has more authority and to ultimately coordinate this within a single managed care network. It also appears that affecting prescribing patterns with the foster population has had a positive effect for the general Medicaid population, as the same physicians tend to see patients in both groups.

**Promising Practice**

The Psychotropic Medication Utilization Parameters for Foster Children have been implemented statewide for over three years. Our data analyses have shown promising positive results with ongoing increases in appropriate medication practices. Once the initial workgroup had developed the Parameters, implementation was relatively straightforward, with the agencies involved implementing the policy on a statewide basis. The Parameters were distributed to existing providers and are also available via the Internet. Acceptance by providers has generally been very high. Data reporting and analysis has proceeded smoothly, once the initial decisions about definitions and methods were made, and have required minimal additional resources.

**For More Information**

E-mail Jose Gonzalez at jose.gonzalez5@hhsc.State.tx.us.
**Alabama: Stakeholder Engagement/Management and Consensus Building Interventions Emerging Practice**

**Background**

Alabama Medicaid has identified a multi-year pattern of steadily increasing utilization of atypical antipsychotics. This pattern is present in all age ranges, but we chose to focus our initial efforts on those of people less than 5 years of age. Our first steps involved data analysis to establish the features and extent of the prescribing patterns, which resulted in the noted utilization. Our pharmacy claims data for calendar year (CY) 2007 revealed 412 children less than 5 years of age who had a claim for an atypical antipsychotic. Based on these findings, we began to reach out to the various stakeholders in the State in order to both engage them in the issue and to help build consensus on next steps. The following groups have been integrated into the process:

- **Department of Mental Health**: The commissioner, medical director, pharmacist, and various administrative staff received a data presentation.
- **Pharmacy and Therapeutics (P&T) Committee**: The data was presented and the P&T committee recommended the formation of a task force that would bring back recommendations. P&T minutes from the meeting are posted on the Agency’s public Web site.
- **Positive Antipsychotic Management (PAM) Task Force**: This task force was formed with multiple stakeholders including the Department of Mental Health, academic and private practice child psychiatrists, Blue Cross Blue Shield (by far the largest private insurer in the State), ALLKids (the S-CHIP program in the State), pharmacists, and the Alabama Chapter of the American Academy of Pediatrics.
- **Child and Adolescent Psychiatric Institute**: A presentation was made to this large consortium of pediatricians, child psychiatrists, and consumers from across the State. The group offered many useful suggestions.
- **Directors of CMHCs**: A presentation will be made to this statewide consortium of center directors who provide the highest volume of care to underserved groups.

**Design**

The PAM Task Force is the sentinel group for assimilating input from the other groups and making recommendations to our Pharmacy and Therapeutics Committee. The task force agreed upon the following strategy:

Beginning in May 2009, focused mailings to prescribers of children under age 18 years through the CNS program on any CNS-Quality Indicator (QI) related to antipsychotics. Beginning in June 2009, educational phone calls to prescribers of an antipsychotic (first or second generation) of children ages 0-4 years by a board-certified child psychiatrist through Prest/CNS. A semiannual re-analysis of prescribing patterns, starting December 2009.
Development Timeline

The initial presentation outside the agency was February 2008 and the outreach/involvement process is still underway. Implementation timeline of operational strategy with providers is described above.

Program Cost

Costs have largely been staff time, routine P&T review, and minimal travel expenses.

Measured Results

Measurement included a high level of engagement and the substantive contributions of suggestions, ideas, and resources by stakeholders.

Outcomes

Targeted outcomes are engendering stakeholder buy-in and minimizing resistance to the recommendations of the task force. At this point, buy-in has been good. Resistance to task force recommendations will have to be measured after they are implemented. Goals include education to providers resulting in appropriate utilization of antipsychotics in the pediatric population.

Lessons Learned

Stakeholders have helped to define some of the unique situations that exist around prescribing these medications, and there are unlabeled indications/target symptoms for the use of these medications, which are established in peer-reviewed literature.

Prescribing Data

Prescribing provider types included physicians, registered nurse practitioners, clinics, and primary care prescribing an AP for children 0-4 years of age.

Breakdown of Medical Chart Review

For classification purposes, recipients were considered to meet FDA indications if they had a documented FDA-approved diagnosis, regardless of age, even if the drug specifically notes adult only.

Recipients were considered to meet unlabeled diagnosis criteria and target symptom criteria if they had a documented diagnosis or target symptom that was not FDA approved, but was considered to be an appropriate off-label use, regardless of age, as supported by peer-reviewed literature.

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</tr>
<tr>
<td>Total Recipients</td>
<td>412</td>
<td>100%</td>
</tr>
</tbody>
</table>
Emerging Practice

This practice is still in development and key elements have yet to be implemented. Targeted outcomes are presently limited to achieving stakeholder acceptance and participation. There are as yet no outcomes focused on member experience.

For More Information

E-mail Robert Moon at Robert.Moon@medicaid.alabama.gov.
California: Epocrates (Education/Marketing)
Promising Practice

Background

Epocrates, Inc., a California company that develops clinical information and decision support tools, enables healthcare professionals to find reliable clinical information quickly and confidently. More than 500,000 healthcare professionals, including one in four U.S. physicians, use Epocrates’ mobile and Web-based products to help them reduce medical errors, improve patient care and increase productivity. The company’s clinical content is developed by physicians and pharmacists and is continuously updated to keep users informed and up to date.

In California, Medi-Cal Pharmacy Benefits Division seeks to maximize the efficiency in the prescribing aspect of care delivery system to the Medi-Cal population. The solution is to make the Medi-Cal and Aids Drug Assistance Program (ADAP) contract drug lists (CDLs) available at the point of care for easy access to clinicians. Since the launching of CDLs in January 2007, more than 19,167 clinicians, including 6,102 physicians have loaded Epocrates Medi-Cal and ADAP drug formularies in a portable electronic format. As a result, prescribing physicians have the ability to see all available drug alternatives and restrictions on drugs, and more appropriately prescribe a CDL drug.

Development Timeline

Once the contract was in place, it took about four weeks to load the Medi-Cal and ADAP contract drug lists (CDL) used by pharmacists and pharmacy technicians into an Epocrates Web-based tool. Pharmacy staff does ongoing weekly updates.

Program Cost

The funding source is general funds from the Department of General Services. The fees and terms are confidential.

Measured Results

Utilization of California CDLs by Epocrates prescribers is indirectly measured using quarterly data on:

- The number of total clinicians as well as the number of MDs who have downloaded the Medi-Cal and ADAP CDLs.
- The number of drug lookups by MDs.

Outcomes

DHS California has not performed a retrospective study on the cost savings and ROI in the Epocrates solution for provider access to our CDLs. However, Epocrates presented DHS CA with studies other commercial health plans have completed. In one such study, there was an average of 0.9 percent increase in generic utilization resulting in a savings of $250,000 per one million members. In a different study, Epocrates physicians had lower Tier 3 rates (0.50 percent lower) and higher Tier 2 rates (0.57 percent higher) than a reference group of physicians.
Lessons Learned

- A multi-prong approach in announcing the launch of Medi-Cal contract drug list with Epocrates is essential to ensure maximum dissemination of information. Providing ongoing good customer services and support is critical in maintaining good utilization rates.
- Knowing whom our target audience and users helps us to prepare "Doc Alerts" that meet their needs.

Epocrates offers other services in which California did not consider participating. In the future, we may consider working with Epocrates on mobile CME programs. Epocrates also offers a platform for providing other tools such as guidelines, calculators, and risk assessments. We may consider using this platform to publish our guidelines in the future.

For More Information

E-mail Penny Knapp at Penny.Knapp@dmh.ca.gov.
Colorado: Medicaid Rx Review Program
Unclassified Practice

Background

The Rx Review Program is a statewide program that provides for one medication therapy counseling session per year between a contracting pharmacist and a Medicaid client. Pharmacists provide a comprehensive medication evaluation, which includes a review of all prescription medications as well as over-the-counter and nutritional supplements, to identify drug-drug interactions, drug-over the counter/supplement interactions, drug duplication, or use of multiple providers, if any.

Design

The Medicaid Department creates a client profile based on claims data listing the client’s medications, providers, dispensing pharmacies and disease States. The client profile is sent to the pharmacist assigned to perform the consultation. Pharmacists must conduct the medication therapy counseling session in person unless the client cannot meet, then it can be conducted over the phone. Client selection used several factors including high drug utilization (taking at least five medications), disease states, and geographic proximity to contracting pharmacists. Participation in the program is voluntary so clients may decline the service. Once the session has been completed, the pharmacist must draft a letter documenting the meeting and any relevant recommendations. The pharmacist will send the letter to the Department, client, and the client's providers.

The program was created pursuant to State legislation. The authors of the bill were the primary drivers of the legislation, with the Wyoming PharmAssist program acting as a model.

Development Timeline

The program required federal approval via submission of a State Plan Amendment (SPA) and the publishing of a public notice of the reimbursement methodology. It took about nine months to draft, submit, and receive federal approval for the SPA. During that time, staff drafted pharmacist orientation materials and a standard letter for clients (two weeks) and a contract template for participating pharmacists (one month), and the Department performed outreach with several organizations/associations in order to recruit pharmacists. Staff estimate it will take about two weeks to perform a data pull that identifies potential clients. A statewide contract freeze became effective in October 2008, putting the program temporarily on hold. Staff determined in November 2008 that the contracts with participating pharmacists are exempt from the freeze; therefore we are proceeding with the final stages of implementation.

Program Cost

The program pays pharmacists $75 per medication therapy counseling session. The State legislation appropriated total funds of $16,950 for the pharmacist payments, at a fund split of 25
percent State and 75 percent Federal. The legislation also provided approximately $68,000 for one FTE to oversee the program, at a fund split of 50/50.

**Measured Results**

The specific metrics are under development, but generally the program will be reviewed to determine how effectively it improves client health outcomes, enhances medication safety, and reduces total health expenditures.

**Outcomes**

Not determined at this time; the program is in the final stages of implementation.

**Unclassified Practice**

The Rx Review program is not mature and outcomes, including cost effectiveness, improved quality, or improved access, have yet to be measured. A significant barrier to implementation was SPA approval.

**For More Information**

E-mail Kimberly Eggert at kimberly.eggert@State.co.us
Massachusetts: Public Education
Emerging Practice

Background

Parents and guardians, including social workers in the Department of Social Services (now, the Department of Children and Families) wanted information to help those who authorize children’s medical treatments to make responsible, informed decisions regarding psychoactive medications. The Department of Mental Health convened a working group to address this need.

