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Implementing the RISE Second Victim Support Program at the Johns Hopkins Hospital

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Title:

“Implementing the RISE Second Victim Support Programme at the Johns Hopkins Hospital”

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ABSTRACT

Background: Second victims are healthcare workers who experience emotional distress following patient adverse events. Studies indicate the need to develop organizational support programmes for these workers. The RISE (Resilience In Stressful Events) programme was developed at Johns Hopkins Hospital to provide this support.

Objective: To describe development of RISE and evaluate its initial feasibility and subsequent implementation. Programme phases included: 1) Developing the RISE Programme 2) Recruiting and training peer responders, 3) Pilot launch in the Department of Pediatrics, and 4) Hospital-wide implementation.

Methods: Mixed-methods study, including frequency counts of encounters, staff surveys, and evaluations by RISE peer responders. Descriptive statistics were used to summarize demographic characteristics and proportions of responses to categorical, Likert, and ordinal scales. Qualitative analysis and coding were used to analyze open-ended responses from questionnaires and focus groups.

Results: A baseline staff survey found that most staff had experienced an unanticipated adverse event, and most would prefer peer support. A total of 119 calls, involving approximately 500 individuals, were received in the first 52 months. The majority of calls were from nurses, and very few were related to medical errors (4%). Peer responders reported that the encounters were successful in 88% of cases and 83.3% reported meeting the caller's needs. Low awareness of the programme was a barrier to hospital-wide expansion. However, over the four years, the rate of calls increased from approximately one to four calls per month. The programme evolved to accommodate requests for group support.

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Conclusion: Hospital staff identified the need for a multidisciplinary peer support programme for second victims. Peer responders reported success in responding to calls, the majority of which were for adverse events rather than medical errors. The low initial volume of calls emphasizes the importance of promoting awareness of the value of emotional support and the availability of the programme.

Strengths of this study

- Describes one of the earliest organizational programmes to support second victims, by the team that originated the concept
- Provides detailed description of the process of development and implementation
- Provides assessment tools that can be used by other organizations
- Uses both quantitative and qualitative methods to evaluate implementation
- Describes the conflicting goals of maintaining caller confidentiality, and evaluating caller outcomes

Limitations of this Study

- In order to maintain caller confidentiality, identifiers and contact information were not retained for callers
- No systematic follow-up of caller outcomes
- Assessment tools were not previously validated
- Relatively small sample sizes and some missing data

INTRODUCTION

Adverse events bring to light system defects that can cause patient harm. In the past decade, health care organizations have adopted standardized procedures to investigate events, and staff have become more aware of system defects [1]. However, organizations often fail to recognize the impact of adverse events on healthcare providers who can suffer emotional distress as “second victims” of the same incidents that harm patients [2-4].

At The Johns Hopkins Hospital, adverse patient-related events are reported to managers and the online incident reporting system; some are debriefed with staff and a few are investigated. Patient safety leaders recognized a gap in the ability of the institution to provide consistent and timely support to second victims – healthcare providers who are traumatized by patient adverse events [5]. In 2010, leaders in patient safety, risk management, and clinical departments began meeting to discuss the magnitude and importance of the problem, current infrastructure to support healthcare providers, stories and experiences, and strategies to improve the system. This process led to the establishment of the RISE (Resilience in Stressful Events) peer support programme.

Although there are a few published descriptions of organizational peer support programmes, there has been little documentation of the steps involved in their development [6, 7].

Additionally, there are limited evaluations of the feasibility, implementation and effectiveness of these programmes [8]. The aim of this paper is to describe the development of RISE at The Johns Hopkins Hospital, and the initial evaluation of a pilot test of the programme, and its

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hospital-wide implementation. It is hoped that this information will help other institutions establish staff support programmes of their own.

Development of RISE Programme

The Johns Hopkins Hospital (JHH) is a 1,075-licensed bed, urban, academic medical center established in 1889. After the occurrence of a significant adverse patient-related event in the JHH Department of Pediatrics in 2001, staff struggled to cope and were affected both personally and professionally. Subsequent review helped hospital leaders recognize the need to provide a programme supporting staff following adverse events. In 2009, the JHH Patient Safety Department took initial steps to establish an organizational support programme for second victims. Development initially took place in four phases: (1) programme development (January 2010-ongoing), (2) recruitment and training of peer responders (June 2011-ongoing), (3) RISE pilot in the Department of Pediatrics (November 2011-June 2012), and (4) hospital-wide expansion of RISE (June 2012-March 2016).

A multidisciplinary Programme Development Team was created to lead the strategic planning and implementation of RISE. To understand the types of support needed, the team developed a survey that was administered in June 2010 at a presentation on second victims by one of the team members (AW) at the First Annual Johns Hopkins Patient Safety Summit. Two-thirds of the respondents to this survey reported experiencing emotional distress following an unanticipated adverse event, and more than half of these respondents had reached out for support from a peer or colleague [5]. Respondents endorsed the need for a hospital-sponsored peer support programme to benefit second victims.

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Development of RISE (Phases 1-4) (See Figure 2 for timeline)Phase 1: RISE Programme Development Team and the RISE Mission

The RISE leadership team was comprised of five members: the Director of Patient Safety (LP), a physician faculty member (AW), a risk manager (JN), a patient safety researcher (HE), a nurse manager (CC), and a hospital chaplain (MN). The leadership team developed a work plan, logistics and procedures for the programme, identified additional team members to provide peer support, and determined the training and resources necessary to support these efforts. The team met twice a month beginning in January 2010.

The RISE team of peer responders was established in the fall of 2011. A long-term goal of the programme was to foster a culture in which all employees were resilient and mutually supportive before, during, and after stressful events (Figure 1). A peer support programme led by health care workers was a preferred option expressed by staff, given that peers were viewed as understanding clinical issues and peer support had been shown to be effective, economically viable, and sustainable [9, 10]. RISE was intended to provide timely access to support employees' immediate needs to complement the services being offered by the existing employee assistance programme (Faculty And Staff Assistance Programme - FASAP) [8, 9].

INSERT FIGURE 1 APPROXIMATELY HERE

Procedures: Responding to Second Victims

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After the occurrence of a stressful, patient-related event—such as an adverse event, medical error, death, unexpected outcome, or non-accidental trauma—the healthcare worker involved or his/her colleague activates a RISE call by paging the RISE team. Both the RISE pager number and an intranet call button activate the RISE pager. The on-call RISE peer responder responds to the page by calling back within 30 minutes, and planning a meeting (encounter) with the caller—ideally within the next 12 hours. The term “peer responder” does not imply that the responder shares the same professional discipline as the caller.

In the encounter, the peer responder actively listens to the second victim and provides psychological first aid and emotional support. The encounter explicitly focuses on the emotions of the employee rather than the details of the incident. At the end of the encounter, the peer responder offers a list of current organizational resources that might be helpful for continued healing, such as the employee assistance programme, community psychiatry, exercise, or massage services.

All interactions between the second victim and the peer responder are confidential. RISE is based organizationally within the Armstrong Institute for Patient Safety and Quality at Johns Hopkins, and discussions between a RISE responder assisting a second victim are presumed to be covered by patient safety privilege under Maryland State Law, despite the fact that there has never been a legal test case [11]. The only exception is if the caller indicates the potential for imminent harm to self or others, in which case the peer responder assists the caller with obtaining the necessary resources to mitigate harm. After the encounter, the peer responder

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3 activates a debriefing, in which he/she facilitates a session to receive support from the other
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6 members of the RISE team and to provide a learning opportunity for other members.
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10 INSERT FIGURE 2 APPROXIMATELY HERE

Phase 2: Recruiting and Training of RISE Peer Responders

Recruitment

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20 Initially, peer responders were recruited based on recommendations from organizational leaders,
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22 based on their known ability to provide support to colleagues. Subsequent groups of responders
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24 were self nominated and asked to complete a structured application and to submit letters of
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26 recommendation. These applications were reviewed by the executive committee of RISE. Most
27
28 of the peer responders from the initial group were registered nurses (63.3%), and half of the peer
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30 responders were from the Department of Pediatrics (50.0%) (Table 1). A total of 42 peer
31
32 responders have been trained, with 30 currently active, including 11 of the original cadre of 18
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34 responders who are still on the team.
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Training

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47 To serve as a Peer Responder, team members were required to attend Psychological First Aid
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49 (PFA) training, RISE team meetings and debriefings after encounters. Psychological First Aid is
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51 a form of early intervention to address emotional distress [10, 12]. Dr. George Everly, the
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53 developer of RAPID-PFA (Reflective listening, Assessment, Prioritization, Intervention, and
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Disposition) offered a six-hour training through the Johns Hopkins Center for Public Health Preparedness [12, 13]. The first training session was offered in September 2011, with a total of eight training sessions offered on a periodic basis. Peer Responder Meetings were conducted monthly and included discussions of the published literature, practice delivering PFA, and sharing of second victim encounters. Material was presented in the form of lectures, storytelling sessions, role-play exercises, and group discussions. Debriefings occurred after each RISE encounter and provided collective learning opportunities for peer responders to reflect, mentor, support one another, and gain vicarious experience about calls.

Refresher training sessions are provided on an annual basis at RISE team retreats. Ongoing training is gained through the debriefings within the RISE team and at monthly meetings where cases are discussed and skills are practiced.

Phase 3: Launching the RISE Pilot in the Department of Pediatrics

To introduce the programme, an awareness campaign was launched on June 24, 2011 in the 205 bed Johns Hopkins Children's Center. In November 2011, RISE began a pilot programme there based on a strong commitment by the Pediatric Department's leadership to RISE.

Phase 4: Hospital-wide Expansion of the RISE Programme

On June 21, 2012, 7 months after the launch of the Pediatrics pilot, the RISE programme received approval from hospital leadership to expand to the entire hospital. The announcement was made at the annual Patient Safety Summit, preceded by a presentation to help staff understand the purpose of the team as well as contact information for RISE.

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6 In this phase of the programme, members of the RISE team developed a two-tiered call system,
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8 whereby two peer responders were on call at any given time. The first responds to the RISE
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10 pager while the second peer responder provides back up for first if additional support is
11
12 necessary. The RISE director is available to provide additional support if technical or
13
14 administrative issues arise. Using this system, staff members are able to call the RISE team
15
16 anonymously. If the first responder and caller happen to work on the same unit, the call can be
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18 handled by the second on-call responder.
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25 To increase the volume of calls, additional efforts were taken to promote awareness among
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27 hospital staff members. This included the development of a website featuring promotional
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29 videos explaining the function and benefits of this service, publicity through internal
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31 publications, screen savers that cycle continuously on public computer screens, presentations to
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33 targeted departments and units, and recruitment of unit level champions.
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40 Approximately 56% of callers requested group, rather than individual, support. In the group
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42 RISE calls, the inciting incidents were almost uniformly related to patient death unrelated to
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44 medical errors and were often known to the hospital community, and some even to the public.
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46 RISE encounters for groups tended to be longer than individual sessions. The groups have a
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48 variety of multidisciplinary compositions and range from 5 to 25 attendees depending on the
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50 number of employees affected. To make sure that members of the group received enough
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52 attention, it was required that group requests be attended by at least two responders.
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3 Financial support for the RISE programme was provided by the Armstrong Institute which
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5 assures safety and quality for the health system. The budget supports 0.30 FTE of the
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7 programme director (CC) who emerged as the operational leader of the team.
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METHODS**Study Design**

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17 This evaluation of a novel hospital programme used a mixed methods design that included a staff
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19 survey, peer responder self-evaluations, and a focus group of peer responders (See Appendix).

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21 The project was approved by The Johns Hopkins Institutional Review Board.
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27 Design of the evaluation reflected the need to assure confidentiality for callers, which program
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29 leaders thought was necessary for distressed health care workers to use the programme. There
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31 was also a concern by the institution that records of encounters might be potentially admissible
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33 as evidence in a malpractice suit. For that reason, the programme was designed not to collect
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35 identifying information from callers, or follow up systematically with them. It was also
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37 considered insensitive to ask distressed callers to complete a satisfaction survey at the end of the
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39 encounter. Therefore, our measures were collected from the perspective of the peer responders
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41 after their encounters with callers.
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Participants and Procedures

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49 Before launching the pilot programme (Phase 3), frontline staff in the Department of Pediatrics
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51 (n=144) completed the *Organizational Staff Assessment Survey* and were asked to assess their
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53 perceptions of the second victim problem and implementation of a second victim support
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programme (Table 2). All faculty and staff working in the Department were included in the survey. Peer responders in Phase 4 returned the *Peer Responder Encounter* and the *Assessment Form* (n=80, 57 complete forms) For group encounters, the lead peer responder was asked to complete the Peer Responder Encounter and Peer Responder Assessment forms after each encounter. A random sample of 9 members of the peer responder team were invited to participate in the focus group discussion, of whom 5 were able to participate at the designated time.

INSERT TABLE 2 APPROXIMATELY HERE

Measures and Variables

Organizational Staff Assessment Survey: was used to collect data from healthcare professionals on the need for support of health care workers. Information collected included respondent characteristics, respondents' personal experience as a second victim, and desired features and services of an organizational support programme.

Peer Responder Encounter Form: was used by peer responders to provide de-identified information on the event and nature of the RISE call. "De-identified" in this case meant that the information collected on the event could not be traced to a specific person or patient. Several items were based on the University of Missouri's forYOU Peer Responder Encounter Form [14].

Peer Responder Assessment Form: was used by peer responders to evaluate the interaction with the caller after each encounter (Appendix). All of the items were newly developed for this

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assessment in an effort to capture a minimal amount of information needed to evaluate the encounter and inform quality improvement. Information collected included a brief description of the encounter with the second victim, peer responder evaluation of the appropriateness of RISE training to respond to the specific call, the peer responder's experience in providing support to the caller(s), and their recommendations on how to improve the RISE programme. This form was not modified at the time of hospital-wide expansion.

Peer Responder Focus Group: The aim of the focus group was to assess peer responder perceptions, confidence levels, and self-assessed competence based on the RISE training they received. The interview guide also directed questions about the peer responders' own emotional distress when responding to a second victim.

Data Analysis

We used descriptive statistics to summarize calls and participant demographic characteristics. We calculated proportions for the quantitative responses, which included categorical/multiple choice and Likert-type scale questions (1=strongly disagree; 5=strongly agree), ordinal scales and counts. Content analysis of the open-ended responses on the Organizational Staff Survey and of the focus group transcript were used to extract emergent themes.

RESULTS

Respondents to the *Organizational Staff Assessment Survey* were primarily registered nurses (70.8%), and most respondents had over one year of work experience in healthcare (Table 2).

Approximately 70% of respondents had been directly involved in an unanticipated adverse event,

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and 57.9% reported experiencing problems, such as anxiety or inability to perform their job, as a result of this event. Over two thirds (70.3%) had reached out for support following the event (Table 2).

When asked about potential second victim support programmes (Table 2), most respondents (68.7%) indicated they would prefer a multidisciplinary peer group to offer support. Others mentioned they would prefer a nurse manager (15.5%) or pastoral care (13.3%). More than two thirds (70.7%) preferred individual to group support. Additionally, respondents preferred to access support soon after the event: as soon as it happened (12.7%), a few hours after the event happened (25.4%), a couple of days after the event happened (48.2%), and a week after the event took place (8.1%). Others indicated that timeliness of support desired depended on the severity of the event or their comfort level following the event.

Description of Calls

There was a total of 119 calls. There were 12 calls during the Pediatrics pilot, 15 calls in year 2, 37 calls in year 3, 40 calls in year 4, and 15 calls in the first 4 months of year 5. Thus, the rate of calls was approximately 1 per month for the first year, 2 per month in the second year, 3 per month in the third year and 4 per month thereafter. Approximate proportions of callers by profession were as follows: nurse 56%, nurse practitioner 2.5%, multidisciplinary group 28.8%, physician 16.2%, other 6.3%, not recorded 13% for 80 encounters.

The majority of incidents were related to adverse events, rather than medical errors. For 80 of the encounters for which the information was available, 45.0% included death of a patient, and

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3 21.3% involved an adverse event. The remainder of calls were for other difficult situations such
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5 as difficult decisions, burnout, staff assault, intrastaff conflicts, and others. Only 4 of the 80
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7 incidents were related to a clear-cut medical error. The average interaction lasted for 49 minutes.
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10 A total of 44% were one-to-one encounters, and 56% were group sessions.
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Peer Responder Encounter and Assessment Forms

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17 All of the responders on the team responded to at least one call. Data were completed by peer
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19 responders for a total of 80 out of the 119 encounters between November 2011 and March
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21 2016—a 67% completion rate (Table 3). The mean interaction length was 49 minutes (median
22
23 50 minutes). Most of the callers were looking for support at the recommendation of their
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25 supervisors (56.2%) with the remainder being self-referred. Less than 8% of the callers reported
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27 experiencing barriers with accessing the RISE team; the primary barrier was lack of awareness
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29 on how to access the programme. In Phase 4, peer responders' perceptions were also assessed on
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31 the programme structure and processes.
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43 Peer responders believed that the RISE training enriched their interactions with callers. Role-
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45 play focusing on key principles of peer response has been identified as the most effective method
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47 for training. Additionally, role-play provides a safe place for the responders to practice.
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49 Scenarios that have been actual encounters are often used so that responders can continue to
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51 learn and apply strategies, resulting in a positive future encounter. When call volume was low,
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53 anticipated scenarios were used to prepare responders. Responders reported higher comfort
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3 levels in responding to the second victim after the peer responder training compared to rating
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5 their overall competence in meeting the callers' needs (excellent or very good only 44.9% of the
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7 time).
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12 Most of the peer responders (90.5%) offered the caller additional support resources (Table 4).

