Rapid Response Teams: The Stories

Caring for Our Own: Deploying a Systemwide Second Victim Rapid Response Team

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Individuals who choose to become health care professionals are likely to be exposed to emotional turmoil repeatedly during their careers.[1] Patient tragedies such as loss of life—even when expected—stillbirths, and permanent harm or deaths from violence or trauma affect the most resilient health care professional. It is normal for clinical members of health care teams to face unfortunate events with their patients. Entire health care teams can suffer when unanticipated clinical events or medical errors occur. Patient suffering from complications of treatment or consequences of medical mistakes can shake the strongest clinical foundation of seasoned, health care providers, even jolting their career paths.

The emotional responses to adverse clinical events have been described in the literature as a second victim phenomenon.[2–9] For the purpose of our research, the following consensus definition of *second victim,* as adapted from elsewhere,[10(p.326)] was used:

> A second victim is a health care provider involved in an unanticipated adverse patient event, medical error and/or a patient-related injury who become victimized in the sense that the provider is traumatized by the event. Frequently, second victims feel personally responsible for the unexpected patient outcomes and feel as though they have failed their patients, second-guessing their clinical skills and knowledge base.

The term *health care provider* is used to include any individual who provides patient services such as physicians, nurses, allied health clinicians, support personnel, students, and volunteers. The medical literature does not clearly establish the proportion of health care professionals who are affected by the second victim phenomenon, nor is the long-term impact on the careers of health care professionals well delineated. We believed that, without immediate emotional support following an event, the recovery and future career satisfaction of health care providers could be jeopardized. We felt that, if appropriately addressed, the harsh impact of adverse clinical events could be mitigated, leading to a healthy emotional recovery. We believed that, similar to medical emergency teams or rapid response teams in which experienced clinicians can be summoned rapidly to manage acute patient deterioration and can often prevent further decline and/or patient death,[11–14] a dedicated team with knowledge and experience in supporting clinicians during the acute stage of emotional trauma could be realized and could significantly aid clinician recovery. This article describes our deployment of an institutional rapid response system (RRS) for second victims.

Identifying the Problem

University of Missouri Health Care (MUHC) is an academic health care system with approximately 5,300 faculty, staff, students, and volunteers who provide comprehensive health care services to the citizens of Missouri. In 1998, the Office of Clinical Effectiveness (OCE) at MUHC was designed to oversee clinical outcomes, and was charged with transformation of the safety culture beginning in 2000. This work included development and oversight of an electronic patient safety reporting system, coordination of safety investigations, and management of root cause analyses for the health care system. In May 2006, in the course of clinical-event investigations, we began to become acutely aware of intense professional suffering experienced by the health care providers involved in unanticipated events. Surprisingly, a predictable emotional response pattern seemed to emerge. This realization fueled our desire to better understand and support health care providers during critical event processes so that these well-intentioned clinicians would be less vulnerable to suffering and to possible abandonment of

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their chosen profession.

In October 2006, MUHC executives commissioned the OCE to convene an interprofessional team whose initial step was to review existing literature surrounding the second victim experience. Team members represented patient safety, risk management, medical staff, nursing staff/managers, clergy, social sciences, respiratory therapy, the Employee Assistance Program (EAP), and education. Some authors have advised the need for health care systems, drawing on sufficient internal resources such as EAPs, chaplains, social work, and private counseling services,[15–18] to develop uniform, well-defined processes to address the emotional issues surrounding unanticipated health care events.[19–22] In addition, others have recommended that health care leaders take action toward establishing and funding designated programs that would formalize support for second victims in dealing with the emotional burden of clinical care, ensuring that the affected health care providers are treated with respect, compassion, and support.[23–27] However, we could not identify literature on any approaches taken to formalize access to support or the specific strategies that would address the distinctively unique needs of second victims.

At a national meeting in 2006, Dr. Rick van Pelt cited the pioneering efforts of a peer support initiative at Brigham and Women's Hospital (Boston) and discussed preliminary results of a pilot program for operating room health care providers.[28] Around the same time, we learned of another support program, Medically Induced Trauma Support Services (MITSS), which since 2002 has provided a predictable support network for patients, families, and clinicians following adverse medical events.[29] We then looked to non–health care industries for additional guidance to find a model— known as Critical Incident Stress Management (CISM)[30–32]—used by aviation and pre-hospital personnel after posttraumatic community events, such as the Oklahoma City Bombing and the terrorist attacks of September 11, 2001.