A document was produced and is available in English and Spanish online at the Department of Mental Health (DMH) public Web site: http://www.mass.gov/Eeohhs2/docs/dmh/publications/psychoactive_booklet.pdf.

The document provides parents, guardians and others with information about psychoactive medications in children. It goes beyond the provision of information to help readers understand how children’s emotional and behavioral problems are assessed, what are the elements of comprehensive care, and what criteria should be used in deciding to initiate or continue a trial of medication treatment.

Development Timeline

In 2001, a working group was convened representing interested parties in both the public and private sectors to produce a document. That document, “Psychoactive Medication for Children and Adolescents: Orientation for Parents, Guardians, and Others,” was first made available in February 2002 and has since been revised three times, most recently in September 2007.

Program Cost

The time of those who developed the document and the costs of posting it on the Web site of the Department of Mental Health.

Measured Results

Satisfaction data are gathered informally from DCF social workers and supervisors.

Outcomes

DCF social workers report that the document is helpful.

Lessons Learned

Information needs regarding psychoactive medications for children can be met with a specially developed, Web-available document.

Emerging Practice

This intervention has yet to measure effectiveness.
For More Information

E-mail MaryEllen Foti at maryellen.foti@dmh.State.ma.us
Missouri: Road Shows for Behavioral Pharmacy Management (BPM) Emerging Practice

Background
As part of Missouri’s implementation of Comprehensive NeuroSciences’ (CNS) Behavioral Pharmacy Management (BPM) program, a series of meetings were held that were designed to inform prescribers and other stakeholders of the program and to answer questions and address concerns.

Design
Initially, these were primarily informational in nature, and consisted of grand rounds at various universities and medical schools in Missouri, CME presentations at annual meetings of Missouri behavioral health organizations, presentations to the professional staff at community mental health centers, and community invitational professional luncheons and dinners. The focus was to introduce the program to physicians and generate interest. We also utilize a Stakeholder Advisory Group composed of a diverse selection of Missouri behavioral health opinion leaders and advocates reviewing cost and quality data, and soliciting feedback on opportunities for improvement. Plans for pilot programs are unveiled, and data from such programs in progress are presented and reviewed. Generally lasting five to six hours and including a meal, these meetings are held in a central location and attract stakeholders from across the State. During implementation this group met every six months more recently it has met every 12 to 18 months.

Development Timeline
The initial introductory presentations took four hours to develop. Logistics for each event took approximately another four hours of staff time. The intensive introductory phase occurred over the first year of the project.

Program Cost
Overall cost of the introductory first year is approximately $10,000 specific to the project budget. This does not include any overhead from annual meetings that were already scheduled where we were one of several presentations and dinner meetings that we were invited to present at sponsored by local psychiatric societies.

Measured Results
On standard CME participant feedback forms these presentations were rated highly. Initially we received many letters, phone calls, and personal verbal contacts of individuals and organizations expressing their concerns that the intervention would be inappropriate or have negative impacts. We have not received any such communications for the past two years.

Outcomes
The significant outcomes were decreased resistance and community anxiety during implementation, increased understanding of the key principles making prescribing more
consistent with evidence-based practice, maintaining position/patient autonomy in making medication decisions, and focusing on improving quality first with cost control as a secondary outcome.

**Lessons Learned**

Attendance at road shows is highest when psychiatrists and other stakeholders are anxious and fearful regarding a new intervention and drops off significantly once the intervention is understood and accepted. Multiple exposures to a road show presentation appeared to be more effective than single exposures.

**Emerging Practice**

This practice is limited to one site (Missouri) and its outcomes data are limited to participant feedback without a control group. It is a time-limited startup/implementation practice. Its strengths include low-cost, high acceptance, straightforward implementation and favorable outcome based on available data. For

**More Information**

[http://www.dmh.mo.gov/MHMPP/MHMPP.htm](http://www.dmh.mo.gov/MHMPP/MHMPP.htm)
E-mail Joe Parks at Joe.Parks@dmh.mo.gov
**Missouri: Access to Consultation in Behavioral Pharmacy Management (BPM) Initiative**  
**Mature Practice**

**Background**

Behavioral Pharmacy Management (BPM) analyzes pharmacy-prescribing patterns and then mails a letter to individual prescribers making recommendations on how they can improve the quality of their prescribing practice involving psychiatric medications. Some prescribers receiving the letter have additional questions regarding the recommendations and how they apply to their individual patients. Consultants with expertise in psychopharmacology need to be available to answer their questions.

**Design**

The mailed intervention offers consultation with a psychiatrist specializing in psychopharmacology upon request. Consultation also occurs as outreach (cold call) to 20-30 prescribers monthly with the highest portion of potentially questionable prescription patterns. Initially, in 2004-2006, three local Missouri psychiatrists noted for expertise in psychopharmacology provided this service. These peer consultation phone calls tended to resemble a true “case consultation” format, and focused on specific patients, often in a series of multiple phone calls. In an effort to move toward a broader format focusing more on prescribing practices more generally rather than on specific challenging patients, and to avoid the large amounts of time that the local psychiatrists were spending to schedule these calls, Prest & Associates was brought in to handle the peer consultation calls in 2006.

**Development Timeline**

The initial approach using local psychiatrists took approximately three months to develop and implement. The current approach of contracting took approximately two months to plan and procure.

**Program Cost**

The initial cost of using local psychiatrists and the Prest & Associates contract was approximately $10,000 annually.

**Measured Results**

Prest & Associates delivers monthly reports on the number of physicians contacted, the number of completed consultations, and the number of physicians contacted without success.

**Outcomes**

There was increased acceptance of the intervention due to availability of consultation by psychiatrists as opposed to pharmacists. Some physicians who did not change their practice in response to the mailed message have changed in response to the consultant contact.
Lessons Learned

Anecdotally, it appears that non-psychiatric prescribers are more receptive to feedback and consultation regarding prescribing of behavioral medications than are psychiatrists, and are more likely express a willingness to change prescribing practices. Nevertheless, there is some indication that even outlier prescribers who protest that all of their outlier prescribing is clinically warranted do eventually make changes to their prescribing to bring it more in line with best practices. This would reinforce the value of repeated messaging via monthly reports and periodic peer consultation calls.

Mature Practice

BPM, including the consultation component, has been implemented in multiple States and received several awards as an innovative practice improving the quality of prescribing.

For More Information

Visit: http://www.dmh.mo.gov/MHMPP/MHMPP.htm or e-mail Joe Parks at Joe.Parks@dmh.mo.gov
Washington: Evidence-Based Mental Health Care Treatments
Mature and Promising Practices

Background

A common theme is that a combination of medical treatment and social/behavioral care often ensures the best of outcomes. Unfortunately, tracking mental health treatments and associated medication use is made difficult by the lack of codes. Washington State has recommended a set of evidence based mental health treatments for the treatment of child and adolescent disorders.1-6

Design

The importance of engaging both a child and family in treatment cannot be underestimated. Several evidence based mental health treatment can be classified as mature and promising and are described below.

Development Timeline

Many if not most of these interventions are being used actively in practice. Unfortunately the integrity, adherence and outcomes are not tracked. Ensuring the fidelity of these evidence-based practices can be immediately implemented if incorporated into ongoing education programs, CME and monitoring services.

Program Cost

Each mental health treatment will have differing training and resource costs. Brief descriptions can be found at http://depts.washington.edu/pbhjp/.

Measured Results

Each mental health treatment will have differing measures and outcomes. Brief descriptions can be found at http://depts.washington.edu/pbhjp/.

Lessons Learned

Brief learning descriptions of each treatment can be found at http://depts.washington.edu/pbhjp/.

Mature Practices

- Motivational Enhancement Therapy is a systematic intervention based designed to evoke rapid, internally generated changes in behaviors of abusers of drugs and alcohol. Information available at http://motivationalinterview.org.
- Motivational Interviewing has been expanded to address a variety of substance abuse issues as well as health promotion and medical treatment adherence. Information available at: http://www.motivationalinterview.org.
• Trauma Focused Cognitive Behavioral Therapy treats victims of sexual abuse and their non-abusive parents and since been expanded to treat other traumatic events in a child’s life. Information available at: http://tfcbt.musc.edu/.
• Parent Child Interaction Therapy to improve parenting behaviors through play therapies. Information found at: http://pcit.phhp.ufl.edu/.
• Multisystemic Therapy services serious juvenile offenders and is designed to improve behaviors and outcomes. Information available at: www.mtservices.com.
• Aggression Replacement Therapy is a multimodal psychoeducational intervention designed to alter the behavior of chronically aggressive adolescents and young children. Information available at: http://artgang0.tripod.com/.
• Functional Family Therapy serves a population of at-risk adolescents and families become more adaptable and productive. Information available at: www.ffdinc.com.
• The Incredible Years strengthens young children’s social competence and problem-solving abilities, and reduce aggression at home and school. Information available at: http://www.incredibleyears.com/.
• Multidimensional Treatment Foster Care is a behavioral treatment alternative to residential placement for adolescents with chronic antisocial behavior, emotional disturbance, and delinquency. Information available at: http://www.mtfc.com/.
• Cognitive Behavioral Therapy is a framework to treat depression. Information available at: http://nacbt.org or http://www.beckinstitute.org/.

Promising Practice

• Relapse Prevention Therapy (RP) is a cognitive behavioral approach to helping the individual avoid backsliding or worsening of behaviors related to substance use. Information available by e-mail at gparks@u.washington.edu
• Family Integrated Transitions combines Multisystemic Therapy, Dialectical Behavior Therapy, Motivational Enhancement Therapy, and Relapse Prevention techniques to meet the unique needs of these youth and their families. Information available at http://depts.washington.edu/pbhjp/projects/fit.php.

References


For More Information

E-mail Jeff Thompson at ThompJ@dshs.wa.gov
California: Relationship of Poly-Pharmacy Rate to Practice Setting
Emerging Practice

Background

One percent (50 prescribers) of California’s 5,000 Medicaid pharmacy providers account for over 30 percent of the clients receiving multiple atypical antipsychotics concurrently. There is little evidence to support this practice, which is generally referred to as “poly-pharmacy.” Further analysis of this data showed that many of these pharmacies were “closed door” operations, serving mostly long term care facilities and/or assisted living facilities. Federal regulations governing the operation of long-term care facilities require that a pharmacist perform drug regimen review of all residents in skilled nursing facilities at least monthly. Any irregularities must be reported to the facility’s attending physician and director of nursing, and these reports must be acted upon. This review is supposed to include an assessment of the presence of any unnecessary drugs, which would include multiple atypical antipsychotics.