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14 Following the encounter, peer responders rated the success of the interaction to be either
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16 'excellent' (74.5%) or 'neutral' (25.5%). Most believed that they met the second victims'
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18 expectations (87.8%) and were satisfied with the interaction (82.4%). Approximately 70% of the
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20 peer responders indicated that they themselves experienced little or no emotional distress after
21
22 they offered support to the second victim.
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29 Peer Responder Focus Group: The focus group was conducted in April 2013 during a 90-minute
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31 session. Nine peer responders were invited to participate in the focus group, and five
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33 participated, for a 55.6% response rate. Peer responders had varying levels of experience in
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35 responding to second victims and joined the RISE team at different times since the inception of
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37 the programme. Approximately three minutes was allocated for each peer responder to respond
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39 to each of the focus group questions.
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49 Several themes emerged from the qualitative analysis of this session (Table 5). Initial PFA
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51 training and ongoing training, such as the peer responder meetings and debriefings, were
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53 described as helpful in preparing peer responders. Most of the peer responders found the greatest
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value in the initial PFA training and in the ongoing skill-sharpening opportunities in the debriefings and monthly meetings. These aspects of training provided the peer responders with adequate skills to respond to a distressed employee. There was a desire for more training on how to facilitate group sessions comprised of multiple disciplines and services, role plays involving clinicians with different professional roles, and the development of “key phrases” or scripts to be used at the beginning and at the end of an encounter. Some peer responders experienced higher levels of personal distress in providing group (rather than one-on-one) support.

Recommendations for future training and education included: (1) group support, (2) interdisciplinary approach in holding debriefings, (3) training focused on physicians as opposed to other providers, and (4) key phrases and scripts.

DISCUSSION

We describe the initial evaluation of RISE (Resilience in Stressful Events) a multidisciplinary peer support programme based within a large teaching hospital. The structure and features of RISE were guided by the results of an initial survey which suggested that such a programme would be preferred by workers who experienced stressful, patient-related events. Evaluation based on the self-reports of peer responders supported the success of most encounters with callers and the effectiveness of training – particularly role playing exercises – in preparing them to support second victims. However, at the end of the pilot period, peer responders also identified the desire for additional training and education to increase their confidence and competence in responding to second victims. There were relatively few calls in the first year of operation. This may have been due in part to lack of staff awareness of RISE services or how to access them. In subsequent years, additional measures were taken to increase awareness and

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3 acceptance of the service. Concurrent with this, use of the programme has increased steadily,
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5 and in year 5 of the programme the rate of calls is four times higher than during its pilot phase.
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10 A strength of the RISE programme is that it was based both on local staff perceptions of the
11 second victim problem, as well as on existing resources—the MITSS Toolkit for Building a
12 Clinician and Staff Support Program, and the pioneering ForYou Program established at the
13 University of Missouri [2, 5, 6, 15]. In addition, both quantitative and qualitative evaluation
14
15 methods were utilized to gain a greater understanding of programme implementation processes.
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17 Based on the results, it appears that it has been beneficial to have a well-structured organizational
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19 peer support programme for staff members after a stressful, patient related event. This is
20
21 consistent with findings from other programmes [16-21]. We developed tools to help evaluate
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23 effectiveness, including a peer responder self-evaluation that may be useful to other institutions
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25 in evaluating their current or future programmes.
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36 Our initial survey of employees supported the need for the programme. Most of the respondents
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38 to our baseline survey had experienced unanticipated adverse events, with subsequent personal
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40 problems, such as depressed mood, or concern about their ability to safely perform their job.
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42 The majority of these respondents mentioned that they did seek support and would prefer to
43
44 speak with a colleague or peer, followed by their spouse/significant other, a friend, or their
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46 supervisor. These results confirm the feelings of guilt, worry, helplessness, doubt, and anger
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48 described by healthcare workers in previous studies [22, 23]. Peer support emerged as the
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50 preferred mode of support for an institutional programme, also consistent with previous studies
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6 Despite the compelling rationale for RISE, we encountered challenges in implementing the
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8 programme at a large academic medical center. These included limited awareness of the
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10 magnitude and importance of the second victim problem, overcoming staff concerns about the
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12 confidentiality of the service, and risks of exposure to legal or disciplinary actions. The
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14 programme was supported and sanctioned by the hospital and has operated primarily with
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16 existing resources relying on the voluntary efforts of hospital staff. Financial limitations also
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18 reduced the capacity for formal mechanisms for data collection and monitoring.
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25 The greatest challenge was getting staff members who could benefit from the programme to use
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27 it. During the pilot study, RISE received a relatively low volume of calls – only approximately
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29 one per month. Reports from these encounters suggested that some callers had been unaware of
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31 the programme, while others did not know how to activate an encounter. For that reason, after
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33 expansion of the programme hospital-wide, we launched a multi-pronged effort to increase
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35 awareness of the problem of the second victim, the availability of RISE, and that it was both
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37 beneficial and safe to use. One successful initiative was adding a screen saver to publicize RISE
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39 to the small number of such ticklers that cycle continuously on the computer work stations across
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41 the medical center. Formal presentations, particularly given in conjunction with Departmental
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43 leadership on specific adverse events, appeared to be followed by an increased number of calls
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45 from related units. These presentations described the problem of the second victim, the
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47 availability of timely peer support, and the independent and confidential nature of the
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49 programme. We encouraged staff to speak up about events and how these events affected them
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51 personally [22] and encouraged them to use support services—all part of the larger priority of
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developing a culture of safety within the organization [25]. RISE was featured prominently on the cover of a widely distributed internal hospital magazine. Finally, several directors from units at increased risk for death and adverse events received RISE training in Psychological First Aid, an action that also corresponded to more calls originating from those units.

Limitations

This study had several limitations. The first and greatest limitation involved the inherent conflict between the mission of assuring confidentiality for callers and the desire to evaluate the outcomes of encounters. Because of this, we did not collect identifiers on callers or follow up systematically with them. Instead, we measured success from the perspective of peer responders after their encounters with callers. Second, the data collection process evolved during programme implementation, so the data collection tools were for the most part not previously validated. Third, we have used a paper-based system for collecting responder encounter documents, and this has contributed to both missing forms and data. We are now planning to implement a web-based document and with the capacity for real time monitoring of missing data. Finally, we had relatively small sample sizes for both the survey and the focus group, emphasizing the need for continued evaluation.

Implications for Patient Safety

This study has practical implications for organizations interested in planning and developing formal provider support structures for employees to access after adverse events, and evaluating the results. Our experience and the tools included in this report should be helpful. There are also policy implications. For example, the Joint Commission and the National Quality Forum now

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recommend healthcare institutions to recognize second victims' needs, and establish a support structure to assist them through coping with traumatic medical events [26, 27]. Furthermore, this programme has attracted additional resources. The Johns Hopkins Hospital and the Maryland Patient Safety Center have collaborated to develop guides for implementing a second victim support programme and measuring effectiveness—"Caring for Caregivers in Distress: Implementing RISE", and for training peer responders—"RISE Basic Training for Peer Responders." The experiences of hospitals in Maryland and elsewhere that differ in size, teaching status, and rural status, should help to inform efforts to implement and adapt peer support programmes, so they can help the full range of healthcare workers that need them.

Summary

Hospital workers face many challenges following the occurrence of stressful, patient-related events [2, 3]. A few of these involve medical errors, but the large majority are simply related to the extraordinary stresses incumbent in the job. The lack of recognition of this problem, and the lack of support in the workplace may lead to additional adverse events and to further patient harm. To help support these providers and prevent them from burnout or leaving their clinical profession and the hospital, organizations should offer additional support to their employees [4, 23]. Committed leaders and the involvement of stakeholders representing disciplines and functional units across the institution were crucial to the development and implementation of the RISE programme at Johns Hopkins. Despite a well-conceived and structured programme and a dedicated team of peer responders, there were relatively few calls in the first year. A sustained, multi-pronged campaign was required to increase awareness and trust among staff members, and to finally increase the volume of calls.

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May 8, 2016**Acknowledgements**

We thank the RISE Peer Responders for their time and dedication in supporting their peers at JHH. We acknowledge the efforts and commitment of the Second Victim Advisory Board for championing the RISE programme throughout JHH. We thank Dr. George Everly for his generosity in providing PFA training to the RISE team, and Jeffery Natterman, JD for his guidance and advice with risk management and legal issues.

Figure 1: RISE Mission and Objectives**RISE Mission:**

“To provide timely support to employees who encounter stressful, patient-related events”

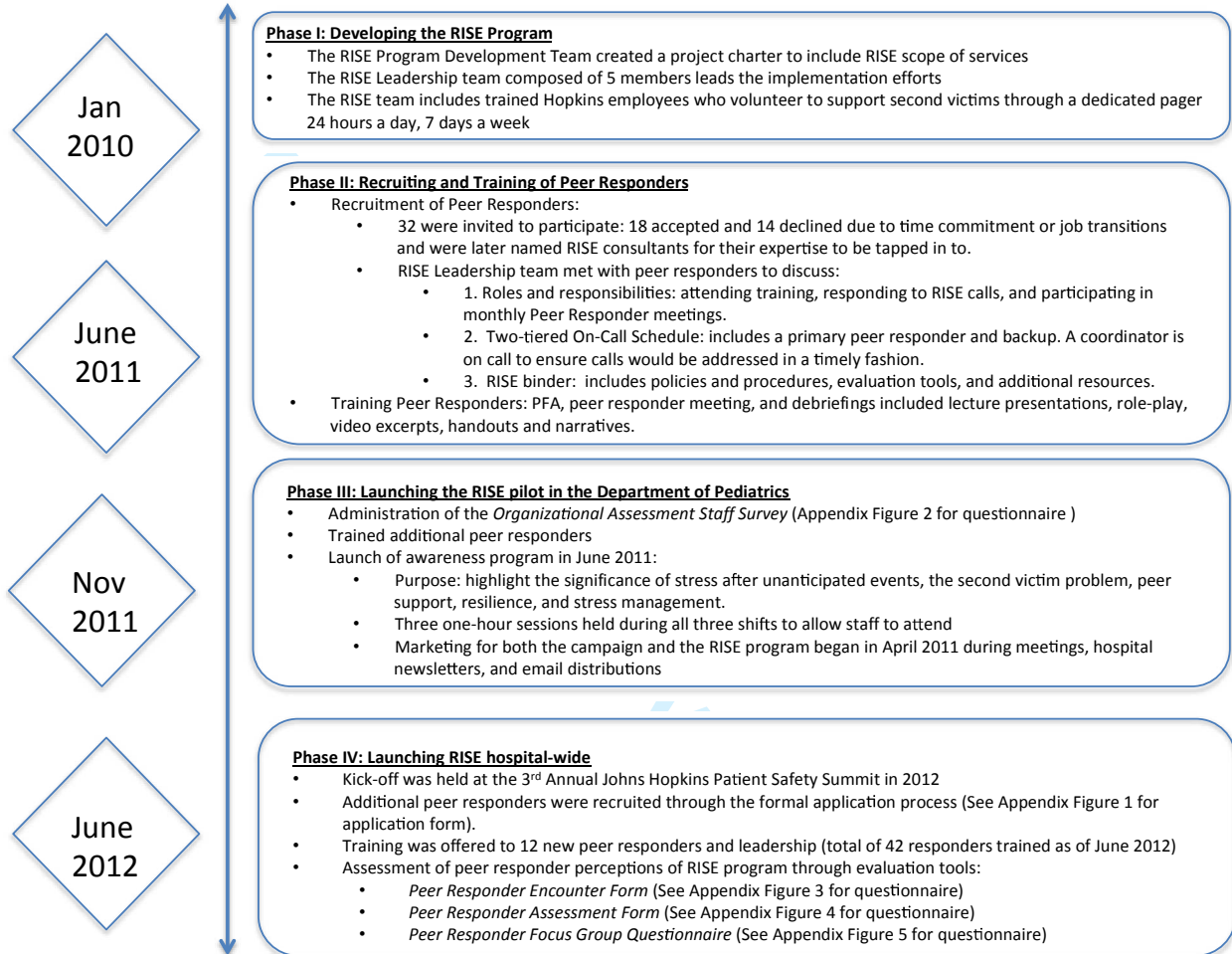
RISE Team Objectives:

1. Increase awareness of the second victim phenomenon in healthcare’s high-risk environment.
2. Provide multi-disciplinary, one-to-one or group, peer support in a non-judgmental environment.
3. Equip managers and employees with healthy coping strategies to promote well-being:
 - a. Offer tools to support managers in their roles when responding to second victim events
 - b. Provide first responder tips to all employees before, during, and after an event
4. Reassure & guide employees to continue thriving in their role
 - a. Develop a non-punitive approach to handling stressful patient-related events
 - b. Define policies and procedures for the RISE program

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Figure 2: RISE Timeline



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Appendix: Peer Responder Assessment Form

I. SECOND VICTIM INITIAL CALL

1. Did the second victim encounter any barriers to accessing RISE?
 Yes No
2. Were there any barriers to setting up a time/place to meet with the second victim?
 Yes No
3. Was this the first time you responded to this second victim?
 Yes No
4. Had this person had spoken with another RISE Responder?
 Yes No
5. If he/she had spoke to another RISE provider, was it about the same event or a different event?
 Same event Different event

II. ENCOUNTER WITH SECOND VICTIM

1. After meeting with the second victim, did you feel you were able to provide helpful support?
 Yes No
2. As you listened to the second victim, did you find yourself wanting to 'fix' the problem? If so, how did you respond to this feeling?
3. Was there a point during the discussion with the second victim when you struggled/felt uncomfortable?
4. What worked well during your encounter with the second victim?
5. Do you have worries or concerns that the second victim might have additional problems? If yes, what were they?
 Yes _____
 No
6. Did you experience any worries or concerns about how you responded? If so, please describe them.
7. Was there information you would have liked to have had prior to the encounter? If so, please describe.

III. TRAINING/EDUCATION:

1. I felt comfortable listening to the second victim.
 Strongly Disagree Disagree Agree Strongly Agree
2. I felt comfortable responding to the second victim.
 Strongly Disagree Disagree Agree Strongly Agree
3. I need additional training/experience as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
4. I am comfortable with my knowledge and skill as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
5. I am highly competent as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
6. I would be able to train other peer responders
 Strongly Disagree Disagree Agree Strongly Agree
7. Which aspect of the Psychological First Aide (PFA) training you received was most beneficial to your role as a peer responder?
 Lecture Presentation Role Play RAPID acronym Video excerpts
 Handouts Narratives Other _____
8. Please rate your overall competence as a peer responder:
 Poor Fair Good Very Good Excellent

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IV. PEER RESPONDER OVERALL EXPERIENCE

1. How would you rate your own emotional distress as a responder to this encounter (1 not at all painful-10 extremely painful)?
 1 2 3 4 5 6 7 8 9 10
2. I felt the need to refer the second victim to additional resources:
 Strongly Disagree Disagree Agree Strongly Agree
3. I was able to offer the second victim additional helpful resources.
 Strongly Disagree Disagree Agree Strongly Agree
4. I felt confident in offering the second victim additional resources
 Strongly Disagree Disagree Agree Strongly Agree
5. If you offered the second victim additional resources, what were they?

V. PEER RESPONDER RECOMMENDATIONS:

1. Overall how would you rate the success of this encounter?
 Poor Neutral Excellent
2. It was beneficial for the second victim to contact the RISE team:
 Strongly Disagree Disagree Agree Strongly Agree
3. I met the second victim's expectations:
 Strongly Disagree Disagree Agree Strongly Agree
4. I felt satisfied with how this encounter turned out:
 Strongly Disagree Disagree Agree Strongly Agree
5. This encounter suggests ways to improve the RISE program, including:

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Table 1: Characteristics of Peer Responders

Peer Responder Demographics (n=30)	n (%)
Gender	
Female	26 (86.7)
Male	4 (13.3)
Discipline	
Nursing	19 (63.3)
Administration	3 (10)
Patient Safety	2 (6.7)
Child life	2 (6.7)
Medicine	1 (3.3)
Social Work	1 (3.3)
Respiratory Therapy	1 (3.3)
Chaplain	1 (3.3)
Department and Unit	
Pediatrics	15 (50.0)
Adult Medicine	9 (30)
Patient Safety	3 (10)
JHH	2 (6.7)
Bone Marrow Transplant Specialist	1 (3.3)
Other units represented: oncology, psychiatry, OB/GYN, labor and delivery, surgery	

Table 2: Organizational Staff Assessment Survey—Participant characteristics and staff experience in seeking support

Profession (n=144)	n (%)	
Registered Nurse	102 (70.8)	
Pharmacist	14 (9.7)	
Clinical Social Worker	10 (6.9)	
Child Life Specialist	6 (4.2)	
Clinical Technician	3 (2.1)	
Clinical Therapist	2 (1.4)	
Attending/Staff Physician	1 (0.7)	
Administrator	3 (2.1)	
Environmental Support	1 (0.7)	
Other	2 (1.4)	
Number of Years in Healthcare (n=142)	n (%)	
less than 1 year	7 (4.9)	
1-5 years	47 (33.1)	
6-10 years	26 (18.3)	
11-20 years	33 (23.2)	
21 years or more	29 (20.4)	
Survey Questions (number of responses)	n	Percent Agree
Directly involved in an unanticipated adverse event (n=143)	95	66.4
Experience any problems, such as anxiety, depression, or concern about ability to perform job, as a result of this event (n=133)	77	57.9
Reached out for support or talked to someone about the event (n=128)	90	70.3
If you reached out for support, who did you talk to (of n=90) (one or more response per respondent)	Percent Agree	
Colleague on the unit	32.5	
Colleague off the unit	11.3	
Spouse/significant other	22.2	
Friend	18.2	
Manager/supervisor	11.3	
Counselor	2.0	
Chaplain/clergy	1.5	
Risk manager/attorney	1.0	

