

**Asthma Self-Management Education (ASME)
Program Certification Standards:
Purpose, Evidence and Instruction**

**Revised 2/6/09
American Association for Respiratory Care**

TABLE OF CONTENTS

| | |
|---|---|
| Standard #1: Program Organization, Plan, and Goals | 3 |
| Standard #2: Program Leadership..... | 3 |
| Standard #3: Instructional Team..... | 4 |
| Standard #4: Continuing Education | 5 |
| Standard #5: Identification of the Asthma Education Target Population and Its Needs | 5 |
| Standard #6: Operational Support..... | 6 |
| Standard #7: Individual Needs Assessment | 7 |
| Standard #8: Individual Education Plan | 7 |
| Standard #9: Individual Asthma Plan of Action Development | 8 |
| Standard #10: Establishing Individual Patient Outcome Measures | 8 |
| Standard # 11: Evaluating and Analyzing Outcomes to Improve the Program (Continuous Quality Improvement)..... | 9 |
| Standard #12: Record Keeping | 9 |

Standard #1: Program Organization, Plan, and Goals

The organization recognizes and supports quality asthma education as an essential part of asthma care through its organizational structure, goals, and objectives.

Purpose and Rationale

The organization supporting the ASME Program must view the program as a vital and valuable part of the overall institutional mission for the program to be successful. It must assure that sufficient fiscal and human resources are allocated to meet the goals of all of the stakeholders. Setting clear goals and measurable objectives provides the basis for articulating the program outcomes. Defining and documenting the process for providing services allows the program to articulate clear policies and defined roles. Documenting the program's organizational structure, identifying reporting relationships and channels of communication provides a foundation for effective and efficient program operations.

Required Elements to Meet Standards

1. A statement from the parent organization's chief administrative officer indicating the organization's commitment and support and how the ASME Program aligns with the parent organization's overall structure and goals
2. Clearly stated program goals and objectives that reflect the National Asthma Education and Prevention Program (NAEPP) "Expert Panel Report 3 Asthma Guidelines. These goals and objectives must be consistent with the needs assessment discussed in Standard #5.
3. A description of the methodology for measuring the program goals and objectives
4. Documentation of the program's organizational structure that identifies personnel reporting relationships and channels of communication
5. A description of the process used to identify and screen potential patients
6. Documentation (algorithm, flow chart, outline, etc.) that clearly identifies and describes critical elements for asthma education and the program personnel responsible for each, which may include but are not limited to:
 - a. Initial contact and assessment
 - b. Individualized plan of education
 - c. Patient education
 - d. Measurement of outcomes to determine success of the educational plan
 - e. Follow-up and implementation
 - f. continuous quality improvement

Standard #2: Program Leadership

The ASME Program must designate a medical director and coordinator with academic and/or experiential preparation in asthma education to lead the instructional team. The medical director must have documented training in allergy, immunology, pulmonary medicine, or experience/education specific to asthma treatment. The program coordinator must have a current AE-C credential. The medical director and coordinator will be responsible for collaborative program planning, implementation, evaluation, and continuous quality improvement.

Purpose and Rationale

Physician involvement and approval of the asthma education plan is critical for ensuring the success of the program. Information that is presented must be consistent with current accepted medical guidelines. The physician must have experience with the treatment of asthma as evidenced by specialty training and credentialing or documented experience and education specific to the diagnosis and management of asthma according to current NHLBI guidelines. The medical director must have an active role in developing and planning the overall program as well as effectively communicating with other physicians when necessary to recommend changes in therapy or additional testing. The coordinator must hold a current AE-C credential awarded by the National Asthma Educator Certification Board as evidence of competency documentation. Ongoing collaboration between the medical director and the program coordinator is essential to assure adherence to program goals and objectives.