Since the Licensing and Certification Division of California’s Department of Public Health has responsibility for monitoring compliance (and the authority to enforce compliance) with these regulations, the Department of Health Care Services is collaborating with this sister agency to promote responsible prescribing and dispensing behaviors in facilities with high rates of atypical antipsychotic poly-pharmacy.

Development Timeline

It took one year, from conception to program implementation, to begin this collaboration.

Program Cost

There were no direct costs associated with collaboration, but a significant amount of staff time was required to develop appropriate AP poly-pharmacy metrics and agreements.

Measured Results

- AP poly-pharmacy rate among skilled nursing facility residents (pre- and post-review)
- Dollars recovered from pharmacy (If referred to audit and Investigation)

Outcomes

Results are forthcoming, but we anticipate a reduced AP poly-pharmacy rate per SNF facility, fewer claims per client, and reduced payment to pharmacies per beneficiary per month.

Lessons Learned

Collaboration with existing State programs can leverage existing resources and/or data and minimize the need for new programs that are redundant in function and purpose.

For More Information

E-mail Penny Knapp at Penny.Knapp@dmh.ca.gov.
**California: Improving the Use of Antipsychotics: A Pharmacy Tool Kit for Measurement and Feedback**

**Emerging Practice**

**Background**

As we began the study of antipsychotics utilization as a pilot collaborative performance improvement project (PIP) with four participating California county mental health services in California, it becomes apparent to us that we have accumulated significant knowledge and experience working with Medi-Cal claims and administrative data. Subsequently we developed a pharmacy tool kit with the goal of disseminating our lessons learned to the rest of the 54 counties in California. The pharmacy tool kit consists of (1) an overview of quality improvement methodology and concepts; (2) sample forms, tables, templates, sample reports, reference materials, clinical guides, pharmacotherapy literature review and summaries, and other helpful references; (3) a set of established quality measures in report format, based on Medi-Cal claims and administrative data; and (4) HIPPA compliance and protection of private health information (PHI).

The pharmacy tool kit supports quality improvement efforts and enables users to:
- Evaluate “best practices” for effective and efficient use of antipsychotics.
- Address over or under utilization of antipsychotics and to reduce unexplained variances.
- Gain further insights in the prescribing patterns.
- Identify areas of service needs based on demographic data, stratified by ethnicity, age, gender, and location.
- Access baseline data and ongoing measurements for tracking and trending of improvements, benchmarking to similar county by geographical location, population size and services.

**Development Timeline**

The development of the tool kit took 12 months, from January to December 2007. The vetting and review process is ongoing.

**Program Cost**

Not yet implemented.

**Funding Source**

Primary support: Medi-Cal Pharmacy Benefits Division.

**Measured Results**

A set of measures on prescribing patterns, including (1) poly-pharmacy (two or more concurrent use of antipsychotics), (2) out of range dosages (high/low), and (3) medication procession ratio (MPR) to measure adherence and/or gaps in therapy.
Measure an Effect Using Data Elements from the Data Dictionary

Pharmacy and administrative claims: provider/prescribing information, dosage, day’s supply, duration/gaps in therapy, concurrent use of antipsychotics, and demographic data.

Outcomes

Not available at this point.

Lessons Learned

Developing measurements that are well tested for reliability and feasibility takes time and effort—“If it is not measured, it cannot be improved.” State Medicaid programs are best positioned to carry out initiatives like this, which requires significant initial start up time and efforts. A tool kit provides potential users “turn key” resources to jump-start a quality improvement program and significantly reduces barriers due time and resource constraints.

For More Information

E-mail Penny Knapp at Penny.Knapp@dmh.ca.gov.
Colorado: Comprehensive NeuroScience (CNS) Promising Practice

Background
Starting June 1, 2006, the Department engaged in a two-year project with Comprehensive NeuroScience (CNS) to run the Behavioral Pharmacy Educational (BPE) program. Through this program, the Department was able to provide information to prescribers about the psychiatric utilization of their patients.

During the two-year span of the BPE program, educational alerts/letters were sent to prescribers to inform them if the medication dosing for their patients were in line with Food and Drug Administration (FDA) guidelines and, for children, research and consensus-based guidelines. The messages were advisory and intended to be supportive. Prescribers were asked to review each case in the context of the guidelines and decide individually what was best for the patient. The program was also designed to notify prescribers about forgotten refills and when a patient obtained the same class of drug from multiple prescribers. If prescribing patterns did not change, follow-up letters were sent to the prescribers. When deemed necessary, peer consultants met with prescribers to discuss their prescribing habits and current clinical information regarding the drugs.

The program targeted the top 300 prescribers who had written prescriptions that deviated from best practices guidelines.

The Department supplied summary reports to our Behavioral Health Organizations (BHOs), which the clinics and prescribers found useful for internal quality improvement.

Development Timeline
Since contracts were needed between the Department, CNS and Eli Lilly, the sponsor of CNS, it was approximately one year from the time the Department decided to implement the program until the program started.

Program Cost
The program costs approximately $750,000 per year; however, this program was funded entirely by Eli Lilly, Inc.

Measured Results
While it was not possible to fully quantify health care outcomes, the program provided cost savings.
Outcomes

CNS was able to provide the cost avoidance information to the Department. CNS determined that the total cost avoidance for FY 2006-07 was estimated at $800,000 for adults and $1.1 million for children. This measure takes in account the full twelve months of the intervention in addition to the results that were observed in FY 2007-08 on the population that was intervened in FY 2007. The total cost avoidance for FY 2007-08 was estimated at $20,000 for adults and $20,000 for children. The FY 2007-08 results were based on data from three mailing periods for both adult and child populations and followed through the end of the program. There was a 49 percent reduction in adults and 64 percent reduction in children.

Lessons Learned

If the Department had paid for the program offered by CNS, it would have been cost neutral for the first two years. This program did not have the ability to offer continued cost savings after the initial two years. The Department also learned that mailings are not always an effective form of communication for the State of Colorado since our client and provider files are not accurate.

Promising Practice

This two-year program improved shifts in provider prescribing habits. The program had significant community acceptance as evidenced through provider surveys and outreach with stakeholders. Outcomes measures were reported by CNS and appear to offer some cost effectiveness for the first year. The second year of the program did not have the ability to offer continued cost savings. Overall, the program was considered cost neutral if the Department had paid for the program.

For More Information

E-mail Kimberly Eggert at kimberly.eggert@State.co.us
Maine: Academic Detailing
Maine Independent Clinical Information Service (MiCiS)
Emerging Practice

Background

Academic detailing is an outreach educational program wherein trained clinicians make office visits to provide physicians with evidence-based information on how best to treat specific medical conditions. The program, which was first instituted in 2005 by the State of Pennsylvania’s Pharmaceutical Assistance Contract for the Elderly (PACE) program in collaboration with Harvard University Independent Drug Information Services, emulates the highly successful drug company practice of sending detailers to doctors’ offices to influence prescribing practices, with the goal of providing unbiased information so that clinicians will better align prescribing practice with current scientific evidence. As of mid 2009, nine States have undertaken academic detailing programs directed at prescribing practices in Type 2 diabetes, antibiotics for respiratory disease, pain relievers, cholesterol lowering drugs, pain relievers, anti-platelet drugs and mental health drugs.

The Maine legislature authorized the Maine Department of Health and Human Services Office of Medicaid Services to create an academic detailing program—Maine Independent Clinical Information Service (MiCiS). MiCiS, is based on the Pennsylvania PACE program, has two physician assistant academic detailers trained by the Harvard group that worked on the creation of the PACE, with materials purchased from PACE. Their first detailing topic concerned the initiation of insulin for Type 2 diabetes, the evidence for use of multiple oral agents, and the role of diabetes education in management. A second topic concerned antiplatelet agents: when, which one, how much. Participation has been voluntary. Prescribing data for MaineCare members is shared with the provider to show them how their prescribing habits compare to their peers. Partners in MiCiS are Maine Medicaid, Maine Medical Association, which recruited the academic detailers and provides educational materials, and GHS, the State’s Medicaid pharmacy contractor, which supplies data analysis and clinical support. An advisory committee, which meets quarterly and has representatives from advocate groups, universities, providers, pharmacies, the two academic detailers, and Maine Medicaid, provides oversight.

An initial discussion with the advisory committee was held in April 2010 to launch a similar project to disseminate best practice guidelines for prescribing atypical antipsychotics. It is expected that medical staff from the State mental health authority, GHS and Medicaid, in collaboration with the State’s Psych Work Group, will use national sources to identify best practice guidelines, with final selection of guidelines for appropriate prescribing and monitoring in the fall of 2010. The Psych Work Group is the equivalent in Maine of a P&T Committee specific to psychotropic medications and is composed of consumer advocates, community psychiatrists, representatives of professional societies and DHHS medical directors. Following selection of guidelines, training will be provided to the detailers who will be doing the academic detailing at provider sites. GHS is now collecting data on prescribing patterns and metabolic monitoring, which will be shared with prescribers who participate in this project.
**Development Timeline**

Planning for the Maine diabetes academic detailing project began in 2008. Training of the academic detail staff was completed in October 2008. Recruitment and office visits that educational material were implemented in February 2009 and are ongoing as of provide May 2010.

**Program Cost**

Maine Medicaid has funded the project through fees collected from pharmaceutical companies as a cost of doing business in Maine, in accordance with State law governing clinical drug trials. The cost of the first full year of the program was $218,400. Manufactures are required by law to submit a fee and report clinical trials. The MiCiS has completed a grant request to expand academic detailing, both within Maine and in a cooperative program with New Hampshire.

**Measured Results**

While there are several new State programs targeting antipsychotic medications, no results specific to antipsychotics are yet available. Evaluation of Maine’s academic detailing project on diabetes and anti-platelet drugs has shown a high degree of satisfaction and acceptance by prescribers.

**Outcomes**

Data on changes to prescribing patterns has generally shown positive results. Acceptance has generally been good. Cost savings have also been demonstrated in many instances. Data related to antipsychotics is not yet available.

**Emerging Practice**

Academic detailing has been shown in multiple settings to be a promising practice for increasing prescribing according to evidence-based guidelines, with high levels of prescriber satisfaction. Idaho, Oregon, and South Carolina have instituted academic detailing projects specific to APs, but these programs are still in their first year and Maine’s academic detailing program for antipsychotics is not expected to be implemented until 2011. While there is no specific reason that the experience with antipsychotic academic detailing will be different from the experience with other drugs, this is probably best described as an emerging practice at this time.