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Staff perceptions on features and services of an Organizational Second Victim Support Programme	
Preferred individuals to provide support (n=138)	
Multidisciplinary peer group	68.7
Nurse manager	15.5
Pastoral care	13.3
Counselor	1.7
Social work	0.9
Type of support (n=138)	
Individual support	70.7
Group support	29.3
Preferred timeframe to access support (n=135)	
As soon as the event happened	12.7
A few hours after the event happened	25.4
A couple of days after the event took place	48.2
A week after the event took place	8.1
Other	
Depends on the severity of the event	3.6
When second victim felt comfortable to access support	2.0

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**Table 3: Characteristics of RISE calls
(Number of RISE calls=80)**

Profession of Second Victim	n (%)
RN	45 (56.3)
Multidisciplinary group	23 (28.8)
Physician	13 (16.3)
Nurse Practitioner	2 (2.5)
Other (Nurses aide, respiratory technician, child psychology specialist, clinical customer service representative, CT scan staff)	7 (6.3)
Not known	11 (13)
Type of Call	
Individual (one-on-one)	34 (43)
Group	44 (56)
Unknown	2 (1)
Mean length of the interaction	49 minutes (range: 10-120 minutes)
Referral Sources	
Supervisor	43 (54)
Self	17 (21)
Peer	9 (11)
Nurse leader	4 (5)
Unknown	7 (9)

* Pharmacist, chaplain, student, case manager, supervisor, radiation therapist, SA, specialists, customer services representative

Table 4: Peer Responder Evaluation of RISE Calls (n=57)

	n (%)	
	Agree	Strongly Agree
Process—Peer Responder Training and Education		
I felt comfortable listening to the second victim.	6 (25.0)	17 (70.1)
I felt comfortable responding to the second victim.	12 (50.0)	12 (50.0)
I need additional training/experience as a peer responder.	10 (41.7)	1 (4.2)
I am comfortable with my knowledge and skill as a peer responder.	16 (66.7)	4 (16.7)
I am highly competent as a peer responder.	15 (62.5)	3 (12.5)
I would be able to train other peer responders.	12 (50.0)	3 (12.5)
Outcomes—Peer Responder Overall Experience and Recommendations		
I was able to offer the second victim additional helpful resources.	8 (33.3)	13 (54.2)
I felt confident in offering the second victim additional resources.	6 (25.0)	13 (54.2)
It was beneficial for the second victim to contact the RISE team.	10 (41.7)	13 (54.2)
I met the second victim's expectations.	4 (16.7)	16 (66.7)
I felt satisfied with how this encounter turned out.	6 (25.0)	15 (62.5)
Overall Success of the Encounter		Excellent
		38 (74.5)

Table 5: Emergent Themes from Focus Group

Themes	Main Findings	Descriptive Quote
Peer Responder Training and Education	<p><u>Psychological First Aid (PFA):</u> <u>Strengths:</u></p> <ul style="list-style-type: none"> PFA concepts were helpful and easy to relate to: “active listening,” therapeutic listening, and medicine’s “do no harm” Benefitted from role-play exercises <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> Create a second victim-focused curriculum, given that PFA focused on disaster and relief workers as opposed to clinicians working a hospital setting 	<p>“The biggest takeaway I got from the PFA training was the active listening and the <i>do no harm</i>.”</p> <p>“I think a lot of the experiences that this type of training is modeled after is military, firefighters, police—in which I have experience with emergency medicine and firefighting—you are either completely bored or there is maximum stress; there is no real in between. And so decompressing or having an encounter after a police officer was short, I think that is a much richer field to encounter. We have significant stresses in the hospital on a daily basis, but hey are not the same kind of thing. They are things that build over a period of time and then they acutely explode in someone’s face. How do you mold the training to the environment we are in, which is not a disaster-based experience?”</p>
	<p><u>Peer Responder Meetings:</u> <u>Strengths:</u></p> <ul style="list-style-type: none"> Meetings were helpful to gain information and share insight with peers Benefitted from the activities, including the role-play scenarios Case studies/interactions from other peer responders were also helpful, especially stories related to “non-ideal” scenarios, such as 	<p>“Hearing about how the [second victim] calls that have been handled was helpful.”</p> <p>“Sometimes getting more details on the event that happened would allow me to say—this is how I would have done as a responder or this is how I would have handled it. And even if that opens up the discussion: this is the situation we have faced and ask others ‘what would you have said’ and what are some of the things you would say to that staff member. Then, the team can go through a debrief to discuss the response.”</p> <p>“The articles [current events] that we have gotten about nurse x, y, z who has gone through something, committed suicide, or got fired from her</p>

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<p>anger from a family member.</p> <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Second victim stories were too de-identified and would like to hear more details about the event 		<p>job; I think those are so powerful and they make us see how important this programme is.”</p>
	<p><u>RISE Debriefings:</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Encouraged therapeutic listening • Helpful to hear other peer responders’ experiences • Debriefing process is very streamlined • Support received from the peer responders is very helpful <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Difficult to relate some of the second victim cases since the details of the event are de-identified 	<p>“I like to hear about what is going on with other second victims and it makes you think about—if that person came to me, how would I respond to them?”</p> <p>“I think the debriefings are fabulous! I think that it’s really important for those who respond to have a place to process and get support from their peers and get the validation that they did well, and they didn’t do any harm. And hearing how others responded is more training.”</p>
<p><u>Emotional distress as a peer responder</u></p>	<p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Insufficient training for providing group support as opposed to one-on-one support • Anxiety around not following up with a second victim or a unit after an interaction 	<p>“What we did not take into account [when responding to second victims] are prior stress levels.”</p> <p>“When I did a group debriefing, it was very anxiety-producing because I had no idea what I was walking in to. I took one of my nurses with me and she sat with me for support and it ended up being fine.”</p> <p>“I would have trouble with not following up with the second victim after responding to them. And when you’re a provider, you make a change in</p>

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		any patient's system, you follow up and make sure that that change was effective. And not having that opportunity to see if the 'patient' [second victim] is doing better as result, feels incomplete."
<u>Confidence in responding to a second victim(s)</u>	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Different levels of confidence in responding to second victims • More confident since they provided support as part of their current role • More confident due to prior clinical training <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • More comfortable in responding to second victims (one-on-one) as opposed to responding to an group 	<p>"From my very first day in nursing school, active and therapeutic listening was a very big part of the nursing model. Most of us who have made it through nursing degrees are skilled at that already. As a provider, what cements my ability to do something well is to be able to do it time and time again."</p> <p>"Training as a provider in general, is that you take from each portion of your training pieces that you will apply throughout your career. One thing I learned from my psychiatry rotation is the idea of therapeutic, thoughtful, and provocative listening. Thinking about events in the media through therapeutic listening is something I do now more than I do before."</p> <p>"We are also getting a lot of requests for group debriefs."</p> <p>"One thing that we did not get in any of our trainings was how to handle a group debriefing. And I think everybody would like that."</p> <p>"It's interesting to see that there is a disparity in the responders in their own assessment in their ability to respond to a different group of people [responding to residents would be different than responding to nurses, for instance]."</p>
<u>Recommendations for training</u>	<ul style="list-style-type: none"> • Develop a mechanism to gather background information on event prior to interacting with second victim • Provide more training on how to respond to groups 	<p>"The role-play script helped me organize what I was saying [when responding to the second victim], which was like a map that tells me to start with this and do this."</p> <p>"The role-playing helped people to feel more at ease."</p>

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	<ul style="list-style-type: none"> • Include content that is relevant to clinicians in hospital settings as opposed to PFA for relief workers • Helpful for group debriefings to be less nurse-oriented and include an interdisciplinary approach • Develop a debriefing mechanism to share the background of the event so that peers understand how the peer responder responded • Develop a list of “key phrases” peer responders can use in their interactions with second victims 	<p>“Having the RISE binder and documents made me feel more secure [when responding to a second victim].”</p>
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Contributorship Statement:

The authors of this work and their contributions are as follows:

Hanan H. Edrees, DrPH, MHSA is a Manager for Quality and Patient Safety at the Ministry of National Guard Health Affairs in the Kingdom of Saudi Arabia and was a member of the leadership team of the RISE programme. Dr. Edrees drafted the manuscript and provided substantial contributions to the acquisition and interpretation of the data.

Lori Paine, RN, MS is the Director of Patient Safety for the Johns Hopkins Hospital and the Johns Hopkins Armstrong Institute for Patient Safety & Quality. Ms. Paine provided substantial contributions to the conception of the research and critically revised the manuscript for programme specific content.

Cheryl Connors, MS, RN, NEA-BC is a Patient Safety Specialist at the Johns Hopkins Armstrong Institute for Patient Safety and Quality and Co-director of the RISE Programme. Ms. Connors critically revised the manuscript for programme specific content relating to the development and structure of RISE.

Matt Norvell, M.Div., M.S., BCCM., is a Pediatric Chaplain at the Johns Hopkins Children's Center and Co-director of the RISE Programme. Mr. Norvell critically revised the manuscript for programme specific content and tool development.

Henry Taylor, MD, MPH is a Senior Associate at the Johns Hopkins Bloomberg School of Public Health and an instructor in curriculum development at the Johns Hopkins University School of Education. Dr. Taylor contributed to the design of peer responder training and the programme framework.

Albert W. Wu, MD, MPH is a Professor of Health Policy and Management at Johns Hopkins Bloomberg School of Public Health, and Co-Director of the RISE Programme. Dr. Wu oversaw the research, provided substantial contributions to the conception and design of the study, and critically revised the manuscript.

Competing Interests:

None

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2. Abstract (page 1; 3)	<p>a. Provide adequate information to aid in searching and indexing.</p> <p>b. Summarise all key information from various sections of the text using the abstract format of the intended publication or a structured summary such as: background, local problem, methods, interventions, results, conclusions.</p>
Introduction	<i>Why did you start?</i>
3. Problem description (page 5)	Nature and significance of the local problem.
4. Available knowledge (page 5)	Summary of what is currently known about the problem, including relevant previous studies.
5. Rationale (page 5)	Informal or formal frameworks, models, concepts and/or theories used to explain the problem, any reasons or assumptions that were used to develop the intervention(s) and reasons why the intervention(s) was expected to work
6. Specific aims (page 5)	Purpose of the project and of this report.
Methods	<i>What did you do?</i>
7. Context (page 6-10)	Contextual elements considered important at the outset of introducing the intervention(s).
8. Intervention(s) (page 6-10)	<p>a. Description of the intervention(s) in sufficient detail that others could reproduce it.</p> <p>b. Specifics of the team involved in the work.</p>
9. Study of the intervention(s) (page 6-10)	<p>a. Approach chosen for assessing the impact of the intervention(s).</p> <p>b. Approach used to establish whether the observed outcomes were due to the intervention(s).</p>
10. Measures (page 10-12)	<p>a. Measures chosen for studying processes and outcomes of the intervention(s), including rationale for choosing them, their operational definitions and their validity and reliability.</p> <p>b. Description of the approach to the ongoing assessment of contextual</p>

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	<p>elements that contributed to the success, failure, efficiency and cost.</p> <p>c. Methods employed for assessing completeness and accuracy of data.</p>
11. Analysis (page 12)	<p>a. Qualitative and quantitative methods used to draw inferences from the data.</p> <p>b. Methods for understanding variation within the data, including the effects of time as a variable.</p>
12. Ethical considerations	Ethical aspects of implementing and studying the intervention(s) and how they were addressed, including, but not limited to, formal ethics review and potential conflict(s) of interest.
Results	<i>What did you find?</i>
13. Results (page 12-15)	<p>a. Initial steps of the intervention(s) and their evolution over time (eg, timeline diagram, flow chart or table), including modifications made to the intervention during the project.</p> <p>b. Details of the process measures and outcomes.</p> <p>c. Contextual elements that interacted with the intervention(s).</p> <p>d. Observed associations between outcomes, interventions and relevant contextual elements.</p> <p>e. Unintended consequences such as unexpected benefits, problems, failures or costs associated with the intervention(s).</p> <p>f. Details about missing data.</p>
Discussion	<i>What does it mean?</i>
14. Summary (page 15; 4)	<p>a. Key findings, including relevance to the rationale and specific aims.</p> <p>b. Particular strengths of the project.</p>
15. Interpretation (page 15-18)	<p>a. Nature of the association between the intervention(s) and the outcomes.</p> <p>b. Comparison of results with findings from other publications.</p> <p>c. Impact of the project on people and systems.</p> <p>d. Reasons for any differences between observed and anticipated outcomes, including the influence of context.</p>

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	e. Costs and strategic trade-offs, including opportunity costs.
16. Limitations (page 17; 4)	a. Limits to the generalisability of the work. b. Factors that might have limited internal validity such as confounding, bias or imprecision in the design, methods, measurement or analysis. c. Efforts made to minimise and adjust for limitations.
17. Conclusions (page 18)	a. Usefulness of the work. b. Sustainability. c. Potential for spread to other contexts. d. Implications for practice and for further study in the field. e. Suggested next steps.
Other information	
18. Funding (page 33)	Sources of funding that supported this work. Role, if any, of the funding organisation in the design, implementation, interpretation and reporting.

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Implementing the RISE Second Victim Support Programme at the Johns Hopkins Hospital: A Case Study

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Title:

“Implementing the RISE Second Victim Support Programme at the Johns Hopkins Hospital: A Case Study”

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ABSTRACT

Background: Second victims are healthcare workers who experience emotional distress following patient adverse events. Studies indicate the need to develop organizational support programmes for these workers. The RISE (Resilience In Stressful Events) programme was developed at Johns Hopkins Hospital to provide this support.

Objective: To describe development of RISE and evaluate its initial feasibility and subsequent implementation. Programme phases included: 1) Developing the RISE Programme 2) Recruiting and training peer responders, 3) Pilot launch in the Department of Pediatrics, and 4) Hospital-wide implementation.

Methods: Mixed-methods study, including frequency counts of encounters, staff surveys, and evaluations by RISE peer responders. Descriptive statistics were used to summarize demographic characteristics and proportions of responses to categorical, Likert, and ordinal scales. Qualitative analysis and coding were used to analyze open-ended responses from questionnaires and focus groups.

Results: A baseline staff survey found that most staff had experienced an unanticipated adverse event, and most would prefer peer support. A total of 119 calls, involving approximately 500 individuals, were received in the first 52 months. The majority of calls were from nurses, and very few were related to medical errors (4%). Peer responders reported that the encounters were successful in 88% of cases and 83.3% reported meeting the caller's needs. Low awareness of the programme was a barrier to hospital-wide expansion. However, over the four years, the rate of calls increased from approximately one to four calls per month. The programme evolved to accommodate requests for group support.

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Conclusion: Hospital staff identified the need for a multidisciplinary peer support programme for second victims. Peer responders reported success in responding to calls, the majority of which were for adverse events rather than medical errors. The low initial volume of calls emphasizes the importance of promoting awareness of the value of emotional support and the availability of the programme.

Strengths of this study

- Describes one of the earliest organizational programmes to support second victims, by the team that originated the concept
- Provides detailed description of the process of development and implementation
- Provides assessment tools that can be used by other organizations
- Uses both quantitative and qualitative methods to evaluate implementation
- Describes the conflicting goals of maintaining caller confidentiality, and evaluating caller outcomes

Limitations of this Study

- In order to maintain caller confidentiality, identifiers and contact information were not retained for callers
- No systematic follow-up of caller outcomes
- Assessment tools were not previously validated
- Relatively small sample sizes and some missing data

BMJ Open**June 22, 2016****INTRODUCTION**

Adverse events bring to light system defects that can cause patient harm. In the past decade, health care organizations have adopted standardized procedures to investigate events, and staff have become more aware of system defects [1]. However, organizations often fail to recognize the impact of adverse events on healthcare providers who can suffer emotional distress as “second victims” of the same incidents that harm patients [2-4].

At The Johns Hopkins Hospital, adverse patient-related events are reported to managers and the online incident reporting system; some are debriefed with staff and a few are investigated. Patient safety leaders recognized a gap in the ability of the institution to provide consistent and timely support to second victims – healthcare providers who are traumatized by patient adverse events [5]. In 2010, leaders in patient safety, risk management, and clinical departments began meeting to discuss the magnitude and importance of the problem, current infrastructure to support healthcare providers, stories and experiences, and strategies to improve the system. This process led to the establishment of the RISE (Resilience in Stressful Events) peer support programme.

Although there are a few published descriptions of organizational peer support programmes, there has been little documentation of the steps involved in their development [6, 7].

Additionally, there are limited evaluations of the feasibility, implementation, and effectiveness of these programmes [8]. The aim of this paper is to describe the development of RISE at The Johns Hopkins Hospital, and the initial evaluation of a pilot test of the programme, and its

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hospital-wide implementation. It is hoped that this information will help other institutions establish staff support programmes of their own.

Development of RISE Programme

The Johns Hopkins Hospital (JHH) is a 1,075-licensed bed, urban, academic medical center established in 1889. After the occurrence of a significant adverse patient-related event in the JHH Department of Pediatrics in 2001, staff struggled to cope and were affected both personally and professionally. Subsequent review helped hospital leaders recognize the need to provide a programme supporting staff following adverse events. In 2009, the JHH Patient Safety Department took initial steps to establish an organizational support programme for second victims. Development initially took place in four phases: (1) programme development (January 2010-ongoing), (2) recruitment and training of peer responders (June 2011-ongoing), (3) RISE pilot in the Department of Pediatrics (November 2011-June 2012), and (4) hospital-wide expansion of RISE (June 2012-March 2016).

A multidisciplinary Programme Development Team was created to lead the strategic planning and implementation of RISE. To understand the types of support needed, the team developed a survey that was administered in June 2010 at a presentation on second victims by one of the team members (AW) at the First Annual Johns Hopkins Patient Safety Summit. Two-thirds of the respondents to this survey reported experiencing emotional distress following an unanticipated adverse event, and more than half of these respondents had reached out for support from a peer or colleague [5]. Respondents endorsed the need for a hospital-sponsored peer support programme to benefit second victims.

