Chapter 7. Implementation of ESI Triage

Up to this point, an in-depth discussion has been provided of the ESI algorithm and how to apply it with individual patients. To help ensure successful adoption of the Emergency Severity Index (ESI) in an emergency department (ED), a well-thought-out implementation plan is critical. Change has become constant, pervasive, and persistent in health care. It is important to keep in mind that implementation of any new system or process takes time, careful planning, and a group of professionals dedicated to a successful transition.

This chapter presents background information on the change process in health care organizations and a step-by-step guide for successful implementation of the ESI. The implementation strategies successfully used by members of the ESI research team and others are presented.

The decision to switch from another triage acuity rating system to ESI may be based on multiple reasons. One reason may be the American College of Emergency Physicians (ACEP) and the ENA joint position statement on a standardized triage scale and acuity categorization that supports the adoption of a reliable, valid five-level triage scale such as ESI. In many institutions, a particular event may be the impetus for the change, such as a mistriage or a sentinel event due to prolonged patient waiting time. The clinical or administrative staff may express concerns about patient safety. The nursing staff may find that they are continuously re-triangulating patients. In crowded EDs with many urgent patients waiting to be seen, nurses are forced to constantly reprioritize these patients for the scarce ED beds.

The implementation of the ESI may be part of a larger plan, but before transitioning to a new triage acuity rating system, the implementation team needs to consider all aspects of the “door to doctor” process.

Revising the system requires understanding of the planned change process. Planned change results from a well-thought-out and conscious effort to improve something. Kurt Lewin’s theory of planned change is a frequently used approach in health care organizations (Nelson, 2002). Lewin identified three phases of change:

1. Unfreezing
2. Movement
3. Refreezing

These steps parallel the steps in the nursing process that triage nurses follow. The first step in implementing any change is to recognize that a problem exists and that there is a clear need for change. This unfreezing phase is often compared to assessment, the first step of the nursing process. During the assessment phase, data are gathered and the problem or problems are identified. Both informal and formal discussions may occur around the problem and the need for change. In the ED, this may occur at nursing and physician meetings or during informal discussions in the clinical area. In many cases, one individual, typically a nurse or physician in a leadership role, drives the push for change. This “champion” should take every opportunity to discuss the problem and explain why a change needs to occur. Hospital and department leadership have to create a sense of urgency regarding the change. Data that show staff that the system they are using is not working can help engender support for changing triage systems. Such data may include mistriages per week, numbers of patients who leave without being seen, and delays in physician evaluation of high-risk patients.

As in the nursing process, during the movement phase, those charged with carrying out the change (the change agent or agents) identify, plan, and implement suitable strategies. The last phase, the refreezing phase, is similar to the evaluation and reassessment phase of the nursing process. At this stage, the champions of the new system need to ensure that the change has been successfully integrated into the day-to-day operations of the ED.

Once the decision is made to change to the ESI, a multidisciplinary implementation team needs to be identified. The implementation team becomes the change agent. The implementation team leader is a key player in the successful implementation of the ESI and needs to have the respect of the department as well as strong skills in leadership, communication, problem solving, and decision making.

Selection of the team members is paramount to the timely success of lasting change. Membership must include management, physicians with a collaborative style, nursing staff with triage expertise, the clinical educator or clinical nurse specialist, and the triage committee if the department has one. Staff in other disciplines, such as registration and information systems, who will be
affected by the change, may also be asked to join the team. These members may be invited to attend meetings on an as-needed basis. The group should consider asking one or more of the informal nursing leaders to be staff nurse team members. This will facilitate the informal leaders' buy-in of the change, which will be helpful if staff begins to raise concerns about the change to ESI.

It is important for the implementation team to meet regularly. Department leadership needs to arrange for staff to be available during meeting time. It is well established that without adequate planning, implementation will fail. Implementation is never a single action but involves a well-designed comprehensive plan, a stepwise process, and a variety of strategies and interventions (Grol & Grinshaw, 1999).

The implementation team must decide what needs to be done, who will do it, and what strategies will be used and develop a time line. Other teams have found flow-charting or using a computer project application helpful. A flow chart identifies the critical tasks that need to occur and links them with completion target dates. The team members can regularly refer to the flow chart to see if they are meeting their target dates.

