

Children with Special Health Care Needs--Health Administration Case Study: Quality

Following is an example of applications to promoting quality services in a health care provider servicing children and families with special needs.
(Common concepts are noted in **bold** type.)

A Case Example of TQM Rapid Cycle Continuous Performance Improvement

Overview: This case illustrates the use of a TQM strategy – the rapid cycle process improvement approach of Plan, Do, Study, Act (PDSA). The aim of the process improvement effort is to achieve the standards of practice related to family-centered care, medical home, and cultural competence. This case illustrates how several aspects of quality of care are integrated to advance quality in this health care setting: patient empowerment, TQM, and evidence-based practice which assumes that the Title V national standards and performance measures are based in evidence of their effectiveness in optimizing outcomes for children and families. Also illustrated in this case is the importance of measurement to monitor progress of the quality improvement effort.

The Neurodevelopmental Clinic of the Beatrice F. Kaplan Medical Center in Orono, Maine, has embarked on a quality improvement project whose aim is to better meet two national performance measures for children with special health care needs (CSHCN) established by the federal Maternal and Child Health Bureau,¹ a principle funder of the clinic. The clinic provides highly specialized diagnostic and care planning services for neurodevelopmental conditions, which are disorders that involve varying levels of impairments in physical, cognitive, and behavioral functioning and that are generally considered to be chronic over the lifespan. Examples of neurodevelopmental conditions are autism spectrum disorders, attention deficit hyperactivity disorder, mental retardation, cerebral palsy, global developmental delay, and communication disorders.² The two national performance measures for serving children with special health care needs being addressed in this instance are: *1) every child with a special need should have a medical/health home; and 2) the families of children with special health care needs partner in decision-making and are satisfied with the services they receive – health care is “family-centered.”* In 2002 the American Academy of Pediatrics called for a medical home for all CSHCN.³ **Medical Home** includes:

¹ <http://www.ahrq.gov/chtoolbx/measure5.htm>.

² Michael J. Guralnick, ed. *Interdisciplinary Clinical Assessment of Young Children with Developmental Disabilities*. Baltimore MD: Paul Brooks Publishing Co., 2000.

³ American Academy of Pediatrics. Medical Home Initiative for Children with Special Health Care Needs Project Advisory Committee. The medical home. *Pediatrics*. 2002;110:184-186. TF Tonniges and J Palfrey. Supplement to Pediatrics – The Medical Home. *Pediatrics*. 2004;113:1471-1548.

a partnership between the family and the child's primary care doctor, a relationship based on mutual trust and respect, connections to supports and services to meet the child's and family's needs, respect for the family's cultural and religious beliefs, after hours and weekend access to medical consultation, perceived support in caring for a child with special health care needs, and the primary doctor working with the team of other care providers.⁴ **Family-centered care** represents an approach to services for CSHCN and their families that embodies these principles: each family is unique, the family is the constant in the child's life, the family is the expert on the child's abilities and needs, the family works together with service providers to make informed decisions about the services and support, and the strengths and needs of all family members are considered.⁵

Clinic staff have noted a gap between current clinic practice and national standards for medical home and family-centered care in three areas that could be addressed by a quality improvement effort: better attention to medical home in the assessment process and care plans, improving shared decision-making in the parent-provider conferences, and decreasing waiting times for parents to obtain the oral and written results of the comprehensive assessment thus increasing family satisfaction. Attention to these three problems will require altering some of the current systems and procedures, including intake, scheduling, clinical dictations procedures, care planning, and follow-up.

Process Modification Method

Given the complexity of assessment process and multiple players and systems involved, a team approach to making changes that can better align clinic practices with national guidelines will be required. The management team wants to make improvements quickly in anticipation of accreditation by the JCAHO in the near future. Therefore, the management team has chosen to use the Focus PDSA approach to quality improvement⁶ to address the goals related to medical home and family-centered care. Practice change goals related to medical home will focus on acquiring in-depth information on the patient's current health care providers and integrating the role of community providers into the results and recommendations phase of the assessment. Enhancement of family-centered care should focus on examining the case conference and parent conference phases of the assessment process to consider ways of reducing family waiting time and improve planning for the family-provider communication and care planning that occur during the case conference and parent conference phases of the assessment. Four procedural changes will be pilot-tested during the study phase of the PDSA cycle related to intake procedures, scheduling, and a

⁴ American Academy of Pediatrics National Center of Medical Home Initiatives for Children with Special Needs. www.medicalhomeinfo.org.