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Development of RISE (Phases 1-4) (See Figure 1 for timeline)Phase 1: RISE Programme Development Team and the RISE Mission

The RISE leadership team was comprised of five members: the Director of Patient Safety (LP), a physician faculty member (AW), a risk manager (JN), a patient safety researcher (HE), a nurse manager (CC), and a hospital chaplain (MN). The leadership team developed a work plan, logistics and procedures for the programme, identified additional team members to provide peer support, and determined the training and resources necessary to support these efforts. The team met twice a month beginning in January 2010.

INSERT FIGURE 1 APPROXIMATELY HERE

The RISE team of peer responders was established in the fall of 2011. A long-term goal of the programme was to foster a culture in which all employees were resilient and mutually supportive before, during, and after stressful events (Figure 2). A peer support programme led by health care workers was a preferred option expressed by staff, given that peers were viewed as understanding clinical issues and peer support had been shown to be effective, economically viable, and sustainable [9, 10]. RISE was intended to provide timely access to support employees' immediate needs to complement the services being offered by the existing employee assistance programme (Faculty And Staff Assistance Programme - FASAP) [8, 9].

INSERT FIGURE 2 APPROXIMATELY HERE

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Procedures: Responding to Second Victims

After the occurrence of a stressful, patient-related event—such as an adverse event, medical error, death, unexpected outcome, or non-accidental trauma—the healthcare worker involved or his/her colleague activates a RISE call by paging the RISE team. Both the RISE pager number and an intranet call button activate the RISE pager. The on-call RISE peer responder responds to the page by calling back within 30 minutes, and planning a meeting (encounter) with the caller—ideally within the next 12 hours. The term “peer responder” does not imply that the responder shares the same professional discipline as the caller.

In the encounter, the peer responder actively listens to the second victim and provides psychological first aid and emotional support. The encounter explicitly focuses on the emotions of the employee rather than the details of the incident. At the end of the encounter, the peer responder offers a list of current organizational resources that might be helpful for continued healing, such as the employee assistance programme, community counseling, or exercise.

All interactions between the second victim and the peer responder are confidential. RISE is based organizationally within the Armstrong Institute for Patient Safety and Quality at Johns Hopkins, and discussions between a RISE responder assisting a second victim are presumed to be covered by patient safety privilege under Maryland State Law, despite the fact that there has never been a legal test case [11]. The only exception is if the caller indicates the potential for imminent harm to self or others, in which case the peer responder assists the caller with obtaining the necessary resources to mitigate harm. After the encounter, the peer responder

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activates a debriefing, in which he/she facilitates a session to receive support from the other members of the RISE team and to provide a learning opportunity for other members.

Phase 2: Recruiting and Training of RISE Peer Responders

Recruitment

Initially, peer responders were recruited based on recommendations from organizational leaders, based on their known ability to provide support to colleagues. Subsequent groups of responders were self-nominated and asked to complete a structured application and to submit letters of recommendation. These applications were reviewed by the executive committee of RISE. Most of the peer responders from the initial group were registered nurses (63.3%), and half of the peer responders were from the Department of Pediatrics (50.0%) (Table 1). A total of 42 peer responders have been trained, with 30 currently active, including 11 of the original cadre of 18 responders who are still on the team.

Table 1: Characteristics of Peer Responders

Peer Responder Demographics (n=30)	n (%)
Gender	
Female	26 (86.7)
Male	4 (13)
Discipline	
Nursing	19 (63.3)
Administration	3 (10)
Patient Safety	2 (7)
Child life	2 (7)
Medicine	1 (3)
Social Work	1 (3)
Respiratory Therapy	1 (3)

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Chaplain	1 (3)
Department and Unit	
Pediatrics	15 (50.0)
Adult Medicine	9 (30)
Patient Safety	3 (10)
JHH	2 (7)
Bone Marrow Transplant Specialist	1 (3)
Other units represented: oncology, psychiatry, OB/GYN, labor and delivery, surgery	

Training

To serve as a Peer Responder, team members were required to attend Psychological First Aid (PFA) training, RISE team meetings and debriefings after encounters. Psychological First Aid is a form of early intervention to address emotional distress [10, 12]. Dr. George Everly, the developer of RAPID-PFA (Reflective listening, Assessment, Prioritization, Intervention, and Disposition) offered a six-hour training through the Johns Hopkins Center for Public Health Preparedness [12, 13]. The first training session was offered in September 2011, with a total of eight training sessions offered on a periodic basis. Hour-long Peer Responder Meetings were conducted monthly and included discussions of the published literature, practice delivering PFA, and sharing of second victim encounters. Material was presented in the form of lectures, storytelling sessions, role-play exercises, and group discussions. Debriefings occurred after each RISE encounter and provided collective learning opportunities for peer responders to reflect, mentor, support one another, and gain vicarious experience about calls. These meetings took place for an hour.

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Refresher training sessions are provided on an annual basis at RISE team retreats. Ongoing training is gained through the debriefings within the RISE team and at monthly meetings where cases are discussed and skills are practiced.

Phase 3: Launching the RISE Pilot in the Department of Pediatrics

To introduce the programme, an awareness campaign was launched on June 24, 2011 in the 205 bed Johns Hopkins Children's Center. In November 2011, RISE began a pilot programme there based on a strong commitment by the Pediatric Department's leadership to RISE.

Phase 4: Hospital-wide Expansion of the RISE Programme

On June 21, 2012, 7 months after the launch of the Pediatrics pilot, the RISE programme received approval from hospital leadership to expand to the entire hospital. The announcement was made at the annual Patient Safety Summit, preceded by a presentation to help staff understand the purpose of the team as well as contact information for RISE.

In this phase of the programme, members of the RISE team developed a two-tiered call system, whereby two peer responders were on call at any given time. The first responds to the RISE pager while the second peer responder provides back up for first if additional support is necessary. The RISE director is available to provide additional support if technical or administrative issues arise. Using this system, staff members are able to call the RISE team anonymously. If the first responder and caller happen to work on the same unit, the call can be handled by the second on-call responder.

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To increase the volume of calls, additional efforts were taken to promote awareness among hospital staff members. This included the development of a website featuring promotional videos explaining the function and benefits of this service, publicity through internal publications, screen savers that cycle continuously on public computer screens, presentations to targeted departments and units, and recruitment of unit level champions.

Approximately 56% of callers requested group, rather than individual, support. In the group RISE calls, the inciting incidents were almost uniformly related to patient death unrelated to medical errors and were often known to the hospital community, and some even to the public. RISE encounters for groups tended to be longer than individual sessions. The groups have a variety of multidisciplinary compositions and range from 5 to 25 attendees depending on the number of employees affected. To make sure that members of the group received enough attention, it was required that group requests be attended by at least two responders.

Financial support for the RISE programme was provided by the Armstrong Institute which assures safety and quality for the health system. The budget supports 0.30 FTE of the programme director (CC) who emerged as the operational leader of the team.

METHODS**Study Design**

This evaluation of a novel hospital programme used a mixed methods design that included a staff survey, peer responder self-evaluations, and a focus group of peer responders (See Appendix).

The project was approved by The Johns Hopkins Institutional Review Board.

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6 Design of the evaluation reflected the need to assure confidentiality for callers, which program
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8 leaders thought was necessary for distressed health care workers to use the programme. There
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10 was also a concern by the institution that records of encounters might be potentially admissible
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12 as evidence in a malpractice suit. For that reason, the programme was designed not to collect
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14 identifying information from callers, or follow up systematically with them. It was also
15
16 considered insensitive to ask distressed callers to complete a satisfaction survey at the end of the
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18 encounter. Therefore, our measures were collected from the perspective of the peer responders
19
20 after their encounters with callers.
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Participants and Procedures

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28 Before launching the pilot programme (Phase 3), frontline staff in the Department of Pediatrics
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30 (n=144) completed the *Organizational Staff Assessment Survey* and were asked to assess their
31
32 perceptions of the second victim problem and implementation of a second victim support
33
34 programme (Table 2). All faculty and staff working in the Department were included in the
35
36 survey. Peer responders in Phase 4 returned the *Peer Responder Encounter* and the *Assessment*
37
38 *Form* (n=80, 57 complete forms) For group encounters, the lead peer responder was asked to
39
40 complete the Peer Responder Encounter and Peer Responder Assessment forms after each
41
42 encounter. A random sample of 9 members of the peer responder team were invited to
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44 participate in the focus group discussion, of whom 5 were able to participate at the designated
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Table 2: Organizational Staff Assessment Survey—Participant characteristics and staff experience in seeking support

Profession (n=144)	n (%)	
Registered Nurse	102 (70.8)	
Pharmacist	14 (9.7)	
Clinical Social Worker	10 (6.9)	
Child Life Specialist	6 (4)	
Clinical Technician	3 (2)	
Clinical Therapist	2 (1)	
Attending/Staff Physician	1 (1)	
Administrator	3 (2)	
Environmental Support	1 (1)	
Other	2 (1)	
Number of Years in Healthcare (n=142)	n (%)	
less than 1 year	7 (5)	
1-5 years	47 (33.1)	
6-10 years	26 (18.3)	
11-20 years	33 (23.2)	
21 years or more	29 (20.4)	
Survey Questions (number of responses)	n	Percent Agree
Directly involved in an unanticipated adverse event (n=143)	95	66.4
Experience any problems, such as anxiety, depression, or concern about ability to perform job, as a result of this event (n=133)	77	57.9
Reached out for support or talked to someone about the event (n=128)	90	70.3
If you reached out for support, who did you talk to (of n=90) (one or more response per respondent)	Percent Agree	
Colleague on the unit	32.5	
Colleague off the unit	11.3	
Spouse/significant other	22.2	
Friend	18.2	
Manager/supervisor	11.3	
Counselor	2.0	
Chaplain/clergy	1.5	
Risk manager/attorney	1.0	
Staff perceptions on features and services of an Organizational Second Victim Support Programme		

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Preferred individuals to provide support (n=138)	
Multidisciplinary peer group	68.7
Nurse manager	15.5
Pastoral care	13.3
Counselor	1.7
Social work	0.9
Type of support (n=138)	
Individual support	70.7
Group support	29.3
Preferred timeframe to access support (n=135)	
As soon as the event happened	12.7
A few hours after the event happened	25.4
A couple of days after the event took place	48.2
A week after the event took place	8.1
Other	
Depends on the severity of the event	3.6
When second victim felt comfortable to access support	2.0

Measures and Variables

Organizational Staff Assessment Survey: was used to collect data from healthcare professionals on the need for support of health care workers. Information collected included respondent characteristics, respondents' personal experience as a second victim, and desired features and services of an organizational support programme.

Peer Responder Encounter Form: was used by peer responders to provide de-identified information on the event and nature of the RISE call. "De-identified" in this case meant that the information collected on the event could not be traced to a specific person or patient. Several items were based on the University of Missouri's forYOU Peer Responder Encounter Form [14].

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Peer Responder Assessment Form: was used by peer responders to evaluate the interaction with the caller after each encounter (Appendix). All of the items were newly developed for this assessment in an effort to capture a minimal amount of information needed to evaluate the encounter and inform quality improvement. Information collected included a brief description of the encounter with the second victim, peer responder evaluation of the appropriateness of RISE training to respond to the specific call, the peer responder's experience in providing support to the caller(s), and their recommendations on how to improve the RISE programme. This form was not modified at the time of hospital-wide expansion.

Peer Responder Focus Group: The aim of the focus group was to assess peer responder perceptions, confidence levels, and self-assessed competence based on the RISE training they received. The interview guide also directed questions about the peer responders' own emotional distress when responding to a second victim.

Data Analysis

We used descriptive statistics to summarize calls and participant demographic characteristics. We calculated proportions for the quantitative responses, which included categorical/multiple choice and Likert-type scale questions (1=strongly disagree; 5=strongly agree), ordinal scales and counts. Content analysis was conducted to assess the open-ended responses in both the Organizational Staff Survey and the focus group transcript using standard qualitative analysis methods [15]. Each transcript was analyzed by two members of the study team (HE, CC) first to get a global impression, then identifying and coding each meaning unit in the transcript. The

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3 contents of each meaning unit were abstracted and organized into groups with other units as
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5 themes emerged. The interview questions were compared to the transcript to refine this iterative
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7 analysis. Disagreements in coding were resolved by consensus.
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RESULTS

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12 Respondents to the *Organizational Staff Assessment Survey* were primarily registered nurses
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14 (70.8%, n=102), and most respondents had over one year of work experience in healthcare
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16 (Table 2). Approximately 70% of respondents had been directly involved in an unanticipated
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18 adverse event, and 57.9% (n=77) reported experiencing problems, such as anxiety or inability to
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20 perform their job, as a result of this event. Over two thirds (70.3%, n=90) had reached out for
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22 support following the event (Table 2).
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32 When asked about potential second victim support programmes (Table 2), most respondents
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34 (68.7%, n=95) indicated they would prefer a multidisciplinary peer group to offer support.
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37 Others mentioned they would prefer a nurse manager (15.5%, n=21) or pastoral care (13.3%,
38
39 n=18). More than two thirds (70.7%, n=97) preferred individual to group support. Additionally,
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41 respondents preferred to access support soon after the event: as soon as it happened (12.7%,
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43 n=17), a few hours after the event happened (25.4%, n=34), a couple of days after the event
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45 happened (48.2%, n=66), and a week after the event took place (8.1%, n=11). Others indicated
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47 that timeliness of support desired depended on the severity of the event or their comfort level
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49 following the event.
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Description of Calls

There was a total of 119 calls. There were 12 calls during the Pediatrics pilot, 15 calls in year 2, 37 calls in year 3, 40 calls in year 4, and 15 calls in the first 4 months of year 5. Thus, the rate of calls was approximately 1 per month for the first year, 2 per month in the second year, 3 per month in the third year and 4 per month thereafter. Approximate proportions of callers by profession were as follows: nurse 56%, nurse practitioner 2.5%, multidisciplinary group 28.8%, physician 16.2%, other 6.3%, not recorded 13% for 80 encounters.

The majority of incidents were related to adverse events, rather than medical errors. For 80 of the encounters for which the information was available, 45.0% included death of a patient, and 21.3% involved an adverse event. The remainder of calls were for other difficult situations such as difficult decisions, burnout, staff assault, intrastaff conflicts, and others. Only 4 of the 80 incidents were related to a clear-cut medical error. The average interaction lasted for 49 minutes. A total of 43% (n=34) were one-to-one encounters, and 56% (n=44) were group sessions.

Peer Responder Encounter and Assessment Forms

All of the responders on the team responded to at least one call. Data were completed by peer responders for a total of 80 out of the 119 encounters between November 2011 and March 2016—a 67% completion rate (Table 3). The mean interaction length was 49 minutes (median 50 minutes). Most of the callers were looking for support at the recommendation of their supervisors (56.2%) with the remainder being self-referred. Less than 8% of the callers reported experiencing barriers with accessing the RISE team; the primary barrier was lack of awareness

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on how to access the programme. In Phase 4, peer responders' perceptions were also assessed on the programme structure and processes.

**Table 3: Characteristics of RISE calls
(Number of RISE calls=80)**

Profession of Second Victim	n (%)
RN	45 (56.3)
Multidisciplinary group	23 (28.8)
Physician	13 (16.3)
Nurse Practitioner	2 (3)
Other (Nurses aide, respiratory technician, child psychology specialist, clinical customer service representative, CT scan staff)	7 (6)
Not known	11 (13)
Type of Call	
Individual (one-on-one)	34 (43)
Group	44 (56)
Unknown	2 (1)
Mean length of the interaction	49 minutes (range: 10-120 minutes)
Referral Sources	
Supervisor	43 (54)
Self	17 (21)
Peer	9 (11)
Nurse leader	4 (5)
Unknown	7 (9)

* Pharmacist, chaplain, student, case manager, supervisor, radiation therapist, SA, specialists, customer services representative

Peer responders believed that the RISE training enriched their interactions with callers. Role-play focusing on key principles of peer response has been identified as the most effective method for training. Additionally, role-play provides a safe place for the responders to practice.

Scenarios that have been actual encounters are often used so that responders can continue to learn and apply strategies, resulting in a positive future encounter. When call volume was low, anticipated scenarios were used to prepare responders. Responders reported higher comfort

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levels in responding to the second victim after the peer responder training compared to rating their overall competence in meeting the callers' needs (excellent or very good only 44.9% of the time).

Most of the peer responders (84.3%) offered the caller additional support resources (Table 4).

Following the encounter, peer responders rated the success of the interaction to be either 'excellent' (66.7%) or 'neutral' (22.8%). Most believed that they met the second victims' expectations (87.8%) and were satisfied with the interaction (82.4%). Approximately 70% of the peer responders indicated that they themselves experienced little or no emotional distress after they offered support to the second victim.

Peer Responder Focus Group: The focus group was conducted in April 2013 during a 90-minute session. Nine peer responders were invited to participate in the focus group, and five participated, for a 55.6% response rate. Peer responders had varying levels of experience in responding to second victims and joined the RISE team at different times since the inception of the programme. Approximately three minutes was allocated for each peer responder to respond to each of the focus group questions.

