



## Take Care to Learn Project: Albert Einstein Healthcare Network, Philadelphia, 2002–03

*Our patients and families don't always understand all we have to offer in terms of education, and how much they can affect their own health. The single biggest turning point for patients is when they really understand our relationship with them and their relationship with their chronic condition.*

*—Co-Project Director Allan Arbeter, M.D.*

A project team of eight faculty and senior staff introduced a number of changes enhancing asthma care at the Pediatric and Adolescent Ambulatory Center of the Albert Einstein Medical Center. Allan Arbeter, M.D., and Jerry Maliot, M.D., served as project co-directors during the time described here.

### The Project Setting

Einstein's pediatric center serves a mostly low-income urban population and has 18,000 visits a year. Prior to TCTL, in 1997, the clinic had launched its first chronic illness management<sup>1</sup> program—called "STAR" (Support Team for Asthma Relief) to manage asthma among some of the center's children and adolescents. In its first year of operation, the STAR program produced statistically significant reductions in emergency room visits and hospitalizations.

Center staff had intended to use STAR as a training vehicle for residents, but never did. With the TCTL project, leadership took this step, applying STAR throughout the primary care clinic and involving all pediatric residents in it.

### The TCTL Project

In the project's 18 months, faculty engaged 64 pediatric residents in TCTL, the majority of residents participating for six months, but a substantial minority (22) participating for 12 months.

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<sup>1</sup> **Chronic illness management.** The use of a strategy or strategies to manage an individual's chronic illness to achieve a better outcome. Often the term is used in the context of managing a group of patients over time who share a common chronic illness.

Like others in the program, this project's faculty used the chronic care model<sup>2</sup> to guide teamwork in the treatment of asthma. The center already employed a patient registry<sup>3</sup>. Its plan comprised these clinical and educational goals:

### **Clinical Goals**

- Use of evidence-based treatment guidelines.
- Use of a team approach involving the resident, a nurse care manager and a health educator, with a formal action plan, a written workbook for patients and check sheets for physicians.
- Residents' assessment of patients using a "biosocial" model (this considers the patient's health and social environment and values, especially as these may affect the patient's perception of his or her ability to take control of an illness).
- Visits to patients' homes by residents.
- Patient follow up that would include additional office visits and telephone calls.

### **Educational Goals**

- Several asthma-related grand rounds.
- Clinic conferences dedicated to asthma management.
- Participation in the project by the hospital's managed care manager.
- Regular meetings to discuss patients.

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<sup>2</sup> **Chronic Care Model.** A systems approach to chronic illness management for health care providers. It identifies six essential elements of a health care system to be engaged to encourage high-quality chronic disease care:

- The community.
- The health system.
- Patient self-management support.
- Delivery system design.
- Decision support.
- Clinical information systems.

Implementation of the model relies on a focus on these six elements, as well as the development of productive interactions between patients who take an active part in their care and providers backed up by resources and expertise. It can be applied over a variety of chronic illnesses, health care settings, and target populations. Edward Wagner, M.D., M.P.H., director of Seattle's W.A. MacColl Institute for Healthcare Innovation, Group Health Cooperative of Puget Sound, and colleagues developed the model with RWJF funding.

<sup>3</sup> **Registry.** An electronic record of patients with the same chronic illness such as asthma or diabetes. Frequently part of a clinical information system, it usually contains a variety of patient data in addition to patient names. Providers can use a registry in chronic illness management to monitor the progress and care provision of individual patients, or of groups of patients (population management), and check on progress toward care targets set for providers, such as the provision of foot checks for diabetic patients.

- Patient education activities for use in the patients' homes and schools (for child patients) as well as teaching about asthma by residents during clinic hours.

According to PQE program office staff, as the project developed over time its participants focused most significantly on two aspects of the chronic care model:

- Their support of patient self-management<sup>4</sup> of their asthma.
- The center's care delivery system (with a primary focus on facilitating productive interactions between physicians and patients).

The latter was driven by a low rate of kept appointments at the center, which could not be improved, hovering throughout the project at around 50 percent. Faculty also began using a more interactive, hands-on style of teaching with a focus on using pre-clinic conferences as the primary education tool.

