The State Medical Home Team and Title V at the South Carolina Department of Health and Environmental Control have created educational materials on the medical home concept for children with special health care needs. Request medical home brochures for families or for physicians; resource brochures and posters; or a copy of an eleven minute training video on this concept. Contact information for requests is provided below.

Printed with the support of the S. C. State Medical Home Team and Champions for Progress at Utah State University. For more information contact betsywolff@aol.com or call 803-782-0238.

July 2004

Palmetto Pediatrics

A Case Study of Dr. Robert Walker's Medical Home Mentor Site

The Project

A series of mentor medical home sites are being developed by the S. C. State Medical Home Team under the leadership of the Title V program in the S C. Department of Health and Environmental Control. The majority of project activities are funded by a three-year grant from HRSA that began in 2002. Key members of the State Medical Home Team include representatives of the state's chapter of the American Academy of Pediatrics, Family Connection of South Carolina, Inc., the state's Medicaid agency, and the University of South Carolina School of Medicine.

Delivery Model

Palmetto Pediatric and Adolescent Clinic is a large practice that includes 16 physicians working in 4 office locations in the Greater Columbia Metropolitan Area in central South Carolina. The practice patient population is characterized as fairly educated and affluent with the majority of parents of children with special health care needs equipped and empowered to navigate their systems of care and advocate on their children's behalf. Approximately 26% of practice patients are Medicaid eligible.

Kim Peters, a licensed practical nurse with significant experience working with children with special health care needs (CSHCN), was promoted internally to serve as the Special Needs Care Coordinator for a cohort of 125 to 150 CSHCN in October 2002. Sherry Larson, an experienced support parent employed by Family Connection works in the practice part-time, assisting Kim Peters in educating families and facilitating their navigation through systems of care. A Medical Home Advisory Team comprised of approximately 15 parents of CSHCN was created by Palmetto Pediatrics to provide guidance and direction to the project. This group meets quarterly.

Patients selected for the project were determined by individual physicians. In the early phase of the grant, each MD made a list of his or her special needs patients with higher levels of medical complexity. These patients were all enrolled initially. Other patients were added by the MDs as they enrolled in the practice or were seen in the office. A referral form was developed internally to use at all 4 locations for referral to the Special Needs Coordinator.

Framework of Project

The framework used for project implementation was based on a program developed by the Center for Medical Home Improvement under the leadership of Dr. Carl Cooley. The Center asserts that the following six domains are defining concepts for a medical home: organizational capacity, chronic care management, care coordination, community outreach, data management, and quality improvement.

Medical Home Strategies

(a) A licensed practical nurse was hired to serve as a full-time care coordinator.
(b) A trained support parent was placed in the practice to support care coordination activities.
(c) The practice's medical chart forms were revised to reflect a comprehensive, coordinated care plan that promoted preventive as well as specialty care for children with special health care needs.
(d) Changes to the medical record facilitated the core service characteristics of a medical home.
(e) The parent's role was enhanced to include conducting interviews with families of other children with special health care needs on thoughts and concerns about their children's care.
(f) A comprehensive resource manual containing

updated information on specialists, community-based resources, school programs, family support services, state agency-sponsored services, and wellness programs have been developed.

(g) A Medical Home Advisory Committee of 12 to 15 parents provides programmatic direction.

(h) All practice staff receive training on medical home issues at quarterly meetings.

(i) Quarterly educational offerings are held for all families of CSHCN in the practice.

(j) Charts were color coordinated to indicate a CSHCN and computer "ticklers" were added to allow more time scheduled for these patients.

(k) Physicians were trained on services available for CSHCN in the area on a monthly basis.

Evaluation

As part of primary data collection, family satisfaction surveys are conducted annually, with an initial assessment occurring before the intervention. The most recent assessment using a tool developed by Cooley, showed that families of cohort patients were most satisfied with the medical home's --

(a) Improved access to their children's medical records,

(b) Physician and staff relationship with the family,

(c) Practice advocacy work,

(d) Assistance in finding adult services, and

(e) Increased communication with providers.