Table 4: Peer Responder Evaluation of RISE Calls (n=57)

	n (%)	
	Agree	Strongly Agree
Process—Peer Responder Training and Education		
I felt comfortable listening to the second victim.	17 (29.8)	2 (4)
I felt comfortable responding to the second victim.	23 (40.4)	1 (2)
I need additional training/experience as a peer responder.	20 (35.1)	1 (2)
I am comfortable with my knowledge and skill as a peer responder.	27 (47.4)	18 (31.6)

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I am highly competent as a peer responder.	31 (54.4)	10(17.5)
I would be able to train other peer responders.	31 (54.4)	9 (15.8)
Outcomes—Peer Responder Overall Experience and Recommendations		
I was able to offer the second victim additional helpful resources.	36 (63.2)	12 (21.1)
I felt confident in offering the second victim additional resources.	35 (61.4)	11 (19.3)
It was beneficial for the second victim to contact the RISE team.	27 (47.4)	25 (43.9)
I met the second victim's expectations.	36 (63.2)	14(24.6)
I felt satisfied with how this encounter turned out.	32 (56.1)	15 (26.3)
Overall Success of the Encounter		Excellent
		38 (66.7)

Several themes emerged from the qualitative analysis of this session (Table 5). Initial PFA training and ongoing training, such as the peer responder meetings and debriefings, were described as helpful in preparing peer responders. Most of the peer responders found the greatest value in the initial PFA training and in the ongoing skill-sharpening opportunities in the debriefings and monthly meetings. These aspects of training provided the peer responders with adequate skills to respond to a distressed employee. There was a desire for more training on how to facilitate group sessions comprised of multiple disciplines and services, role plays involving clinicians with different professional roles, and the development of “key phrases” or scripts to be used at the beginning and at the end of an encounter. Some peer responders experienced higher levels of personal distress in providing group (rather than one-on-one) support.

Recommendations for future training and education included: (1) group support, (2) interdisciplinary approach in holding debriefings, (3) training focused on physicians as opposed to other providers, and (4) key phrases and scripts.

Table 5: Emergent Themes from Focus Group

Themes	Main Findings	Descriptive Quote
Peer Responder Training and Education	<p><u>Psychological First Aid (PFA):</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • PFA concepts were helpful and easy to relate to: “active listening,” therapeutic listening, and medicine’s “do no harm” • Benefitted from role-play exercises <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Create a second victim-focused curriculum, given that PFA focused on disaster and relief workers as opposed to clinicians working a hospital setting 	<p>“The biggest takeaway I got from the PFA training was the active listening and the <i>do no harm</i>. ”</p> <p>“I think a lot of the experiences that this type of training is modeled after is military, firefighters, police—in which I have experience with emergency medicine and firefighting—you are either completely bored or there is maximum stress; there is no real in between. And so decompressing or having an encounter after a police officer was short, I think that is a much richer field to encounter. We have significant stresses in the hospital on a daily basis, but hey are not the same kind of thing. They are things that build over a period of time and then they acutely explode in someone’s face. How do you mold the training to the environment we are in, which is not a disaster-based experience?”</p>
	<p><u>Peer Responder Meetings:</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Meetings were helpful to gain information and share insight with peers • Benefitted from the activities, including the role-play scenarios • Case studies/interactions from other peer responders were also helpful, especially stories related to “non-ideal” scenarios, such as 	<p>“Hearing about how the [second victim] calls that have been handled was helpful.”</p> <p>“Sometimes getting more details on the event that happened would allow me to say—this is how I would have done as a responder or this is how I would have handled it. And even if that opens up the discussion: this is the situation we have faced and ask others ‘what would you have said’ and what are some of the things you would say to that staff member. Then, the team can go through a debrief to discuss the response.”</p> <p>“The articles [current events] that we have gotten about nurse x, y, z who has gone through something, committed suicide, or got fired from her</p>

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	<p>anger from a family member.</p> <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Second victim stories were too de-identified and would like to hear more details about the event 	<p>job; I think those are so powerful and they make us see how important this programme is.”</p>
	<p><u>RISE Debriefings:</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Encouraged therapeutic listening • Helpful to hear other peer responders’ experiences • Debriefing process is very streamlined • Support received from the peer responders is very helpful <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Difficult to relate some of the second victim cases since the details of the event are de-identified 	<p>“I like to hear about what is going on with other second victims and it makes you think about—if that person came to me, how would I respond to them?”</p> <p>“I think the debriefings are fabulous! I think that it’s really important for those who respond to have a place to process and get support from their peers and get the validation that they did well, and they didn’t do any harm. And hearing how others responded is more training.”</p>
<p><u>Emotional distress as a peer responder</u></p>	<p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Insufficient training for providing group support as opposed to one-on-one support • Anxiety around not following up with a second victim or a unit after an interaction 	<p>“What we did not take into account [when responding to second victims] are prior stress levels.”</p> <p>“When I did a group debriefing, it was very anxiety-producing because I had no idea what I was walking in to. I took one of my nurses with me and she sat with me for support and it ended up being fine.”</p> <p>“I would have trouble with not following up with the second victim after responding to them. And when you’re a provider, you make a change in</p>

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		any patient's system, you follow up and make sure that that change was effective. And not having that opportunity to see if the 'patient' [second victim] is doing better as result, feels incomplete."
<u>Confidence in responding to a second victim(s)</u>	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Different levels of confidence in responding to second victims • More confident since they provided support as part of their current role • More confident due to prior clinical training <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • More comfortable in responding to second victims (one-on-one) as opposed to responding to an group 	<p>"From my very first day in nursing school, active and therapeutic listening was a very big part of the nursing model. Most of us who have made it through nursing degrees are skilled at that already. As a provider, what cements my ability to do something well is to be able to do it time and time again."</p> <p>"Training as a provider in general, is that you take from each portion of your training pieces that you will apply throughout your career. One thing I learned from my psychiatry rotation is the idea of therapeutic, thoughtful, and provocative listening. Thinking about events in the media through therapeutic listening is something I do now more than I do before."</p> <p>"We are also getting a lot of requests for group debriefs."</p> <p>"One thing that we did not get in any of our trainings was how to handle a group debriefing. And I think everybody would like that."</p> <p>"It's interesting to see that there is a disparity in the responders in their own assessment in their ability to respond to a different group of people [responding to residents would be different than responding to nurses, for instance]."</p>
<u>Recommendations for training</u>	<ul style="list-style-type: none"> • Develop a mechanism to gather background information on event prior to interacting with second victim • Provide more training on how to respond to groups 	<p>"The role-play script helped me organize what I was saying [when responding to the second victim], which was like a map that tells me to start with this and do this."</p> <p>"The role-playing helped people to feel more at ease."</p>

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	<ul style="list-style-type: none"> • Include content that is relevant to clinicians in hospital settings as opposed to PFA for relief workers • Helpful for group debriefings to be less nurse-oriented and include an interdisciplinary approach • Develop a debriefing mechanism to share the background of the event so that peers understand how the peer responder responded • Develop a list of “key phrases” peer responders can use in their interactions with second victims 	<p>“Having the RISE binder and documents made me feel more secure [when responding to a second victim].”</p>
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DISCUSSION

We describe the initial evaluation of RISE (Resilience in Stressful Events) a multidisciplinary peer support programme based within a large teaching hospital. The structure and features of RISE were guided by the results of an initial survey which suggested that such a programme would be preferred by workers who experienced stressful, patient-related events. Evaluation based on the self-reports of peer responders supported the success of most encounters with callers and the effectiveness of training – particularly role playing exercises – in preparing them to support second victims. However, at the end of the pilot period, peer responders also identified the desire for additional training and education to increase their confidence and competence in responding to second victims. There were relatively few calls in the first year of operation. This may have been due in part to lack of staff awareness of RISE services or how to access them. In subsequent years, additional measures were taken to increase awareness and acceptance of the service. Concurrent with this, use of the programme has increased steadily, and in year 5 of the programme the rate of calls is four times higher than during its pilot phase.

A strength of the RISE programme is that it was based both on local staff perceptions of the second victim problem, as well as on existing resources—the Medically Induced Trauma Support Services (MITSS) Toolkit for Building a Clinician and Staff Support Program, and the pioneering ForYou Program established at the University of Missouri [2, 5, 6, 16]. In addition, both quantitative and qualitative evaluation methods were utilized to gain a greater understanding of programme implementation processes. Based on the results, it appears that it has been beneficial to have a well-structured organizational peer support programme for staff members after a stressful, patient related event. This is consistent with findings from other

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2
3 programmes [17-22]. We developed tools to help evaluate effectiveness, including a peer
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5 responder self-evaluation that may be useful to other institutions in evaluating their current or
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7 future programmes. Another strength of the programme is that it provides a HIPPA compliant
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9 alternative venue for discussions to take place, while protecting the privacy of both patients and
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11 providers.
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17 Our initial survey of employees supported the need for the programme. Most of the respondents
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19 to our baseline survey had experienced unanticipated adverse events, with subsequent personal
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21 problems, such as depressed mood, or concern about their ability to safely perform their job.
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24 The majority of these respondents mentioned that they did seek support and would prefer to
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26 speak with a colleague or peer, followed by their spouse/significant other, a friend, or their
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28 supervisor. These results confirm the feelings of guilt, worry, helplessness, doubt, and anger
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30 described by healthcare workers in previous studies [23, 24]. Peer support emerged as the
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32 preferred mode of support for an institutional programme, also consistent with previous studies
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34 [6, 8, 25].
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41 Despite the compelling rationale for RISE, we encountered challenges in implementing the
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43 programme at a large academic medical center. These included limited awareness of the
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45 magnitude and importance of the second victim problem, overcoming staff concerns about the
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47 confidentiality of the service, and risks of exposure to legal or disciplinary actions. The
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49 programme was supported and sanctioned by the hospital and has operated primarily with
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51 existing resources relying on the voluntary efforts of hospital staff. Financial limitations also
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53 reduced the capacity for formal mechanisms for data collection and monitoring.
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The greatest challenge was getting staff members who could benefit from the programme to use it. During the pilot study, RISE received a relatively low volume of calls – only approximately one per month. Reports from these encounters suggested that some callers had been unaware of the programme, while others did not know how to activate an encounter. For that reason, after expansion of the programme hospital-wide, we launched a multi-pronged effort to increase awareness of the problem of the second victim, the availability of RISE, and that it was both beneficial and safe to use. One successful initiative was adding a screen saver to publicize RISE to the small number of such ticklers that cycle continuously on the computer work stations across the medical center. Formal presentations, particularly given in conjunction with departmental leadership on specific adverse events, appeared to be followed by an increased number of calls from related units. These presentations described the problem of the second victim, the availability of timely peer support, and the independent and confidential nature of the programme. We encouraged staff to speak up about events and how these events affected them personally [23] and encouraged them to use support services—all part of the larger priority of developing a culture of safety within the organization [26]. RISE was featured prominently on the cover of a widely distributed internal hospital magazine. Finally, several directors from units at increased risk for death and adverse events received RISE training in Psychological First Aid, an action that also corresponded to more calls originating from those units.

Limitations

This study had several limitations. The first and greatest limitation involved the inherent conflict between the mission of assuring confidentiality for callers and the desire to evaluate the

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3 outcomes of encounters. Because of this, we did not collect identifiers on callers or follow up
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5 systematically with them. Instead, we measured success from the perspective of peer responders
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7 after their encounters with callers. Second, the data collection process evolved during
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9 programme implementation, so the data collection tools were for the most part not previously
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11 validated. Third, we have used a paper-based system for collecting responder encounter
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13 documents, and this has contributed to both missing forms and data. We are now planning to
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15 implement a web-based document and with the capacity for real time monitoring of missing data.
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17 Finally, we had relatively small sample sizes for both the survey and the focus group,
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19 emphasizing the need for continued evaluation.
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Implications for Patient Safety

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28 This study has practical implications for organizations interested in planning and developing
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30 formal provider support structures for employees to access after adverse events, and evaluating
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32 the results. Our experience and the tools included in this report should be helpful. There are also
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34 policy implications. For example, the Joint Commission and the National Quality Forum has
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36 now recommend healthcare institutions to recognize second victims' needs, and establish a
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38 support structure to assist them through coping with traumatic medical events [27, 28].
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43 Furthermore, this programme has attracted additional resources. The Johns Hopkins Hospital
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45 and the Maryland Patient Safety Center have collaborated to develop guides for implementing a
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47 second victim support programme and measuring effectiveness—"Caring for Caregivers in
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49 Distress: Implementing RISE", and for training peer responders—"RISE Basic Training for Peer
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51 Responders." The experiences of hospitals in Maryland and elsewhere that differ in size,
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3 teaching status, and rural status, should help to inform efforts to implement and adapt peer
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5 support programmes, so they can help the full range of healthcare workers that need them.
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10 Summary

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12 Hospital workers face many challenges following the occurrence of stressful, patient-related
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14 events [2, 3]. A few of these involve medical errors, but the large majority are simply related to
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16 the extraordinary stresses incumbent in the job. The lack of recognition of this problem, and the
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18 lack of support in the workplace may lead to additional adverse events and to further patient
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20 harm. To help support these providers and prevent them from burnout or leaving their clinical
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22 profession and the hospital, organizations should offer additional support to their employees [4,
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24 24]. Committed leaders and the involvement of stakeholders representing disciplines and
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26 functional units across the institution were crucial to the development and implementation of the
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28 RISE programme at Johns Hopkins. Despite a well-conceived and structured programme and a
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30 dedicated team of peer responders, there were relatively few calls in the first year. A sustained,
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32 multi-pronged campaign was required to increase awareness and trust among staff members, and
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34 to finally increase the volume of calls.
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Contributorship Statement:

The authors of this work and their contributions are as follows:

Hanan H. Edrees, DrPH, MHSA is an Associate Faculty member at the Johns Hopkins University Bloomberg School of Public Health and Quality and Patient Safety Manager at the Ministry of National Guard Health Affairs—Kingdom of Saudi Arabia. Dr. Edrees was a member of the leadership team of the RISE programme. She drafted the manuscript and provided substantial contributions to the acquisition and interpretation of the data.

Lori Paine, RN, MS is the Director of Patient Safety for the Johns Hopkins Hospital and the Johns Hopkins Armstrong Institute for Patient Safety & Quality. Ms. Paine provided substantial contributions to the conception of the research and critically revised the manuscript for programme specific content.

Cheryl Connors, MS, RN, NEA-BC is a Patient Safety Specialist at the Johns Hopkins Armstrong Institute for Patient Safety and Quality and Co-director of the RISE Programme. Ms. Connors critically revised the manuscript for programme specific content relating to the development and structure of RISE.

Matt Norvell, M.Div., M.S., BCCM., is a Pediatric Chaplain at the Johns Hopkins Children's Center and Co-director of the RISE Programme. Mr. Norvell critically revised the manuscript for programme specific content and tool development.

Henry Taylor, MD, MPH is a Senior Associate at the Johns Hopkins Bloomberg School of Public Health and an instructor in curriculum development at the Johns Hopkins University School of Education. Dr. Taylor contributed to the design of peer responder training and the programme framework.

Albert W. Wu, MD, MPH is a Professor of Health Policy and Management at Johns Hopkins Bloomberg School of Public Health, and Co-Director of the RISE Programme. Dr. Wu oversaw the research, provided substantial contributions to the conception and design of the study, and critically revised the manuscript.

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None

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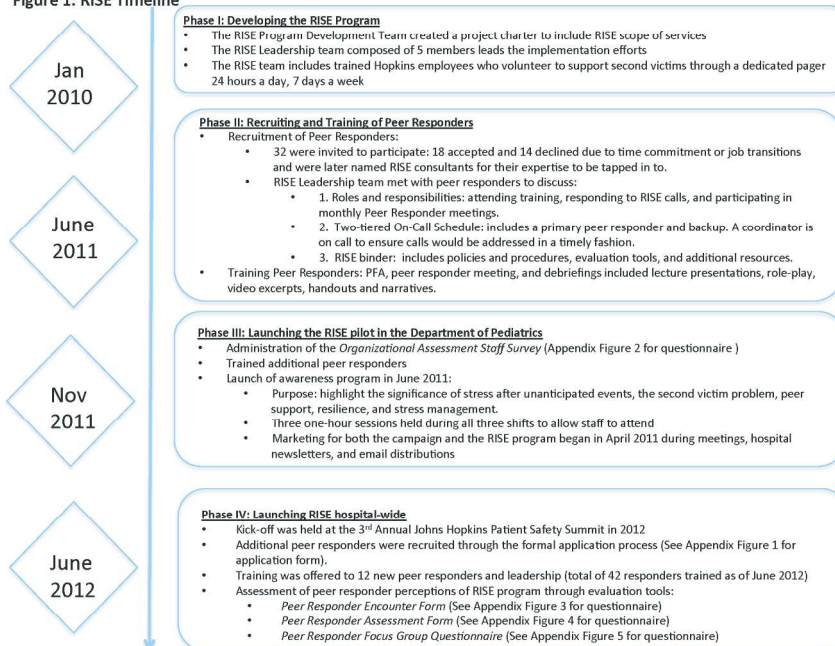
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Figure 1: RISE Timeline



279x215mm (220 x 220 DPI)

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Figure 2. RISE Mission and Objectives

RISE Mission

To provide timely support to employees who encounter stressful, patient-related events

RISE Team Objectives

1. Increase awareness of the second victim phenomenon in healthcare's high-risk environment
2. Provide multi-disciplinary, one-to-one or group, peer support in a non-judgmental environment
3. Equip managers and employees with healthy coping strategies to promote well-being:
 - a. Offer tools to support managers in their roles when responding to second victim events
 - b. Provide first responder tips to all employees before, during, and after an event
4. Reassure and guide employees to continue thriving in their roles
 - a. Develop a non-punitive approach to handling stressful patient-related events
 - b. Define policies and procedures for the RISE program

215x279mm (200 x 200 DPI)

Appendix: Peer Responder Assessment Form

I. SECOND VICTIM INITIAL CALL

1. Did the second victim encounter any barriers to accessing RISE?
 Yes No
2. Were there any barriers to setting up a time/place to meet with the second victim?
 Yes No
3. Was this the first time you responded to this second victim?
 Yes No
4. Had this person had spoken with another RISE Responder?
 Yes No
5. If he/she had spoke to another RISE provider, was it about the same event or a different event?
 Same event Different event

II. ENCOUNTER WITH SECOND VICTIM

1. After meeting with the second victim, did you feel you were able to provide helpful support?
 Yes No
2. As you listened to the second victim, did you find yourself wanting to 'fix' the problem? If so, how did you respond to this feeling?
3. Was there a point during the discussion with the second victim when you struggled/felt uncomfortable?
4. What worked well during your encounter with the second victim?
5. Do you have worries or concerns that the second victim might have additional problems? If yes, what were they?
 Yes _____
 No
6. Did you experience any worries or concerns about how you responded? If so, please describe them.
7. Was there information you would have liked to have had prior to the encounter? If so, please describe.

