

From Medscape Medical News

"Medical Home" Concept for Medically Fragile Children Significantly Decreases ED Visits

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March 19, 2010 — Employing a "medical home" care approach for chronically ill children can reduce emergency department (ED) visits by more than half, according to a study published online March 11 by the *Journal of Pediatrics*.

The medical home model is a streamlined approach in which a child's care is coordinated through a single provider, usually a pediatrician. The concept is designed to reduce trips to the ED — the most expensive modality of care.

"The benefits of care coordination using the medical home model has become an established part of the dialogue on health care reform and specifically in addressing improvements in pediatric health care delivery," write Thomas Klitzner, MD, PhD, chief, University of California–Los Angeles Division of Pediatric Cardiology, and executive director of the medical home project, Mattel Children's Hospital University of California–Los Angeles. "However, the feasibility of comprehensive care coordination, as envisioned in the medical home concept, on a large scale remains uncertain."

Conforming to the guidelines of the American Academy of Pediatrics, the medical home program at the University of California–Los Angeles consists of 4 components:

- A formal, 1-hour intake appointment
- 40-minute follow-up appointments (double the average follow-up appointment time)
- A bilingual liaison to aid families steer their way through the medical system
- A family binder that stores the child's medical records in a single location

For 1 year before and 1 year after enrollment, researchers examined ED, urgent care, and inpatient visits for 30 medical home patients between 2004 and 2007. Seventeen participants were girls. The group ranged in age from 1.6 to 13.6 years (7.0 ± 3.8 years).

Findings Point to Value of Medical Home Training for Residents

The results showed that ED visits fell by 55% for those who participated in the medical home program; however, the number of trips to other types of medical facilities was not significantly affected:

- Before enrollment, the average number of trips to the ED was 1.1 ± 1.7 per patient; after enrollment, ED visits were reduced to 0.5 ± 0.9 ($P = .02$).
- The mean number of urgent care visits was 2.6 ± 3.3 vs 3.3 ± 4.8 ($P = .45$).
- The average hospital admissions were 0.9 ± 1.7 vs 1.1 ± 1.2 ($P = .54$).
- The average length of hospital stay was 4.5 ± 13.5 days vs 3.1 ± 4.5 days ($P = .54$).

In addition to resulting in fewer ED trips, the medical home concept also raised the level of confidence reported by families of children in the study.

"The parents told us that they felt empowered by the pediatric residents, supervising faculty and medical home staff to use scheduled outpatient primary care and specialty visits rather than using the [ED] to get care," Dr. Klitzner said in a press release.

According to the study authors, their results may have been affected by several factors, including a wider decrease in ED visits, improved health or advancing age of the study population, or the parents' naturally increasing competence in working within the healthcare system.

The prospect of training residents in the medical home approach to decrease ED visits is supported by the findings, according to the investigators, and will be fully addressed in future studies.

"This study did not evaluate the educational goals of teaching pediatric residents the principles of care coordination according to the medical home model," the authors write. "A formal evaluation of the educational values of the Medical Home Program is needed and will be undertaken in the future."

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