



Provider Asthma Care Education
Summary of Activities: 1/2003 – 5/31/2005
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Respiratory Health Division
American Lung Association of Minnesota

Development of PACE

PACE (Physician Asthma Care Education) was developed by the University of Michigan School of Medicine and Public Health as a three-component educational program aimed at improving physicians' therapeutic and patient counseling skills. The three components of the original program included: 1) optimal clinical practice based on NHLBI Best Practice pediatric asthma guidelines; 2) patient teaching and communication; and 3) suggestions on how to incorporate these skills into everyday practice. The program was evaluated with funds from the Robert Wood Johnson Foundation beginning in 2000. Results from this evaluation demonstrate that PACE significantly improves physician practice in asthma treatment and improves long-term patient asthma outcomes (Clark al, 2000).

PACE in Minnesota

Pilot Phase

The Twin Cities metropolitan area served as a control site for the PACE study conducted by the University of Michigan. Therefore, the American Lung Association of Minnesota (ALAMN) delayed implementation of this program in the state until 2003. In 2003, ALAMN received funding from the Hearst Foundation, Blue Cross Blue Shield of Minnesota Foundation, and the Controlling Asthma in American Cities Project (CAACP) of Minneapolis and St Paul funded by the Centers for Disease Control and Prevention to deliver PACE throughout Minnesota. The PACE program was incorporated into the Minnesota Department of Health Statewide strategic plan for asthma. Health professionals interested in serving as faculty were recruited from each region through personal invitation from staff at ALAMN and the regional coalition coordinators. In January 2003, the CAACP sent a team of six professionals to Chicago to be trained by the University of Michigan to deliver the PACE curriculum. In March 2003, another twenty-one Asthma Champions from around the state received the same training to deliver the PACE curriculum statewide in teams of three. These champions include pulmonologists, allergists, family practice physicians, pediatricians, nurses, pharmacists, and certified asthma educators. Renamed "Setting the PACE (Provider Asthma Care Education) for Asthma in Minnesota," the program was piloted 9 times throughout the state in 2003 by the CAACP or the regional coalitions of MAC. In total, 76 primary care providers attended these 9 trainings held in St Paul, St Cloud, Duluth, Bemidji, Owatonna, and Redwood Falls. Through process evaluation, the PACE program was modified and improved after each pilot offering.

Modifications to PACE Content

In January 2004, the faculty for the program convened to discuss the evaluation results of the pilot project and recommend changes for the future. Based on recommendations from the evaluation, the program was again modified to ensure more content on the NHLBI Guidelines, asthma medications, spirometry, and coding. The total program content was adjusted to create 5 one-hour segments including 1) Guidelines and Management, 2) Medications, 3) Spirometry, 4) Patient Education & Communication, and 5) Coding and Reimbursement. The faculty recommended changing the overall program objectives to reflect the changes in content. The new objectives are as follows: 1) Increase knowledge of diagnosing asthma, including the use of pulmonary function testing (spirometry), 2) Increase knowledge of asthma management and medications, and 3) Increase knowledge of patient communication and education, 4) Increase knowledge of legal and appropriate documentation and coding.

The overall goal of the program has remained consistent with the original PACE program from University of Michigan. The course aims to improve provider awareness, attitudes, ability and application of communication and therapeutic skills for asthma. Based on results from the pilot, ALAMN planned to reach 300 providers throughout Minnesota by the end of 2005.

Modifications to PACE Delivery

In rolling out PACE on a larger scale throughout Minnesota, ALAMN has encountered some barriers as well as additional opportunities resulting in modifications to the delivery of the program. PACE has been very successful in the Twin Cities metropolitan area. The program has had, on average, 12 providers in attendance at each offering. Part of this success has emerged from a partnership with the Children's Physician Network, an 11-county pediatric provider network in the Twin Cities, to promote the program among its member practices and providers. In many of the regions in Greater Minnesota, however, attendance at the PACE programs was very low, in some instances requiring that the program be cancelled all together. This was due in part to a much lower number of primary care providers in non-metro locations. Similarly, those providers in a given region who were interested in attending the program had to commute longer distances. Finally, a five-hour long program proved too long to attract some region's physician base. As a result of these challenges, the Minnesota Asthma Coalition broke PACE into sections, offering each region a menu of options to choose from. Instead of the full PACE program, the regional coalitions have been offered the opportunity to deliver a 2-hour Asthma Management program, covering the Guidelines & Management, and Medications components. Similarly, Spirometry and the Documentation & Coding are each offered as separate components. Additionally, a 2-hour program for Pharmacists has been added, modified and expanded from the original PACE Medications presentation. Since this change has been made, several of the regions have offered the Asthma Management program to providers in their region with greater attendance. The Pharmacist program has also been offered in the St Cloud area.

Several of the family practice residency training programs in the Twin Cities metropolitan area have approached ALAMN requesting that PACE be offered to their residents. Not only are residents a captive audience, but they are also the future of family practice. Training these

physicians on best practices of asthma before they have developed their own practice habits will improve asthma care now and in the future. PACE has been delivered 5 times to residents in 2 different clinics. Instead of a full five-hour program, components of PACE have been offered to residents at the clinics in several smaller sections over consecutive weeks.

Additionally, ALAMN has begun a clinic-based systems change initiative to improve asthma care within the clinics through a continuous quality improvement model. Rather than offer PACE as a stand-alone program, it has been incorporated into the systems-change project. Prescribing providers within each participating clinic are required to attend PACE as part of the larger project. ALAMN currently works with 10 clinics through this project, and another 4 clinics plan to begin in July 2005.

