ACUTE POST-RESUSCITATION DEBRIEFING (APRD) TOOLKIT

A guide developed with the support of
ACEP QIPS and PEM sections
for emergency medical professionals following critical cases

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Table of Contents

APRD Background **Page 3**

Definitions, Benefits, Barriers, Toolkit Purpose

APRD Basics **Page 5**

Process, Inclusion, Facilitation, Training, Setting, Initiation, Timing, Documentation, Follow-up

APRD Content **Page 8**

Basic Components, Introduction, Team Wellness, Information Sharing, Follow-up

Getting Started **Page 10**

Pre-planning, Planning, Implementation, Follow-up

Sample APRD and Documentation Form **Page 11**

Paper form, Electronic Resources

Development of the APRD Toolkit **Page 15**

Acknowledgments **Page 16**

Project Sponsor, Project Leadership Team, Delphi Participants

References **Page 17**

Background

Important Definitions:

- APRD – For the purposes of this instrument, an APRD was defined as "a discussion after caring for a critical patient , stressful event or resuscitation generally involving two or more members of the team to reflect upon and improve performance".

- PSWP - PSWP (Patient Safety Work Product) is the information protected by the privilege and confidentiality protections of the Patient Safety Act and Patient Safety Rule. PSWP may also include patient information that is protected health information as defined by the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule (see 45 CFR 160.103). The Patient Safety Act and Rule provide protections that are designed to allay fears of providers of increased risk of liability if they voluntarily participate in the collection and analysis of patient safety events.

The Benefits of APRD:

Acute post-resuscitation debriefing (APRD) is a foundation of high-performing teams. The American Heart Association and The Joint Commission recommend that teams use debriefing after resuscitations to improve care.[1] Two studies have surveyed staff and reported that a large majority of clinicians believed debriefing is an important process.[2, 3] From their 2015 study of all pediatric emergency medicine fellows in the US, Zinns et al reported that over 90% of pediatric emergency medicine fellows wanted education on debriefing.[4]

Studies in different disciplines have reported on the widespread prevalence of secondary trauma in emergency personnel.[5, 6] Leadership and teamwork have been shown to foster process improvement in trauma.[7]

The purpose of an APRD is not only to provide opportunities for improvement, but to provide emotional support for the team immediately following an event. Communication and team approaches to problem-solving can only serve to improve both staff wellness and patient care. A multidisciplinary APRD performed in a safe environment allows for better interdisciplinary communication and improved shared understanding. Other studies have concluded that conducting a debrief following critical events is useful in fostering communication, trust, and performance improvement in emergencies.[8-10]

Barriers to APRD:

Despite the growing body of literature, APRD infrequently occurs. Several studies reveal common barriers - lack of a skilled facilitator, lack of time, and lack of an appropriate setting.[2,3]

There is a significantly higher frequency of resuscitations in adults. Pediatric resuscitations are relatively infrequent but are often emotionally more challenging, which may lead to communication breakdown. Effective APRDs can be useful for identifying communication and systems issues in both settings, allowing for improved patient safety and quality of care. Thus, learning from each resuscitation event and providing support to the involved staff would enable: 1. identification of latent safety threats to improve care of subsequent patients, and 2. improved multidisciplinary communication and resilience.

APRD Toolkit Purpose:

A structured and generalizable approach incorporating guidelines to the debrief process, initial training on facilitation and optimal mechanisms to address quality of care, patient safety and staff communication and wellness is imperative to increasing effective APRDs. There are few scripted debriefing templates available, notably the Promoting Excellence and Reflective Learning in Simulation (PEARLS) and the Debriefing In Situ Conversation after Emergent Resuscitation Now (DISCERN) tool.[8, 11]

According to our understanding, there is not a consensus-based generalizable APRD toolkit to guide leaders to develop local processes and educate facilitators to conduct effective APRDs. The goal of this toolkit is to provide a framework for pediatric and adult care hospital emergency departments to conduct meaningful and efficient debriefings following the care of critically ill patients.