III. TRAINING/EDUCATION:

1. I felt comfortable listening to the second victim.
 Strongly Disagree Disagree Agree Strongly Agree
2. I felt comfortable responding to the second victim.
 Strongly Disagree Disagree Agree Strongly Agree
3. I need additional training/experience as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
4. I am comfortable with my knowledge and skill as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
5. I am highly competent as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
6. I would be able to train other peer responders
 Strongly Disagree Disagree Agree Strongly Agree
7. Which aspect of the Psychological First Aide (PFA) training you received was most beneficial to your role as a peer responder?
 Lecture Presentation Role Play RAPID acronym Video excerpts
 Handouts Narratives Other _____
8. Please rate your overall competence as a peer responder:
 Poor Fair Good Very Good Excellent

IV.

PEER RESPONDER OVERALL EXPERIENCE

1. How would you rate your own emotional distress as a responder to this encounter (1 not at all painful-10 extremely painful)?
 1 2 3 4 5 6 7 8 9 10
2. I felt the need to refer the second victim to additional resources:
 Strongly Disagree Disagree Agree Strongly Agree
3. I was able to offer the second victim additional helpful resources.
 Strongly Disagree Disagree Agree Strongly Agree
4. I felt confident in offering the second victim additional resources
 Strongly Disagree Disagree Agree Strongly Agree
5. If you offered the second victim additional resources, what were they?

V.

PEER RESPONDER RECOMMENDATIONS:

1. Overall how would you rate the success of this encounter?
 Poor Neutral Excellent
2. It was beneficial for the second victim to contact the RISE team:
 Strongly Disagree Disagree Agree Strongly Agree
3. I met the second victim's expectations:
 Strongly Disagree Disagree Agree Strongly Agree
4. I felt satisfied with how this encounter turned out:
 Strongly Disagree Disagree Agree Strongly Agree
5. This encounter suggests ways to improve the RISE program, including:

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Text section and item name	Section or item description
<i>Title and abstract</i>	
1. Title (page 1)	Indicate that the manuscript concerns an initiative to improve healthcare (broadly defined to include the quality, safety, effectiveness, patient-centredness, timeliness, cost, efficiency and equity of healthcare).
2. Abstract (page 1; 3)	<p>a. Provide adequate information to aid in searching and indexing.</p> <p>b. Summarise all key information from various sections of the text using the abstract format of the intended publication or a structured summary such as: background, local problem, methods, interventions, results, conclusions.</p>
Introduction	<i>Why did you start?</i>
3. Problem description (page 5)	Nature and significance of the local problem.
4. Available knowledge (page 5)	Summary of what is currently known about the problem, including relevant previous studies.
5. Rationale (page 5)	Informal or formal frameworks, models, concepts and/or theories used to explain the problem, any reasons or assumptions that were used to develop the intervention(s) and reasons why the intervention(s) was expected to work
6. Specific aims (page 5)	Purpose of the project and of this report.
Methods	<i>What did you do?</i>
7. Context (page 6-10)	Contextual elements considered important at the outset of introducing the intervention(s).
8. Intervention(s) (page 6-10)	<p>a. Description of the intervention(s) in sufficient detail that others could reproduce it.</p> <p>b. Specifics of the team involved in the work.</p>
9. Study of the intervention(s) (page 6-10)	<p>a. Approach chosen for assessing the impact of the intervention(s).</p> <p>b. Approach used to establish whether the observed outcomes were due to the intervention(s).</p>
10. Measures (page 10-12)	<p>a. Measures chosen for studying processes and outcomes of the intervention(s), including rationale for choosing them, their operational definitions and their validity and reliability.</p> <p>b. Description of the approach to the ongoing assessment of contextual</p>

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	<p>elements that contributed to the success, failure, efficiency and cost.</p> <p>c. Methods employed for assessing completeness and accuracy of data.</p>
11. Analysis (page 12)	<p>a. Qualitative and quantitative methods used to draw inferences from the data.</p> <p>b. Methods for understanding variation within the data, including the effects of time as a variable.</p>
12. Ethical considerations	Ethical aspects of implementing and studying the intervention(s) and how they were addressed, including, but not limited to, formal ethics review and potential conflict(s) of interest.
Results	<i>What did you find?</i>
13. Results (page 12-15)	<p>a. Initial steps of the intervention(s) and their evolution over time (eg, timeline diagram, flow chart or table), including modifications made to the intervention during the project.</p> <p>b. Details of the process measures and outcomes.</p> <p>c. Contextual elements that interacted with the intervention(s).</p> <p>d. Observed associations between outcomes, interventions and relevant contextual elements.</p> <p>e. Unintended consequences such as unexpected benefits, problems, failures or costs associated with the intervention(s).</p> <p>f. Details about missing data.</p>
Discussion	<i>What does it mean?</i>
14. Summary (page 15; 4)	<p>a. Key findings, including relevance to the rationale and specific aims.</p> <p>b. Particular strengths of the project.</p>
15. Interpretation (page 15-18)	<p>a. Nature of the association between the intervention(s) and the outcomes.</p> <p>b. Comparison of results with findings from other publications.</p> <p>c. Impact of the project on people and systems.</p> <p>d. Reasons for any differences between observed and anticipated outcomes, including the influence of context.</p>

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	e. Costs and strategic trade-offs, including opportunity costs.
16. Limitations (page 17; 4)	a. Limits to the generalisability of the work. b. Factors that might have limited internal validity such as confounding, bias or imprecision in the design, methods, measurement or analysis. c. Efforts made to minimise and adjust for limitations.
17. Conclusions (page 18)	a. Usefulness of the work. b. Sustainability. c. Potential for spread to other contexts. d. Implications for practice and for further study in the field. e. Suggested next steps.
Other information	
18. Funding (page 33)	Sources of funding that supported this work. Role, if any, of the funding organisation in the design, implementation, interpretation and reporting.

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Implementing the RISE Second Victim Support Programme at The Johns Hopkins Hospital: A Case Study

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Title:

“Implementing the RISE Second Victim Support Programme at The Johns Hopkins Hospital: A Case Study”

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ABSTRACT

Background: Second victims are healthcare workers who experience emotional distress following patient adverse events. Studies indicate the need to develop organizational support programmes for these workers. The RISE (Resilience In Stressful Events) programme was developed at Johns Hopkins Hospital to provide this support.

Objective: To describe development of RISE and evaluate its initial feasibility and subsequent implementation. Programme phases included: 1) Developing the RISE Programme 2) Recruiting and training peer responders, 3) Pilot launch in the Department of Pediatrics, and 4) Hospital-wide implementation.

Methods: Mixed-methods study, including frequency counts of encounters, staff surveys, and evaluations by RISE peer responders. Descriptive statistics were used to summarize demographic characteristics and proportions of responses to categorical, Likert, and ordinal scales. Qualitative analysis and coding were used to analyze open-ended responses from questionnaires and focus groups.

Results: A baseline staff survey found that most staff had experienced an unanticipated adverse event, and most would prefer peer support. A total of 119 calls, involving approximately 500 individuals, were received in the first 52 months. The majority of calls were from nurses, and very few were related to medical errors (4%). Peer responders reported that the encounters were successful in 88% of cases and 83.3% reported meeting the caller's needs. Low awareness of the programme was a barrier to hospital-wide expansion. However, over the four years, the rate of calls increased from approximately one to four calls per month. The programme evolved to accommodate requests for group support.

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Conclusion: Hospital staff identified the need for a multidisciplinary peer support programme for second victims. Peer responders reported success in responding to calls, the majority of which were for adverse events rather than medical errors. The low initial volume of calls emphasizes the importance of promoting awareness of the value of emotional support and the availability of the programme.

Strengths of this study

- Describes one of the earliest organizational programmes to support second victims, by the team that originated the concept
- Provides detailed description of the process of development and implementation
- Provides assessment tools that can be used by other organizations
- Uses both quantitative and qualitative methods to evaluate implementation
- Describes the conflicting goals of maintaining caller confidentiality, and evaluating caller outcomes

Limitations of this Study

- In order to maintain caller confidentiality, identifiers and contact information were not retained for callers
- No systematic follow-up of caller outcomes
- Assessment tools were not previously validated
- Relatively small sample sizes and some missing data

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INTRODUCTION

Adverse events bring to light system defects that can cause patient harm. In the past decade, health care organizations have adopted standardized procedures to investigate events, and staff have become more aware of system defects [1]. However, organizations often fail to recognize the impact of adverse events on healthcare providers who can suffer emotional distress as “second victims” of the same incidents that harm patients [2-4].

At The Johns Hopkins Hospital, adverse patient-related events are reported to managers and the online incident reporting system; some are debriefed with staff and a few are investigated. Patient safety leaders recognized a gap in the ability of the institution to provide consistent and timely support to second victims – healthcare providers who are traumatized by patient adverse events [5]. In 2010, leaders in patient safety, risk management, and clinical departments began meeting to discuss the magnitude and importance of the problem, current infrastructure to support healthcare providers, stories and experiences, and strategies to improve the system. This process led to the establishment of the RISE (Resilience in Stressful Events) peer support programme.

Although there are a few published descriptions of organizational peer support programmes, there has been little documentation of the steps involved in their development [6, 7].

Additionally, there are limited evaluations of the feasibility, implementation, and effectiveness of these programmes [8]. The aim of this paper is to describe the development of RISE at The Johns Hopkins Hospital, and the initial evaluation of a pilot test of the programme, and its

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hospital-wide implementation. It is hoped that this information will help other institutions establish staff support programmes of their own.

Development of RISE Programme

The Johns Hopkins Hospital (JHH) is a 1,075-licensed bed, urban, academic medical center established in 1889. After the occurrence of a significant adverse patient-related event in the JHH Department of Pediatrics in 2001, staff struggled to cope and were affected both personally and professionally. Subsequent review helped hospital leaders recognize the need to provide a programme supporting staff following adverse events. In 2009, the JHH Patient Safety Department took initial steps to establish an organizational support programme for second victims. Development initially took place in four phases: (1) programme development (January 2010-ongoing), (2) recruitment and training of peer responders (June 2011-ongoing), (3) RISE pilot in the Department of Pediatrics (November 2011-June 2012), and (4) hospital-wide expansion of RISE (June 2012-March 2016).

A multidisciplinary Programme Development Team was created to lead the strategic planning and implementation of RISE. To understand the types of support needed, the team developed a survey that was administered in June 2010 at a presentation on second victims by one of the team members (AW) at the First Annual Johns Hopkins Patient Safety Summit. Two-thirds of the respondents to this survey reported experiencing emotional distress following an unanticipated adverse event, and more than half of these respondents had reached out for support from a peer or colleague [5]. Respondents endorsed the need for a hospital-sponsored peer support programme to benefit second victims.

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Development of RISE (Phases 1-4) (See Figure 1 for timeline)Phase 1: RISE Programme Development Team and the RISE Mission

The RISE leadership team was comprised of five members: the Director of Patient Safety (LP), a physician faculty member (AW), a risk manager (JN), a patient safety researcher (HE), a nurse manager (CC), and a hospital chaplain (MN). The leadership team developed a work plan, logistics and procedures for the programme, identified additional team members to provide peer support, and determined the training and resources necessary to support these efforts. The team met twice a month beginning in January 2010.

INSERT FIGURE 1 APPROXIMATELY HERE

The RISE team of peer responders was established in the fall of 2011. A long-term goal of the programme was to foster a culture in which all employees were resilient and mutually supportive before, during, and after stressful events (Figure 2). A peer support programme led by health care workers was a preferred option expressed by staff, given that peers were viewed as understanding clinical issues and peer support had been shown to be effective, economically viable, and sustainable [9, 10]. RISE was intended to provide timely access to support employees' immediate needs to complement the services being offered by the existing employee assistance programme (Faculty And Staff Assistance Programme - FASAP) [8, 9].

INSERT FIGURE 2 APPROXIMATELY HERE

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Procedures: Responding to Second Victims

After the occurrence of a stressful, patient-related event—such as an adverse event, medical error, death, unexpected outcome, or non-accidental trauma—the healthcare worker involved or his/her colleague activates a RISE call by paging the RISE team. Both the RISE pager number and an intranet call button activate the RISE pager. The on-call RISE peer responder responds to the page by calling back within 30 minutes, and planning a meeting (encounter) with the caller—ideally within the next 12 hours. The term “peer responder” does not imply that the responder shares the same professional discipline as the caller.

In the encounter, the peer responder actively listens to the second victim and provides psychological first aid and emotional support. The encounter explicitly focuses on the emotions of the employee rather than the details of the incident. At the end of the encounter, the peer responder offers a list of current organizational resources that might be helpful for continued healing, such as the employee assistance programme, community counseling, or exercise.

All interactions between the second victim and the peer responder are confidential. RISE is based organizationally within the Armstrong Institute for Patient Safety and Quality at Johns Hopkins, and discussions between a RISE responder assisting a second victim are presumed to be covered by patient safety privilege under Maryland State Law, despite the fact that there has never been a legal test case [11]. The only exception is if the caller indicates the potential for imminent harm to self or others, in which case the peer responder assists the caller with obtaining the necessary resources to mitigate harm. After the encounter, the peer responder

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activates a debriefing, in which he/she facilitates a session to receive support from the other members of the RISE team and to provide a learning opportunity for other members.

Phase 2: Recruiting and Training of RISE Peer Responders

Recruitment

Initially, peer responders were recruited based on recommendations from organizational leaders, based on their known ability to provide support to colleagues. Subsequent groups of responders were self-nominated and asked to complete a structured application and to submit letters of recommendation. These applications were reviewed by the executive committee of RISE. Most of the peer responders from the initial group were registered nurses (63.3%), and half of the peer responders were from the Department of Pediatrics (50.0%) (Table 1). A total of 42 peer responders have been trained, with 30 currently active, including 11 of the original cadre of 18 responders who are still on the team.

Table 1: Characteristics of Peer Responders

Peer Responder Demographics (n=30)	n (%)
Gender	
Female	26 (86.7)
Male	4 (13.3)
Discipline	
Nursing	19 (63.3)
Administration	3 (10.0)
Patient Safety	2 (6.7)
Child life	2 (6.7)
Medicine	1 (3.3)
Social Work	1 (3.3)
Respiratory Therapy	1 (3.3)

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Chaplain	1 (3.3)
Department and Unit	
Pediatrics	15 (50.0)
Adult Medicine	9 (30.0)
Patient Safety	3 (10.0)
JHH	2 (6.7)
Bone Marrow Transplant Specialist	1 (3.3)
Other units represented: oncology, psychiatry, OB/GYN, labor and delivery, surgery	

Training

To serve as a Peer Responder, team members were required to attend Psychological First Aid (PFA) training, RISE team meetings and debriefings after encounters. Psychological First Aid is a form of early intervention to address emotional distress [10, 12]. Dr. George Everly, the developer of RAPID-PFA (Reflective listening, Assessment, Prioritization, Intervention, and Disposition) offered a six-hour training through The Johns Hopkins Center for Public Health Preparedness [12, 13]. The first training session was offered in September 2011, with a total of eight training sessions offered on a periodic basis. Hour-long Peer Responder Meetings were conducted monthly and included discussions of the published literature, practice delivering PFA, and sharing of second victim encounters. Material was presented in the form of lectures, storytelling sessions, role-play exercises, and group discussions. Debriefings occurred after each RISE encounter and provided collective learning opportunities for peer responders to reflect, mentor, support one another, and gain vicarious experience about calls. These meetings took place for an hour.

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3 Refresher training sessions are provided on an annual basis at RISE team retreats. Ongoing
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5 training is gained through the debriefings within the RISE team and at monthly meetings where
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7 cases are discussed and skills are practiced.
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Phase 3: Launching the RISE Pilot in the Department of Pediatrics

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12 To introduce the programme, an awareness campaign was launched on June 24, 2011 in the 205
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14 bed Johns Hopkins Children's Center. In November 2011, RISE began a pilot programme there
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16 based on a strong commitment by the Pediatric Department's leadership to RISE.
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Phase 4: Hospital-wide Expansion of the RISE Programme

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26 On June 21, 2012, 7 months after the launch of the Pediatrics pilot, the RISE programme
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28 received approval from hospital leadership to expand to the entire hospital. The announcement
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30 was made at the annual Patient Safety Summit, preceded by a presentation to help staff
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32 understand the purpose of the team as well as contact information for RISE.
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40 In this phase of the programme, members of the RISE team developed a two-tiered call system,
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42 whereby two peer responders were on call at any given time. The first responds to the RISE
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44 pager while the second peer responder provides back up for first if additional support is
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46 necessary. The RISE director is available to provide additional support if technical or
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48 administrative issues arise. Using this system, staff members are able to call the RISE team
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50 anonymously. If the first responder and caller happen to work on the same unit, the call can be
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52 handled by the second on-call responder.
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To increase the volume of calls, additional efforts were taken to promote awareness among hospital staff members. This included the development of a website featuring promotional videos explaining the function and benefits of this service, publicity through internal publications, screen savers that cycle continuously on public computer screens, presentations to targeted departments and units, and recruitment of unit level champions.

Approximately 56% of callers requested group, rather than individual, support. In the group RISE calls, the inciting incidents were almost uniformly related to patient death unrelated to medical errors and were often known to the hospital community, and some even to the public. RISE encounters for groups tended to be longer than individual sessions. The groups have a variety of multidisciplinary compositions and range from 5 to 25 attendees depending on the number of employees affected. To make sure that members of the group received enough attention, it was required that group requests be attended by at least two responders.