Developing the Second Victim Rapid Response System Requisites

Our journey to explore the second victim phenomenon began with the aim of understanding the second victim experience to define effective support structures in a rapid response system (RRS). We designed the specific workplace interventions following interviews and a survey.

Interviews

From October 2007 through January 2008, we conducted a qualitative study, in which we interviewed 31 health care providers, identified by purposive sampling, with whom we had interacted during event investigations.[10] The interviews were designed to understand the suffering experience and to elicit the specific healing interventions that the participants believed would hasten long-term recovery. On the basis of the findings, we delineated six distinct recovery stages—spanning the time between immediate postevent chaos and accident response through "moving on"—to describe the natural history of the second victim phenomenon. We then developed an approach to screening for potential second victims during high-risk clinical events.

Survey

To estimate the size, scope, and requirements to deploy an effective and comprehensive support network, we then designed a survey to quantify the frequency and nature of the second victim experience and to solicit desired characteristics of an effective institutional support response. In February 2009, we distributed a 10-item Web-based survey (Figure 1, page 235) to approximately 5,300 faculty and staff at MUHC. We solicited participation by e-mail (to internal listserves), newsletters, and a mailing to the chief of staff. We used simple counts and proportions for demographic items and categorical variables and iteratively reviewed the narrative responses submitted for desired support strategies.

The Walking Wounded: Defining Support Needs. Across six facilities at MUHC, 898 surveys were returned from four professional groups, for an overall response rate of 17%. Thirty-four percent of third- and fourth-year medical students, as well as one fourth of physicians and professional nurses, responded (Table 1, page 235). Thirty-nine percent (352/898) of the respondents had previously heard the term *second victim*, and approximately 30% (269/898) reported experiencing personal problems within the past 12 months, such as anxiety, depression, or concerns about their ability to perform their jobs, as a result of a clinical patient safety event. Approximately 15% (40/269) reported seriously contemplating leaving their chosen profession, and 65% (175/269) reported working out the issue(s) on their own. When support was offered, 35% of the responding second victims reported receiving support from colleagues and peers, and 29% received support from supervisory personnel (Figure 2, page 236).

More than one-third (354/898) responded to the narrative item about desired support resources, and many of the respondents offered numerous comments about the types of support they desired. Some 83% of the narratives offered suggestions for supportive interventions that could be readily available

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The Second Victim Experience Survey

Survey Greeting:

The Office of Clinical Effectiveness (OCE) is sponsoring this brief survey to evaluate the effectiveness of staff support following unanticipated serious events in the workplace. Your feedback is extremely important to us. Your response will remain anonymous. Please take a few moments to complete this survey. Thank you for your participation.

10 Survey Items	Response Sets
1. At which facility do you currently work?	Drop Down-Select One
2. What is your current position?	Drop Down-Select One
3. How long have you worked in your current profession?	Drop Down-Select One
4. How long have you been employed with MUHC?	Drop Down-Select One
5. Have you heard the term *second victim* used to describe health care team members who have been emotionally traumatized by an unanticipated clinical event/outcome?	Yes/No
6. In the past 12 months, were there any clinical events that caused personal problems such as anxiety, depression, or concern about your ability to perform your job? If yes, proceed to # 7; If no, proceed to #10.	Yes/No
7. Did you receive support from anyone in the University of Missouri system?	Yes/No
8. Who supported you following this event? [included 8 options for Administration, Close friend, Colleague/Peer, Family member, Manager, Significant other, Supervisor, and/or Other]	Select All That Apply and open text box for "Other"
9. Following the unanticipated clinical event, check all that apply. [Included 26 options, ranging from "I worked it out emotionally on my own" to "I seriously contemplated leaving the profession"]	Select All That Apply and open text box for "Other"
10. Please describe your recommendations for supportive strategies if you or another health care peer/colleague were involved in a serious clinical event.	Open Text Box (unlimited characters)
Additional Comments	Open Text Box (unlimited characters)

Figure 1. *The survey consisted of four basic demographic questions and three "yes/no" items to quantify knowledge of the term* second victim*, prior experience as a second victim, and institutional support received. The next two multiple-selection items focused on recent personal experience with both event-related emotional anguish and support received. The final item was an open-ended text box for the participant to recommend supportive strategies that he or she believed would promote healing and to record what he or she desired from the organization.*

Table 1. Survey Response Rate*

Professional Type	Professional Type Estimated Count†	Returned Surveys	Response Rate
Physicians (attending, fellow, resident)	814	184	23%
Medical Students (M3s and M4s)	192	65	34%
Professional Nurses (nursing managers/supervisors, RNs, and LPNs)	1,466	362	25%
Allied Health (e.g., pharmacists, respiratory therapists, nursing technicians)	2,827	287	10%
Totals	**5,299**	**898**	**17%**

* M3, third-year medical student; M4, fourth-year medical student; RN, registered nurse; LPN, licensed practical nurse.