APRD Basics

Process: An acute post-resuscitation debriefing (APRD) is a short, face-to-face meeting of the members of a clinical team immediately after caring for a seriously ill/injured patient, in order to learn from the event and foster interdisciplinary communication.

Inclusion: An APRD should include a multi-disciplinary group directly involved in the patient's care, and optionally member(s) from leadership who were not directly involved in patient care. Some of the staff members included in the process will be there to learn, while others will be there to either provide or receive emotional support. It is important to recognize the debrief should be performed in a 'safe space' for staff members to speak openly, without any fear of judgement or retaliation.

Staff members to be included in the APRD process, at a minimum should be:

- Nurses involved in the patient's care
- Physician team lead
- ED and Respiratory technicians
- Trainees (medical and nursing) involved in the patient's care
- Consultants co-managing patient's care (i.e. trauma surgery, critical care)

Note: *Chaplains and Social Workers are recommended for inclusion in APRDs to serve in supporting roles for staff. The APRD should be open for participation by anyone who feels it would be useful.*

If they are interested and available, other members of staff from the following groups may be invited to join:

- Emergency Department pharmacist
- Child Life representative
- Interpreter
- EMS Transport team involved in the patient's care
- Unit assistant

Facilitation: A dedicated leader of the team should be selected prior to starting the APRD. The leader should be adept in moderating a focused discussion, gauging the "temperature of the room," and be able to interpret both verbal and non-verbal cues. Best suited for this role would be:

Someone directly involved in the patient's care: Attending Physician preferred, or Bedside Nurse
OR
Someone not directly involved in the patient's care: Charge Nurse

Whichever of the above you choose should be based on the level of trust and candor your team feels. In some cases, team members may feel more comfortable speaking openly when their APRD leader was not part of the care team, while others may have anxiety about having a member of department leadership present. It is important to adapt the APRD program to suit local needs through continuous

process improvement. Whichever option a department adopts, it is crucial the leader/facilitator take ownership and be dedicated to the success of the process.

Training: The formal training of APRD leadership is an important component of APRD success. Anyone who wishes to attend training should be welcome, but the following roles should be trained to adequately prepare them for moderating the APRD to keep it efficient and productive:

- APRD Lead Facilitator, if separate from the roles below
- Charge Nurses
- Attending Physicians
- PEM Fellows

While Chaplains and Social Workers are an important addition to the process, the nature of their daily work already provides them with the training and skills needed to serve in support roles for the emotional component of the APRD. They should be invited to the training if it would help them learn the APRD format selected for the specific department.

Setting: The best place to conduct an APRD is in a non-clinical space close to the patient care area. It should be near enough to allow staff to respond to other active patients and incoming emergent issues, but far enough away to provide a separation from patients and families. The space should be quiet and free from distractions whenever possible. In the absence of this type of space, an APRD should be conducted wherever time and facility conditions allow.

Initiation of APRD: Best practice is to have two reasons for initiating an APRD:

1) when pre-established criteria occur in a patient case. Examples of mandatory criteria for initiating an APRD include:

- Trauma cases
- Mortality cases
- Other high-stress or psychosocial impact cases
- CPR need

Note: *Based on local needs and sentiments, it may be reasonable to include resuscitations, pediatric DNR cases, intubations, complex co-morbidity cases and safety/security-involved cases as mandatory criteria.*

2) when a team member wishes to debrief, regardless of criteria.

Timing: Initiation of an APRD should occur within an hour of the event, but preferably takes place immediately following the event. An appropriate length for the APRD event is under 30 minutes, but

time may be added or subtracted based on the specific circumstances of the case being discussed and the state of the rest of the department.

Documentation: Collecting APRD documentation is vital to making improvements in patient care and staff well-being over time. A key role in documentation is an assigned note-taker or recorder.