## Results

According to its directors, the project team:

- **Decreased the frequency of patients' asthma visits (visits to physicians due to asthma), inpatient hospitalizations, physician visits for other reasons and emergency room visits.** The following data represent health outcomes for 48 Medicaid managed-risk children or adolescents with asthma who participated in the TCTL/STAR project:

Patient Indicator (use of services)	2002 (pre-project)	2003 (post-project)	Percent Change
Asthma Visits	88	67	24 percent reduction
Inpatient hospitalizations	127	85	33 percent reduction
Physician visits	762	428	44 percent reduction
ER Visits	160	128	20 percent reduction

- **Increased the percentage of asthma patients with clinician-written asthma action plans.** A review of all patient charts done prior to the project, in 2002, showed no clinician's asthma action plans in charts for patients with asthma. By 2003, the number had increased to 22 percent of charts for these patients.
- **Introduced residents to a new curriculum on asthma management.** Over time, faculty moved away from an emphasis on traditional clinical case studies, noon conferences and grand rounds. Based on feedback from residents, faculty retooled the curriculum to provide a more hands on, practical dimension. Faculty:

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<sup>4</sup> **Patient self-management.** The patient's learning and effective use of skills needed to manage his or her own health conditions (such as blood sugar monitoring, use of inhalers for asthma) and includes the adoption of health enhancing behaviors. Health providers use the term particularly with patients who have chronic diseases. Patient self-management is often taught as one component of chronic illness management.

- Made pre-clinic conferences (meetings taking place just before residents saw their patients) a primary education delivery vehicle. At these meetings, faculty and residents discussed patient cases in relation to the chronic care model, specifically how to better care for patients with chronic conditions. In these meetings, residents also had the opportunity to discuss any patients with whom they were experiencing care management concerns.
- Responded to residents' requests for more educational information—for example, on how to use peak flow meters and nebulizers so that they could better educate their patients. (A peak flow meter measures breathing function. A nebulizer delivers asthma medication as a mist that patients can breathe.)
- Introduced creative avenues, such as one-on-one resident education, role-playing and newsletters, in order to meet the needs of residents who had rotations at multiple sites. These avenues reflect methods used in adult learning theory that suggests adults attain more knowledge through participatory, as opposed to didactic, education.
- **Instituted assessments of patients' homes.** Many residents participated in these home visits, which sought to identify environmental asthma triggers.

*This component of the curriculum was extremely valuable, as it provided residents with a real-life understanding of the challenges facing their patients. For example, while the residents encouraged patients to avoid triggers such as smoking, the home visits shed light on how difficult it can be to avoid secondhand smoke in the home.*

—Co-Project Director Arbeter

- **Altered the relationships between clinicians and patients and their families.** According to project faculty, residents, attending physicians and clinic staff over time began to "create closer relationships with both our patient and [their] family members." The project team:
  - Held monthly asthma group meetings for patients. These met the needs of patients and family members who wanted to ask specific questions about asthma but did not want to go through the process of seeing a physician.
  - Employed a health educator in the clinic four days a week to answer patient questions and provide patient education resources.
- **Organized quarterly "asthma parties" for clinicians and patients and their families to promote techniques of patient self-care.** The patient registry was key in establishing a guest list. The asthma parties also led to the development of group visits for asthma patients noted above.

*The residents talked informally with families about asthma triggers and management, and conducted a survey among families about asthma care and concerns.*

—Co-Project Director Arbeter

### **Clinic-Wide Changes**

In a 2004 report to program staff, the project directors noted the following changes made to their treatment system as a result of work on TCTL. Though not part of stated project goals at the outset, they termed these among their "most significant successes:"

- **The development of a multidisciplinary work environment.** Prior to the TCTL project, disciplines within the Pediatric and Adolescent Ambulatory Center acted as separate entities with little communication among them. In early 2003, the team recognized the same dynamic among disciplines within the project, hampering its progress. In addition, many individuals who were integral to the project were not members of the project team.

To address this problem, the project team established a clinic committee that included representatives from nursing staff, medical assistants and residents. Its purpose was to extend the reach of project decision-making beyond faculty to other disciplines. In the end, the committee gave direction not only to the Take Care to Learn project but also facilitated process improvements in the Pediatric and Adolescent Ambulatory Center itself.

According to the project directors, the committee hadn't ameliorated "turf" issues, but residents know more about systems in health care and how to improve them.

- **Improved systems within the pediatric and adolescent ambulatory center.** The project team used the chronic care model and improvements in resident education, patient care and operational systems (especially patient information and billing systems) to increase the center's productivity. They:
  - Convinced the center to provide clinicians with patient lists on an ongoing basis. Prior to 2002, for example, residents were unable to obtain lists of patients being seen on a given day in the clinic. Because the project team insisted on having these lists, the residents overnight had a clearer picture of the population they were to manage.
  - Posted photos of clinicians in the center, which helped patients remember the clinician they had seen last. This allowed for improved continuity of care for the patient.
  - Improved resident "succession planning" so that patients were handed on to the most appropriate providers for care when residents completed their residency program.

