Guideline Summary NGC-8651

Guideline Title

Rapid response team.

Bibliographic Source(s)

Institute for Clinical Systems Improvement (ICSI). Rapid response team. Health care protocol. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2011 Jul. 45 p. [28 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Institute for Clinical Systems Improvement (ICSI). Rapid response team. Health care protocol. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009 May. 32 p.

Scope

Disease/Condition(s)

Cardiopulmonary arrest, other life-threatening event, or any worrisome or acute clinical change for which a rapid response team may be summoned

Guideline Category

Evaluation

Management

Prevention

Clinical Specialty

Cardiology

Critical Care

Emergency Medicine

Internal Medicine

Nursing

Pediatrics

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Emergency Medical Technicians/Paramedics

Health Care Providers

Health Plans

Hospitals

Managed Care Organizations

Nurses

Physician Assistants

Physicians

Respiratory Care Practitioners

Guideline Objective(s)

- To increase early intervention and stabilization to prevent clinical deterioration of any individual prior to cardiopulmonary arrest or other life-threatening event
- To decrease the number of cardiopulmonary arrests that occur outside of the intensive care unit and emergency department
- To increase patient, family and staff satisfaction
- To decrease hospital mortality

Target Population

All individuals within an acute care setting including inpatients, outpatients, volunteers, visitors, students, employees, etc.

Interventions and Practices Considered

1. Recognition of a worrisome or acute clinical change and a quick assessment of respiratory status, heart rate, blood pressure, neurological changes, chest pain, uncontrolled bleeding
2. Developing a behavioral emergency response team (BERT) to assist staff in proactively de-escalating patients who may be exhibiting potentially violent behaviors
3. Implementation of an early warning score system
4. Activation of the rapid response team
   - Education of patients and families on how to activate rapid response teams
5. Initiation of appropriate interventions (e.g., oxygen therapy, intravenous fluid administration, Narcan® or D50, resuscitation if needed)
6. Consultation with the inpatient's appropriate provider and development of a continuing plan of care
   - Situation, background, assessment, recommendation (SBAR) communication among team members
7. Transferring the patient to a higher level of care (e.g., emergency department) when indicated
8. Follow-up

Major Outcomes Considered

- Hospital mortality rates
- Unplanned intensive care unit admission
- Hospital length of stay
- Cardiopulmonary arrest

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

A literature search of clinical trials, meta-analyses, systematic reviews, or regulatory statements and other professional order sets and protocols is performed.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Classes of Research Reports

Class	Description
Primary Reports of New Data Collection	
A	Randomized, controlled trial
B	Cohort-study
C	Non-randomized trial with concurrent or historical controls • Case-control study • Study of sensitivity and specificity of a diagnostic test • Population-based descriptive study

D	Cross-sectional study • Case series • Case report
Reports that Synthesize or Reflect upon Collections of Primary Reports	
M	Meta-analysis • Systematic review • Decision analysis • Cost-effectiveness analysis
R	Consensus statement • Consensus report • Narrative review
X	Medical opinion

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Document Development

A workgroup consisting of 6 to 12 members that includes physicians, nurses, pharmacists, other healthcare professionals relevant to the topic, and an Institute for Clinical Systems Improvement (ICSI) staff facilitator develops each document. Ordinarily, one of the physicians will be the leader. Most work group members are recruited from ICSI member organizations, but if there is expertise not represented by ICSI members, 1 or 2 members may be recruited from medical groups, hospitals or other organizations that are not members of ICSI.

The work group will meet for 3 to 4 three-hour meetings to develop the order set and protocol. Under the coordination of the ICSI staff facilitator, the work group develops the algorithm and writes the annotations and literature citations. The literature is graded in the document based on the ICSI Evidence Grading System.

Once the final draft copy of the protocol is developed, the document is sent to the ICSI members for review and comment.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

Review and Comment

The purpose of the review and comment process is to provide an opportunity for the clinicians in the member organizations to review the science behind the recommendations and focus on the content of the protocol. Review and comment also provides an opportunity for clinicians in each organization to come to consensus on feedback they wish to give the work group and to consider changes needed across systems in their organization to implement the protocol.

All member organizations are encouraged to provide feedback on protocols; however, responding to review and comment is not a criterion for continued membership within the Institute for Clinical Systems Improvement (ICSI).

