Calling a Condition H(elp)

One facility gives patients and families the ability to summon a rapid response team.

In January 2001, an 18-month-old girl named Josie King died as a result of hospital errors at Johns Hopkins Medical Center in Baltimore, Maryland. Hospitalized for first- and second-degree burns she’d suffered in a bathtub accident, Josie had reportedly been “healing beautifully,” and a speedy recovery was expected. But two days before she was to return home, Josie died from “severe dehydration and misused narcotics.”

Speaking at the national conference of the Institute for Healthcare Improvement (IHI) in October 2002, Sorrel King described the series of errors that led to her daughter’s death:

[H]er central line had been taken out. I began noticing that every time she saw a drink she would scream for it, and I thought this was strange. I was told not to let her drink. While a nurse and I gave her a bath, she sucked furiously on a washcloth. As I put her to bed, I noticed that her eyes were rolling back in her head. Although I asked the nurse to call the doctor, she reassured me that oftentimes children did this and her vitals were fine. I told her Josie had never done this and perhaps another nurse could look at her. After yet another reassurance from another nurse that everything was fine, I was told that it was OK for me to sleep at home. . . . [But the next morning] she was not fine. Josie’s medical team arrived and administered two shots of Narcan [naloxone]. I asked if she could have something to drink. The request was approved, and Josie gulped down nearly a liter of juice. Verbal orders were issued for there to be no narcotics given. As I

sat with Josie, I noticed that the nurse on morning duty was acting very strangely. She seemed nervous, overly demonstrative, and in a hurry. . . . I expressed my concern to one of the doctors, and he agreed that she was acting a bit odd. Meanwhile, Josie started perking up. She was more alert and had kept all liquids down. I was still scared and asked her doctors to please stay close by. At 1:00 [pm] the nurse walked over with a syringe of methadone. Alarmed, I told her that there had been an order for no narcotics. She said, “It was the result of a total breakdown in the system.” She has been an advocate of allowing patients and family members to call for a rapid response team when they deem it necessary.
Josie’s heart stopped as I was rubbing her feet. Her eyes were fixed, and I screamed for help. I stood helpless as a crowd of doctors and nurses came running into her room. I was ushered into a small room with a chaplain. The next time I saw Josie she had been moved back up to the [pediatric ICU]. Doctors and nurses were standing around her bed. No one seemed to want to look at me... [Two days later] Josie was taken off of life support. She died in our arms on a snowy night in what’s considered to be one of the best hospitals in the world... Josie’s death was not the fault of one doctor, or one nurse, or one misplaced decimal point. It was the result of a total breakdown in the system.

In December 2004, Ms. King reprised her speech at the IHI’s national forum on behalf of the institute’s 100,000 Lives Campaign. Addressing one of the campaign’s proposed interventions—rapid response teams—Ms. King proposed that parents be able to initiate a call. One of the authors of this article, Tamra Merryman, then—vice president of Patient Care Services at University of Pittsburgh Medical Center (UPMC) Shadyside Hospital in Pittsburgh, Pennsylvania, was in the audience. Ms. Merryman took this idea back to UPMC Shadyside and, with the support of hospital leadership, developed it. Condition H (the H stands for “help”), a mechanism by which patients, families, and visitors can initiate a rapid response team call, was implemented at UPMC Shadyside in May 2005. (The King family has provided monetary support for condition H programs at UPMC Shadyside and elsewhere. For more about the Josie King Foundation’s work promoting patient safety, go to www.josieking.org).

FROM PATERNALISM TO PARTNERSHIP

Until fairly recently, physicians traditionally assumed sole responsibility for treatment decisions—a paternalistic approach wherein the physician’s authority was rarely challenged by patients and families. Within the past 30 years or so, that approach has shifted slowly toward a model of care in which, ideally, health care professionals, patients, and families make decisions in equal partnership. Patient rights and responsibilities are often emphasized in health care today, and the benefits of including patients and families in decision making, as well as providers’ obligation to do so, may seem clear. Yet in clinical practice, it has proven difficult to achieve such a partnership. When should a patient and family participate in decision making? Whose responsibility is it to ensure their participation? Is patient participation always beneficial for the patient? These questions are difficult to answer.