Physicians and office staff are surveyed annually to capture how they view their practice as a medical home. Using a tool adapted from the AAP, office staff recently indicated they were very satisfied with how the medical home is providing compassionate and accessible care. A Cooley tool assessed the physicians, who most recently demonstrated significant improvements in how they perceived their --

(a) Organizational capacity,

(b) Chronic condition management,

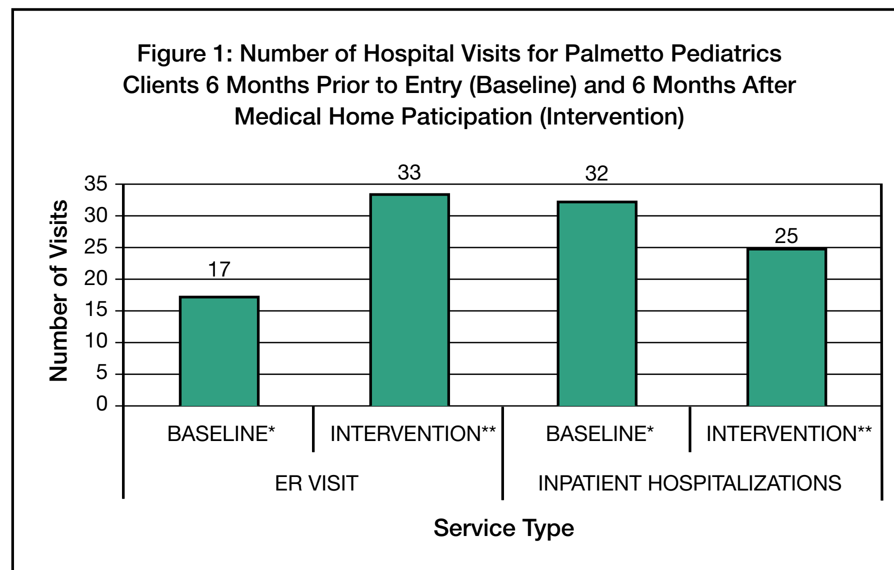
(c) Care coordination,

(d) Community outreach,

(e) Data management, and

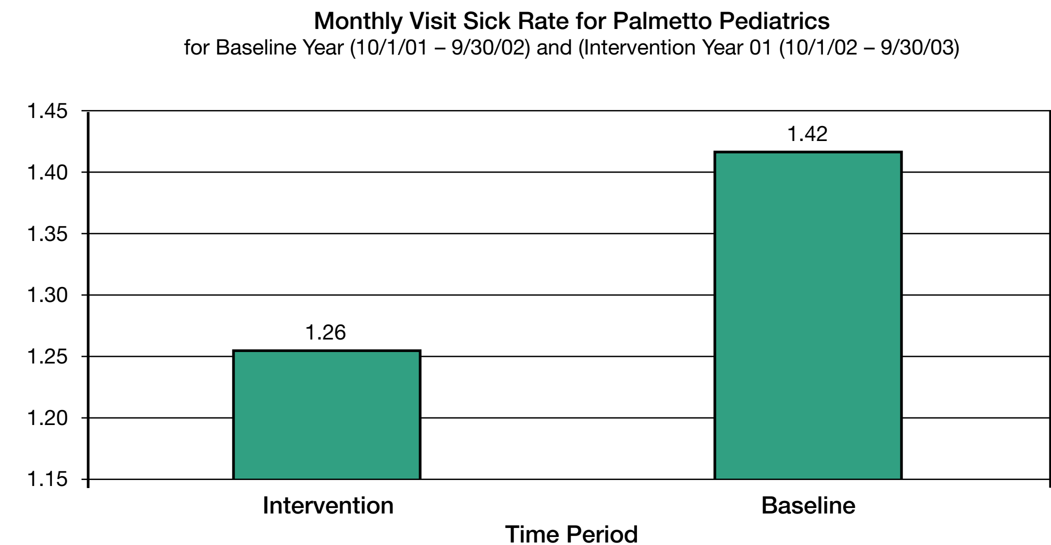
(f) Quality improvement.