Required Elements to Meet Standards

1. Documentation of medical director's education and training (If the physician has not completed a fellowship in allergy/immunology or pulmonary medicine, then additional documentation of experience or education in the treatment of asthma is required. Evidence can include: CME credits, letters of recommendation by board-certified allergy/immunology or pulmonary physicians, participation in research, and publication in peer-reviewed journals or professional magazines.)
2. Documentation of coordinator's current AE-C credential
3. Evidence of collaborative planning including: minutes of planning meetings that includes documentation of medical director and coordinator attendance; medical director and program coordinator signatures on policies, procedures, action plans, and review of program outcomes

Standard #3: Instructional Team

The ASME Program will include a multidisciplinary instructional team composed of licensed healthcare professionals from various professional disciplines to meet the varied needs of the target population. This team must include at least one credentialed respiratory therapist who is legally qualified to deliver respiratory therapy within the state in which the ASME Program is located. The instructional team will have evidence of documented training in the treatment, management, and education of patients with asthma.

Purpose and Rationale

The unique expertise of various health care professionals is required to meet the wide-ranging health care needs of patients with asthma. As the certifying institution, the American Association for Respiratory Care (AARC) recognizes the value of respiratory therapists as key members of this interdisciplinary team.

Required Elements to Meet Standards

1. Provide a job description for each member of the educational team
2. Provide evidence of credentials and a current copy of the license of all instructional team members (where applicable)

Standard #4: Continuing Education

The ASME Program coordinator, medical director, and each member of the multidisciplinary instructional team must complete a minimum of three (3) hours per year of continuing education in key content areas. These may include but are not limited to asthma management, behavioral interventions, teaching, learning, and counseling skills. These continuing education activities must be accredited by an entity recognized by the professional's respective state licensing board or by an appropriate national professional association.

Purpose and Rationale

New evidence on the best way to diagnose and treat asthma and to educate patients is continuously evolving. Regular participation in continuing education can help ASME instructors acquire the knowledge and skills to maintain competency in asthma management. Continuing education is the most accepted practice for health care professionals to maintain certification in many disciplines.

Required Elements to Meet Standards

A file documenting the continuing education of each member of the multidisciplinary instructional team must be maintained by the program coordinator. The file must contain:

1. Name of the educational program
2. Location of the program
3. Dates of attendance
4. Number of contact hours awarded
5. Entity awarding the continuing education contact hours
6. Name and location of the accrediting agency.

There must be documentation that the program coordinator has reviewed the compliance of all interdisciplinary team members with this continuing education requirement.

Standard #5: Identification of the Asthma Education Target Population and Its Needs

The ASME will identify the needs of its target population(s) of patients through an analysis of relevant information. This will include but not be limited to: demographic information including age, sex, primary languages; medical record information including the intensity and cost utilization of medical services; the number of lost school or work days; language or cultural barriers and additional work or insurance information as appropriate. The ASME Program will identify and prioritize appropriate resources to meet the needs of the identified target population(s).

Purpose and Rationale

The identified needs of target populations for asthma education programs will dictate the required educational intervention. For example, the asthma population within a school system will be different than in an acute care hospital. The results of needs assessment will enable the asthma education team to determine the target population(s) needs, the current issues related to asthma control, and resources required. A needs assessment is critical to ensure program efficacy and to appropriately target education needs. Evaluating the history of asthma control, risk at baseline and the characteristics of the asthma patients most in need will allow the team to anticipate problems that are unique to their specific setting such as: lost school or work days, utilization of medical services and pharmacy, language and literacy barriers, and financial and transportation issues. The assessment will also guide the selection of outcome measures.

Required Elements to Meet Standards

1. Documentation of an updated annual population(s) needs assessment analysis to include demographic information, identified needs, and the resources required to address the identified needs.
2. A list of identified and prioritized needs with the strategies to address each area.
3. Documentation that teaching materials and strategies are chosen based on identified needs.

Standard #6: Operational Support

The program shall have the operational resources required to enable the ASME Program to reach its goals. These include personnel, sufficient physical space to support patient teaching activities, and administrative functions. The ASME Program must have a sufficient budget to provide the equipment, supplies, and other resources required to meet the needs of the identified patient populations.