**For More Information**

Independent Drug and Information Service Web site: www.rxfacts.org/  
Prescription Policy Choices: www.policychoices.org  
Prescription Policy Choices Academic Detailing Toolkit: www.policychoices.org/AcademicDetailingToolkit_000.shtml
Drug Effectiveness Review Project: www.ohsu.edu/ohsuedu/research/policycenter/DERP/  
Maine Academic Detailing: www.academicdetailing@mainemed.com
Maine: Report Cards
Emerging Practice

Background
Antidepressant Adherence: MaineCare informs prescribers about their patients’ failure to refill antidepressant medication prescriptions. Electronically submitted statewide pharmacy claims data is monitored weekly by Goold Health Services (GHS), the State’s pharmacy management contractor. Any prescription for an antidepressant that is not refilled within 7-14 days is flagged and an automatic fax is sent to the prescriber. This project was launched in January 2006. On average, 2,899 letters are sent out per quarter.

Report Card: GHS sends quarterly reports to each prescriber who has a minimum of 20 Medicaid patients, documenting compliance with the preferred drug list (PDL) for all classes of drugs. These reports include per prescriber, the number of prescriptions and average cost for both preferred and non-preferred drugs in all major drug categories, including psychotropic drugs. There is no comparative data, however, allowing the prescriber to evaluate utilization in comparison to others.

Periodically, reports are generated on older patients and sent to each prescriber statistically comparing them to a peer (Z scores) to show how far off the prescriber is from the ideal.

Development Timeline
Undetermined.

Outcomes
Undetermined.

Lessons Learned
Medication therapy is effective for a wide variety of conditions and lack of medication adherence is an increasingly recognized problem. Prescribers are generally not aware of their patients’ compliance with medication therapy.

Measured Results
Evaluation of the effectiveness of this approach is underway with results expected sometime in 2010 and can be obtained from the source below.

Emerging Practice
We consider these emerging practices. The comparative AP drug use study shows that Maine’s rate of non-adherent use of AP drugs is almost 7 percent lower than the median of the 15 States studied, and has decreased 0.7 percent between 2004 and 2007. A variety of mechanisms are in use to increase medication adherence. Report cards, non-refill reminders, and reports of possible drug side effects are relatively low-cost and non-intrusive methods of providing prescribers of
information about patient medication compliance. We are not aware of studies showing the
efficacy of these methods and are hopeful that our effectiveness evaluation will add to the
knowledge on the subject.

For More Information

E-mail Elsie Freeman at Elsie.Freeman@maine.gov.
**Massachusetts: Access To Consultation—MCPAP**

**Mature Practice**

**Background**

It is widely recognized that the need for child psychiatrists’ services exceeds the supply nationwide. Nationally it is estimated that there are 1.6 child and adolescent psychiatrists per 1,000 children and youth with DSM IV diagnoses rated as “severe.” Although Massachusetts fares better than other States with 21.3 child psychiatrists per 100,000 children and youth (national average is 8.6), in the past satisfaction has been low. In one study 33 percent of families waited one year or more before receiving mental health treatment. Two-thirds of primary care providers (PCPs) reported appointment delays for mental health referrals averaging three to four months, with many complaints of dissatisfaction with professional communications from child psychiatrists.

The Massachusetts Child Psychiatry Access Project (MCPAP) is a system of regional children’s mental health consultation teams designed to help primary care providers meet the needs of children with psychiatric problems.

In 2003 the Center for Medicare & Medicaid Services (CMS) and MassHealth funded a pilot program by Dr. Ron Steingard to provide consultations in central Massachusetts around child psychiatry problems. In 2004, the Massachusetts Behavioral Health Partnership (MBHP), the MassHealth behavioral health vendor, and a service center of ValueOptions adapted the program for a statewide rollout with a budget of approximately $3 million. The project received legislative support with assistance from advocates, providers, insurers, State administrators and academic centers. The project was funded through the Department of Mental Health.

**Design**

Six regional teams with 1.0 full-time employee (FTE) child psychiatrist, 1.5 FTE social worker/psychologist, and 1.0 FTE care coordinator were needed for implementation. All 1.5 million Massachusetts children, without regard to insurance, are eligible for MCPAP services. Telephone consultation is provided Monday-Friday, 9:00 a.m. to 5:00 p.m. within 30 minutes of a request. Each PCP signs an agreement to cooperate with the MCPAP educational program and to provide prescribing for appropriate cases. The team provides ongoing education to PCPs based on their need. MBHP provides electronic medical record and data collection, and evaluates the program based on encounters and PCP satisfaction. Numerous other services including organized continuing medical education (CME) and a Web site ([www.mcpap.org](http://www.mcpap.org)) are provided.

**Program Cost**

The program began with six teams, 331 practices, and 1,237 FTEs of primary care providers. More than 14,000 encounters in fiscal year (FY) 08 and more than 96 percent of the children in the Commonwealth were covered. Only two percent of PCPs refuse to participate. The total costs were $3 million per year or $0.17 per child per month.
**Measured Results**

Phone consultation with PCP–46 percent; care coordination–21 percent; face-to-face evaluation–16 percent; phone to member/family–10 percent; follow-up visit–6 percent; other–1 percent.

**Outcomes**

PCP satisfaction measured by surveys before and after the program showed marked increase in satisfaction across many domains. There was strong provider support for the program as measured by surveys.

**Lessons Learned**

- Providing consultation and education about child psychiatry to PCPs will relieve problems with access to child psychiatry
- Well-designed co-location works best
- Not payer-based works best
- Use academic, not community psychiatrists
- No prescription pads, consultation only
- Need an administrator who is accountable statewide

**Mature Practice**

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<thead>
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<td>Documented by increase in PCP satisfaction across many domains</td>
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**For More Information**

E-mail MaryEllen Foti at [maryellen.foti@dmh.State.ma.us](mailto:maryellen.foti@dmh.State.ma.us).

Missouri: Benchmark Reporting in BPM Intervention
Mature Practice

Background

The Missouri implementation of CNS’ BPM program includes a series of custom-designed benchmark reports comparing individual prescribers as well as group practices.

Design

Physicians who prescribe a significant volume of behavioral health medications receive an individual Benchmark Report with their monthly BPM Quality Letter, which contains additional information on their percentage of outlier prescriptions, a numerical and percentile rank comparison to other high volume providers, and a list of the number of the provider’s patients and prescriptions that were involved in each Quality Indicator during the designated reporting period. Each Quality Indicator identifies a particular prescribing practice that is considered to be outside of best practices guidelines. In addition to these individual reports, a Group Practice Benchmark Report is provided monthly to the directors of Missouri’s Community Mental Health Centers and quarterly to the directors of Missouri’s Habilitation Centers, which promotes improvement of behavioral health prescribing practices for complex need patients in these settings. The report lists the percentage of outlier prescriptions written for each agency’s patients during the designated reporting period.

Finally, for State-level administrators, a Prescriber Detail Report provides extensive information on the nature of all outlier Medicaid prescriptions by prescriber. For each physician with outlier prescriptions, the report provides the total number of patients served by that physician and the total number and cost of claims, plus, for scripts that triggered a Quality Indicator, a description of the specific QI, the count of the prescribers patients associated with those scripts, and the associated costs of those claims.

Development Timeline

Each took approximately one year initially and has been revised and improved subsequently.

Program Cost

The reports are part of the overall BPM program.

Measured Results

The benchmark metric, the number of psychotropic prescriptions involved in a potentially questionable practice, calculates percentile rankings divided by all psychotropic prescriptions reported for both raw counts and percentile rankings.
Outcomes

Initial report revealed a threefold variation across Community Mental Health Centers (CMHCs) (6 percent to 18 percent outliers). In the first year after implementation, there was a 3 percent overall reduction in the percentage of outlier prescriptions by CMHCs.

Lessons Learned

Following group discussions, it was agreed that the agencies would all be individually identified in the outlier reports, thus allowing everyone to see where everyone else stood in the rankings. CMHC managers reported that this was a very helpful tool to engage their psychiatric staff discussions of practice quality of the information. It was also useful for meeting certification requirements for drug utilization review (DUR). Individual psychiatrists have also been accepting and appreciative of the benchmark information.

Mature Practice

The use of benchmarking in quality improvement, in general, has a long history and a robust published literature proving its efficacy. The use of benchmarking specifically applied to prescribing practices in Missouri has more than one implementation, has been going on more than three years, has documented improvement in quality and cost savings, has good provider acceptance, and is proven straightforward to implement.

For More Information

Visit http://www.dmh.mo.gov/MHMPP/MHMPP.htm or e-mail Joe Parks at Joe.Parks@dmh.mo.gov.
Oklahoma: SoonerPSYCH Behavioral Health Rx Management
Promising Practice

Background

SoonerPSYCH (Prescription Solutions for Your Cognitive Health) is the Oklahoma version of the BPM program performed by Comprehensive NeuroSciences, Inc. (CNS). Oklahoma started this program in 2004 to provide education and claims information to prescribers of behavioral health medications. SoonerPSYCH is co-sponsored by the Medicaid and mental health agencies in Oklahoma—Oklahoma Health Care Authority (OHCA) and Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS).

Development Timeline

- Oklahoma Medicaid, known as SoonerCare, experienced a major change in January 2004, as members who had previously been assigned to managed care plans were transitioned into a single fee-for-service pharmacy program. OHCA and CNS started working out data exchange details early that year and the first mailings to providers were done in August.
- Prior to the start of the mailings from CMT, the medical director for ODMHSAS created a three-hour CME-accredited program. She took the program around the State to mental health practitioners on the Red Dirt Road Tour, explaining the concepts of evidence-based treatments, best practices, and expert consensus guidelines. Most of these presentations took place at CMHSs, but other providers in the area were also invited to attend.
- Mailings for the first year were focused on adult members only. Beginning in March 2006, mailings to children’s prescribers were implemented every other month, alternating with mailings to adult prescribers. For the period of March 2007 to March 2008, mailings were focused only on the children’s prescribers. In October 2008, the program was restructured from the BPM-type intervention to the Medical Risk Management program.

Program Cost

Total payments to CMT for this four-year program are just over $2 million. The bulk of the cost was for the first year, when data matching and technical resources were required. Eli Lilly, Inc. funded SoonerPSYCH. A direct payment was made to CMT by Lilly. No State funds were used directly for this program. However, the data matching and extracting process does require a significant amount of State staff time, as does answering questions and concerns from providers.