Document Approval

Each protocol is approved by the appropriate steering committee. There is a steering committee for Respiratory, Cardiovascular, Women's Health, and Preventive Services. The Committee for Evidence-based Practice approves guidelines, order sets, and protocols not associated with a particular category. The steering committees review and approve each protocol based on:

- Member comments have been addressed reasonably.
- There is sufficient reason to expect that members will use the protocol with minor modifications or adaptations.
- Within the knowledge of the reviewer, the recommendations in the protocol are consistent with other protocols,

regulatory and safety requirements, or recognized authorities.

- When evidence for a particular step in the protocol has not been established, the work group identifies consensus statements that were developed based on community standard of practice and work group expert opinion.
- Either a review and comment by members has been carried out, or within the knowledge of the reviewer, the changes proposed are sufficiently familiar and sufficiently agreed upon by the users that a new round of review is not needed.

Once the document has been approved, it is posted on the ICSI Web site and released to members for use.

Revision Process of Existing Guidelines

ICSI scientific documents are revised every 12 to 36 months as indicated by changes in clinical practice and literature. Every 6 months, ICSI checks with the work group to determine if there have been changes in the literature significant enough to cause the document to be revised earlier than scheduled.

Prior to the work group convening to revise the document, ICSI members are asked to review the document and submit comments. During revision, a literature search of clinical trials, meta-analyses, and systematic reviews is performed and reviewed by the work group. The work group will meet for 1-2 three-hour meetings to review the literature, respond to member organization comments, and revise the document as appropriate.

If there are changes or additions to the document that would be unfamiliar or unacceptable to member organizations, it is sent to members to review prior to going to the appropriate steering committee for approval.

Recommendations

Major Recommendations

Note from the National Guideline Clearinghouse (NGC) and the Institute for Clinical Systems Improvement (ICSI): For a description of what has changed since the previous version of this protocol, refer to Summary of Changes Report – July 2011.

The recommendations for rapid response team are presented in the form of a protocol and an algorithm with 17 components, accompanied by detailed annotations. The algorithm is provided in the original guideline document for Rapid Response Team. Clinical highlights and selected annotations (numbered to correspond with the algorithm) follow.

Class of evidence (A-D, M, R, X) definitions are repeated at the end of the "Major Recommendations" field.

Clinical Highlights

1. When choosing rapid response team members, consider skill set, communication skills, attitude and behavior. (*Introduction - see the original guideline document; Aim #1*)
2. It is recommended that the cardiopulmonary arrest team be activated (versus the rapid response team) if a non-licensed employee is the initial recognizer and is unable to determine if the individual of concern has experienced a true cardiopulmonary arrest. (*Annotations #4; Aim #4*)
3. Family members should be encouraged to activate the rapid response team without regard to distinguishing cardiopulmonary arrest. (*Annotations #1, 6, 8; Aim #4*)
4. The facility should have a process for educating patients and families on how to activate the rapid response team. (*Annotation #8, Aim #1*)
5. Situation, Background, Assessment, Recommendation (SBAR) communication should be the framework used for communication among members of the health care team. (*Annotations #7, 13, 15; Aim #1*)

Special Considerations

When designing and implementing a rapid response team, take into consideration the uniqueness of your organization and the situations that may arise in your hospital. A rapid response team can bring the extra help that is needed when performing an emergency Caesarean section on the night shift or when a patient arrests in a cardiac catheterization lab. You can customize the rapid response team to meet the needs of your organization.

Rapid Response Team Algorithm Annotations

1. **Recognition That an Individual Is Experiencing a Worrisome/Acute Clinical Change**

Any individual within a hospital or acute care facility may experience a health-related event, including outpatients, inpatients, and non-patients (family members or visitors and staff members or volunteers).

Non-Intensive Care Unit (ICU)/Emergency Department (ED) Inpatients

For non-ICU/ED inpatients, the intent of a rapid response team (RRT) process is to detect any significant clinical deterioration at the earliest opportunity, in order to quickly address the issue(s) and prevent further deterioration. In distinction from a hospital code team, the rapid response team process specifically includes all hospital outpatients and inpatients, including those who may have DNAR (do not attempt resuscitation) status. Though DNAR patients will not be coded, they may greatly benefit from relatively simple clinical interventions if made before clinical deterioration has occurred.