Data collection should follow a standardized form, either on paper or electronically captured. Information gathered about the case, as well as the recommendations and outcome of the debrief, should be reported as a consensus from the team participating in the APRD. The documentation template should be consistent for every case but may vary between adult/general patients and pediatric patients, if an institution treats both.

Documentation should be saved in a HIPAA compliant physical or electronic space. Access should be provided to key members of the emergency department who would be responsible for APRD review. To aid open discussion, it may be crucial to have the group and its workings be designated as Patient Safety Work Product (PSWP). This designation with the Patient Safety Organization removes significant barriers that can deter the participation of health care providers in patient safety and quality improvement initiatives, such as fear of legal liability or professional sanctions.

Follow-up: Response and follow-up to APRDs is considered a high priority. It is recommended emergency departments create an APRD Review Committee to conduct a periodic review of the data and the APRD procedure.

Case specific follow-up:
This is vital to improving quality and safety within the institution based on learnings from individual events. This should include:

- Updates on the status of follow-up to the event team
- Escalating issues to higher channels including ED and institutional leaders
- Final summary of the APRD to the event team
- Timely rechecks on anyone significantly distressed team members, and providing additional resources as needed

APRD process follow-up:
This is intended as a means of continuous process improvement. Some institutions may also utilize the APRD review committee to help oversee follow-through from improvement ideas to implementation of the changes. Ongoing improvement is more likely if the APRD committee:

- Consists of multi-disciplinary staff
- Allows for feedback from all ED staff about the process
- Involves regularly scheduled periodic reviews, and
- Includes review of previous APRD events to audit for areas of concern and allow suggestions for improvement

APRD Content

Components:

Each APRD should include these basic components:

Top priorities during the APRD event:

1. Brief review of the patient case
2. Review of what went well during the event
3. Acknowledgment that a high-stress event has occurred
4. Reminder of the purpose and ground rules for the debrief
5. Open sharing of the team members' thoughts and emotions regarding the event
6. Opportunity for members to comment and raise any concerns they have

Other priorities as time allows:

7. Time for team members to vent frustrations
8. Review of the challenges experienced
9. Discussion on ways to improve / things that could have been done differently to change the outcome
10. Planning of follow-up to any issues discussed
11. Offer of emotional support resources for staff who still need it
12. Offer of a formal review of the clinical case (or secondary APRD)

Introduction:

When conducting an APRD it is important to orient all attendees by reminding them about the purpose and ground rules of the debriefing.

Team Wellness:

It is important to acknowledge that a high-stress event has occurred. The "temperature of the room" should be assessed at least once during the APRD. Members should be allowed to share their thoughts and emotions regarding the event. In the appropriate circumstances, members should be allowed to express their frustrations. Acute and ongoing emotional support should be provided to staff who need it.

Information Sharing:

The case should be briefly reviewed in order to gather information for future events. Members should have the opportunity to review what went well during the event and to identify challenges and areas of concern. Through this discovery process the team can identify opportunities for improvement or change in order to improve future outcomes.

Follow-up:

If time permits, the APRD can be helpful for planning follow up to issues discussed during the session. If the team feels there is not satisfactory closure, consider offering a formal review of the clinical case or a secondary APRD of the case scheduled at a later time.

Getting Started

Developing an APRD process at your institution should include the following steps, with variation as needed to meet local needs.

Pre-planning

Identifying key stakeholders within the department
Identifying APRD committee
Getting buy-in from leadership
Understanding local needs
Establishing *Patient Safety Work Product (PSWP)* designation

Planning

Get buy-in from ED staff and identifying APRD 'champions'
Establishing data collection tool
Choosing or building an APRD template
Establishing criteria for conducting APRD

Implementation

Training key personnel
Resources promptly available for effective APRD (template, guide)
Tracking APRD use for preset criteria
Regular communication about APRD to the ED staff
Timely resolution of systems and process issues
Recognition and celebrating early wins

Follow-up

Modification of the APRD process as warranted
Analyzing effect of APRD on personnel morale and communication and on department flow

Sample APRD Form

Was an APRD done? ❍ Yes ❍ No (*skip to case info)* Start Date/Time of APRD:_____/____/_____ ____:____

TIPS FOR APRD LEADER: Arrange APRD close to the time of the resuscitation (20-30 minutes) and announce overhead. Please consider a pre-APRD with team leader and charge nurse to confirm who will lead, and any issues that should be considered. Select a documenter, different from the APRD Leader, to complete this form.