Measured Results

The program was tracked and measured using standardized reports from CMT. In addition to tracking the number of members utilizing certain medication classes, there are over 20 Quality Indicators that are measured and tracked. Reports are generated for a rolling three-month period, each ending with the most recent month of data. The table below shows a comparison between the quarter ending December 2004 and the quarter ending December 2007. The “Percent Pop” columns indicate the percentage of children utilizing at least one medication from the listed class.
from the total child population for the last month of the quarter. The final column shows the change from 2004 to 2007.

Several data elements from the data dictionary could be used to measure the effects of this program: Prescribed AP, AP at ≤ 5 years of age, High Dose AP, Multiple APs.

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Dec. 04</th>
<th>Percent Pop</th>
<th>Dec. 07</th>
<th>Percent Pop</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Atypical Antipsychotics</td>
<td>5,901</td>
<td>1.65%</td>
<td>7,148</td>
<td>1.77%</td>
<td>0.12%</td>
</tr>
<tr>
<td>Any Typical Antipsychotics</td>
<td>74</td>
<td>0.02%</td>
<td>63</td>
<td>0.02%</td>
<td>-0.01%</td>
</tr>
<tr>
<td>Any Anxiolytics/Sedative Hypnotics</td>
<td>2,032</td>
<td>0.57%</td>
<td>3,012</td>
<td>0.75%</td>
<td>0.18%</td>
</tr>
<tr>
<td>Any Antidepressants</td>
<td>7,880</td>
<td>2.21%</td>
<td>7,238</td>
<td>1.80%</td>
<td>-0.41%</td>
</tr>
<tr>
<td>Any Anticonvulsants/Mood Stabilizers</td>
<td>3,613</td>
<td>1.01%</td>
<td>3,331</td>
<td>0.83%</td>
<td>-0.18%</td>
</tr>
<tr>
<td>Any Sympathomimetics/ Stimulants</td>
<td>13,848</td>
<td>3.88%</td>
<td>14,967</td>
<td>3.72%</td>
<td>-0.16%</td>
</tr>
<tr>
<td>Any ADHD Non-Stimulant</td>
<td>3,236</td>
<td>0.91%</td>
<td>2,101</td>
<td>0.52%</td>
<td>-0.38%</td>
</tr>
</tbody>
</table>

**Lessons Learned**

The most significant lesson we learned was the importance of the agency partnership approach, coupled with the exceptional educational component from ODMHSAS. Without their participation and support of the program through their educational efforts, we believe the program would have had serious opposition from the provider and advocacy community. Because we implemented only after meeting with a large number of stakeholders, where program goals were clearly communicated to providers and advocate, we believe the program was well accepted and successful in improving the quality of care for our members.

**Promising Practice**

The SoonerPSYCH, or BPM-type program, is a promising practice because of the evidence, maturity, dissemination, acceptance, and implementation criteria:

- Evidence: at least one implementation site with data showing desirable results
- Maturity: the program was in place for about four years
- Dissemination: the program was implemented in several States and data is available from at least three States (Oklahoma, Utah, and Missouri)
- Acceptance: members were not directly affected, so their acceptance could not be measured. However, since their access to medications was not affected, we believe they would generally be accepting of the program in that their care would be improved. Providers were generally accepting of the program; however, if they requested that they be removed from the mailing list, that request was honored.
- Implementation: fairly straightforward, some data kinks to work out, but otherwise simple. Did not require policy changes, legislative action, or funding review.

**For More Information**

E-mail Paul Keenan at Paul.Keenan@okhca.org.
Oklahoma: SoonerCare Medical Risk Management
Emerging Practice

Background

The ODMHSAS and the OHCA implemented a program called Medical Risk Management (MRM) for SoonerCare members under the age of 18 who have been diagnosed with schizophrenia and a co-occurring medical disorder.

MRM is patient focused and designed to keep physicians and case managers informed of medical and psychiatric issues arising in each patient’s care. Care Management Technologies (CMT) is the vendor who performs the data analysis and mailings for the program.

MRM utilizes predictive risk modeling for pinpointing which patients with schizophrenia are trending toward high-risk/high cost disease States, allowing existing provider systems to proactively focus appropriate clinical interventions. CMT utilizes medical, behavioral services, and pharmacy claims data to identify targeted patients most in need of intervention.

MRM provides Integrated Health Profiles on a regular basis to keep physicians and case managers alerted to patient care issues such as:
- Emerging patient health risks
- Potentially dangerous drug-drug interactions or side effects
- A comprehensive list of the patient’s prescriptions
- Recent medical and psychiatric outpatient visits
- Recent emergency room and hospital admissions

After patients are identified, the MRM program will determine if they have a “psychiatric home” such as an CMHC program already serving them. If not, they will be referred to the appropriate CMHC in their area. In addition, MRM will determine if each patient has a “medical home” such as a physician who is serving as the patient’s primary medical care coordinator. If not, an MRM health liaison will assist in finding a primary care provider.

Development Timeline

- In October 2008, CMT began mailing packets on approximately 600 children.
- There was a short period of time required to determine if there were SoonerCare members selected for the MRM project who were already involved in one of the other care coordination projects at OHCA. Members were excluded from the MRM program if they were included in another program.

Program Cost

- Payments to CMT for this program have been less than $500,000 per year.
- The MRM program was funded by Eli Lilly, Inc. A direct payment was made to CMT by Lilly. No State funds were used directly for this program. However, the data matching and extracting process does require State staff time.
Measured Results

The analysis for this program is pending. The expected outcomes of the MRM program include:

• Greater patient adherence to medication plans (physical and behavioral)
• Fewer unplanned urgent, emergent and inpatient hospitalization events
• Lower overall health care costs per patient when compared to costs of comparable patients not involved in the MRM program
• Healthier patient with a better quality of life

Lessons Learned

Many children enrolled in the SoonerCare program experience fractured systems of care. This project attempts to get all providers on the same page with respect to mental and physical health conditions and treatments.

Emerging Practice

The MRM program is an Emerging practice because:

• Evidence: at least one implementation site with data showing desirable results
• Maturity: the program has been in place for about 1.5 years
• Dissemination: the program has been implemented in at least two States. Data available has not been formally analyzed at this point.
• Acceptance: members are not directly affected, so their acceptance cannot be measured. Providers have been generally accepting of the program
• Implementation: fairly simple and straightforward, most data problems had been settled with previous programs. Did not require policy changes, legislative action, or funding review.

For More Information:

E-mail Paul Keenan at Paul.Keenan@okhca.org.
Washington: Provider Access Lines (Phone-Based Consultation)
Promising Practice

Background

PCPs often provide primary mental health services to children, in large part because they have limited access to child mental health specialists. Creating a collaborative care arrangement among PCPs and a limited number of child mental health specialists may be an effective way to support, educate, and enhance the ability of PCPs to provide basic mental health services, even when there are few local resources available.

Washington State created a collaborative care program to address this very need called the Partnership Access Line (PAL). The design of Washington State’s collaborative care and access program models the Massachusetts Provider Education Program (MCPAP). The pilot is similar to the MCPAP in scope; however, it differs in that WA Medicaid uses a single center for calls through the Seattle Children’s Medical Center Department of Psychiatry rather than several local resources. At this time the pilot is available in two regions. These regions were chosen due to higher than expected utilization of mental health medication (high dose and poly-pharmacy). The program is marketed with an emphasis on foster care; however, there are no restrictions related to insurance status. The nature of the conversation between PCP and PAL consultants is best characterized as a “curbside consult” in style, but in substance it offers much more than a simple curbside. PAL consultants are expected to hold their advice to an evidence-based standard, using regular consultation group meetings to review currently available evidence based assessment and treatment information and to assure consistency across consultants. Consultant recommendations are based on a child mental health care guide developed specifically for this program and distributed to PCPs. One early measure of feasibility is overall utilization of the program. The program is featured on www.palforkids.org which contains contact information as well as a resources section with State agreed clinical algorithms.

Development Timeline

It took nine months to contract and build infrastructure for the lines. During the building, provider education and marketing began based on the mental health treatment and new mental health guidelines that were a strong marketing source.

Program Cost

The funds stem from a bill (SB1088) to improve mental health access. The PAL line had a budget line of $1.3 million.

Measured Results

Under PAL there are provisions for customer services (waiting and call back times) as well as reports on referrals, client types, issues and outcomes. A provider satisfaction questionnaire recently showed strong support. The program is tracking prescription changes, referrals for consultations, and inpatient evaluation recommendations. Thus far one in 10 consultations have led to a face-to-face review and exam. So far the PAL reviewers think that evidence based
treatment through consultations is giving raise to less expensive care that usual care. Each consultation begins by the PCP calling a toll free number that is answered by one of two assistants who work with the program. Over the first seven months of the program PAL has performed well over 300 phone consults originating from more than 150 providers. Of the calls received 17 percent were for kids 0-6 years old, 39 percent for kids 6-12, and 44 percent were for kids 12-18 years old. We have also provided local CME mental health education to over 170 providers (many of whom subsequently called our program). We have also begun to collect survey data relevant to feasibility and satisfaction. We have received 26 satisfaction surveys as of October 2008. These pilot data are quite positive with an overall average satisfaction/feasibility rating of 4.82 (SD = 0.32) on a 5-point scale (5 indicating the highest level of satisfaction/feasibility).

Qualitatively primary care providers using the program have been quite vocal in their support of the arrangement, saying things like, “It has been so incredibly awesome to have you guys,” and “The service is very valuable to me. I’m so glad I can call!” Qualitatively, the consultations questions thus far cover a wide range of topics and over half the time the primary consultation question is medication requests.

Outcomes

In the first seven months the PAL had 300 calls from 150 providers treating children (58 are in foster care).

Lessons Learned

Timelines for building this project are slow for the following reasons: (1) child and adolescent psychiatry resources are scarce and therefore competes for time with clinical duties, (2) marketing is more by word of mouth and typical mail FYI has been ineffective in boosting consolations, (3) mental health and psychiatry need to be at the table for design and implementation to ensure integration, (4) funding should be built in the Medicaid claims budget rather than an admin budget to ensure it is resistant to budget cuts, and (5) PCPs are more comfortable with telephone-only advice from PAL than we expected. To our knowledge, Washington is the first State to replicate and adapt the Massachusetts MCPAP child mental health consult program. Washington’s PAL provides rapid child mental health consultation and resource connection assistance to primary care providers over a very large geographic area with few specialist resources, and has a unique emphasis on providing service assistance to the State’s Medicaid population. There are plans for an extensive evaluation of this program for the University of Washington.