- Activation of an RRT call may be made at any time based on judgment regarding the potential clinical deterioration of a patient.
- The early warning score (see Annotation #6, "Does the Individual Meet Criteria for Rapid Response Team or Demonstrate an Elevated Early Warning Score?") is a further means of assessing potential inpatient deterioration. The early warning score is intended as a tool for the bedside nurse to either help identify a patient who may be deteriorating, or help corroborate his/her clinical impression of deterioration. The early warning score can be calculated by a bedside nurse, and both the score and its trend over time are intended to provide guidance and support for when to initiate a rapid response team call. Though the early warning score complements the judgment of an experienced nurse, it may provide especially important guidance to less experienced nurses.

There are other ways to perform early identification of patients who may be at risk of clinical deterioration:

There are other ways to perform early identification of patients who may be at risk of clinical deterioration.

- A designated qualified individual might receive notification of all ICU transfers to one of the medical or surgical wards. He/she could then later check on that patient's status within a set amount of time and review the ongoing plan of care with the bedside nurse.
- A designated qualified individual could also (or alternatively) make routine rounds of the medical/surgical wards to assist and provide support to bedside nurses who may already have concerns regarding either deteriorating patients or those felt to be at risk of doing so. It is suggested that the rapid response team nurse meet with the charge nurse and bedside nurse(s) to help identify, discuss and review these patients. Additionally, this type of rounding is also a tool to help educate and support medical and surgical ward staff, particularly when done in a professional and supportive manner.

Non-Inpatients

For non-inpatients, the intent of a rapid response team process and team is to assess, provide support and facilitate the provision of care if they are indeed having a health event. This includes any non-inpatient who has significant symptoms of a health event, or frank evidence of one (such as evidence of severe respiratory distress, or a full arrest).

2. **Is the Individual Experiencing a Behavioral Health Emergency**

The work group recognizes that responding, assessing and implementing care for an individual experiencing a behavioral health emergency in a non-behavioral health unit is outside of the scope of the protocol. However, hospitals may want to consider developing a behavioral emergency response team (BERT) to assist staff in proactively de-escalating patients who may be exhibiting potentially violent behaviors. The BERT may consist of staff members (RNs, social workers, security staff, psychiatrists, etc.) from behavioral health units who are experienced in caring for patients with acute psychiatric disorders and management of assaultive behaviors.

4. **Is the Individual Progressing Toward or Experiencing a Cardiopulmonary Arrest?**

Patients who are experiencing a cardiopulmonary arrest should have a code team response. Patients who are rapidly deteriorating and will likely need emergent interventions to prevent a cardiopulmonary arrest should also have a code team response. There should be an understanding among patient care staff that a rapid response team may take up to five minutes to respond and does not typically carry with it a full complement of medical expertise (i.e., pharmacy, anesthesia).

6. **Does the Inpatient Meet Criteria for Rapid Response Team or Demonstrate an Elevated Early Warning Score?**

Below are suggested criteria to activate the rapid response team. Each organization should tailor these to its own needs.

Employee and/or family member concerned – Acute significant change in vital signs or status. He/she does not "look right." The licensed medical provider may have a "gut" feeling that something is not quite right with their patient. This may be based upon previous experience with the same patient or a similar incident with another patient.

Pediatric Criteria for Rapid Response Team Activation

Health care provider worried about clinical status

Airway: airway threat

Breathing

- Apnea
- Hypoxemia (on any amount of oxygen) (saturation of peripheral oxygen [SpO_2] <90%, SpO_2 <60% for children with cyanotic heart disease)
- Moderate to severe respiratory distress
- Tachypnea (0-3 months >60, 3-12 months >50, 1-4 years >40, >5 years >30)

Circulation

- Heart rate (<1 year <100 or >180, 1-4 years <90 or >160, 5-12 years <80 or >140, >12 years <60 or >130)
- Hypotension (systolic blood pressure [BP], mmHg) (<3 months <50, 4-12 months <60, 1-4 years <70, 5-12 years <80, >12 years <90)

Neurological changes

- Acute change in mental status
- Seizure

[R]

Adult Criteria for Rapid Response Team Activation

Health care provider worried about clinical status

Respiratory status

Acute significant change in patient's baseline respiratory rate

OR

- Consider rates less than 8 or greater than 28 breaths per minute
- Consider pulse oximeter unexpected reading less than 85% to 90% for more than five minutes
- Increasing oxygen demands to maintain baseline oxygen saturation