We are going to APRD together for about 15 min, and the issues discussed are protected as part of patient safety work project (PSWP) and are not part of the patient's chart.

To begin this APRD, please classify your level of concern for this event (*Wait 1 minute for reactions*):
(Through a show of hands, count the number of team members who feel as follows)

Tally of RED - Highly confused
Tally of YELLOW - Want clarification / Confused
Tally of GREEN - Clear / No concerns

Provide a very short summary of the case in medical terms *(to be sure all team members are on the same page)*:
_____
_____

SUCCESSES

Let's Begin with the positive aspects of the case. Please volunteer an answer…

Positive clinical care /decision-making aspects took place during this case:
_____
_____

Positive Communication / team skills:
_____
_____

Positive aspects of Technical skills - CPR / Vascular access / Chest Tube / Defibrillator: *(Example: Staff started CPR prior to calling for help)*
_____
_____

Positive Systems Related - Massive Transfusion / Blood Bank / Transfer / ECPR Activation: (*Example: One staff member knew who to call for malignant hyperthermia case)*
_____
_____

Other Issues that went well - Problem Solved or Overcome / Work Arounds: (*Example: staff member had a CPR app on their phone*)
_____
_____

Other Issues that went well - Problem Solved or Overcome / Work Arounds: (*Example: staff member had a CPR app on their phone*)
_____
_____

(Continues…)

CHALLENGES

Now, let's switch gears and discuss the challenges we encountered in this case. Please volunteer an answer…

Challenges related to clinical care/decision-making aspects: (*Example: Low temperature not recognized for altered mental status patient*)

_____
_____

Challenges related to Communication / Team skills: (*Example: Wrong medication dose ordered, team unclear until pharmacy recognized error*)

_____
_____

Challenges with Technical skills - CPR / Vascular Access / Chest Tube / Defibrillator: (*Example: Unsure of how to use defibrillator or arterial line*)

_____
_____

Challenges due to systems or process related: (*Example: Massive transfusion, Blood bank, ECPR activation, Delay in transfers to other parts of hospital {no ICU beds, OR not available etc…}*)

_____
_____

Other issues / equipment that were challenging, limited to the ED: (*Example: Not enough space in ED room, Equipment not stocked/available, ED sign in the driveway outside the department led a family to bring an adult to our ED instead of Truman.*)

_____
_____

Please provide any suggestions for improvement in care for the next team: (*What we did that can benefit care for the next team, Ideas for other positive changes, etc*)

_____
_____

List any issues identified that require further action, clarification, or answers: (*Example: Can we use adult pads to defibrillate a child. This section should be used when no clear resolution has been agreed upon.*)

_____
_____

SUMMARY STATEMENT: To end this APRD please classify your level of concern for this event now:
(Through a show of hands, count the number of team members who feel as follows)

Tally of RED - Highly confused
Tally of YELLOW - Want clarification / Confused
Tally of GREEN - Clear / No concerns

[APRD Leader] Thank the group for participating. Offer an additional means of communicating further about this case (*anonymously preferred*). Offer resources for anyone still experiencing difficulty: "If you need additional support, check in with your supervisor. You have to take care of yourselves, and some options are: taking a break, getting food/drink, talking to a friend." (Provide link to other resources for free supportive counseling and referrals)

End Date/Time of APRD:_____/____/_____ ____:____ **APRD Duration (mins):**_____

Was the APRD Finished? ❍ Yes ❍ No

(*Continues…*)