Purpose and Rationale

Sufficient qualified personnel, appropriate physical facilities, and other operational support are necessary for the ASME Program to serve the needs of the patient populations and achieve the program outcomes.

Required Elements to Meet Standards

1. A description of the layout of the physical facilities that details the physical space of the facilities used to conduct the ASME Program activities
2. A budget for the current fiscal year that includes personnel, equipment, supplies, and other expenses of the ASME Program
3. Evidence that resources required for the program are reviewed annually by the program coordinator and medical director.

Standard #7: Individual Needs Assessment

Each patient shall have an individualized baseline needs assessment. This assessment can include documentation or assessment of:

1. Relevant medical history and previous testing when available
2. Current pulmonary function test (PFT) or peak flow results
3. Asthma knowledge
4. Self-management skills
5. Perception of symptoms
6. Asthma severity
7. Asthma control
8. Individual goals and quality of life
9. Knowledge of personal asthma triggers and their remediation
10. Adherence or compliance issues or obstacles
11. Competency in the use of prescribed medical devices including peak flow meters and medication delivery devices
12. Barriers that impede asthma management including financial, transportation, psycho-social, etc.

Purpose and Rationale

Each patient has unique problems related to controlling asthma symptoms and the impact on their lives. Initial evaluation is important to determine the priority areas of asthma education.

Required Elements to Meet Standards

Each individual needs assessment must be documented in the patient's chart. The documentation must also include a list of problems identified, a list of goals (program and individual), and a plan for addressing these problems and achieving these goals.

Standard #8: Individual Education Plan

Based on the patient's needs assessment, an individual education plan is established. This plan will identify the specific educational content the patient must learn to control their asthma and minimize the impact of acute exacerbations on their quality of life. The plan must be developed with the patient and their support system (family or significant others) so that consideration of their personal goals and objectives are addressed. The components of the individual education plan of action must include:

1. Causes and treatment options for asthma
2. Monitoring symptoms and/or peak flows as a means of determining control of asthma.
3. Personal triggers.
4. Environmental triggers and action to take.
5. Use of medication delivery devices or therapies.
6. Purpose and indication for asthma medications
 - a. According to impairment and risk
 - b. According to symptoms

Purpose and Rationale

If following a needs assessment, deficiencies are found in patient knowledge, an individual education plan will document that the instruction was given and may guide the instructional team to look at educational materials or strategies to bring improvement. Information related to the individual's diagnosis and classification of asthma including medical history, physical exam, and PFT testing, as well as validated symptom perception, quality of life, and symptom control questionnaires, competency documentation, allow the educator to determine the educational priorities. Because research has shown that allowing for self-management and patient input increases adherence to treatment and enhances ability to recognize problems when they occur, it is critical to assure the patient has input into the development of the educational plan.

Required Elements to Meet Standards

The individualized education plan may take various forms. It is not the purpose of this certifying body to limit the creativity of the programs in meeting these standards. Checklists that include the areas covered, dates completed, and comments are suggested. There must be evidence that the patient has participated in establishing the educational plan.

Standard #9: Individual Asthma Plan of Action Development

Based on the information provided by the individual assessment, a plan of action and the elements of the education plan, an individual asthma plan of action must be developed. The patient must demonstrate that they understand the correct actions to take when faced with specific situations they are personally likely to encounter. This plan of action must be documented in the patient's chart.

Purpose and Rationale

The plan of action describes measures patients can take to minimize the impact of an acute asthma exacerbation in specified situations.

Required Elements to Meet Standards

The plan of action may take various forms. It is not the purpose of this certifying body to limit the creativity of the programs in meeting these standards. However the description of the action plan must detail specific circumstances in which asthma becomes out of control and provide appropriate action to minimize the impact of the exacerbation.

Standard #10: Establishing Individual Patient Outcome Measures

Individualized patient outcome measures must be developed to determine the effectiveness of the educational plan. Further, performance criteria must be established for each outcome. The patient's ability to achieve the criteria defined for the outcome measures will determine the effectiveness of the educational plan. In addition to outcome measures related to the educational plan, patient satisfaction with the program must be measured.