Heart rate

Acute significant change in patient's baseline heart rate or rhythm (awake status)

- Consider ranges of less than 40 or greater than 160 beats per minute
- Greater than 140 beats per minute with symptoms

Blood pressure

Acute significant change in patient's baseline blood pressure

- Consider ranges of less than 80 or greater than 180 systolic
- Greater than 100 diastolic

Neurological changes

Acute significant change in patient's baseline neurological status

- Alteration in level of consciousness
- Acute mental status change
- Unexplained onset of lethargy and/or agitation
- Seizure
- Symptoms of stroke:
  - Sudden loss or change in speech
  - Sudden loss of movement (or weakness) of face, arms or legs
  - Numbness and tingling

Chest pain

- Unresponsive to nitroglycerin
- Acute new onset of pain

Significant acute change in:

- Pain
- Fluid status
- Skin color (pale, dusky, blue)

Uncontrolled bleeding

Early Warning Score

The use of early warning scores to trigger rapid response teams has not been well validated, but this process is being utilized by many organizations as another method of initiating a rapid response team *[C]*, *[R]*, *[D]* and may be of further benefit in the identification of at-risk patients earlier in their hospitalization. The early warning scores can be calculated by the bedside nurse utilizing vital sign parameters and physical exam findings.

Refer to the original guideline document for additional information.

7. **Contact Appropriate Provider and/or Implement Orders**

It is recommended that the patient's primary provider be contacted and an update provided with a patient's change in condition. The update should be provided using the Situation, Background, Assessment, Recommendation (SBAR) format. Orders should be implemented as appropriate.

8. **Activate Rapid Response Team**

Each organization should use a communication process and system that is efficient and reliable, and that has a minimum number of steps.

Consideration should be given to the communication system that notifies the appropriate personnel (rapid response team) to respond. Include a plan for clear identification of the event location.

Each organization must determine when the patient's primary provider will be contacted. Points to consider in making this determination include:

- Primary provider preference
- Primary provider availability
- Composition of the rapid response team

Provide a mechanism for patients and/or families to directly activate the rapid response team in accordance with The Joint Commission. When contemplating such a process, it is recommended that the following be taken into consideration *[R]*.

- Upon admission or transfer to a unit that is covered by the rapid response team, the patient/family orientation to the unit should include information about patient/family activation of the rapid response team.
- Develop a brochure as well as posted material that describe the rapid response team, the reason they would utilize the rapid response team and how to activate the team. Ensure material is available in other languages for non-English speaking patients/families.
- Expect the team to "check in" with the charge nurse or patient's nurse before entering the patient's room.
- Surveys of patients/families regarding their knowledge of activating the rapid response team should be performed periodically to ensure that the information is being provided appropriately.

9. **Rapid Response Team Assesses and Initiates Appropriate Interventions, Consults with Appropriate Provider and Develops a Continuing Plan of Care**

The ability to quickly assess a patient's condition and implement appropriate interventions is the cornerstone of the

value of the rapid response team *[X]*. Since the team is often unfamiliar with the patient, it is critical that the individual that activated the team be available to provide background information and answer questions *[X]*. When the patient is an inpatient, the bedside nurse becomes an integral member of the rapid response team and as such is expected to remain at the patient's bedside during assessment and treatment. In particular the bedside nurse will do the following:

- Provide patient's medical history, medications, lab values and acute medical changes
- Provide reason(s) for activating the call
- Assist other members of the rapid response team

The charge nurse should be made aware of the initiation of the RRT in order to ensure the bedside nurse's other patients' care interruption is kept to a minimum and provide assistance to the team as needed. Other staff on the nursing unit may be required to temporarily take over responsibility of the bedside nurse's other patients.

In order to rapidly and appropriately assess the patient's condition, it may be necessary to conduct diagnostic laboratory or radiology tests such as an arterial blood gas analysis, electrocardiogram or chest x-ray. In addition, the team members may initiate interventions utilizing an order set as appropriate. If the team does not include a physician, a protocol may be used by the rapid response team, which may facilitate gathering information to be interpreted by the appropriate provider *[C]*, *[X]*. This protocol should be unique to the facility and the skill set of the members of the team. See Appendix A, "Rapid Response Team Order Sets," in the original guideline document for an example.