Promising Practice

This pilot program in two large rural Washington regions has improved access to children’s psychiatric services. The program enjoys wide community acceptance as evidenced through provider and consumer surveys. The program costs and implementation are supported through a State statute and funding by the legislature. The consultations are integrated into the foster care and mental health clinic systems. Outcomes measures including Rx cost effectiveness are being tracked and appear to bring some cost effectiveness. Outcomes, including referrals to services,
juvenile justice, foster care stability and placements, sick days in school, medical and mental health costs, are being tracked.

**For More Information**

Visit [www.palforkids.com](http://www.palforkids.com) or e-mail Jeff Thompson at ThompJ@dshs.wa.gov.
California: Use of the Web
Promising Practice

Background:
The California Mental Health Care Management Program (CalMEND) was established in 2005 as a quality improvement program to promote wellness and recovery for individuals with mental illness. Supported by funds from California’s Mental Health Service Act (MHSA), CalMEND operates under the sponsorship of the California Department of Health Care Services (DHCS) Pharmacy Benefits Division, in collaboration with the California Department of Mental Health. In 2007, CalMEND established a Web site www.calmend.org dedicated to the communication and dissemination of CalMEND news, program development and initiatives, including best practices and transformative changes.

Development Timeline

Three months.

Program Cost

$5,000 start up cost which included expenses associated with purchasing of hardware and software needed to launch the www.calmend.org Web site. Ongoing maintenance is budgeted at about four hours per week of staff time.

Funding Source

MHSA funded the cost of Web site designs, implementation and maintenance. DHCS and the Department of Mental Health provided the staff to support content development.

Performance Metrics

Quarterly reports on site visits and other statistics are collected to monitor the usage of this Web site.

Trends Changed

Traffic to the Web site (number of hits) has increased over time. The length of time spent on the Web site (depth of activity) has also increased. The number of inquiries (phone and emails) has also increased over time.

Lessons Learned

- Use of the Web is an efficient and cost effective way to inform the public on the development of CalMEND.
- Having a distinctive Web address— www.CalMEND.org—increases ease of access to the CalMEND program.
For More Information

Visit www.CalMEND.org or e-mail Penny Knapp at Penny.Knapp@dmh.ca.gov.
Background

Colorado Medicaid posted information about a two-year project conducted with Comprehensive NeuroScience (CNS) and is available on its Web site at http://www.colorado.gov/cs/Satellite/HCPF/HCPF/1201542571182. The project ran from July 1, 2006 through June 1, 2008.

In order to offer assistance in the establishment of quality-based mental healthcare, Colorado Medicaid has posted a link to the Florida Best Practices Medication Guidelines on its Web site at http://flmedicaidbh.fmhi.usf.edu/recommended_guidelines.htm. The link allows providers the ability to easily access the guidance provided by these suggested practices. In addition, CNS used these guidelines in establishing their quality indicators and Colorado Medicaid posted them on their Web site for providers interested in more background about the CNS program.

Development Timeline

The development of a timeline was not applicable to the posting of the links or information on the Web site for Colorado Medicaid.

Program Cost

There was no cost to post the links or information on the Web site for Colorado Medicaid.

Measured Results

No data were collected and no measurements of performance were conducted regarding the Web site postings.

Outcomes

No outcomes were scientifically measured regarding the Web site postings. Colorado Medicaid received informal feedback that providers appreciated having the information available on the Web site.

Lessons Learned

The Department is looking into expanding the information on the Web site. The Department plans to discuss what would be useful with interested stakeholders.

Unclassified Practice

Offering clinical resources on the department’s Web site is new to the community. It is unknown if the service will provide cost effectiveness, improve quality, improve access, or show improved outcome measures but Colorado is optimistic that providing and expanding the clinical
resources available to our providers will be of benefit. There are no barriers to implementation. The clinical community has expressed appreciation for the service.

**For More Information**

E-mail Kimberly Eggert at [kimberly.eggert@State.co.us](mailto:kimberly.eggert@State.co.us).
Maine: Edits at Point of Sale Leading to Mandatory Filing for Prior Approval
Promising Practice

Background

Maine’s PDL was implemented in July 2003. A PDL, unlike a formulary, has all drugs included in it with non-preferred drugs available under specific circumstances, through a prior approval (PA) mechanism. For the most part, restrictions apply only to new starts with grandfathering of persons on established regimens. Edits are programmed into the system for obtaining Medicaid authorization at the point of sale, disallowing dispensing and requiring the filing of a request for PA. Requests for PA are then reviewed by a medical staff employed by the State’s pharmacy management provider, with follow-up consultation to prescribers in specific cases. Preferred drugs must be tried and failed due to lack of efficacy or intolerable side effects before non-preferred drugs will be approved, unless an acceptable clinical exception is offered on the PA form, such as the presence of a condition that prevents usage of the preferred drug or a significant potential drug interaction between another drug and the preferred drug(s) exists.

Design

In Maine, especially in the early days of the PDL, designation as preferred or non-preferred was largely determined by a drug company’s willingness to enter into cost-lowering contractual agreements with the State, so long as clinically equivalent non-preferred drugs were available. The list of preferred and non-preferred drugs that is driven by these cost saving negotiations generally changes once a year, after contract negotiations are complete. Quality and safety edits are added at various times during any year, after review of the evidence, deliberation by the DUR (and in the case of psych drugs, the Psychiatric Work Group), and publication of the new PA requirements in various mailings to prescribers. Quality edits regarding high and low dosage and within class and duplicate therapies were among the first quality edits implemented in 2006, but others continue to be added as evidence indicates. Thus the point of sale edit and PA process is a dynamic and evolving system.

With regard to psychotropic drugs, as of May 2010, quality edits limit concurrent prescribing beyond a 90-day cross-over period for two or more antipsychotics, selective serotonin reuptake inhibitors (SSRI’s), benzodiazepines and other within class drugs. In January 2007 a limited step therapy protocol for atypicals was implemented (and fully implemented by July 2007), requiring a trial of one preferred atypical before therapy with a non-preferred agent could be approved. At present, non-preferred atypicals that require a trial of one preferred agent include Risperidal Consta, Saphris, Fanapt and Invega. Preferred atypicals such as Clozapine, Seroquel or Zyproxa become non-preferred and require a PA if used in combination with Carbamazapine. Other quality edits include PA requirements for low dose Seroquel (to diminish utilization as a sedative hypnotic) and also for certain combinations of drugs where there is data on interference with metabolic degradation by liver enzymes when these drugs are prescribed in combination, (e.g., carbamazapine in conjunction with Ability, Clozapine, Seroquel or Zyproxa). In 2010, a PA requirement will be implemented for the prescription of any antipsychotic to a child under the age of 5, and in the planning stages is a requirement for PA for continued prescription of an
atypical antipsychotic beyond six months in the absence of any Medicaid service claim showing that glucose or lipid testing has occurred.

Potential quality edits are reviewed by the Psych Work Group, a DUR MaineCare supported advisory group comprised of consumer advocates and psychiatrists representing State mental health agencies, hospitals, community mental health centers, the Maine Medical Association, and NAMI Maine. The PA process is managed by GHS, the State’s pharmacy management contractor. There are approximately 20,000 PA requests for all drugs in any given quarter. The wait time for review is, on average, 3.8 hours, with 75 percent of requests approved. Of 23,938 PA requests in the third quarter of 2007, 7.9 percent were for atypical antipsychotics and the remainders were for non-psychiatric drugs.

Development Timeline

The first edit for two or more drugs within a specific class for more than 90 days was started January 2006 and fully implemented by July 2006. The other quality edits have been ongoing.

Program Cost

Costs for programming the edits into the point of sale, medical review, and development of additional quality improvement initiatives are integrated into the contract between GHS and Medicaid. Support stems from the Psych Work Group and the DUR committee.

Measured Results

Data on utilization from the Child and Youth Antipsychotic study shows that overall utilization of antipsychotics did not change in the four years between 2004 and 2007 and that, overall, utilization of these drugs in Maine is in the top quartile compared to other States. Thus there does not appear to be a reduction in overall utilization of antipsychotics in the period in which the PDL and the PA processes were instituted. While one study limited to the first year of implementation of the PDL suggested that there was an increase in gaps in therapy in Maine, longer-term four year tracking of gaps in treatment from the Child Antipsychotic study shows that Maine’s rate of discontinuities is among the lowest of the 16 participating States, suggesting that adherence has not been adversely affected by the PA policy. Thus, the institution of the PA process for antipsychotics does not appear to have negatively affected access or adherence. Maine’s rates of antipsychotic poly-pharmacy and high dose antipsychotic prescribing is low compared to other States, suggesting that the PA requirements related to quality management have had the desired effect. Analysis of expenditures for antipsychotics has shown significant cost savings, even as overall utilization has remained stable.

Outcomes

Data has shown a decrease in rates of poly-pharmacy and high dose prescribing, with Maine rating amongst the lowest in the 16-State study. Gaps in adherence have remained stable and low. Introducing quality edits has therefore had the intended effect of improving quality and safety without sacrificing access or continuity. What is lacking is data on psychiatric outcomes, e.g., on impact of changes in policy on psychiatric emergency room use or hospitalization, or family or school function. Additionally, there was an increase in the number of children
diagnosed with diabetes, raising concerns about atypical antipsychotics and long term health issues, which have been highlighted as a potential factor in the 25 year premature mortality of adults with Serious Mental Illness. Maine hopes to join with other States in the next stage of analysis of antipsychotic use across the lifespan, with inclusion of data on both psychiatric and health outcomes.

**Promising Practice**

The use of the PA process to guide quality and safety has been in place statewide for the past four years. Data from the Child Antipsychotic Study has shown improvements in quality of prescribing without change in access or discontinuities. Although members and providers were skeptical in the early stages of implementation of the PDL, the utilization of the PA process has gained more widespread acceptance, as a result of greater collaboration with the mental health community, broader educational programs, greater knowledge about the dangerous side effects of the atypicals, and efforts to reduce the administrative burden on psychiatrists treating the sickest populations.

**For More Information**

Visit [www.mainecarepdl.org](http://www.mainecarepdl.org) and [www.ghsinc.com](http://www.ghsinc.com) or e-mail Elise Freeman at Elsie.Freeman@maine.gov.

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Missouri: Prior Authorization (PA) of ADHD Medications
Unclassified Practice

Background
Missouri’s prior authorization of ADHD medication is a clinical edit process focused primarily on ensuring appropriate utilization utilizing clinical criteria.