Financial support for the RISE programme was provided by the Armstrong Institute which assures safety and quality for the health system. The budget supports 0.30 FTE of the programme director (CC) who emerged as the operational leader of the team.

METHODS**Study Design**

This evaluation of a novel hospital programme used a mixed methods design that included a staff survey, peer responder self-evaluations, and a focus group of peer responders (See Appendix).

The project was approved by The Johns Hopkins Institutional Review Board.

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6 Design of the evaluation reflected the need to assure confidentiality for callers, which program
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8 leaders thought was necessary for distressed health care workers to use the programme. There
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10 was also a concern by the institution that records of encounters might be potentially admissible
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12 as evidence in a malpractice suit. For that reason, the programme was designed not to collect
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14 identifying information from callers, or follow up systematically with them. It was also
15
16 considered insensitive to ask distressed callers to complete a satisfaction survey at the end of the
17
18 encounter. Therefore, our measures were collected from the perspective of the peer responders
19
20 after their encounters with callers.
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Participants and Procedures

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28 Before launching the pilot programme (Phase 3), frontline staff in the Department of Pediatrics
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30 (n=144) completed the *Organizational Staff Assessment Survey* and were asked to assess their
31
32 perceptions of the second victim problem and implementation of a second victim support
33
34 programme (Table 2). All faculty and staff working in the Department were included in the
35
36 survey. Peer responders in Phase 4 returned the *Peer Responder Encounter* and the *Assessment*
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38 *Form* (n=80, 57 complete forms) For group encounters, the lead peer responder was asked to
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40 complete the Peer Responder Encounter and Peer Responder Assessment forms after each
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42 encounter. A random sample of 9 members of the peer responder team were invited to
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44 participate in the focus group discussion, of whom 5 were able to participate at the designated
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Table 2: Organizational Staff Assessment Survey—Participant characteristics and staff experience in seeking support

Profession (n=144)	n (%)	
Registered Nurse	102 (70.8)	
Pharmacist	14 (9.7)	
Clinical Social Worker	10 (6.9)	
Child Life Specialist	6 (4.2)	
Clinical Technician	3 (2.1)	
Clinical Therapist	2 (1.4)	
Attending/Staff Physician	1 (0.7)	
Administrator	3 (2.1)	
Environmental Support	1 (0.7)	
Other	2 (1.4)	
Number of Years in Healthcare (n=142)	n (%)	
less than 1 year	7 (4.9)	
1-5 years	47 (33.1)	
6-10 years	26 (18.3)	
11-20 years	33 (23.2)	
21 years or more	29 (20.4)	
Survey Questions (number of responses)	n	Percent Agree
Directly involved in an unanticipated adverse event (n=143)	95	66.4
Experience any problems, such as anxiety, depression, or concern about ability to perform job, as a result of this event (n=133)	77	57.9
Reached out for support or talked to someone about the event (n=128)	90	70.3
If you reached out for support, who did you talk to (of n=90) (one or more response per respondent)	Percent Agree	
Colleague on the unit	32.5	
Colleague off the unit	11.3	
Spouse/significant other	22.2	
Friend	18.2	
Manager/supervisor	11.3	
Counselor	2.0	
Chaplain/clergy	1.5	
Risk manager/attorney	1.0	
Staff perceptions on features and services of an Organizational Second Victim Support Programme		

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Preferred individuals to provide support (n=138)	
Multidisciplinary peer group	68.7
Nurse manager	15.5
Pastoral care	13.3
Counselor	1.7
Social work	0.9
Type of support (n=138)	
Individual support	70.7
Group support	29.3
Preferred timeframe to access support (n=135)	
As soon as the event happened	12.7
A few hours after the event happened	25.4
A couple of days after the event took place	48.2
A week after the event took place	8.1
Other	
Depends on the severity of the event	3.6
When second victim felt comfortable to access support	2.0

Measures and Variables

Organizational Staff Assessment Survey: was used to collect data from healthcare professionals on the need for support of health care workers. Information collected included respondent characteristics, respondents' personal experience as a second victim, and desired features and services of an organizational support programme.

Peer Responder Encounter Form: was used by peer responders to provide de-identified information on the event and nature of the RISE call. "De-identified" in this case meant that the information collected on the event could not be traced to a specific person or patient. Several items were based on the University of Missouri's forYOU Peer Responder Encounter Form [14].

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Peer Responder Assessment Form: was used by peer responders to evaluate the interaction with the caller after each encounter (Appendix). All of the items were newly developed for this assessment in an effort to capture a minimal amount of information needed to evaluate the encounter and inform quality improvement. Information collected included a brief description of the encounter with the second victim, peer responder evaluation of the appropriateness of RISE training to respond to the specific call, the peer responder's experience in providing support to the caller(s), and their recommendations on how to improve the RISE programme. This form was not modified at the time of hospital-wide expansion.

Peer Responder Focus Group: The aim of the focus group was to assess peer responder perceptions, confidence levels, and self-assessed competence based on the RISE training they received. The interview guide also directed questions about the peer responders' own emotional distress when responding to a second victim.

Data Analysis

We used descriptive statistics to summarize calls and participant demographic characteristics. We calculated proportions for the quantitative responses, which included categorical/multiple choice and Likert-type scale questions (1=strongly disagree; 5=strongly agree), ordinal scales and counts. Content analysis was conducted to assess the open-ended responses in both the Organizational Staff Survey and the focus group transcript using standard qualitative analysis methods [15]. Each transcript was analyzed by two members of the study team (HE, CC) first to get a global impression, then identifying and coding each meaning unit in the transcript. The

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3 contents of each meaning unit were abstracted and organized into groups with other units as
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5 themes emerged. The interview questions were compared to the transcript to refine this iterative
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7 analysis. Disagreements in coding were resolved by consensus.
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RESULTS

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12 Respondents to the *Organizational Staff Assessment Survey* were primarily registered nurses
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14 (70.8%, n=102), and most respondents had over one year of work experience in healthcare
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16 (Table 2). Approximately 70% of respondents had been directly involved in an unanticipated
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18 adverse event, and 57.9% (n=77) reported experiencing problems, such as anxiety or inability to
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20 perform their job, as a result of this event. Over two thirds (70.3%, n=90) had reached out for
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22 support following the event (Table 2).
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32 When asked about potential second victim support programmes (Table 2), most respondents
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34 (68.7%, n=95) indicated they would prefer a multidisciplinary peer group to offer support.
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37 Others mentioned they would prefer a nurse manager (15.5%, n=21) or pastoral care (13.3%,
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39 n=18). More than two thirds (70.7%, n=97) preferred individual to group support. Additionally,
40
41 respondents preferred to access support soon after the event: as soon as it happened (12.7%,
42
43 n=17), a few hours after the event happened (25.4%, n=34), a couple of days after the event
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45 happened (48.2%, n=66), and a week after the event took place (8.1%, n=11). Others indicated
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47 that timeliness of support desired depended on the severity of the event or their comfort level
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49 following the event.
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Description of Calls

There was a total of 119 calls. There were 12 calls during the Pediatrics pilot, 15 calls in year 2, 37 calls in year 3, 40 calls in year 4, and 15 calls in the first 4 months of year 5. Thus, the rate of calls was approximately 1 per month for the first year, 2 per month in the second year, 3 per month in the third year and 4 per month thereafter. Approximate proportions of callers by profession were as follows: nurse 56%, nurse practitioner 2.5%, multidisciplinary group 28.8%, physician 16.2%, other 6.3%, not recorded 13% for 80 encounters.

The majority of incidents were related to adverse events, rather than medical errors. For 80 of the encounters for which the information was available, 45.0% included death of a patient, and 21.3% involved an adverse event. The remainder of calls were for other difficult situations such as difficult decisions, burnout, staff assault, intrastaff conflicts, and others. Only 4 of the 80 incidents were related to a clear-cut medical error. The average interaction lasted for 49 minutes. A total of 43% (n=34) were one-to-one encounters, and 56% (n=44) were group sessions.

Peer Responder Encounter and Assessment Forms

All of the responders on the team responded to at least one call. Data were completed by peer responders for a total of 80 out of the 119 encounters between November 2011 and March 2016—a 67% completion rate (Table 3). The mean interaction length was 49 minutes (median 50 minutes). Most of the callers were looking for support at the recommendation of their supervisors (56.2%) with the remainder being self-referred. Less than 8% of the callers reported experiencing barriers with accessing the RISE team; the primary barrier was lack of awareness

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on how to access the programme. In Phase 4, peer responders' perceptions were also assessed on the programme structure and processes.

**Table 3: Characteristics of RISE calls
(Number of RISE calls=80)**

Profession of Second Victim	n (%)
RN	45 (56.3)
Multidisciplinary group	23 (28.8)
Physician	13 (16.3)
Nurse Practitioner	2 (3.8)
Other (Nurses aide, respiratory technician, child psychology specialist, clinical customer service representative, CT scan staff)	7 (8.7)
Not known	11 (13.8)
Type of Call	
Individual (one-on-one)	34 (42.5)
Group	44 (55.0)
Unknown	2 (2.5)
Mean length of the interaction	49 minutes (range: 10-120 minutes)
Referral Sources	
Supervisor	43 (53.8)
Self	17 (21.3)
Peer	9 (11.3)
Nurse leader	4 (5.0)
Unknown	7 (8.8)

* Pharmacist, chaplain, student, case manager, supervisor, radiation therapist, SA, specialists, customer services representative

Peer responders believed that the RISE training enriched their interactions with callers. Role-play focusing on key principles of peer response has been identified as the most effective method for training. Additionally, role-play provides a safe place for the responders to practice.

Scenarios that have been actual encounters are often used so that responders can continue to learn and apply strategies, resulting in a positive future encounter. When call volume was low, anticipated scenarios were used to prepare responders. Responders reported higher comfort

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levels in responding to the second victim after the peer responder training compared to rating their overall competence in meeting the callers' needs (excellent or very good only 44.9% of the time).

Most of the peer responders (84.3%) offered the caller additional support resources (Table 4).

Following the encounter, peer responders rated the success of the interaction to be either 'excellent' (66.7%) or 'neutral' (22.8%). Most believed that they met the second victims' expectations (87.8%) and were satisfied with the interaction (82.4%). Approximately 70% of the peer responders indicated that they themselves experienced little or no emotional distress after they offered support to the second victim.

Peer Responder Focus Group: The focus group was conducted in April 2013 during a 90-minute session. Nine peer responders were invited to participate in the focus group, and five participated, for a 55.6% response rate. Peer responders had varying levels of experience in responding to second victims and joined the RISE team at different times since the inception of the programme. Approximately three minutes was allocated for each peer responder to respond to each of the focus group questions.

Table 4: Peer Responder Evaluation of RISE Calls (n=57)

	n (%)	
	Agree	Strongly Agree
Process—Peer Responder Training and Education		
I felt comfortable listening to the second victim.	17 (29.8)	2 (3.5)
I felt comfortable responding to the second victim.	23 (40.4)	1 (1.8)
I need additional training/experience as a peer responder.	20 (35.1)	1 (1.8)
I am comfortable with my knowledge and skill as a peer responder.	27 (47.4)	18 (31.6)

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I am highly competent as a peer responder.	31 (54.4)	10(17.5)
I would be able to train other peer responders.	31 (54.4)	9 (15.8)
Outcomes—Peer Responder Overall Experience and Recommendations		
I was able to offer the second victim additional helpful resources.	36 (63.2)	12 (21.1)
I felt confident in offering the second victim additional resources.	35 (61.4)	11 (19.3)
It was beneficial for the second victim to contact the RISE team.	27 (47.4)	25 (43.9)
I met the second victim's expectations.	36 (63.2)	14(24.6)
I felt satisfied with how this encounter turned out.	32 (56.1)	15 (26.3)
Overall Success of the Encounter		Excellent
		38 (66.7)

Several themes emerged from the qualitative analysis of this session (Table 5). Initial PFA training and ongoing training, such as the peer responder meetings and debriefings, were described as helpful in preparing peer responders. Most of the peer responders found the greatest value in the initial PFA training and in the ongoing skill-sharpening opportunities in the debriefings and monthly meetings. These aspects of training provided the peer responders with adequate skills to respond to a distressed employee. There was a desire for more training on how to facilitate group sessions comprised of multiple disciplines and services, role plays involving clinicians with different professional roles, and the development of “key phrases” or scripts to be used at the beginning and at the end of an encounter. Some peer responders experienced higher levels of personal distress in providing group (rather than one-on-one) support.

Recommendations for future training and education included: (1) group support, (2) interdisciplinary approach in holding debriefings, (3) training focused on physicians as opposed to other providers, and (4) key phrases and scripts.

Table 5: Emergent Themes from Focus Group

Themes	Main Findings	Descriptive Quote
Peer Responder Training and Education	<p><u>Psychological First Aid (PFA):</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • PFA concepts were helpful and easy to relate to: “active listening,” therapeutic listening, and medicine’s “do no harm” • Benefitted from role-play exercises <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Create a second victim-focused curriculum, given that PFA focused on disaster and relief workers as opposed to clinicians working a hospital setting 	<p>“The biggest takeaway I got from the PFA training was the active listening and the <i>do no harm</i>. ”</p> <p>“I think a lot of the experiences that this type of training is modeled after is military, firefighters, police—in which I have experience with emergency medicine and firefighting—you are either completely bored or there is maximum stress; there is no real in between. And so decompressing or having an encounter after a police officer was short, I think that is a much richer field to encounter. We have significant stresses in the hospital on a daily basis, but hey are not the same kind of thing. They are things that build over a period of time and then they acutely explode in someone’s face. How do you mold the training to the environment we are in, which is not a disaster-based experience?”</p>
	<p><u>Peer Responder Meetings:</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Meetings were helpful to gain information and share insight with peers • Benefitted from the activities, including the role-play scenarios • Case studies/interactions from other peer responders were also helpful, especially stories related to “non-ideal” scenarios, such as 	<p>“Hearing about how the [second victim] calls that have been handled was helpful.”</p> <p>“Sometimes getting more details on the event that happened would allow me to say—this is how I would have done as a responder or this is how I would have handled it. And even if that opens up the discussion: this is the situation we have faced and ask others ‘what would you have said’ and what are some of the things you would say to that staff member. Then, the team can go through a debrief to discuss the response.”</p> <p>“The articles [current events] that we have gotten about nurse x, y, z who has gone through something, committed suicide, or got fired from her</p>

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<p>anger from a family member.</p> <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Second victim stories were too de-identified and would like to hear more details about the event 		<p>job; I think those are so powerful and they make us see how important this programme is.”</p>
<p><u>RISE Debriefings:</u></p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Encouraged therapeutic listening • Helpful to hear other peer responders’ experiences • Debriefing process is very streamlined • Support received from the peer responders is very helpful <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Difficult to relate some of the second victim cases since the details of the event are de-identified 		<p>“I like to hear about what is going on with other second victims and it makes you think about—if that person came to me, how would I respond to them?”</p> <p>“I think the debriefings are fabulous! I think that it’s really important for those who respond to have a place to process and get support from their peers and get the validation that they did well, and they didn’t do any harm. And hearing how others responded is more training.”</p>
<p><u>Emotional distress as a peer responder</u></p>	<p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • Insufficient training for providing group support as opposed to one-on-one support • Anxiety around not following up with a second victim or a unit after an interaction 	<p>“What we did not take into account [when responding to second victims] are prior stress levels.”</p> <p>“When I did a group debriefing, it was very anxiety-producing because I had no idea what I was walking in to. I took one of my nurses with me and she sat with me for support and it ended up being fine.”</p> <p>“I would have trouble with not following up with the second victim after responding to them. And when you’re a provider, you make a change in</p>

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		any patient's system, you follow up and make sure that that change was effective. And not having that opportunity to see if the 'patient' [second victim] is doing better as result, feels incomplete."
<p><u>Confidence in responding to a second victim(s)</u></p>	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Different levels of confidence in responding to second victims • More confident since they provided support as part of their current role • More confident due to prior clinical training <p><u>Opportunities for improvement:</u></p> <ul style="list-style-type: none"> • More comfortable in responding to second victims (one-on-one) as opposed to responding to an group 	<p>"From my very first day in nursing school, active and therapeutic listening was a very big part of the nursing model. Most of us who have made it through nursing degrees are skilled at that already. As a provider, what cements my ability to do something well is to be able to do it time and time again."</p> <p>"Training as a provider in general, is that you take from each portion of your training pieces that you will apply throughout your career. One thing I learned from my psychiatry rotation is the idea of therapeutic, thoughtful, and provocative listening. Thinking about events in the media through therapeutic listening is something I do now more than I do before."</p> <p>"We are also getting a lot of requests for group debriefs."</p> <p>"One thing that we did not get in any of our trainings was how to handle a group debriefing. And I think everybody would like that."</p> <p>"It's interesting to see that there is a disparity in the responders in their own assessment in their ability to respond to a different group of people [responding to residents would be different than responding to nurses, for instance]."</p>
<p><u>Recommendations for training</u></p>	<ul style="list-style-type: none"> • Develop a mechanism to gather background information on event prior to interacting with second victim • Provide more training on how to respond to groups 	<p>"The role-play script helped me organize what I was saying [when responding to the second victim], which was like a map that tells me to start with this and do this."</p> <p>"The role-playing helped people to feel more at ease."</p>

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	<ul style="list-style-type: none"> • Include content that is relevant to clinicians in hospital settings as opposed to PFA for relief workers • Helpful for group debriefings to be less nurse-oriented and include an interdisciplinary approach • Develop a debriefing mechanism to share the background of the event so that peers understand how the peer responder responded • Develop a list of “key phrases” peer responders can use in their interactions with second victims 	<p>“Having the RISE binder and documents made me feel more secure [when responding to a second victim].”</p>
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DISCUSSION

We describe the initial evaluation of RISE (Resilience in Stressful Events) a multidisciplinary peer support programme based within a large teaching hospital. The structure and features of RISE were guided by the results of an initial survey which suggested that such a programme would be preferred by workers who experienced stressful, patient-related events. Evaluation based on the self-reports of peer responders supported the success of most encounters with callers and the effectiveness of training – particularly role playing exercises – in preparing them to support second victims. However, at the end of the pilot period, peer responders also identified the desire for additional training and education to increase their confidence and competence in responding to second victims. There were relatively few calls in the first year of operation. This may have been due in part to lack of staff awareness of RISE services or how to access them. In subsequent years, additional measures were taken to increase awareness and acceptance of the service. Concurrent with this, use of the programme has increased steadily, and in year 5 of the programme the rate of calls is four times higher than during its pilot phase.