Interventions designed to stabilize the patient and prevent further deterioration of the patient's condition may also be included in an order set used by the team. Some common interventions include oxygen therapy, intravenous fluid administration, Narcan®, or D50 *[R]*. If the rapid response team members are Advanced Cardiac Life Support or Pediatric Advanced Life Support certified and the patient's condition deteriorates to a cardiopulmonary arrest, they may initiate resuscitation protocols prior to the code team's arrival.

Information gathered and interventions provided should be documented on either a paper or electronic form designed for that purpose *[X]*. The form should become a permanent part of the medical record. Fields that may be included on the rapid response team form include but are not limited to:

- Patient demographics
- Patient location
- Date and time of call
- Team's arrival and departure times
- Reason for the call, including past medical history, events leading up to the team's activation, current vital signs and pertinent lab values
- Diagnostic tests performed during assessment and test results
- Interventions
- Patient disposition at end of the call
- Event note
- Time and details of report to the patient's physician
- Name of the person who contacted the patient's physician
- Names and titles of all RRT members
- Name of the person completing the form
- Follow-up assessment of the patient, additional interventions if appropriate, the time of the follow-up and the signature of the person completing the follow-up.

Additional elements may also be captured by individual facilities to aid in the detection of process improvement opportunities. See Appendix B, "Sample Documentation Forms," in the original guideline document for an example.

Continuing Plan of Care

It is recommended that the patient's primary provider be contacted and an update provided. Based on the organization's preference, the patient's primary provider may or may not know the team has been called until the patient has been assessed and stabilized.

The update should be provided using the SBAR format and include the team's recommendation for next steps. The plan may or may not include transferring the patient to another unit within the hospital or to another facility. During this consultation there should be a discussion about contacting the patient's family and/or significant other and who will be performing that role. This may also be an appropriate time to start dialogue of end-of-life care for the terminally ill patients *[C]*.

The agreed-upon plan of care must be documented in the patient's medical record.

Physician Support to the Rapid Response Team

Larger hospitals or organizations may have a physician as part of the RRT, who would then help provide the assessment and appropriate treatment, and help plan for appropriate transfer, if necessary.

If an RRT does not have a designated physician member and inpatient physicians are not immediately available, it is highly recommended that a physician/physician group be designated as being on-call to the RRT when needed. The physician groups that would typically be included are hospitalist, intensivist, and/or emergency medicine specialists. In environments where there are no designated inpatient physicians available to the RRT, the RRT relies upon the attending or on-call physician for help and support.

13. **Rapid Response Team Member Accompanies Individual to Emergency Department, Completes Hand-over and Documents**

Once the non-inpatient has been assessed and stabilized by the rapid response team, further evaluation should be offered. In cases requiring emergency department evaluation, the following activities should be completed:

- As quickly as possible, the rapid response team transports the individual by wheelchair or cart to the emergency department.
- Rapid response team gives verbal report using the SBAR format.
- Rapid response team completes documentation (paper or electronic).
- Rapid response team later checks to see if the individual was admitted. If yes, the team then completes a 24-hour follow-up and documents.

15. **Rapid Response Team Member Accompanies Inpatient to Receiving Unit, Completes Hand-over and Documents**

Following a rapid response team intervention, the inpatient may require transfer to an alternative level of care. The following activities should be complete in conjunction with a transfer:

- Rapid response team assesses patient to determine appropriate equipment (cart, oxygen, etc.) and personnel necessary to safety transport patient to higher level of care.
- Rapid response team transports patient to assigned bed and gives verbal report using SBAR format.
- Rapid response team completes documentation (paper or electronic).

17. **Follow-Up**

Consideration should be given to having a member of the rapid response team follow up in person with patients to assess their status and their response to the initial interventions, to review the plan of care and assist in the determination if additional interventions should be implemented.

An in-person follow-up with inpatients, as well as those patients who were evaluated in the emergency department (and possibly admitted), at two to four hours following a rapid response team and again at 12 to 24 hours (if they were not discharged) should be considered. If a patient declines treatment or transport to the emergency department, a follow-up is not necessary.

The follow-up evaluation should be conducted in person rather than with a telephone call. This allows an opportunity to have a conversation directly with the patient and/or the family, as well as the bedside nurse. It may also be a chance to provide education to the bedside nurse or other patients.

An evaluation tool or satisfaction survey about the rapid response team call may be provided to the activator of the call. This tool can provide feedback in order to improve the rapid response team if needed. See tool Appendix C, "Sample Evaluation/Satisfaction Survey," in the original guideline document.