Design
The edit process uses pharmacy claims data analysis of the prior three years as well as physician and hospital claims allowing that most requests be adjudicated without requiring prescribers to send additional information. The approval criteria are age banded with separate criteria for under 6 years old, 6 to 18 years old, 18 to 23 years of age, and over 23 years of age. Approval under 6 years of age requires use of standardized rating scale. Approval of an ADHD medication over 23 years of age requires psychiatric consultation for initial diagnosis and treatment initiation and may require use of the standardized rating scale. Persons with prior claims for substance abuse disorders, use of benzodiazepines or three or more psychiatric medications are flagged for clinical consultant review.

Development Timeline
The ADHD clinical edit took approximately 18 months to develop. Feedback was obtained at several points in the process from DUR and PA public committee hearings. An expert work group was formed to review literature and develop the criteria.

Program Cost
Unknown.

Measured Results
Unknown.

Lessons Learned
Program still in development.

Unclassified Practice
Program is still in development and no results have been achieved.

For More Information
E-mail Joe Parks at Joe.Parks@dmh.mo.gov
**New Hampshire: E-Prescribing**  
**Emerging Practice**

**Background**

New Hampshire’s e-prescribing program began as part of its pharmacy benefit management services. In order to realize the benefits of e-prescribing, the prescriber must have access to a patient’s drug history and alerts regarding potential adverse drug events. Eventually, individual payer management tools will be available through e-prescribing (e.g., prior authorizations, quantity limits, etc.). When available, these tools will further reduce adverse events and markedly reduce prescriber and pharmacist administrative burden. The NH Medicaid program and its pharmacy benefit administrator, First Health Services, Inc, jointly managed the project.

**Development Timeline**

It took six months to initiate the intervention.

**Program Cost**

The initial cost of creating the database to hold formulary and clinical information was approximately $64,000 and $0.14/drug transaction. Funding came from existing PBA administrative funds. No new funding was used.

**Measured Results**

The performance metrics include the number of prescribers currently accessing the database, monitored quarterly.

**Outcomes**

The number of prescribers fully capable to e-prescribe in NH is still small. It’s anticipated that with the Medicare requirement to e-prescribe, the number of prescribers will increase. Additional outcomes could be better adherence to the Medicaid program’s preferred drug list; however, many more prescribers would be needed. Generic utilization is already quite high in the State of NH; it is not expected to significantly increase due to e-prescribing. The Medicaid program does not monitor adverse drugs reactions.

**Lessons Learned**

The project was remarkably cheap and easily implemented. NH Medicaid has enabled prescribers to use e-prescribing for beneficiaries. The next steps belong to prescribers.

**Emerging Practice**

The number of prescribers is still small and the impact on prescribing patterns has not been measured.
For More Information

E-mail Doris Lotz at dlotz@dhhs.State.nh.us
New York: PSYCKES, Prior Authorization, and Feedback
Promising Practice

Background
The New York State Office of Mental Health (OMH) developed and implemented a phased approach to improving prescribing practices in its entire network of 26 State-operated inpatient psychiatric hospitals.

- Phase I: PSYCKES Implementation—The Psychiatric Services and Clinical Knowledge Enhancement System (PSYCKES) was developed and implemented in all OMH-operated State hospitals. PSYCKES provides access to client-level data derived from State administrative pharmacy databases, summarizing individual treatment histories back to 1989 and flagging questionable practices. PSYCKES also measures performance on guideline-derived quality indicators at the State, hospital, ward, and prescriber levels.
- Phase II: Prior Authorization—After PSYCKES was implemented, PA was established by the Office of the Medical Director in April 2005. This policy required written PA by the OMH Medical Director for use of three or more antipsychotics; it did not, however, block prescriptions from being filled.
- Phase III: Feedback—Six months after instituting PA, feedback to hospital clinical and administrative leadership was established. On a quarterly basis each hospital executive director and clinical director received a list of patients on three or more antipsychotics. Performance on this measure was discussed in quarterly meetings among hospital leadership and OMH central office leadership.

Development Timeline
PSYCKES was developed by an in-house OMH team for State-operated inpatient units in 2002-2003. First, quality measures were established and then end users engaged with prototyping reports, focus groups, and other readiness activities. The programming for the Web-based version of PSYCKES occurred in 2003, and was implemented in 2004-2005. As above, PA was established in April 2005 and six months later feedback to hospital leadership was initiated.

Program Cost
- Costs were attributed to dedicated personnel supporting the project:
  - Senior Project Director—.5 FTE x four years
  - Senior programmer—one FTE x one year for development
  - SAS programmer/data analyst—one FTE x one year; 0.5 FTE x one year for evaluation; 0.25 FTE ongoing for maintenance;
  - Field worker/technical assistance—one FTE x two years; 0.1 ongoing

Measured Results
- To evaluate the impact and success of the project we used the following measures:
  - Participation rates at the hospital and prescriber level—tracked via requests for access
  - Rates of use—tracked via usage logs
• Impact on prescribing practices, specifically use of antipsychotic poly-pharmacy—tracked via PSYCKES

Outcomes

• Participation rates:
  o 100 percent of hospitals that offered access to PSYCKES requested access.
  o Prescribers were a target end user group and 75 percent requested access.
  o Rates of use of PSYCKES: use remained stable after implementation over a two-year period of study, with 30 percent of enrolled users logging on each month.
  o Clinical supervisors had the highest level of use.

• Impact on prescribing practices:
  o Overall prevalence rates of antipsychotic poly-pharmacy of three or more decreased 85.1 percent
  o Awards helped to document acceptability and impact of the project.
  o Governor’s Workforce Champion Award for improving the work life of staff (prescribers)
  o Council of State Governments Award for Innovation
  o Based on the success of the project, OMH was funded for an expansion to the State Medicaid system statewide, focusing on poly-pharmacy in youth and adults

Lessons Learned

• Stakeholders, including prescribers, are interested in having access to administrative data for the purposes of managing clinical care and improving quality.
• PSYCKES can be used as a tool to improve quality and efficiency.
• Mandates alone may move practice, but not as significantly as when these policies incorporate monitoring and feedback.
• Evaluation of clinical impact and economic modeling can help to secure ongoing and enhanced funding for quality improvement.

Promising Practice

Data are available to support impact, have been presented at professional conferences, and are currently being prepared for publication. The project is mature (fully implemented by October 2005), and has been expanded to 337 outpatient mental health clinics. Impact can be assessed for all sites through PSYCKES. The project yielded both cost savings and quality improvement. PSYCKES have high levels of acceptance as evidenced by State and national awards, high participation rates, usability ratings, and stable usage rates over a two year follow-up period. PSYCKES was initially developed and implemented by an in-house team without additional resources, however, may require additional resources depending upon State. Some States have barriers to data sharing beyond the Health Insurance Portability and Accountability Act (HIPAA) that create challenges to implementation.

For More Information

E-mail Molly Finnerty at COMDMTF@omh.State.ny.us.
Pennsylvania: Prior Authorization of Olanzapine
Mature Practice

Background

In August of 2005, the Pennsylvania Office of Medical Assistance Program’s Fee-For-Service Pharmacy and Therapeutics Committee (P&T) reviewed the atypical antipsychotics as part of the PDL process. Whenever behavioral health drugs are reviewed, the P&T Committee adds several psychiatrists as voting members. The Committee includes a physical health and behavioral health consumer as voting members. The consumers also have a voting physician advisor.

At the Committee meeting there was general discussion about the efficacy of the newer antipsychotics and their side effects, especially since the CATIE study was about to be released. This study indicated that olanzapine was associated with greater weight gain and metabolic side effects than other antipsychotics. There was concern about utilization of this drug in adults and especially in Pennsylvania’s Medicaid pediatric population that already exhibited a 15 percent rate of obesity and a 17 percent rate of being overweight. The P&T Committee recommended olanzapine undergo prior authorization requiring the trial and failure of one preferred antipsychotic by adults and children before trying olanzapine. Existing recipients were grandfathered and allowed to continue their medication without prior authorization.

Development Timeline

The Committee made its recommendation in August of 2005. The recommendation was presented publicly at the Pennsylvania Medical Assistance Advisory Committee and then underwent a public comment period. After reviewing public comment, the Secretary of the Department of Public Welfare, Estelle Richman, approved the recommendation. A Medical Assistance Bulletin describing the list of preferred and non-preferred drugs as well as the prior authorization process was published in November of 2005 (see Web links below). From August to November, system changes were made to the MMIS claim payment system so that pharmacies would know via hard edit at the point of sale that prior authorization of olanzapine was required for non-grandfathered recipients. The program was implemented in November of 2005. See the following Web sites for details:

http://www.dpw.State.pa.us/PubsFormsReports/NewslettersBulletins/003673169.aspx?AttachmentId=4418

Program Cost

Implementation costs were minimal (<$10,000) since no new staff positions were added to the existing pharmacy management unit in the Bureau of FFS Programs. Costs were associated with MMIS system changes, notices to providers and internal training.
Measured Results

The following pediatric metrics were developed to assess the program—unique recipients receiving the drug by age, percent of recipients receiving olanzapine that are on any antipsychotic (market share), total cost for olanzapine per year, and average cost of olanzapine per recipient.

Outcomes

Unique recipients receiving olanzapine were reduced from 2004 to 2007

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Percentage of Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &lt;5 Years</td>
<td>50</td>
<td>27</td>
<td>18</td>
<td>8</td>
<td>-84%</td>
</tr>
<tr>
<td>Age 6-11 Years</td>
<td>535</td>
<td>355</td>
<td>186</td>
<td>124</td>
<td>-77%</td>
</tr>
<tr>
<td>Age 12-18 Years</td>
<td>1,215</td>
<td>763</td>
<td>503</td>
<td>384</td>
<td>-68%</td>
</tr>
<tr>
<td>Total</td>
<td>1,800</td>
<td>1,145</td>
<td>707</td>
<td>516</td>
<td>-71%</td>
</tr>
</tbody>
</table>

Market share of olanzapine was significantly reduced. Market share was defined as the number of recipients receiving olanzapine divided by the number of recipients on any antipsychotic

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total on olanzapine</td>
<td>1,800</td>
<td>1,145</td>
<td>707</td>
<td>516</td>
</tr>
<tr>
<td>Total on antipsychotic</td>
<td>9,473</td>
<td>10,442</td>
<td>11,168</td>
<td>12,032</td>
</tr>
<tr>
<td>Percentage on olanzapine</td>
<td>19.0%</td>
<td>11.0%</td>
<td>6.3%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

The total cost for olanzapine per year and average cost of olanzapine per recipient were both significantly reduced

<table>
<thead>
<tr>
<th>Year</th>
<th>Unique Recipients</th>
<th>Paid Amount</th>
<th>Avg. Paid Per Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1,800</td>
<td>$2,455,407.09</td>
<td>$1,413.59</td>
</tr>
<tr>
<td>2005</td>
<td>1,145</td>
<td>$1,701,119.64</td>
<td>$1,545.07</td>
</tr>
<tr>
<td>2006</td>
<td>707</td>
<td>$983,008.56</td>
<td>$1,535.95</td>
</tr>
<tr>
<td>2007</td>
<td>516</td>
<td>$708,541.02</td>
<td>$1,373.14</td>
</tr>
</tbody>
</table>

Lessons Learned

Engaging the psychiatric community, consumers, and other stakeholders in the discussion of prior authorizing olanzapine was essential to successful implementation of this initiative. To assure an adequate safety net, availability of a five-day emergency supply and grandfathering of current consumers was allowed.