At Brigham and Women's Hospital in Boston, MA, the team brainstormed to identify who and what would be affected by the change to ESI. The list generated by this process included:

- Information systems
- The patient tracking system
- The physician record
- The nursing record
- Triage policies and procedures
- Triage orientation

Visiting other EDs that have already implemented ESI can be very informative. Start by contacting managers, educators, or clinical nurse specialists at area EDs to identify EDs using ESI. Visiting a department that has been using ESI for at least 6 months should be most beneficial. The leadership team may share valuable information about their own implementation experience, including issues they encountered and strategies that worked well. It is important to plan these visits to make sure that all of the group's open issues are addressed. Prior to the visit, make a list of questions and information the team needs. Be sure to request copies of policies and documentation forms. If team members have questions that cannot be answered by the publications, this book, or others who have implemented ESI, they can contact the ESI Research Team through AHRQ (see information in front cover of this handbook).

Changing to ESI takes several months of planning, and timing is important. Once all the tasks associated with the change are identified and timeframes established, the group can choose a realistic implementation date. The team must consider what is happening in the hospital and in the ED and identify a time when the unit is able to support the change and the educational activities. The acuity system cannot be changed gradually. A definite start date and time must be set and shared with all staff affected by the change.

**Policies and Procedures**

All policies related to triage must be reviewed in light of the change to ESI. Individual hospitals must decide how the ESI will be incorporated into their ED's existing triage policies and procedures. Many policies may need to be rewritten. Examples of policies and procedures that need to be addressed include:

- Where are different types of patients seen within the ED? This varies by hospital, depending on the ED structure and patient flow.
- If non-urgent patients have been seen in the urgent care or fast-track area, does that mean all ESI levels 4 and 5 may be triaged to fast-track? Can some ESI level-3 patients also go to the fast track?
- Where will patients be seen who are triaged ESI level 2 due to pain? For example, on a busy afternoon in what part of the ED is the patient with renal colic in severe pain seen? Are they placed in the last open bed even if it is monitored? In an ED with several different sections, do they have to go to a specific section?
- Some EDs are using a licensed independent provider in the triage area. The provider's role is to see and treat low acuity patients and discharge them from triage. Is this a process your department is considering? If a two-tier triage process is being used, and the patient's first contact is with the greet nurse, does the greet nurse assign ESI level for just ESI levels 1 and 2?
The ED leadership team will ultimately make these policy decisions, but the implementation team should identify these issues and make recommendations.

The ESI research team is frequently asked if the ESI system includes criteria for a time to reassessment by triage level. The ESI system does not include reassessment recommendations. This is a key difference between ESI and other five-level triage systems. The ESI triage research group has purposefully not identified reassessment times but has left that to individual departments to incorporate into their triage policy. The group urges caution; in this era of ED crowding it is very difficult for busy triage nurses to reassess patients at set time intervals when they are busy sorting incoming patients. Falling short of the policy can become a departmental liability. The ED tech can take and document another set of vital signs, but the RN must talk to the patient and evaluate the vital signs for changes. Assessment is a nursing function that cannot be delegated to non-licensed nursing personnel (e.g., nursing assistants).

It would be unrealistic for the implementation team to assume that all staff will embrace the change to ESI. Resistance is expected. Major change can trigger a wide range of emotional responses such as enthusiasm, skepticism, stress, anxiety, anger, and a sense of loss. The implementation team needs to be prepared for these reactions and not personalize them. The team should put into place strategies to minimize or manage them. Change is never easy and the implementation team needs to “stay the course” and not give up. The team needs to openly discuss the planned change, answer questions, and gather support.

Planning ESI Education

Education for physicians, nurses, and support staff is one of the critical tasks that the implementation team needs to consider. ED leadership must commit the resources to thoroughly prepare the ED staff to use ESI. Several key concepts need to be understood to maintain the reliability and validity of the instrument. Some form of education about the ESI should be provided to all staff who will use the ESI information, including ED nurses, physicians, and other providers; nursing assistants; and clerical staff. While the triage nursing staff will need a full orientation to the ESI, other staff will need less education. The original ESI hospitals have found that successful implementation of the ESI requires every triage nurse to attend, at a minimum, a 2-4 hour education program. At University of North Carolina Hospitals, clerical and nursing assistant staff members received a memo describing the five ESI categories and notice of the implementation date.