† Estimated from University of Missouri Health Care human resource database for Spring 2009.

within the health care system (Figure 3, page 236).

We identified eight themes from the narratives to describe general support infrastructure characteristics to aid second victim recovery (Table 2, page 237). The most frequently cited characteristic of an effective supportive program was to implement an institutionally sanctioned respite away from the care environment immediately after an event to allow the second victim to compose him- or herself before resuming patient care. These eight infrastructure characteristics could form the foundation for deployment of a comprehensive institutional support network. Given the synthesis of these eight support themes, we again reexamined the narratives to learn how respondents believed that this support system should be deployed—specifically, where support should take place, when it should be available, and by whom should it be provided (Table 3, page 237).

A Framework of Caring: The Scott Three-Tiered Interventional Model of Support. The survey provided insights into second victim suffering, in terms of both the sheer num-

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Source of Emotional Support After a Clinical Event When Offered

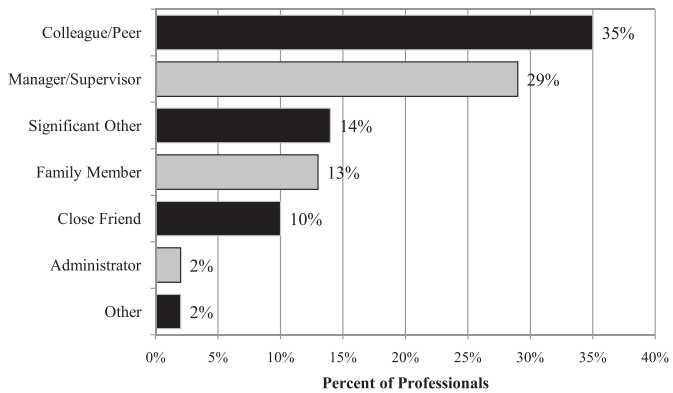

Figure 2. *When support was offered, 35% of the 898 second victims who responded reported receiving support from colleagues and peers, and 29% received support from supervisory personnel.*

Internal Versus External Support for Second Victim Assistance

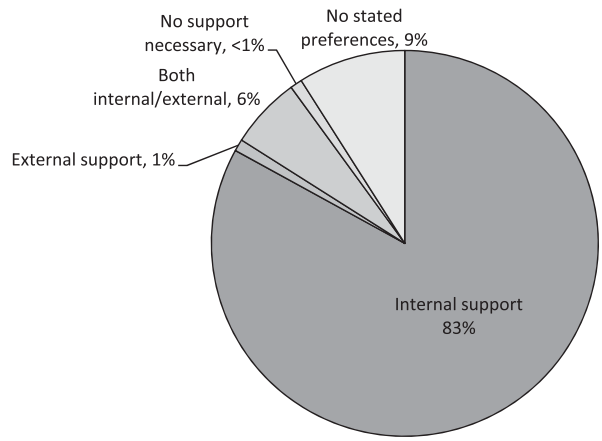

Figure 3. *Only 1% of narratives from the 354 respondents expressed a desire to involve professionals or other individuals outside the internal practice environment. Some 6% desired a complement of both internal and external support structures, and 9% described characteristics of a supportive environment but did not indicate where the services should originate (internal versus external support). Fewer than 1% (3 participants) did not believe that any support structure should ever be necessary and made comments such as "welcome to health care—get used to it."*

ber of responding health care providers and the narratives expressing personal suffering and desired institutional support. Regardless of professional group or years of experience, respondents preferred formal support that was provided by the institution, optimally at the department/unit level. In addition, the support network, when needed, should be readily accessible with prompt, easy access to professionally trained counselors.