Purpose and Rationale

Measuring outcomes of the individual will determine if the program has met the individual's goals and where further deficiencies in knowledge or control exist. When outcomes are met, it provides evidence of the effectiveness of the program. When outcomes are not met, it helps the instructor to plan further educational interventions.

Required Elements to Meet Standards

Outcome measures must be identified in the patient's chart, and documentation of the patient's performance before and after education intervention must be documented. In the event that problems with asthma control, quality of life or patient satisfaction remain following completion of the program, a new plan will be devised to address these areas with a plan for additional follow-up.

Standard # 11: Evaluating and Analyzing Outcomes to Improve the Program (Continuous Quality Improvement)

The ASME Program will conduct continuous quality improvement initiatives to evaluate the achievement of program goals, mission and/or outcomes, and effectiveness of the education, and to determine areas for needed improvement. There must be a continuous quality improvement plan that includes clearly stated goals, defined methodology for collecting and analyzing supportive documents/data, and identification of actions that will assure the process is continuously improved.

Purpose and Rationale

It is important for the program to set measurable outcomes that are expected from educational interventions in order to determine effectiveness of the educational plan and to make improvements when necessary. Quality improvement goals must be consistent with the goals and values of the organization and require organizational commitment. Monitoring outcomes through data collection over time can achieve these goals.

Required Elements to Meet Standards

1. Provide a description of a continuous quality improvement plan that reflects the goals of the program and the outcomes that have been identified and measured
2. Provide documentation of a review of outcomes and resulting changes when outcomes do not meet stated organizational or individual goals

Standard #12: Record Keeping

There will be documentation of the individual's asthma action plan in a permanent confidential record. Documentation will include: assessment, intervention, and follow-up. The initial evaluation, the educational plan, and follow-up assessment will be maintained in a confidential record for a length of time determined by federal, state, and local policies -usually seven (7) years.

Purpose and Rationale

Access to the patient's historical asthma medical record is necessary to assure continuity and appropriateness of care.

Required Elements to Meet Standards

Patient medical records that have been edited to mask patient identity shall be provided upon request.

Bibliography

References for Standard #2

Gipson, S.J., et al. (2000). Impact of the national asthma guidelines on internal medicine primary care and specialty practice. *Baylor University Medical Center Proceedings*, 13(4): 407-411

Steurer-Stey, C., et al. (2004). Patient education in asthma; a survey of physicians' knowledge of the principles and implementation of self-management in practice. *Swiss Med Weekly*, 136: 561-565

Sheares, B., et al. (2007). Use of written treatment plans for asthma by specialist physicians. *Pediatric Pulmonology*, 42, 348-356

Adams, R.J., et al. (2003). How and by whom care is delivered influences anti-inflammatory use in asthma: Results of a national population study. *J Allergy Clin Immunol*, 112(2):445- 450

References for Standard #3

Minai, B., et al. (2004). Results of a physician and respiratory therapist collaborative effort to improve long-term metered-dose inhaler technique in a pediatric clinic. *Respiratory Care*, 49(6): 600-604

Shelledy, D., et al. (2005). The effect of pediatric asthma management program provided by respiratory therapists on patient outcomes and cost. *Heart and Lung*, 34(6): 423-428

Song, W., et al. (2005). Instruction of hospitalized patients by respiratory therapists on metered dose inhaler use leads to decrease in patient errors. *Respiratory Care*, 50(8): 1040-1045

References for Standard #5

Jordan, J., et al. (1998). Health needs assessment; whose priorities? Listening to users and the public, *BMJ*, 316: 668-1670

LeNoir, M., et al. (2006). Assessment of asthma control in a general population of asthmatics, *Current Medical Research and Opinions*, 22(1): 17-22

Wright, J., et al. (1998). Health needs assessment; development and importance of health needs assessment, *BMJ*, 316: 1310-1313

References for Standard #6

Agrawal, SK., et al. (2005). Efficacy of an individualized written home – management plan in control of moderate persistent asthma: a randomized controlled trial, *Acta Paediatr*, 94(12): 1742-1746