Implementing prior authorization of olanzapine based on clinical quality concerns about metabolic syndrome and childhood obesity resulted in: reductions of unique olanzapine users, reduced market share, and reduced spend on this drug. Unfortunately overall utilization of antipsychotics in children has continued to increase in Pennsylvania and market share has shifted significantly to another branded product (aripiprazole).
Mature Practice

The initiative was implemented in a relatively short time frame, has proven to be effective over the past 3 years in reducing utilization and cost of a drug with concerning side effects, and has generally been accepted by the provider community and consumers.

For More Information

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Background

The appropriate use of psychotropic medications in youth is an important public health concern. We built a review process in Washington State to monitor the use of attention deficit hyperactivity disorder (ADHD) drugs in youth receiving fee-for-service Medicaid services. The program developed safety parameters for medications based on a process involving clinicians, community providers, consumer advocates, and industry. A second opinion by a community psychiatrist was mandated for all prescriptions above safety thresholds (e.g., dose, combination therapies, or < age 5). Utilization and cost were compared two years before and after the program began. Pharmacy claims had edits to stop ADHD medication for new starts and initiate a second opinion for refills.

Development Timeline

The program was developed over approximately six months of discussion with the community. Implementation took approximately three months and included provider communication as well as provider training.

Program Cost

Funding for this program was accomplished through the Medicaid outpatient claims system. Second opinions were given a unique current procedural terminology (CPT) code at a rate of $225 per record review. Total costs of the program were approximately $100,000 with estimated savings of $1.1 million and a return on investment of 1:10. There was a strong Hawthorne effect in practice change.

Measured Results

Claims from the pharmacy system were used to monitor trends. A provider questionnaire was conducted to assess customer service and program outcomes showing good provider acceptance and customer service without an increase of fair hearings.

From May 2006 to April 2008, 5.35 percent of ADHD prescriptions exceeded safety thresholds, resulting in 1,032 second opinion reviews. Of those, 576 (56 percent) resulted in a prescription adjustment. Of the prescriptions adjusted, 322 (37 percent) were from primary care physicians, 86 (28 percent) were from psychiatrists, 54 (38 percent) were from nurse practitioners (ARNP), and 21 (38 percent) were from physician assistants. When the pre- and post-periods were compared, second opinions reduced ADHD medication utilization in children less than 5 years of age (23 percent), use of high dose (53 percent) and use of combinations (44 percent). The review process resulted in a savings of $1.2 million with 798 fewer patients exceeding safety thresholds. However, the overall Medicaid expenditures for ADHD medication still increased due to higher unit costs and the preferential use by clinicians of newer brands entering the
market. We are using these outcomes to put in place the AP second opinion process. The program will be measured in similar manner as ADHD medications (see table below).

**Lessons Learned**

A statewide second opinion process reduced outlier ADHD medication practices, was cost effective, and overall worked well with the community. Initially the program contracted with three children's regional hospitals. There were difficulties in maintaining good inter-rater reliability between these three centers. The program has been restructured and now contracts with a single hospital.

**Mature Practice**

This statewide second opinion is mature (>3 years), was built and well accepted by the clinical community as evidenced through a provider survey, was cost effective, improved quality, improved access to child psychiatry, was integrated into the claims system, thus making implementation and payments simple, and the outcome measures showed improvement (lower numbers of kids on too many, too much, or too young). The outcomes have been reviewed internally and were published in the the Journal of the American Academy of Child and Adolescent Psychology (JAACAP).

The Pediatric Advisory Group agreed on the following thresholds based on a review of the claims data reflecting the community prescribing practices. The following thresholds have been incorporated into the clinical guidelines:

- Absence of an of DSM-IV diagnosis in the child’s claim record
- Children less than 5 years of age receiving antipsychotic and ADHD drugs
- Five or more psychotropic medications prescribed concomitantly after 60 days
- Two or more concomitant antipsychotic or ADHD medications after 60 days
- Three or more concomitant mood stabilizer medications
- Prescribed psychotropic medication is not consistent with appropriate care
- Psychotropic poly-pharmacy for a given mental disorder is prescribed before utilizing psychotropic monotherapy as new start noted from pharmacy claims data

<table>
<thead>
<tr>
<th>Drug</th>
<th>FDA Max Dose</th>
<th>&lt;3* Yrs</th>
<th>3-5* Yrs</th>
<th>6-12 Yrs</th>
<th>13-17 Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risperidone</td>
<td>16 mg</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>20 mg</td>
<td>0</td>
<td>2.5</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>800 mg</td>
<td>0</td>
<td>0</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>Ziprasidone</td>
<td>160 mg</td>
<td>0</td>
<td>0</td>
<td>80</td>
<td>160</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>30 mg</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Clozapine</td>
<td>900 mg</td>
<td>0</td>
<td>0</td>
<td>600</td>
<td>900</td>
</tr>
<tr>
<td>Medication</td>
<td>Limitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haloperidol</td>
<td>0 0 10 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perphenazine</td>
<td>0 0 12 24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methylphenidate</td>
<td>Greater than 120 mg (any age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dextroamphetamine</td>
<td>Greater than 60 mg (any age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vyvanse</td>
<td>Greater than 70 mg (any age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daytronna</td>
<td>Greater than 30 mg (any age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strattera</td>
<td>Greater than 120 mg (any age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combination use of SSRI and SNRIs</td>
<td>Restricted to failed mono-therapy and no dosing two SSRI or two SNRIs in combination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*A zero would indicate the need for an expert opinion.

**For More Information**

E-mail Jeff Thompson at ThompJ@dshs.wa.gov.

Notes on Use of the Classification Matrix

The following matrix is designed to classify State activities through a series of categories that capture the scope and depth of the implementation. The intended use of the matrix is to determine where within the spectrum of achievement a current or contemplated State practice lies. The goal is to identify practices that have worked well or are believed likely to do so, and to highlight practices that are replicable in many States. The exercise is not intended to “rank” or “rate” a State’s performance in response to the challenge of antipsychotic medication use in children.

“Mature” practices include those which have achieved acceptance because of their documented performance, but given the nature of innovation it is implicit that “promising” or “emerging” practices may in time prove more effective than those presently declared as “mature.” In theory, a State presently engaged in a few established activities, for a variety of social, fiscal, or political reasons, may find that their activities are mature practices, while another State with more opportunities and resources, pursuing a number of aggressive and innovative measures, may find that their practices are promising or emerging. Neither condition is better or worse than the other. And for numerous reasons, an activity that has found great success in one venue may be impractical or unachievable in another.

Considerations in Using the Matrix

It is not expected that a practice will have all the properties listed within a single column. For example, a mature practice may have dissemination to only a few locations, possibly because of cost or difficulty in implementation, while another practice that has been taken up by many sites may have little information available about its efficacy and thus remain a promising practice. In each case, assignment will depend on the thoughtful judgment of the reviewer.

A single phrase or two describes most features of a practice. In two instances, “cost effectiveness” and “acceptance,” it was felt that two contrasted qualities needed to be considered simultaneously. For example, initiatives to address matters of cost should not be assessed without recognizing the potential for impact on quality. Similarly, acceptance of a practice by providers may be divergent to acceptance by members (recipients). Both have a stake in the assessment of practices. We also considered the role of acceptance by implementers (i.e., State employees), but found that placement with concerns for the external stakeholders would be confounding. Concerns of Medicaid employees may be addressed in the “implementation” section.

There are undoubtedly other features of these practices that have not been addressed by this matrix. We felt the tension between completeness and usability of the tool. We hope that the features we have selected will be sufficient to achieve the goals of identifying useful activities of comparable quality, and that this endeavor will help in achieving optimum care for our youngest Medicaid members.
<table>
<thead>
<tr>
<th>Evidence</th>
<th>Mature Practice</th>
<th>Promising Practice</th>
<th>Emerging Practice</th>
<th>Unclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peer Reviewed. Published studies or detailed reports with methods and outcomes data showing clearly showing desired results. More than one study or report. Independent review(s).</td>
<td>At least one implementation site with data showing desirable results.</td>
<td>Implementation in at least one site. Data may be preliminary.</td>
<td>None</td>
</tr>
<tr>
<td>Maturity</td>
<td>Varies, but usually three or more years.</td>
<td>Varies. Usually within one-three years.</td>
<td>Less than one year to two years. Could be longer.</td>
<td>Usually less than year or could be in planning phase. Could be longer.</td>
</tr>
<tr>
<td>Dissemination</td>
<td>Multiple implementations (possibly of varying maturity). Geography depends on the practice.</td>
<td>One or more implementations, at least one site with data.</td>
<td>At least one implementation.</td>
<td>May still be conceptual.</td>
</tr>
<tr>
<td>Cost Effectiveness</td>
<td>Cost</td>
<td>Quality</td>
<td>Net Saving</td>
<td>Wash</td>
</tr>
<tr>
<td>Access</td>
<td>Substantial shifts in access in the desired direction.</td>
<td>Shifts in access in the desired direction.</td>
<td>May show shifts in access in the desired direction; or does not shift untoward.</td>
<td>Unknown</td>
</tr>
<tr>
<td>Acceptance</td>
<td>By Provider</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>By Member</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td>Implementation</td>
<td>Straightforward. Minimal review. Minimal additional costs. Most resources already in place.</td>
<td>May be straightforward, or may require agency or legislative review. May require budgetary increases and/or additional resources.</td>
<td>Significant perceived barriers of cost, acceptance, review and/or resources.</td>
<td>Unknown, but barriers expected.</td>
</tr>
</tbody>
</table>