The physician on the implementation team may choose to handle physician education. The duration of physician orientation to ESI will depend on how familiar they are with the algorithm. At teaching hospitals, the ED residency director needs to allocate time for a member of the implementation team to provide an orientation for the residents. It is helpful to give residents copies of key ESI research articles for review (see Chapter 1). With more hospitals using physicians at triage, it is even more important that physicians have a solid understanding of the five levels of the ESI triage system.

The education program is best conducted in a setting away from the ED that is free from the distractions of the clinical area and conducive to learning.

Implementation may be an opportunity for collaboration. For example, two hospitals chose to change to ESI at the same time and decided to pool resources. They offered joint educational programs. Two-to-four hours is a realistic timeframe for the triage nurses’ ESI educational program. The educator or clinical nurse specialist should set the day and time for education. Plans should include one or two make-up classes for the triage nurses that are ill, are on vacation, or are pulled from the class and back into clinical duties due to staffing issues.

The implementation team must identify one or several trainers for the orientation to ESI. It may not be realistic to have an educator available to teach all classes. Many groups use a train-the-trainer program, which initially trains team nurses who feel comfortable teaching and confident dealing with questions and resisters in the group. An experienced educator should be available during the initial sessions to ensure accuracy of the information provided and to assist the trainer if needed.

Experienced educators have found that reading the research publications can be particularly helpful in explaining why the change to ESI is so important.
A number of low-cost training opportunities are available for EDs to consider in implementing ESI:

- The ESI Interactive Web Based Training Course
- The ESI Training DVD “Everything You Need to Know”
- The ESI Implementation Handbook is for hospitals with staff with less curriculum development experience

**The ESI Interactive Web-Based Training Course**

The ESI Triage Research Team recognized that staff attendance at a 2-4 hour program is often difficult to organize. In addition, some hospitals have chosen to conduct train-the-trainer programs and found that there were inconsistencies in the information presented by different trainers. As a solution, in 2009 the ESI Research Team developed an on-line education program that is interactive, inexpensive, and self-paced.

The program highlights some of the nuances of the ESI that novices find challenging. This handbook and segments of the ESI training DVD discussed below have been incorporated, as well as numerous learning activities that reinforce some of the key concepts or critical decision points. Individuals have 30 days to complete the course after they register. The advantage of this type of training is that a nurse can take the course at his or her own pace and is actively engaged by the content and review exercises. On completion, the participants receive the course post-test results and a completion certificate.

The Web site also includes many resources and much information about ESI. It is the only Web site developed by the researchers and educators who developed ESI and wrote this implementation handbook. To learn more about the Web-based course, go to www.esitriage.org and click on the Web course.

**The ESI Training DVD**

Another training option is to use the *Emergency Severity Index, Version 4: Everything You Need To Know* DVD, produced by the Agency for Healthcare Research and Quality (AHRQ). This product is free to all EDs and can be ordered from AHRQ by phoning 800-358-9295 or sending an e-mail to AHRQPubs@ahrq.hhs.gov.

The ESI training DVD was produced to help EDs implement the ESI. The intent is to enable EDs to implement ESI using a standardized training program rather than requiring each department to create its own program. The DVD has four sections that can be used in several ways:

**Section 1: The Introduction** may help the ED leadership make the decision to implement ESI. Both physician and nursing leadership may learn more about the value of ESI data.

**Section 2: The Emergency Severity Index** is a step-by-step review of the algorithm and can be used in several different ways depending on the department’s resources. Staff members can view this section independently and then attend a group inservice. The DVD can serve as the primary educational tool with a member of the staff serving as a resource and facilitator answering questions. Educators may choose to develop their own educational program and use the DVD as a guide. The important point is that the DVD provides EDs with standardized educational materials.

**Section 3: Practice Cases** can be used by individuals or small groups to practice the application of ESI. The facilitator can stop the DVD after each patient scenario and ask participants to assign the ESI level. When the DVD is restarted, participants can listen to explanations of level assignments. The facilitator can address the ED’s specific policies and practices.