Bonner, S., et al. (2002). An individualized intervention to improve asthma management among urban Latino and African-American families, *J Asthma*, 39(2): 167-179

Creer, T.L., et al. (2005). A self-management program for adult asthma: part IV, Analysis of context and patient behaviors, *J Asthma*, 42(6):455-462

Dolan, C., et al (2003)., Design and baseline characteristics of The Epidemiology and Natural History of Asthma Outcomes and Treatment Regimens (TENOR) study: a large cohort of patients with severe or difficult to treat asthma. *Annals of Allergy, Asthma and Immunology*, 92: 32-39

- Gibson, P.G., et al. (2007). Self-management education and regular practitioner review for adults with asthma. *Cochrane Database of Systematic Reviews*
- Holgate, S., et al. (2006). Asthma out of control? A structured review of recent patient surveys. *BMC Pulmonary Medicine*, 6 Suppl 1):S2 1471-2466
- Jordan, J., et al. (1998). Health needs assessment; whose priorities? Listening to users and the public, *BMJ* 316:1668-1670
- Killian, K., et al. (2000). Symptom perception during acute bronchoconstriction, *Am J Respir Crit Care Med*, 162:490-496
- Paasche-Orlow, M.K., et al. Tailored education may reduce health literacy disparities in asthma self-management, *Am J Crit Care Med*, 172: 980-986
- Powell, H., Gibson P.G., (2007). Options for self-management education for adults with asthma, *Cochrane Database of Systematic Reviews*
- Shreck, D.M., (2006), Case studies illustrating the implementation of treatment strategies for acute and chronic asthma. *Am J Health Sys Pharm*, 63 (10 Suppl 3): S22-26
- Toelle, B.G., Ram, F.S.F., (2007). Written individualized management plans for asthma in children and adults, *Cochrane Database of Systematic Reviews*
- Wolf, F.M., et al. Educational interventions for asthma with children, *Cochrane Database of Systematic Reviews*
- Wright, J., et al., (1998). Health needs assessment; development and importance of health needs assessment,. *BMJ*, 316: 1310-1313

References for Standard #7

- Agrawal, S.K .et al. (2005). Efficacy of an individualized written home – management plan in control of moderate persistent asthma: a randomized controlled trial. *Acta Paediatr*, 94(12): 1742-1746
- Bonner, S. et al. (2002). An individualized intervention to improve asthma management among urban Latino and African-American families, *J Asthma*, 39(2): 167-179
- Gibson, P.G., et al. (2007). Self-management education and regular practitioner review for adults with asthma. *Cochrane Database of Systematic Reviews*
- Wolf, F.M., et al., Educational interventions for asthma with children, *Cochrane Database of Systematic Reviews*

References for Standard #8

- Creer, T.L., et al. (2005). A self-management program for adult asthma: part IV, Analysis of context and patient behavior., *J Asthma*, 42(6): 455-462
- Dolan, C. et al. (2003). Design and baseline characteristics of The Epidemiology and Natural History of Asthma Outcomes and Treatment Regimens (TENOR) study: a large cohort of patients with severe or difficult to treat asthma. *Annals of Allergy, Asthma and Immunology*, 92: 32-39
- Gibson, P.G., et al. (2007). Self-management education and regular practitioner review for adults with asthma, *Cochrane Database of Systematic Reviews*
- Holgate, S., et al. (2006). Asthma out of control? A structured review of recent patient surveys. *BMC Pulmonary Medicine*, (6 Suppl 1):S2: 1471-2466
- Killian, K. et al (2000), Symptom perception during acute bronchoconstriction, *Am J Respir Crit Care Med*, 162: 490-496

References for Standard #9

Juran, Joseph M. (ed.) and Frank M. Gyrna (assoc. ed.). Juran's quality control handbook, 4th ed. New York, NY: McGraw-Hill, Inc., 1988.

Motheral, B. (1997). Outcomes Management: The why, what and how of data collection. *J Managed Care Pharm*, 3(3)