On the basis of the interview and survey results, in March 2009, MUHC's senior leaders overwhelmingly supported implementation of an on-demand emotional-support RRS for our second victims. We surmised that internal resources could be structured and synchronized to provide emotional support for potential second victims for 24 hours a day, 7 days a week (24/7). We then developed a model of support that we believed could be deployed to provide on-demand rapid intervention, ranging from immediate first aid support through professional counseling. Figure 4 (page 238) provides an illustration of the Scott Three-Tiered Integrated Model of interventional support; each tier is now described.

Tier 1. Similar to a first-responder concept, Tier 1 promotes basic emotional first aid at the "local" or departmental level. We estimate that as many as 60% of second victims will receive sufficient support at this level. This tier involves preemptively addressing potential second victims to ensure that they are "ok" immediately following a critical clinical event that could potentially evoke a second victim response. Individual unit leaders and colleagues/peers from within their respective departments should receive basic awareness training regarding the second victim phenomenon, emotionally trying case types, and key words and key actions at key times that provide surveillance and initial support for potential second victims, as well as provide immediate emotional first aid when suffering occurs.[10]

Tier 2. This middle tier provides guidance and nurturing of previously identified second victims. It is projected that this type of support and guidance will meet the needs of an additional 30% of second victims. Specially trained peer supporters are fundamental at this level as a vital component of a rapid response team. These peers are embedded within clinically high-risk departments to continually monitor colleagues for signs and symptoms suggestive of a second victim response and are equipped to provide instantaneous basic one-on-one support. When necessary, peer supporters can refer second victims to other internal resources, such as to patient safety experts for support during the aftermath of an event and the institutional investigation that follows or to risk management for guidance and long-term assistance/support during stages of legal action. As rapid response team members, peer supporters also learn strategies and tactics for activating and supporting group debriefings when an entire team is affected by an unanticipated clinical event.

Tier 3. This tier must ensure prompt availability and access to professional counseling support and guidance when a second

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Table 2. Desired Characteristics of Support Program

Eight Themes Describing General Support Infrastructure Characteristics	Percentage of All Comments in Narratives
Provide a brief respite or break from the clinical area to allow clinician to regroup/collect thoughts and compose self.	22%
Ensure a safe and just culture approach with a no-blame mentality.	20%
Educate clinicians about adverse clinical event investigations, the second victim phenomenon, and institutionally sanctioned support networks prior to an event.	15%
Ensure the systematic review of the clinical event promotes an objective, complete review of case with opportunity for feedback and reflection on care delivered.	13%
Ensure that internal support team is available 24 hours per day/7 days a week.	10%
Ensure a predictable follow-up with second victim in the aftermath of an adverse event.	10%
Provide strictly confidential services.	8%
Provide services that are individualized based on the unique needs of the staff member.	2%

Table 3. The "Where, When, Who, and What" of an Ideal Support Program

Narrative Descriptions	Count of Narratives	Percentage of Narratives
Where: Support is internally available within second victim's department/work group. *When*: 24/7 immediately accessible *Who:* From persons the second victim works with every day such as work group peers, supervisors, and departmental/unit managers *What*: One-on-one reassurance, professional review of case events with availability of collegial feedback	217	45%
Where: Support is internally available within second victim institution. *When*: 24/7 immediately accessible *Who:* From experts who do patient safety investigations including risk managers and individuals trained in peer support *What*: Trained peers support individuals in crisis, make patient safety and risk management referrals, and coordinate team meeting discussions.	161	34%
Where: Support with specialized counselors can be expedited. *When*: During regular business hours *Who:* Trained personal counselors such as employee assistance program, chaplains, social workers, or clinical health psychologists *What:* One-on-one crisis intervention	75	16%
Where: Not associated with, external to, the health care facility (no health care system involvement) *When:* Arranged by the second victim *Who:* Professional psychologist/counselor/clergy *What:* Therapeutic intervention	19	4%
Where: External to the health care system (no health care system involvement) *When:* As arranged by the second victim *Who:* Family/friends/professional colleagues who are solicited by the second victim *What:* General nurturing/listening	3	< 1%
No support necessary	3	< 1%

victim's emotional stress exceeds the expertise of the peer rapid response team members. We estimate that 10% of second victims will require this level of support and guidance at some point after emotional trauma. Incorporating Tier 3 persons as members of and mentors to the Tier 2 peer support team members helps to increase experience with and understanding of the profound emotional trauma. These mentors can facilitate and support Tier 2 rapid response team members as they guide second victims throughout the various stages of recovery. Examples of Tier 3 professionals include chaplains, EAP personnel, social workers, and clinical health psychologists. An important element to Tier 3 support appears to be the ability to provide a "fast-track" referral source to these professional counselors.