RAPID RESPONSE AT UPMC

At UPMC Shadyside, designated teams have been responding to in-hospital emergencies for several years. Calls are termed condition A (cardiac or respiratory arrest requiring cardiopulmonary resuscitation [CPR]) or condition C (crisis). Many hospitals have separate and distinct CPR (condition A) and rapid response (condition C) teams. However, at our hospital the same core team—led by an ICU physician and including a nurse anesthetist, a respiratory therapist, family practice and internal medicine residents, an advanced practice nurse, two ICU nurses, an administrative nursing coordinator, and the staff nurse caring for the patient—responds to both kinds of calls. It’s important to have the full team present in a condition C situation deteriorating into a condition A situation. It’s also more effective to release some responders if they aren’t needed than to call additional responders. (For more on rapid response teams, see “Implementing a Rapid Response Team,” October.)

Criteria for calling a condition A are straightforward: when a patient is pulseless or not breathing or both and requires CPR. However, a clinician may call a condition C whenever “something is just ‘not right’ with a patient, but he doesn’t meet code criteria.” The IHI has identified signs and symptoms of clinical instability that may indicate an impending cardiac arrest4—; UPMC Shadyside and a sister hospital, UPMC Presbyterian, have developed additional guidelines regarding any changes “that should raise a red flag. . . . These criteria are posted in every nursing unit and distributed to all new staff members.” (See Table 1, page 65.)

An analysis of unpublished data from UPMC Shadyside alone shows that between December 1, 2004, and November 30, 2005, there were 171 condition A calls (involving 159 patients) and 699 condition C calls (involving 601 patients). When mortality rates are calculated based on the number of patients, 50.3% of the condition A patients and 19.3% of the condition C patients died. Moreover, at UPMC Shadyside and UPMC Presbyterian, the number of condition C calls has increased significantly during the past two years, whereas the number of condition A calls has decreased. As Scholle and Mininni stated, “By proactively responding to [life-] threatening situations, the [medical emergency team] program has reduced the number of patients who progress to cardiac arrest by 30% and reduced the rate of unexpected mortality by 27%.”
But rapid response teams generally can be summoned only by providers, not by patients and families. What Sorrel King’s story revealed was that patients and families may recognize signs that a patient is deteriorating before physicians and nurses do. Moreover, some patients may not have round-the-clock nursing care: family members may not be able to reach the nurse quickly, and the rapid response team call will be delayed. Some nurses, concerned about sounding a false alarm, might wait before taking action. Condition H offers patients and families a way to initiate the call themselves.

**CONDITION H**

**How it works.** At UPMC Shadyside, all patients and families upon admission receive guidelines regarding condition H and a telephone number for calling the condition H team. This team differs from the team that responds to condition A and C calls. Our condition H team is led by an administrative nursing coordinator and includes a physician from internal medicine, a patient relations coordinator, and unit nursing staff. The telephone number is a direct inside line to a hospital operator, who asks for caller identification, the room number, the patient’s name, and the caller’s concern. The call immediately activates condition H by sending a message to team members’ pagers and announcing the condition H on the hospital’s public address system. The response team then arrives in the patient’s room and assesses the situation. Additional clinical support is called in as needed. (All calls to the condition H number are treated as true condition H calls, with the exception of calls expressing concerns about diet, requests for geographic directions, basic environmental concerns such as room temperature, or requests for housekeeping. Such calls are rerouted to the patient relations coordinator, who addresses the caller’s needs.)

On the patient’s unit, the admitting nurse reviews condition H guidelines with patients and families. (In the near future, the hospital plans to supplement this with television-based patient education.) The guidelines state that a condition H call should be made

- if a noticeable change in the patient’s condition occurs and the health care team isn’t responsive to either the change itself or to patient and family concerns.
- if there is a breakdown in how care is being given or confusion over what needs to be done.
- if both of these occur.

### Table 1. Signs and Symptoms of Impending Patient Crisis

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<tr>
<th>Signs and Symptoms of Clinical Instability Before Arrest</th>
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<tr>
<td>Mean arterial pressure lower than 70 or higher than 130 mmHg</td>
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<tr>
<td>Heart rate lower than 45 or higher than 125 beats/minute</td>
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<tr>
<td>Respiratory rate lower than 10 or higher than 30 breaths/minute</td>
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<td>Complaints of chest pain</td>
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<td>Change in mental status</td>
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<tr>
<th>Additional UPMC Shadyside–Presbyterian Signs and Symptoms of Clinical Instability</th>
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<tr>
<td>Chest pain unrelieved by nitroglycerin</td>
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<td>Sudden loss of movement or weakness in face, arm, or leg</td>
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<tr>
<td>Change in color of central or peripheral skin (to pale, dusky, gray, or blue)</td>
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<tr>
<td>Unexplained agitation lasting more than 10 minutes</td>
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<td>Bleeding into the airway</td>
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The guidelines do not seek to limit severely the circumstances under which a family member might call a condition H. Rather, the goal is to involve families more substantially in patient care, so as to minimize the likelihood of errors such as those that led to tragedy for the King family.