A secondary data analysis evaluates the service utilization side of the medical home. Specifically, hospital claims data is used to examine inpatient hospitalizations and emergency room visits. The case group's service utilization was compared against themselves 6 months prior to enrollment in the medical home to 6-months after participation in the medical home.

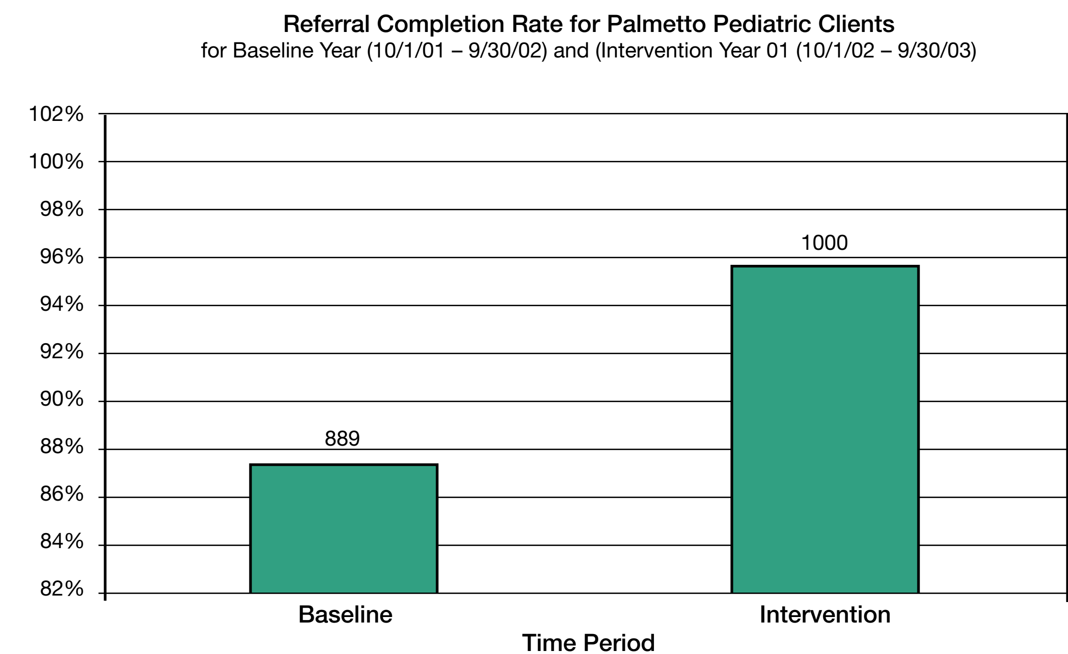


While the inpatient hospitalizations decreased during the first 6-month intervention period, emergency room utilization increased. This increase is likely an artifact of the education that is given through the medical home on the availability of health care resources. The analysis will be conducted again at the 1-year, 2-year, and 3-year intervals of the intervention time period. It is anticipated that as the intervention matures and is practiced, the desired health service utilization will be actualized.

A medical record review was conducted to assess (a), the volume of sick child visits (b) compliance with well child visits, and (c) the percent of referrals completed for a sample of children participating in the medical home. Sixty medical records were randomly selected from the study cohort for inclusion. The results demonstrated positive changes in health seeking behaviors for the children in the medical home. The average number of sick visits decreased from 8.12 during the baseline period to 7.69 during the intervention period. The monthly sick visit rate decreased from 1.42 to 1.26, as evidenced in the figure that follows. Conversely, the percent of children receiving age appropriate well child visits increased from 75% during the baseline period to 92% during the intervention period.



Given the high level of specialty care required by the children in the medical home, referral patterns were also assessed. The percent of children with referrals increased from 68% during the baseline period to 75% during the intervention period. For those children given referrals, their completion rate also increased from 88% to 100%.



It is unclear if the changes in the referral patterns are due to actual health service utilization changes or improved documentation. The medical home implemented improvements in the design of the medical records in order to facilitate better care coordination.