- Created business cards and voicemail for residents so that patients and residents could communicate more easily.

## Challenges

In their 2004 report to program staff, project directors cited two obstacles to the full achievement of project goals:

- **Securing faculty buy-in.** For the first year and a half of the two-year project, according to the project director, it was clear that the team had not secured faculty support. Despite faculty education, discussion in staff meetings and project leadership by the chair of the department, the faculty did not seem to be actively engaged in the project's chronic care concepts or adopt them in their everyday practice. The project director lists the following reasons for this:

- Competing priorities and demands on faculty made it difficult to gain their attention or interest.

In 2001 and 2002, the department of pediatrics lost several attending physicians and support staff. Remaining staff were stretched, which limited their time for teaching and, according to the project directors, left faculty less open to new ways of doing things.

- The project team itself struggled with how to implement the chronic care model, making the project somewhat directionless.

Faculty eventually became more involved in the project, according to the project director, as a result of the following:

- Residents became increasingly educated in the chronic care model and influenced attending physicians to change their behavior.
- The project team formed the multidisciplinary clinic committee (see [Clinic-Wide Changes](#)) to include faculty, residents, medical assistants and nurses in decision-making about both the direction of this project and of the center.
- The faculty saw the changes and progress that took place in the center as a result of the implementation of the chronic care model.

- **Having sufficient time to implement all aspects of the chronic care model of treatment.** At the outset, the project team believed that in 18 months they might have the chronic care model fully implemented at the clinic. In fact, the project team concluded that it can take years to overcome three significant structural impediments:

- Physicians' traditional acute care mindset, which hampers chronic illness management.
- An academic setting's competing priorities and obstacles.

- Lack of a long-term commitment to the model from hospital leadership, which is needed if the model's use is to ride out "difficult" or financially stressed times. Ironically hospital income can suffer as patient health improves, because of a drop off in asthma visits, inpatient hospitalizations or emergency room visits.

While project faculty did not accomplish everything they hoped to, they felt that their efforts in supporting patients' self-management helped patients to deal with their asthma.

## Lessons Learned

The project directors in 2003 offered this advice to others implementing a chronic illness management project:

1. **Engage all interested parties early in the project.** It is difficult to bring new staff members into the fold unless they are active and engaged participants from the start. (Project Directors)
2. **Work hard to secure faculty buy-in.** (Project Co-Director/Arbeter)  
*Residents are led by example. It was very difficult to encourage the residents to adopt behaviors associated with the chronic care model when point-of-care teaching by faculty [who had not bought in] may send different messages.*
3. **Visit with institutions that have practical experience you can use.** Staff of hospitals or medical centers that have taught or implemented chronic illness management programs can offer practical guidance. Similarly, it would be helpful to attend a conference or other relevant hands-on educational activity. As it was, this project team planned and implemented its initiatives on the fly. (Project Directors)
4. **Clearly identify roles for all project participants.** The project team struggled early on with clarifying roles for its members. As the project unfolded, it was important for members to have specific tasks suited to their talents, for which they were individually responsible. (Project Directors)
5. **Give residents who show the most interest in project activities the most responsibility.** This project elicited a mixed response from residents. Most found it difficult to transition to a chronic care mindset. However, some became true believers, outspoken and participatory. These residents were instrumental in developing a patient outreach brochure and staffing the monthly asthma group visits. (Project Directors)
6. **Use a multiple disease approach in teaching chronic care.** (Project Co-Director/Arbeter)

*Knowing what we know now, we would not have focused so heavily on asthma. Our learners said that they were overwhelmed with asthma in the curriculum, and this took away from other subjects they were interested in.*

It also may have been difficult for the learners to grasp that the chronic care concepts taught through the asthma education modules could be applied to other chronic diseases.

7. **Take on one chronic care model component at a time.** The project faculty found that implementing all the components while trying to teach them simultaneously to the learners was overwhelming. (Project Directors)
8. **Do not give up on creating change or become overwhelmed.** Despite a nagging suspicion that this project was "behind" others in the Take Care To Learn program, the project team learned at all-grantee meetings and through the grapevine that other grantees also had made progress in some areas and not in others. Each achieved in some areas.

## Looking Ahead

In 2006, the project director reported:

- The asthma care management project continues (no longer called STAR).
- It is the beneficiary of the Albert Einstein Medical Center's annual Small Miracles golf tournament and another private funder, which will support the project until March 2007.
- New team members include a social worker to coordinate asthma care management, and a pulmonologist to provide yearly evaluation to all pediatric patients who are on daily inhaled steroids.
- The clinic committee still meets regularly to address systems improvement issues around patient flow, registration, medical records, patient assignment to a physician and other issues.