⁵ S King, R Teplicky, G King, P Rosenbaum. Family-centered service for children with cerebral palsy and their families: a review of the literature. *Seminars in Pediatric Neurology*. 1004;11:78-86.

⁶ M Schwarz, SE Landis, JE Rowe. A team approach to quality improvement. *Family Practice Management*. 1999. Retrieved: www.aafp.org 9/23/2003.

decision support intervention that will help clinicians have better access to complex clinical information on each patient to support clinical judgment: 1) a new form will be designed and added to the intake process that will require collection of comprehensive information the patient's current health care providers; 2) new procedures regarding dictations by all clinicians will be completed and reviewed by all involved providers prior to case conferences; 3) case conferences will be scheduled for 60 minutes on a day prior to the parent conference; 4) contact with the child's primary care provider will be formally included in the care plan.

P: The Planning Phase. The first step is to assemble a charter group – the Quality Improvement (QI) team - that will take on the project. The composition of this group will include members from the clinic's core management committee, the medical home leadership team (a group that already exists within this health care system), and administrators. The next step is to develop a process chart (or run chart) that identifies all aspects of the clinical process and the key individuals responsible for these processes that are associated with medical home and family-centered care practices. The team will also identify which individuals within the clinic management structure can support the permanent implementation of any changes that emerge from a pilot or test phase. This group would constitute a charter group that can lead the development of the QI project. The charter group will educate clinic staff regarding the national performance measures, the distance the clinic program may be from the actual to the ideal, and how to contribute to the quality improvement process. The next step is to review data pertinent to the practice change goals, for example, select random patient charts to gather an estimate of the frequency of obtaining sufficient medical home information on each patient and the extent to which cases currently include the medical home principles in the recommendations. Clinical staff and parent interviews should be conducted over a 2-4 week period to obtain their perspectives on satisfaction with scheduling and wait times.

D: Do Phase. Proposed changes in one or more areas may be undertaken during the pilot phase in any of these areas - intake, scheduling, and parent conference procedures. The pilot period would optimally span a 3 month period and include all cases during that interval to obtain a good representation of routine clinic business.

S: The Study Phase. During this phase of the cycle, proposed changes in clinic procedures will be implemented and monitored for process changes and outcomes.

Medical home process measures: documentation of current care providers for index child at intake, documentation of medical home recommendations in care plan, documentation that assessment results were shared with primary care physician or case manager of a health plan or community service system.

Family-centered care process measures: documentation of topics covered in parent conferences (explanations from each clinical assessment, verification

that parent/child understood the clinical findings, discussion of the care options, documentation of mutual agreement, and disagreements if any, on the recommendations for ongoing care), ratio of actual length of case conference and parent conference times to booked time lengths, documentation of wait times for the parent conference and interval between parent conference and completion of final report for parents.

Outcome measures: increased parent and provider satisfaction over baseline estimates, primary care provider satisfaction with diagnostic information received, improved functional health of index child at one-month follow-up post final report, decreased costs associated with clinical staff time dedicated to case and parent conferences.

A: *The Act Phase.* It is in this phase that the QI charter team will make its recommendations to the Clinical Services Committee to either permanently establish those practices that have proven feasible and effective or abandon the approaches that have proven ineffective and explore other strategies or process improvement goals. If the pilot study pointed to some successful care processes, the charter QI team should then develop a detailed business plan that would specify additional resources needed in areas such as staff development and decision support tools for clinicians and administrators. Since staff time is so limited in this clinic, these procedures will streamline the process of patient-provider communication and hopefully free up staff time that could be directed toward other quality improvement projects, thus establishing continuous quality improvement in this vital clinic.