**Section 4: Competency Cases** can be used at the end of a group educational program or individually. Demonstration of competency using ESI is important. Every triage nurse should have the opportunity to demonstrate ability to accurately assign a triage level.

**Locally-Developed ESI Training**

Many EDs develop their own educational programs using the ESI Handbook and the training DVD, as well as additional information relevant to triage at the local ED.

A basic ESI training can take between 2-4 hours. Many hospitals use this opportunity to review other triage-related information, such as high-risk situations or policy and procedure changes. The following section provides a detailed description of a 2-hour training segment of ESI. It is advised that the trainers review the entire ESI Handbook and training DVD prior to developing their own content. This
will help assure reliability and validity of the ESI algorithm.

**Section 1: Introduction.** The introduction explains why the department has chosen to adopt ESI. The issues with the former triage acuity system should be briefly explained along with how ESI will address them and the advantages of ESI. The time allocated for this section will depend on what information has already been shared with staff. It is important for the trainer to focus on what ESI will do for the staff nurse and for ED administration.

A number of reasons can be cited to support a move to ESI:

- Increases in local ED volume, change in admission rate
- Desire to use a reliable and valid triage system
- Changes in ED patient population
  - More trauma patients
  - More psychiatric patients
  - Changes within the hospital that have affected the ED
  - Beds closed
  - Unit renovations
  - Holding patients in the ED
  - Increased length of ED stay for admitted patients
- Nationwide trends
  - Increase in the number of elderly
  - Increase in the number of patients seeking primary care in the ED
  - Increase in the number of uninsured seeking care in an ED
  - Nursing shortage

At the end of the introduction, trainers should discuss the issues with the current triage acuity rating system that the ED may have already identified. These may include mistriages. While it is important to include specific examples of problems the department has experienced with the current triage system, it is also important that the trainer not let this become a "gripe" session. The facts should be presented and any comments or questions can be addressed at the end of the program.

If the staff is not convinced that a change in the triage acuity rating system is necessary, they can play the **Triage Game** before discussing the importance of reliability and validity of triage systems.

**The Triage Game.** The Triage Game is a way to break the ice and illustrate the poor inter-rater reliability of the three-level triage acuity rating system. Each nurse in attendance is given a packet consisting of red, yellow, and green colored cards. The red card is labeled “emergent,” the yellow “urgent,” and the green “non-urgent.” Three cases are read to the group, and after each case participants are asked to rate the patient acuity and hold up the appropriate card. Each participant is able to see how other members of the group rated the patient. Resistance decreases as the group begins to notice that participants rate the same patient differently. The group begins to realize that with a three-level system, there is always some level of disagreement within the group.

Three cases that could be used for this game are presented below:

**Case 1.** A 57-year-old woman presents with epigastric pain 6/10, a smoker, her only medication is for high cholesterol. She has been tired for the last week and thinks she just needs a vacation. Her skin is cool and clammy. Is this patient emergent, urgent, or non-urgent? Chances are many of the group will triage her as urgent. Some more experienced staff may recognize that she is probably having a cardiac event and will label her emergent.

**Case 2.** A 36-year-old female presents with left lower quadrant abdominal pain 6/10, vaginal spotting, last menstrual period 8 weeks ago, vital signs within normal limits. Is this patient emergent, urgent, or non-urgent? This case may generate some interesting discussion. Chances are many of the group will triage the patient as urgent. Some more experienced staff may recognize that she is probably pregnant.

**Case 3.** A 10-day-old baby boy is brought to the ED by the parents because he feels warm and is not nursing well. Mom thinks he has the bug that her other kids are getting over. His rectal temperature is 101°F. Is this patient emergent, urgent, or non-urgent? Some nurses may accurately say he is emergent, recognizing that a temperature of 101°F
in a 10-day old is concerning. Others will say he is merely urgent because a temperature of 101 is not that significant in light of the other kids having been sick.

After the Triage Game, it is useful to highlight the research on poor inter-rater and intra-rater reliability of conventional three-level triage systems, which is described in Chapter 1. At this point the group is about 15-to-20 minutes into the presentation and staff should be ready to hear about ESI. Participants should have a copy of the front and back of the algorithm (see the cards on the back cover of this handbook). The trainer can now begin the discussion.