Evaluation

Reach

In all the various methods of delivery, ALAMN has trained 215 primary care providers in Minnesota, including residents, between January 2003 and June 1, 2005 in a total of 21 full PACE programs.

Through the systems change initiative, 2 clinics will have completed PACE by June 15. The remaining 8 clinics are scheduling PACE programs throughout the summer and early fall 2005. With the new cohort of 4 clinics beginning in July, PACE will be offered between August 2005 and June 2006.

As the abbreviated Asthma Management program, 28 health care professionals attended in Greater Minnesota. Additionally, 25 pharmacists attended the Pharmacist training in St Cloud.

In summary, the goal to reach 300 providers statewide by the end of 2005 will be realized.

Pre & Post-Surveys

For the first PACE programs offered in Minnesota, a pre-survey and post-survey were completed by participants (Appendix A&B).

Pre-Survey

In the pre-survey, the majority of participants indicated that they were familiar with both the 1997 Guidelines for the Management of Asthma and its 2002 update. The number of patients treated by the providers in attendance varied from 1 per week to more than 20 per week.

Reasons that the participants attended the PACE training could be grouped into the following categories: 1) They hoped to improve patient care practices; 2) They wanted to educate other providers about asthma; and 3) They were interested in enhancing their personal skills regarding asthma.

Over the following year, participants indicated that they intend to use the information from the training in the following ways: 1) Share the information with providers or clinics; 2) Provide training seminars; and 3) Use the information when working with patients.

Expectations of the program included the following: 1) An opportunity to learn new methods for working with patients; 2) A networking opportunity; and 3) An opportunity to enhance skills for training others.

Post-Survey

According to the post-survey, all respondents were satisfied with the quality of information received and over 85% were satisfied with the amount of information received. All participants were satisfied with the organization of the training, relevance of the training to their work, and the written materials provided. All participants reported that they will likely apply what they have learned in their work settings.

Participant Satisfaction

In the pilot phase throughout 2003, the PACE program was evaluated by a participant satisfaction survey, including questions about how to modify the original Michigan program to better meet the needs of Minnesota physicians (See Appendix C).

In summary, satisfaction with the seminar faculty was high, and all participants were satisfied with the seminar's overall organization. Participants agreed that their knowledge of diagnosing, managing, and communicating about asthma increased from the program. The majority of participants were very likely to use what was learned in their practice and confident in their ability to use what they learned with their patients. The majority of participants felt the content was "just right." Based on feedback from participants, the level of depth for each topic covered was adjusted including less on communication, more on coding, more on spirometry, and more on use of an asthma action plan.

Self-Reported Provider Behavior Change

In the second year of delivering PACE programs in Minnesota, the evaluation, funded by Blue Cross Blue Shield of Minnesota, was revised to include a measure of behavior change. Immediately following the seminar, participants completed an evaluation that assessed barriers for patients and providers, topic areas that need more emphasis, their intent to use the techniques provided at the PACE seminar, and their current use of spirometry, asthma action plans, asthma education techniques, and inhaled corticosteroid prescriptions.

Four weeks and four months after the seminar, attendees were mailed a follow-up survey asking about their current use of spirometry, asthma action plans, asthma education techniques, and inhaled corticosteroid prescriptions. The survey also inquired about barriers and suggestions for improving the PACE program.

Results

Based on the four-week and four-month follow-up surveys, the program had an overall positive impact on provider behavior. Compared to their practices at the time of the seminar, 60% increased their use of spirometry, 70% increased their use of written asthma action plans, 83% increased their provision of patient education, and 77% increased their prescription of inhaled corticosteroids. Compared to their intentions at the time of the seminar, 30% of attendees met or exceeded their goal for use of spirometry, 37% for written asthma action plans, 50% for patient education, and 60% for use of inhaled corticosteroids.

Based on the open-ended comments from the follow-up surveys, the following barriers for providers were noted: 1) Providers lack the time to provide patient education, 2) Some providers have difficulty classifying patients, especially those that are borderline with few wheezing episodes, and 3) Spirometry is not consistently used.

Barriers related to patients included the following: 1) Providers working with the homeless face additional challenges: patients do not have documentation of previous care, patients do not have insurance and patients lack the monetary resources to pay for services, 2) Providers have difficulty getting patients to come in for a follow-up visit or to continue using medications, especially when the patient has been well, 3) Understanding medications and concerns about using steroids are barriers for families.

With regards to improving the PACE seminar, attendees indicated that ALAMN should build extra time into the seminar to practice spirometry, use spacers, discuss implementation of asthma action plans and discuss patient scenarios.

Future Plans

In summary, the PACE program has been shown to positively influence provider practice behavior in the area of patient education, spirometry, use of asthma action plans, and prescription of inhaled corticosteroids. As such, the American Lung Association of Minnesota will plan to continue to implement this program statewide. Because the ALA of Minnesota will merge with the ALA of Illinois/Iowa in July, PACE will likely be offered in Iowa over the next year. The Minnesota Asthma Coalition continues to offer this program within each of its regions as one of several options for professional education, partnering with the Children's Physician Network within the Twin Cities metro area. The Controlling Asthma in American Cities project now offers PACE exclusively through the Clinic-based Systems Change Initiative, providing education within the broader context of changing practice and systems of addressing asthma for pediatric patient population.