Definitions:

Classes of Research Reports

Class	Description
Primary Reports of New Data Collection	
A	Randomized, controlled trial
B	Cohort-study
C	Non-randomized trial with concurrent or historical controls • Case-control study • Study of sensitivity and specificity of a diagnostic test • Population-based descriptive study
D	Cross-sectional study • Case series • Case report
Reports that Synthesize or Reflect upon Collections of Primary Reports	
M	Meta-analysis • Systematic review • Decision analysis • Cost-effectiveness analysis
R	Consensus statement • Consensus report • Narrative review
X	Medical opinion

Clinical Algorithm(s)

A detailed and annotated clinical algorithm for rapid response team is provided in the original guideline document.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is classified for selected recommendations (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- Increased early intervention and stabilization to prevent clinical deterioration of any individual prior to cardiopulmonary arrest or other life-threatening event
- Decreased number of cardiopulmonary arrests that occur outside of the intensive care unit and emergency department
- Increased patient, family and staff satisfaction
- Decreased hospital mortality

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

- This health care protocol is designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. A protocol will rarely establish the only approach to a problem.
- This health care protocol should not be construed as medical advice or medical opinion related to any specific facts or circumstances. Patients are urged to consult a health care professional regarding their own situation and any specific medical questions they may have.

Implementation of the Guideline

Description of Implementation Strategy

Once a guideline is approved for release, a member group can choose to concentrate on the implementation of that guideline. When four or more groups choose the same guideline to implement and they wish to collaborate with others, they may form an action group.

In the action group, each medical group sets specific goals they plan to achieve in improving patient care based on the particular guideline(s). Each medical group shares its experiences and supporting measurement results within the action group. This sharing facilitates a collaborative learning environment. Action group learnings are also documented and shared with interested medical groups within the collaborative.

Currently, action groups may focus on one guideline or a set of guidelines such as hypertension, lipid treatment, and tobacco cessation.

Detailed measurement strategies are presented in the original guideline document to help close the gap between clinical practice and the guideline recommendations.

Implementation Recommendation Highlights

The following system changes were identified by the protocol work group as key strategies for health care systems to incorporate in support of the implementation of this protocol.

1. Implementation of a rapid response team involves active support from administrative and medical leadership
2. Additional items that need to be considered prior to implementation include:
    - Team composition
    - Criteria for calling the rapid response team
    - The mechanism for calling the team (e.g., team pagers, overhead page)
    - Education and training to senior leaders, physicians, team members, health care facility staff members, patients, visitors and families
    - Documentation tools/forms
    - Communication and feedback processes
3. A long-term multifaceted ongoing marketing strategy should be developed. The first phase is for the initial rollout of the team and involves building the case for the team's existence. The second phase is focused on sustaining awareness and is best rolled out over an extended period of time. Sharing success stories, reviewing lessons learned and using simulation and drills can accomplish maintaining the momentum of the team.
4. Establish a process for ongoing training, education, measurement and feedback for patients, families and staff. Identifying opportunities for improvement using quality improvement methodologies (such as data collection and analysis) should be incorporated into the process.
5. If the hospital has multiple patient care units, piloting the process of activating and responding to rapid response team calls is recommended. Test the process for either a specific period of time or number of calls.
6. There may be institution-specific needs for other forms of rapid response teams to respond to specialized populations that may be present. Examples may include teams that respond to behavioral or obstetric emergencies.

7. Provide a mechanism for patients and/or families to directly activate the rapid response team in accordance with The Joint Commission. When contemplating such a process, it is recommended that the following be taken into consideration:

- Upon admission or transfer to a unit that is covered by the rapid response team, the patient/family orientation to the unit should include information about patient/family activation of the rapid response team.
- Develop a brochure as well as posted material that describe the rapid response team, the reasons they would utilize the rapid response team and how to activate the team. Ensure material is available in other languages for non-English speaking patients/families.
- Expect the team to "check in" with the charge nurse or patient's nurse before entering the patient's room.
- Surveys of patients/families regarding their knowledge of activating the rapid response team should be performed periodically to ensure that the information is being provided appropriately.