Section 2: The ESI Algorithm. This section of the presentation explains the algorithm in detail. It is important to stress to course participants that ESI was developed by a group of emergency nurses and physicians and has been in use at a number of hospitals since April 1999. Other important background information to discuss includes the following points about ESI:

- The program is research based.
- Consistent use of the ESI by all staff is more likely when all triage nurses participate in a standardized educational program.
- ESI allows for rapid sorting into one of five categories.

Begin review of the algorithm with the conceptual version so that the four major decision points can be reviewed. Then begin a detailed description of the algorithm itself. The instructor should walk through each decision point slowly and not move on to the next decision point until all questions and concerns are addressed. This section will take from 40-to-65 minutes depending on the size of the group and the experience of participants. For each decision point, the trainer should review the questions the triage nurse should be asking.

Decision point A: Does this patient require immediate life-saving intervention? If the answer is yes, the patient is assigned to ESI level 1. It is imperative that the instructor spend time reviewing the A notes on the back of the algorithm card. The instructor should also include examples of ESI level-1 patients and the reasons they fall into that triage level. Experienced ED nurses have no problems identifying this group of patients.

Decision point B: Is this a patient who shouldn't wait? The trainer needs to discuss in detail the three questions that are part of Decision Point B:

- Is this a high-risk situation?
- Is there new onset confusion, lethargy or disorientation?
- Is this patient in severe pain or distress?

Is this a high-risk situation? Define the term “high risk” and have the participants identify chief complaints or diagnoses that are high risk. Participants will usually mention aortic abdominal aneurysm and ectopic pregnancy but the trainer needs to encourage the staff to think about other low volume, high-risk presentations. During this discussion, knowledge deficits may become evident and the instructor will need to provide additional educational materials. For example, staff nurses may disagree on the need for immediate evaluation of a patient that presents with symptoms of central retinal artery occlusion. This is a perfect opportunity to explain why this is high-risk situation. A discussion of high-risk situations also provides the trainer with an opportunity to review triage red flags in the elderly and in children.

To prepare for this section of the course, the instructor may want to review the Emergency Nursing Core Curriculum© (Emergency Nurses Association, 2007) or other emergency nursing textbooks and develop a list of high-risk patient situations. These situations are outlined in Chapter 3 (Table 3-1). The instructor needs to stress that a high-risk patient may be safe to wait up to 10 minutes while an open bed is found.

Is there new onset confusion, lethargy or disorientation? This question also needs to be reviewed using examples from various age groups (see Table 3-1 and case studies in Chapters 9 and 10). The definition of “acute” change in level of consciousness is important to clarify.

Is this patient in severe pain or distress? The concept of severe pain or distress elicits many opinions and questions from the audience. The instructor should not engage in a debate about pain scales and their use at triage. The discussion should focus on the intent of this question to identify the patient in extreme pain. It may be helpful to explain that there are actually three components to severe pain:
• The patient's rating of pain is 7/10 or higher.
• The nurse's assessment, including chief complaint, subjective and objective assessment, past medical history, and current medications.
• Can the triage nurse perform any nursing interventions that may decrease this patient's pain? (Examples: ice, elevation, positioning, quiet room, something to cover their eyes, and medications.)

If the patient rates their pain as 7/10 or greater and the triage RN feels this patient cannot wait and needs IV analgesia, the patient will be assigned to ESI level 2. Participants may have many questions about this concept and the trainer needs to stress that it is not just the patient's pain rating that makes the patient an ESI level 2. This concept is discussed in detail in chapter 3. Nurses may say they feel uncomfortable documenting a patient's high pain rating and then leaving the patient in the waiting room. It is important for the instructor to stress that the patient's rating is one piece of an assessment and that the nurse should accurately document what he or she is observing. For example: “Rates pain as 10/10, skin warm and dry, laughing with friend at triage,” or “Generalized abdominal pain for 3 days, constant dull ache. Rates pain as 10/10.”