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Scott Three-Tiered Interventional Model of Second Victim Support

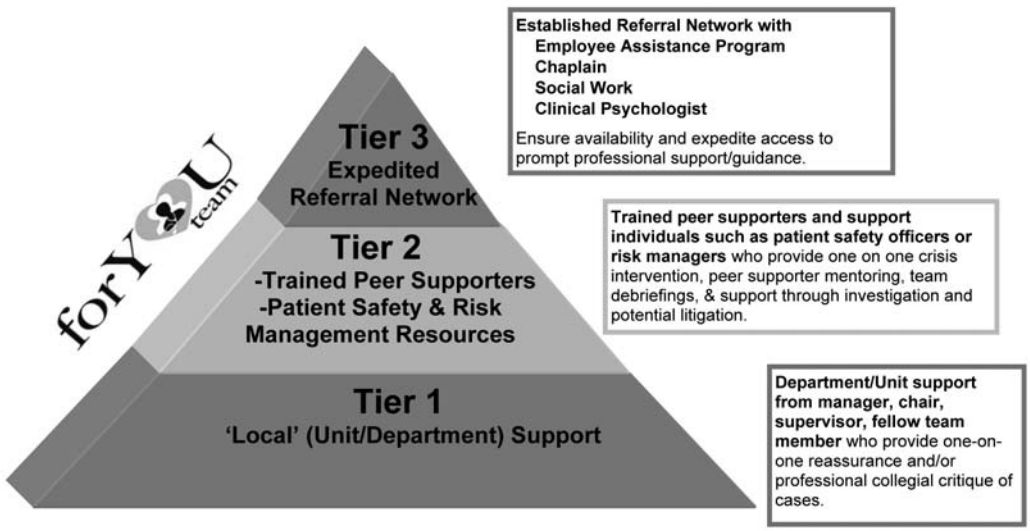

Figure 4. *The Scott Three-Tiered Interventional Model of support consists of three tiers, with the nature of support escalating from Tier 1 through Tier 3.*

Deploying A Second Victim RRS at MUHC

After almost three years of research, planning, design, testing, and specialized training, our 51-member second victim RRS, which serves all six MUHC facilities, was deployed on March 31, 2009. The interprofessional *forYOU Team* consists of physicians, nurses, social workers, respiratory therapists, and other allied health team members. The guiding principle of the *forYOU Team* is the understanding that, although each event is a unique experience with each clinician requiring individualized types and intensity of confidential support, team members are expected to use the three-tiered model to facilitate the second victim's transition through the six stages of emotional recovery.[10]

Team Training of "Clinician Lifeguards"

Initial team training consisted of more than 18 hours of didactics, small-group work, and simulation. Topics included an overview of the second victim literature, our research findings, high-risk clinical events associated with second victim responses, the six-stage second victim recovery trajectory, eight themes articulated in the ideal support network, our three-tiered interventional support model, key words/key actions at key times, active listening skills, one-on-one confidential crisis intervention using critical incident stress management techniques, support roles during team debriefings, and referral procedures for individuals requiring Tier 3 support.

These 51 team members now provide a comprehensive network of clinician lifeguards strategically embedded on various shifts within high-risk clinical areas and groups, such as operating rooms, ICUs, pediatrics, emergency department/trauma, code blue team, and house managers.

Administrative Framework

An administrative framework is critical to ensure program oversight and ultimate success. One individual [S.D.S.] is accountable for coordinating the *forYOU team* efforts across our health care system. Within each facility, one individual team leader is accountable for coordinating all program components to mentor peer support team members within his or her respective institution. At any one time, one of these team leaders is on call by pager 24/7 to ensure support for the 51 *forYOU Team* members and for any other clinician requesting assistance.

The *forYOU Team* members meet monthly for case reflection and ongoing mentoring. Either during team meetings or as part of other safety-related meetings, clinical, administrative, or *forYOU Team* members share success stories regarding local support and nurturing of second victims in a de-identified and confidential manner. It is now common for facility leads to field questions from department/unit supervisors who have been providing basic emotional first aid and supportive interventions at the local level and who are seeking reassurance and mentoring regarding specific cases.