Implementation Tools

Chart Documentation/Checklists/Forms

Clinical Algorithm

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Safety

Timeliness

Identifying Information and Availability

Bibliographic Source(s)

Institute for Clinical Systems Improvement (ICSI). Rapid response team. Health care protocol. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2011 Jul. 45 p. [28 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2006 Jan (revised 2011 Jul)

Guideline Developer(s)

Institute for Clinical Systems Improvement - Nonprofit Organization

Guideline Developer Comment

Organizations participating in the Institute for Clinical Systems Improvement (ICSI): Affiliated Community Medical Centers; Allina Medical Clinic; Aspen Medical Group; Baldwin Area Medical Center; Brown Clinic; Center for Diagnostic Imaging/Medical Scanning Consultants; CentraCare; Central Lakes Medical Clinic; Chippewa County – Montevideo Hospital & Clinic; Cuyuna Regional Medical Center; Essentia Health; Fairview Health Services; Family HealthServices Minnesota; Family Practice Medical Center; Fergus Falls Medical Clinic; Gillette Children's Specialty Healthcare; Grand Itasca Clinic and Hospital; Hamm Clinic; HealthEast Care System; HealthPartners Central Minnesota Clinics; HealthPartners Medical Group & Regions Hospital; Hennepin County Medical Center; Hennepin Faculty Associates; Howard Young Medical Center; Hudson Physicians; Hutchinson Area Health Care; Hutchinson Medical Center; Integrity Health Network; Lake Region Healthcare Corporation; Lakeview Clinic; Mankato Clinic; MAPS Medical Pain Clinics; Marshfield Clinic; Mayo Clinic; Mercy Hospital and Health Care Center; Midwest Spine Institute; Minnesota Association of Community Health Centers; Minnesota Gastroenterology; Multicare Associates; New Richmond Clinic; North Central Heart Institute; North Clinic; North Memorial Health Care; Northwest Family Physicians; Obstetrics and Gynecology Specialists; Olmsted Medical Center; Park Nicollet Health Services; Planned Parenthood Minnesota, North Dakota, South Dakota; Quello Clinic; Raiter Clinic; Rice Memorial Hospital; Ridgeview Medical Center; River Falls Medical Clinic; Riverwood Healthcare Center; South Lake Pediatrics; Stillwater Medical Group; University of Minnesota Physicians; Winona Health

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Source(s) of Funding

The following Minnesota health plans provide direct financial support: Blue Cross and Blue Shield of Minnesota, HealthPartners, Medica, PreferredOne, Security Health Plan of Wisconsin, and UCare. In-kind support is provided by the Institute for Clinical Systems Improvement's (ICSI) members.

Guideline Committee

Committee on Evidence-Based Practice

Composition of Group That Authored the Guideline

Work Group Members: Stephanie Doty, MSN, MBA (*Work Group Leader*) (HealthPartners Medical Group and Regions Hospital) (Patient Safety); Christina Anderson, MD (Montevideo Hospital & Clinic) (Family Medicine); Jeffrey Dichter, MD (HealthPartners Medical Group and Regions Hospital) (Intensivist); Kathy Conway, RN, CNP (Gillette Children's Specialty Healthcare) (Nursing); Pat Hadfield, BSN, MS (Hennepin County Medical Center) (Nursing); Susan Rock, RN (Park Nicollet Health Services) (Nursing); Sameer Gupta, MD (University of Minnesota Physicians) (Pediatric Critical Care); Susan Farris, RCP (Fairview Health Services) (Respiratory Therapy); Kari Retzer, RN (ICSI) (Facilitator)

Financial Disclosures/Conflicts of Interest

In the interest of full disclosure, the Institute for Clinical Systems Improvement (ICSI) has adopted a policy of revealing relationships work group members have with companies that sell products or services that are relevant to this guideline topic. It is not assumed that these financial interests will have an adverse impact on content. They are simply noted here to fully inform users of the guideline.

Jeffrey Dichter does consulting for Cogent Healthcare related to critical care practice.

No other work group members have potential conflicts of interest to disclose.

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Institute for Clinical Systems Improvement (ICSI). Rapid response team. Health care protocol. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009 May. 32 p.

Guideline Availability

Electronic copies: Available from the Institute for Clinical Systems Improvement (ICSI) Web site.

Print copies: Available from ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

Availability of Companion Documents

The appendices of the original guideline document include sample rapid response team order sets, sample documentation forms, and a sample evaluation/satisfaction survey.

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on September 10, 2010. This NGC summary was updated by ECRI Institute on December 9, 2011.

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