The instructor should describe several patients that meet ESI level-2 criteria due to pain. Examples include sickle-cell crisis, a cancer patient with breakthrough pain, and renal colic. At the same time the instructor needs to address patients who probably will not be assigned to ESI level 2 due to pain. Examples include toothache, eye pain, most headaches, and extremity injuries. This is a great opportunity to discuss nursing interventions at triage to minimize or decrease a patient's pain. This discussion may also prompt the recognition of standing orders for analgesia at triage, (e.g., ibuprofen or opthane).

The next area to address is physiological or psychological distress. Examples are often the best method of explaining this concept. Examples of physiological distress include urinary retention and priapism. These patients are in acute distress and require immediate intervention. Many psychiatric emergencies fall under psychological distress. Examples include: sexual assault, domestic violence, paranoia, and manic behavior. The suicidal/homicidal patient has already been assigned to ESI level 2 because they are high risk. These patients should be assigned to ESI level 2 even if they come in every day stating they are going to hurt themselves or someone else. This is an excellent opportunity to review your ED psychiatric policy.

After discussing the three questions under decision point B, it is helpful to review all the level-2 criteria together. Once again a list of examples is helpful.

**Decision point C:** How many different resources will this patient consume? It is important to clarify what is and what is not a resource. Reviewing the resource table on the back of the algorithm card usually generates questions and discussion. The following discussion includes examples of typical questions the trainer should be prepared to discuss.

**Course participant:** Why isn't an interpreter a resource? We use them all the time.

**Trainer:** It is important for the nurse using ESI not become overly focused on differentiation of what is and what is not a resource. ESI is a triage acuity rating system that evaluates how ill or injured a patient is on presentation to the emergency department. The need for an interpreter does not change that. Inclusion of everything as a resource will not allow differentiation of triage levels.

**Course participant:** I don't understand why crutches aren't a resource. Fitting a patient correctly and teaching crutch walking takes time.

**Trainer:** ESI assesses acuity on presentation to the emergency department, not workload issues. If crutch walking instructions counted as a resource, all patients with sprains would now be triaged as ESI Level 3; x ray and crutch walking. This would clearly defeat the purpose of ESI.

**Course participant:** A patient who needs a blood test and urine test will consume two resources.

**Trainer:** This is only one resource. For example, a urinalysis and a urine culture is one resource: laboratory study. A urinalysis and two blood tests are one resource: laboratory study. A vaginal culture and a blood test are one resource: laboratory study.

**Course participant:** Why isn't a pelvic exam a resource? They take staff time.

**Trainer:** As we discussed, a physical exam is not a resource. For the female patient with abdominal pain, a pelvic exam is part of that physical exam. Just like the patient with an eye complaint, a slit lamp exam is part of the physical exam for that chief complaint.
Course participant: I don't understand why security is not a resource. We use them all the time with our psychiatric population.

**Trainer:** Security is used to monitor psychiatric patients when they have been determined to be a danger to themselves, others, or the environment or when they are in acute distress. Because they are high risk, these patients meet the criteria for ESI level 2 as high risk. Remember, resources are only looked at after the triage nurse has determined that the patient does not meet the criteria for ESI level 1 or 2.

Once the group understands the concept of resources, it is important to give multiple examples of patients who would be assigned ESI level 4 and 5. Before discussing ESI level 3, the trainer needs to review decision point D.

**Decision point D:** What are the patient's vital signs? It is important that participants understand that the triage nurse should consider the patient's vital signs. The triage nurse uses her judgment to determine whether the patient should be up-triaged to ESI level 2 based on abnormal vital signs. It is important to present examples of patients the triage nurse should up-triage to ESI level 2, as well as examples of ESI level-3 patients who do not require up-triage based on abnormal vital signs.

At the end of this segment, the participants should be quite comfortable with the type of patients that fall into each ESI level. Reviewing practice cases will reinforce use of the algorithm and answer many questions.

**Section 3: ESI Practice Cases.** After a thorough description of the ESI algorithm, patient scenarios are used as a group teaching tool. Chapter 9 lists many cases specifically written for practice and intended to simulate an actual triage encounter. The cases encompass all age groups and the complete spectrum of acuity. In addition, these cases illustrate most of the important points in the algorithm. The instructor reads each case, and the participants are asked to use the algorithm to assign an ESI level. Each participant can be given an additional packet of colored cards, such as those used in the Triage Game, labeled ESI levels 1 through 5 and be asked to hold up the appropriate card as each case study is discussed. The advantage of using the cards is that participants will begin to notice a higher degree of agreement with ESI than they observed with the three-level triage system.