A strength of the RISE programme is that it was based both on local staff perceptions of the second victim problem, as well as on existing resources—the Medically Induced Trauma Support Services (MITSS) Toolkit for Building a Clinician and Staff Support Program, and the pioneering ForYou Program established at the University of Missouri [2, 5, 6, 16]. In addition, both quantitative and qualitative evaluation methods were utilized to gain a greater understanding of programme implementation processes. Based on the results, it appears that it has been beneficial to have a well-structured organizational peer support programme for staff members after a stressful, patient related event. This is consistent with findings from other

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3 programmes [17-22]. We developed tools to help evaluate effectiveness, including a peer
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5 responder self-evaluation that may be useful to other institutions in evaluating their current or
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7 future programmes. Another strength of the programme is that it provides a HIPPA compliant
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9 alternative venue for discussions to take place, while protecting the privacy of both patients and
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11 providers.
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17 Our initial survey of employees supported the need for the programme. Most of the respondents
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19 to our baseline survey had experienced unanticipated adverse events, with subsequent personal
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21 problems, such as depressed mood, or concern about their ability to safely perform their job.
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24 The majority of these respondents mentioned that they did seek support and would prefer to
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26 speak with a colleague or peer, followed by their spouse/significant other, a friend, or their
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28 supervisor. These results confirm the feelings of guilt, worry, helplessness, doubt, and anger
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30 described by healthcare workers in previous studies [23, 24]. Peer support emerged as the
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32 preferred mode of support for an institutional programme, also consistent with previous studies
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34 [6, 8, 25].
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41 Despite the compelling rationale for RISE, we encountered challenges in implementing the
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43 programme at a large academic medical center. These included limited awareness of the
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45 magnitude and importance of the second victim problem, overcoming staff concerns about the
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47 confidentiality of the service, and risks of exposure to legal or disciplinary actions. The
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49 programme was supported and sanctioned by the hospital and has operated primarily with
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51 existing resources relying on the voluntary efforts of hospital staff. Financial limitations also
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53 reduced the capacity for formal mechanisms for data collection and monitoring.
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The greatest challenge was getting staff members who could benefit from the programme to use it. During the pilot study, RISE received a relatively low volume of calls – only approximately one per month. Reports from these encounters suggested that some callers had been unaware of the programme, while others did not know how to activate an encounter. For that reason, after expansion of the programme hospital-wide, we launched a multi-pronged effort to increase awareness of the problem of the second victim, the availability of RISE, and that it was both beneficial and safe to use. One successful initiative was adding a screen saver to publicize RISE to the small number of such ticklers that cycle continuously on the computer work stations across the medical center. Formal presentations, particularly given in conjunction with departmental leadership on specific adverse events, appeared to be followed by an increased number of calls from related units. These presentations described the problem of the second victim, the availability of timely peer support, and the independent and confidential nature of the programme. We encouraged staff to speak up about events and how these events affected them personally [23] and encouraged them to use support services—all part of the larger priority of developing a culture of safety within the organization [26]. RISE was featured prominently on the cover of a widely distributed internal hospital magazine. Finally, several directors from units at increased risk for death and adverse events received RISE training in Psychological First Aid, an action that also corresponded to more calls originating from those units.

Limitations

This study had several limitations. The first and greatest limitation involved the inherent conflict between the mission of assuring confidentiality for callers and the desire to evaluate the

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3 outcomes of encounters. Because of this, we did not collect identifiers on callers or follow up
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5 systematically with them. Instead, we measured success from the perspective of peer responders
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7 after their encounters with callers. Second, the data collection process evolved during
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9 programme implementation, so the data collection tools were for the most part not previously
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11 validated. Third, we have used a paper-based system for collecting responder encounter
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13 documents, and this has contributed to both missing forms and data. We are now planning to
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15 implement a web-based document and with the capacity for real time monitoring of missing data.
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17 Finally, we had relatively small sample sizes for both the survey and the focus group,
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19 emphasizing the need for continued evaluation.
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Implications for Patient Safety

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28 This study has practical implications for organizations interested in planning and developing
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30 formal provider support structures for employees to access after adverse events, and evaluating
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32 the results. Our experience and the tools included in this report should be helpful. There are also
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34 policy implications. For example, the Joint Commission and the National Quality Forum has
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36 now recommend healthcare institutions to recognize second victims' needs, and establish a
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38 support structure to assist them through coping with traumatic medical events [27, 28].
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43 Furthermore, this programme has attracted additional resources. The Johns Hopkins Hospital
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45 and the Maryland Patient Safety Center have collaborated to develop guides for implementing a
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47 second victim support programme and measuring effectiveness—"Caring for Caregivers in
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49 Distress: Implementing RISE", and for training peer responders—"RISE Basic Training for Peer
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51 Responders." The experiences of hospitals in Maryland and elsewhere that differ in size,
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teaching status, and rural status, should help to inform efforts to implement and adapt peer support programmes, so they can help the full range of healthcare workers that need them.

Summary

Hospital workers face many challenges following the occurrence of stressful, patient-related events [2, 3]. A few of these involve medical errors, but the large majority are simply related to the extraordinary stresses incumbent in the job. The lack of recognition of this problem, and the lack of support in the workplace may lead to additional adverse events and to further patient harm. To help support these providers and prevent them from burnout or leaving their clinical profession and the hospital, organizations should offer additional support to their employees [4, 24]. Committed leaders and the involvement of stakeholders representing disciplines and functional units across the institution were crucial to the development and implementation of the RISE programme at Johns Hopkins. Despite a well-conceived and structured programme and a dedicated team of peer responders, there were relatively few calls in the first year. A sustained, multi-pronged campaign was required to increase awareness and trust among staff members, and to finally increase the volume of calls.

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Contributorship Statement:

The authors of this work and their contributions are as follows:

Hanan H. Edrees, DrPH, MHSA is an Associate Faculty member at The Johns Hopkins University Bloomberg School of Public Health and Quality and Patient Safety Manager at the Ministry of National Guard Health Affairs—Kingdom of Saudi Arabia. Dr. Edrees was a member of the leadership team of the RISE programme. She drafted the manuscript and provided substantial contributions to the acquisition and interpretation of the data.

Lori Paine, RN, MS is the Director of Patient Safety for The Johns Hopkins Hospital and the Johns Hopkins Armstrong Institute for Patient Safety & Quality. Ms. Paine provided substantial contributions to the conception of the research and critically revised the manuscript for programme specific content.

Cheryl Connors, MS, RN, NEA-BC is a Patient Safety Specialist at The Johns Hopkins Armstrong Institute for Patient Safety and Quality and Co-Director of the RISE Programme. Ms. Connors critically revised the manuscript for programme specific content relating to the development and structure of RISE.

Matt Norvell, M.Div., M.S., BCCM., is a Pediatric Chaplain at The Johns Hopkins Children's Center and Co-Director of the RISE Programme. Mr. Norvell critically revised the manuscript for programme specific content and tool development.

Henry Taylor, MD, MPH is a Senior Associate at The Johns Hopkins Bloomberg School of Public Health and an instructor in curriculum development at The Johns Hopkins University School of Education. Dr. Taylor contributed to the design of peer responder training and the programme framework.

Albert W. Wu, MD, MPH is a Professor of Health Policy and Management at Johns Hopkins Bloomberg School of Public Health, and Co-Director of the RISE Programme. Dr. Wu oversaw the research, provided substantial contributions to the conception and design of the study, and critically revised the manuscript.

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None

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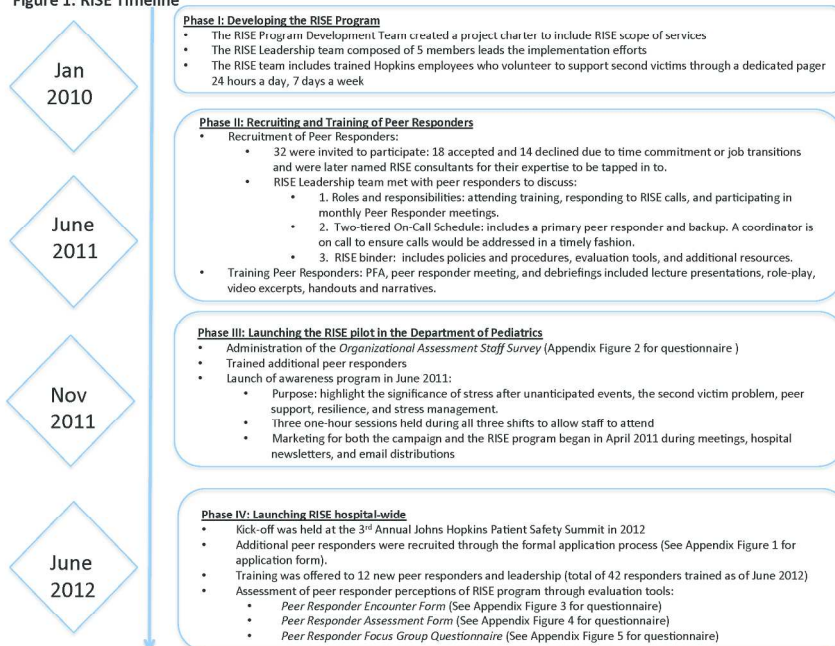
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Figure 1: RISE Timeline



279x215mm (220 x 220 DPI)

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Figure 2. RISE Mission and Objectives

RISE Mission

To provide timely support to employees who encounter stressful, patient-related events

RISE Team Objectives

1. Increase awareness of the second victim phenomenon in healthcare's high-risk environment
2. Provide multi-disciplinary, one-to-one or group, peer support in a non-judgmental environment
3. Equip managers and employees with healthy coping strategies to promote well-being:
 - a. Offer tools to support managers in their roles when responding to second victim events
 - b. Provide first responder tips to all employees before, during, and after an event
4. Reassure and guide employees to continue thriving in their roles
 - a. Develop a non-punitive approach to handling stressful patient-related events
 - b. Define policies and procedures for the RISE program

215x279mm (200 x 200 DPI)

Appendix: Peer Responder Assessment Form

I. SECOND VICTIM INITIAL CALL

1. Did the second victim encounter any barriers to accessing RISE?
 Yes No
2. Were there any barriers to setting up a time/place to meet with the second victim?
 Yes No
3. Was this the first time you responded to this second victim?
 Yes No
4. Had this person had spoken with another RISE Responder?
 Yes No
5. If he/she had spoke to another RISE provider, was it about the same event or a different event?
 Same event Different event

II. ENCOUNTER WITH SECOND VICTIM

1. After meeting with the second victim, did you feel you were able to provide helpful support?
 Yes No
2. As you listened to the second victim, did you find yourself wanting to 'fix' the problem? If so, how did you respond to this feeling?
3. Was there a point during the discussion with the second victim when you struggled/felt uncomfortable?
4. What worked well during your encounter with the second victim?
5. Do you have worries or concerns that the second victim might have additional problems? If yes, what were they?
 Yes _____
 No
6. Did you experience any worries or concerns about how you responded? If so, please describe them.
7. Was there information you would have liked to have had prior to the encounter? If so, please describe.

III. TRAINING/EDUCATION:

1. I felt comfortable listening to the second victim.
 Strongly Disagree Disagree Agree Strongly Agree
2. I felt comfortable responding to the second victim.
 Strongly Disagree Disagree Agree Strongly Agree
3. I need additional training/experience as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
4. I am comfortable with my knowledge and skill as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
5. I am highly competent as a peer responder
 Strongly Disagree Disagree Agree Strongly Agree
6. I would be able to train other peer responders
 Strongly Disagree Disagree Agree Strongly Agree
7. Which aspect of the Psychological First Aide (PFA) training you received was most beneficial to your role as a peer responder?
 Lecture Presentation Role Play RAPID acronym Video excerpts
 Handouts Narratives Other _____
8. Please rate your overall competence as a peer responder:
 Poor Fair Good Very Good Excellent

IV. PEER RESPONDER OVERALL EXPERIENCE

1. How would you rate your own emotional distress as a responder to this encounter (1 not at all painful-10 extremely painful)?
 1 2 3 4 5 6 7 8 9 10
2. I felt the need to refer the second victim to additional resources:
 Strongly Disagree Disagree Agree Strongly Agree
3. I was able to offer the second victim additional helpful resources.
 Strongly Disagree Disagree Agree Strongly Agree
4. I felt confident in offering the second victim additional resources
 Strongly Disagree Disagree Agree Strongly Agree
5. If you offered the second victim additional resources, what were they?

V. PEER RESPONDER RECOMMENDATIONS:

1. Overall how would you rate the success of this encounter?
 Poor Neutral Excellent
2. It was beneficial for the second victim to contact the RISE team:
 Strongly Disagree Disagree Agree Strongly Agree
3. I met the second victim's expectations:
 Strongly Disagree Disagree Agree Strongly Agree
4. I felt satisfied with how this encounter turned out:
 Strongly Disagree Disagree Agree Strongly Agree
5. This encounter suggests ways to improve the RISE program, including:

Peer review only

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Revised Standards for QQuality Improvement Reporting Excellence (SQUIRE 2.0)
publication guidelines

Text section and item name	Section or item description
<i>Title and abstract</i>	
1. Title (page 1)	Indicate that the manuscript concerns an initiative to improve healthcare (broadly defined to include the quality, safety, effectiveness, patient-centredness, timeliness, cost, efficiency and equity of healthcare).
2. Abstract (page 1; 3)	<p>a. Provide adequate information to aid in searching and indexing.</p> <p>b. Summarise all key information from various sections of the text using the abstract format of the intended publication or a structured summary such as: background, local problem, methods, interventions, results, conclusions.</p>
Introduction	<i>Why did you start?</i>
3. Problem description (page 5)	Nature and significance of the local problem.
4. Available knowledge (page 5)	Summary of what is currently known about the problem, including relevant previous studies.
5. Rationale (page 5)	Informal or formal frameworks, models, concepts and/or theories used to explain the problem, any reasons or assumptions that were used to develop the intervention(s) and reasons why the intervention(s) was expected to work
6. Specific aims (page 5)	Purpose of the project and of this report.
Methods	<i>What did you do?</i>
7. Context (page 6-10)	Contextual elements considered important at the outset of introducing the intervention(s).
8. Intervention(s) (page 6-10)	<p>a. Description of the intervention(s) in sufficient detail that others could reproduce it.</p> <p>b. Specifics of the team involved in the work.</p>
9. Study of the intervention(s) (page 6-10)	<p>a. Approach chosen for assessing the impact of the intervention(s).</p> <p>b. Approach used to establish whether the observed outcomes were due to the intervention(s).</p>
10. Measures (page 10-12)	<p>a. Measures chosen for studying processes and outcomes of the intervention(s), including rationale for choosing them, their operational definitions and their validity and reliability.</p> <p>b. Description of the approach to the ongoing assessment of contextual</p>

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	<p>elements that contributed to the success, failure, efficiency and cost.</p> <p>c. Methods employed for assessing completeness and accuracy of data.</p>
11. Analysis (page 12)	<p>a. Qualitative and quantitative methods used to draw inferences from the data.</p> <p>b. Methods for understanding variation within the data, including the effects of time as a variable.</p>
12. Ethical considerations	Ethical aspects of implementing and studying the intervention(s) and how they were addressed, including, but not limited to, formal ethics review and potential conflict(s) of interest.
Results	<i>What did you find?</i>
13. Results (page 12-15)	<p>a. Initial steps of the intervention(s) and their evolution over time (eg, timeline diagram, flow chart or table), including modifications made to the intervention during the project.</p> <p>b. Details of the process measures and outcomes.</p> <p>c. Contextual elements that interacted with the intervention(s).</p> <p>d. Observed associations between outcomes, interventions and relevant contextual elements.</p> <p>e. Unintended consequences such as unexpected benefits, problems, failures or costs associated with the intervention(s).</p> <p>f. Details about missing data.</p>
Discussion	<i>What does it mean?</i>
14. Summary (page 15; 4)	<p>a. Key findings, including relevance to the rationale and specific aims.</p> <p>b. Particular strengths of the project.</p>
15. Interpretation (page 15-18)	<p>a. Nature of the association between the intervention(s) and the outcomes.</p> <p>b. Comparison of results with findings from other publications.</p> <p>c. Impact of the project on people and systems.</p> <p>d. Reasons for any differences between observed and anticipated outcomes, including the influence of context.</p>

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	e. Costs and strategic trade-offs, including opportunity costs.
16. Limitations (page 17; 4)	a. Limits to the generalisability of the work. b. Factors that might have limited internal validity such as confounding, bias or imprecision in the design, methods, measurement or analysis. c. Efforts made to minimise and adjust for limitations.
17. Conclusions (page 18)	a. Usefulness of the work. b. Sustainability. c. Potential for spread to other contexts. d. Implications for practice and for further study in the field. e. Suggested next steps.
Other information	
18. Funding (page 33)	Sources of funding that supported this work. Role, if any, of the funding organisation in the design, implementation, interpretation and reporting.