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Table 4. Multiple Clinical Stimuli Preceding Tier 2 and Tier 3 Second Victim Interventions

Clinical Stimuli	Count of Stimuli
Unanticipated clinical event involving pediatric patient	14
Unexpected patient death	12
Preventable harm to patient	7
Multiple patients with bad outcomes within a short period of time within one clinical area	6
Patient who "connects" to health care professional's own family	6
Long term care relationship with patient death	5
Clinician experiencing his or her first patient death	4
Death of a staff member or spouse of a staff member	4
Failure to detect patient deterioration in timely manner	3
Death in young adult patient	2
Notification of pending litigation plans	2
Community high-profile patient/event	1
Health care professional who experienced needlestick exposure with high-risk patient	1

Monitoring RRS Interventions

It is not possible to quantify the surveillance and emotional first aid that has been provided by untrained supervisors/peers through Tier 1 interactions. This tier was established for basic care and compassion after emotionally charged clinical events. There are no clear inclusion criteria for second victim encounters. However, we have attempted to monitor all Tier 2 and Tier 3 supportive encounters to evaluate and improve program effectiveness. In the program's first 10 months (through January 31, 2010), we documented 49 Tier 2 one-on-one deployments with trained *forYOU Team* members. The average encounter lasted 30 minutes. Types of clinicians receiving support have included medical staff, nursing personnel, respiratory therapists, pharmacists, emergency medical technicians, medical and nursing students, social workers, security officers, and concierge staff. Six team debriefings were also held, lasting an average of 77 minutes and attended by an average of 15 health care professionals. In a team debriefing, which is sometimes called when more than one health provider is in need of assistance, the facility team leader, working in collaboration with the department/house manager at the time of the event, conducts a review of the case details.

The multiple clinical stimuli preceding these Tier 2 and Tier 3 activations are summarized in Table 4 (above). Of the 49 Tier 2 activations, 13 were referred to Tier 3 professional support (7 for EAP support, 4 with counselors, 1 with clergy and 1 with a clinical psychologist).

Discussion

Every day, well-meaning health care providers working in clinically complex environments face the harsh reality of unanticipated and sometimes tragic patient outcomes in their chosen profession. As a result, we believe a large portion of the health care workforce has been suffering in relative silence unsupported during career-related anxiety, stress, and sometimes even shame or guilt. We now believe that it is our moral imperative to design and deploy a readily accessible and effective support infrastructure for all health care providers beginning the moment that events causing anxiety and stress are discovered and extending through years of protracted litigation as necessary. Support initiatives should be established and disseminated widely throughout each institution so that individuals will know what is available, what can be expected, and how to access assistance in the aftermath of clinical events.

The specific program components required for a second victim's effective emotional recovery have not been systematically evaluated. In describing a peer support service, van Pelt has emphasized the development of a support network with its foundation in peer intervention that is immediately available, voluntary, and confidential, with facilitation to a higher level of support as needed,[33] as we have provided in our own three-tiered model. Yet, one essential component for a second victim RRS is a visible institutional commitment from executive and medical leadership to ensure that a predictable, organized support infrastructure is in place and operational. Active surveillance during high-risk clinical stimuli, a culture of immediate basic emotional first aid from untrained peers, engagement with trained peers, and a fast-track referral process for professional support are also essential. Clinician support must become a predictable, expected part of a health care organization's operational response to unanticipated clinical events.[1]

On the basis of our experience, we feel that the necessary building blocks of a comprehensive second victim RRS currently exist within most health care organizations. The administra-

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tive challenge remains that of harnessing the talents of patient safety/risk management leaders, medical/nursing leadership, chaplains, social workers, and EAPs into one unified committee or group to comprise a comprehensive interventional support network for health care's second victims. At MUHC, we were able to incorporate this network into the daily activities of the facility team leaders, thereby avoiding the need for an additional position.

As second victim RRSs become commonplace, research will be needed to evaluate their effectiveness. J

An introduction of these research findings was presented during the May 2009 5th International Symposium on Rapid Response Systems and Medical Emergency Teams Conference held in Copenhagen. The authors wish to recognize the second victim research participants, who shared their personal stories to help provide insight into the unique needs of suffering health care clinicians and the University of Missouri Health Care peer support network—the forYOU Team—in advancing our understanding of the second victim phenomenon.

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