Once everyone in the group has assigned an ESI level, the trainer can proceed with a step-by-step review of how the level was determined. The research group found it helpful to instruct nurses to always start with decision point A and work through the algorithm. If the case moves to decision point C, it is helpful to have the participants verbalize the expected resources. Many misconceptions can be cleared up with this strategy.

As previously discussed, staff may initially have difficulty with what is and what is not a resource and with determining the number of resources. This is a perfect opportunity to re-emphasize the definition of resources in the ESI triage method and answer the "what about" questions.

**Section 4: Competency Cases.** One question managers and educators frequently hear is, "How do you know your staff is competent to perform triage?" Chapter 10 was written with this question in mind. The chapter includes two sets of cases for each nurse to review and assign a triage acuity rating using ESI.

Each nurse should complete the competency cases individually and return them to the trainer to assess for accuracy. The ED management and educational staff of each hospital must define parameters for a passing score prior to assessing staff competency. For the staff nurse whose score falls below the acceptable level, re-education is indicated and competency should be re-assessed at a later date with different cases. Paper case assessment of competency only addresses the staff nurse's ability to assign a triage acuity rating to paper cases. An evaluation of each triage nurse performing triage with real patients and using the ESI criteria should be performed with a triage preceptor or other designated expert.

**Strategies to Assist With Implementation**

Strategies that the ESI triage research group have found useful for successful ESI implementation include the following:

- Wall posters, such as the one included in this handbook, with the ESI algorithm hanging in triage and clinical areas
- Pocket-sized laminated cards of the ESI algorithm for every nurse
• E-mails to remind staff of the upcoming change
• Computer help screens to explain the five ESI levels during triage data entry
• Posters to address questions about ESI after implementation
• Informal chart reviews conducted by the trainer, clinical nurse specialist, or ESI champions focusing on the finer points of the algorithm

Reinforcement is key to the successful implementation of ESI. At Brigham and Women’s Hospital and the York Hospitals, the implementation teams chose to have the algorithm preprinted on progress notes. For 2 months the triage nurse was required to use a progress note and record the patient’s chief complaint and circle the assigned ESI level. The progress note served to make the triage nurse look at the algorithm each time a patient was triaged.

Questions and misinterpretation of the finer points of the algorithm will always arise after implementation and will need to be addressed with re-education. After implementation of ESI at Brigham and Women’s Hospital, it was noted that the staff were not consistently assigning an ESI level 1 to intoxicated and unresponsive patients. This point was emphasized on a poster in the break room to bring attention to the problem.

Implementation Day
The implementation team needs to be available around the clock to support the triage staff, answer questions, and review triage decisions. It is important that mistriages be addressed immediately in a non-threatening manner. Making staff aware ahead of time that this will be taking place is less threatening. Reinforcing the efforts of the staff and being available will help ensure ESI is appropriately integrated into the ED.

Post-Implementation
Following implementation, it is important that triage nurses continue to be vigilant when assigning triage acuity ratings. Many nurses may complain that more patients are ESI level 2. Triage nurses should be reminded not to deviate from the original algorithm but instead to understand the value of ESI as an operational tool. The staff should understand that deviations from the algorithm will threaten the reliability and predictive validity of the tool.

Staff efforts in making a smooth transition to ESI should be recognized and rewarded. This could include an article in the hospital newspaper or a note of thanks to the staff from the ED leadership team. Successful implementation of ESI requires a dedicated team that recognizes the degree of change and effort needed to change triage systems. The team must be able to develop and carry out a specific, simple, and realistic plan. The team leader should have a clear vision, be able to clearly articulate it, be committed to the ESI implementation, and be able to energize the other members of the team and the staff. The team needs the support of the ED leadership and the resources necessary to make this planned change. For this change to be successful there must be broad-based support beginning with the most senior levels of the institution.

Note: Appendix A of this handbook includes frequently asked questions and post-test assessment questions for Chapters 2 through 8. These sections can be incorporated into a locally-developed ESI training course.

References