**Staff response and patient follow-up.** Condition H was initially tested on a 24-bed medical cardiology unit at UPMC Shadyside that was participating in an IHI–Robert Wood Johnson Foundation initiative called Transforming Care at the Bedside. Initial responses from patients, families, and the pilot unit staff were favorable, and the program was expanded hospital-wide.

As Richard Lippe, MD, an admitting physician at UPMC Shadyside, has observed, “Condition H gives to our patients a sense of empowerment and security—something we all need in times of difficulty.” However, some skepticism and wariness among nurses and physicians have been evident. Some staff were concerned that patients and families would make condition H calls for nonemergency needs; others, particularly nurses, worried about the implications of “having an H called on my watch.”

Each condition H call is handled independently by the responding team. Once the patient has been stabilized (or transferred), the responding team
members and any staff who were involved review verbally the events that led to the call. The emphasis is on learning rather than on judgment; what is learned is then shared with all hospital staff and leadership. Twenty-four hours after every condition H call, the patient is visited by the patient relations coordinator and a bedside interview is conducted. (If a family member called the condition H, that person may also be present.) This follow-up provides further opportunity for hospital personnel to learn from patients and families. This approach is helping to lessen staff concerns about condition H.

**NINE MONTHS IN**
In its first nine months at UPMC Shadyside, condition H was initiated 21 times. Analysis of these events indicates that the majority of condition H calls met at least one of the two criteria. Most of the calls were related to communication issues between patients and clinicians and fell into two broad categories. In some cases, the patient and family wanted better explanations of the treatment and care plan (for example, one patient had concerns about receiving a blood transfusion and felt the physician hadn’t adequately explained why it was needed). In others, the patient and family disagreed with the treatment or care plan (or both) and didn’t feel their concerns were receiving enough attention (for example, a patient was prescribed a medication that had previously caused an adverse reaction and was questioning its having been ordered now). Five of the 21 condition H calls were related to a need for more effective pain management, one was made by a nurse who was having difficulty contacting a physician, and three were made mistakenly (for example, one patient misunderstood whom to call for routine needs and made a condition H call instead of using the call bell). One condition H was called by a patient with chest pain who had been waiting to be seen in the ED and felt no one was available to respond.

**Dealing with issues raised.** To address communication issues among staff, the hospital has adopted a situational briefing model known as SBAR (the acronym stands for situation, background, assessment, recommendation) to promote more effective communication among staff. (For more about SBAR, see www.ihi.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/SBARTechniqueforCommunicationASituationalBriefingModel.htm.) Communication issues involving patients, families, and clinicians have been handled on a case-by-case basis. For example, in the case of the patient who called a condition H because the physician hadn’t adequately explained the need for blood transfusion, the vice president of Patient Care Services met with the physician and shared the report from the patient’s post-condition H meeting. The physician welcomed the feedback and realized he needed to provide more time for patient questions.

One patient called a condition H because he was experiencing severe pain during physical therapy. As a result, hospital protocol now recommends that all patients on that unit (an oncology unit) be offered pain medication before physical therapy.

**Patient and family response.** Interviews conducted with patients and families involved in the 21 condition H calls have yielded unanimously favorable responses toward the program. Typical were comments such as “[Condition H] makes me want to come to UPMC Shadyside even more, should I or a family member need medical care again” and “Having condition H available makes me feel safer, respected, and empowered.”

Although none of the first 21 condition H calls at UPMC Shadyside definitely saved a life or averted a health care crisis, future calls may do so. At the least, the program has enhanced the partnership among patients, families, and clinicians. Data collection is ongoing, and as the condition H program matures and the sample of calls increases, the data will be analyzed further, with particular attention to be given to averted adverse events and reduced risk.

**REFERENCES**