CASE INFORMATION

Patient Account Number:_____ **End of Treatment Time:** ____:____
Time from end of treatment to APRD: (mins)_____ **Number of patients in the Department:**_____

Name of Resuscitation Physician Team Leader:_____
Name Primary Nurse:_____

IF NO APRD: Reason for the decision not to debrief/perform APRD:
❒ Didn't have enough time ❒ Didn't feel it was necessary ❒ No resuscitation required ❒ Other (_____)

INDICATION FOR APRD:
❒ ESI 1 ❒ Resuscitation ❒ Level 1 or 2 Trauma ❒ Other (*i.e. NICU, PICU Admit, Psychosocial*)_____

Roles present for the debrief/APRD:
❒ Social Worker ❒ Charge Nurse ❒ Bedside Nurse 1 ❒ Bedside Nurse 2 ❒ Recording RN ❒ ED Tech
❒ PEM Fellow ❒ PEM Attending ❒ Surgical Resident/Fellow/Attending ❒ Resident in ED
❒ Respiratory Therapist ❒ Pharmacist ❒ Chaplain ❒ Other_____

Name of APRD Leader:_____ **Name of APRD Documenter:**_____

Patient Outcome:
❒ Discharged Home ❒ Admitted to Inpatient (Specify Unit:_____)
❒ Expired - ME Case ❒ Expired - Not ME Case ❒ Expired - Unknown if ME Case
❒ Other_____

Please summarize areas of concern / conflict or problems identified:_____
_____
_____

This is NOT an event report form. Designate which form was filled out (if any):
❒ Trauma Evaluation Form ❒ Code/Resuscitation evaluation form ❒ Adverse Event form
❒ STP (situation, target, proposal) ❒ Notify ED leadership / other

With whom, and how, will you follow-up on issues not reported on a code or trauma evaluation form or event reporting tool?_____
_____

Please summarize any areas of successes that should be shared: _____
_____

In your opinion, did doing this APRD adversely affect the flow of the Emergency Department?
❒ Not at all ❒ Just barely ❒ Yes, but not significantly ❒ Yes, moderately ❒ Significantly Impacted

In your opinion, how engaged was the staff during the APRD process? Indicate to what extent:
❒ Disengaged ❒ Slightly engaged ❒ Neutral ❒ Moderately engaged ❒ Highly engaged

Thank you for your time!

Electronic APRD Guide and Data Collection Form

Children's Mercy Hospital has created an electronic version of the form above. An online guide to setting up and using this resource has been made available for use at other hospitals as a means of facilitating use of APRDs. The template is designed for use with Research Electronic Data Capture software (REDCap). [9,10]

Step-by-step instructions are included for how to implement this resource at your institution. You may access the template and instructions at: https://cmhredcap.cmh.edu/surveys/?s=3PP7NTRHMF

This may need to be modified by your information technology staff to use with other programs. APRD program leaders may also need to customize the template to better suit the needs of their specific institution, but it should serve as a good base for getting started quickly. We ask that you cite the authors of this project in your ongoing work, and request that you complete a short follow-up survey to provide feedback.

Development of the APRD Toolkit

Beginning in January of 2019, the toolkit was developed using a Delphi process. The Delphi method was performed by using a series of detailed questionnaires to gather information, opinions and feedback from a group of experts to establish a consensus on a topic.

The Delphi surveys were collected and managed using Research Electronic Data Capture (REDCap)[9,10] electronic data capture tools hosted at Children's Mercy Hospital of Kansas City. REDCap is a secure, web-based software platform designed to support data capture for research studies.

In order to have a balanced team, an initial interest was solicited during the September 2018 ACEP Conference in San Diego, California, after which 31 medical professionals (physicians, nurses, social workers and child life) from around the United States agreed to assist. The group was allowed to select the role of their choice:

- **Site Coordinator:** Recruit from their institution at least one of each of these disciplines: physician; social worker; and nurse. Site Coordinator could also be a participant OR reviewer but not both.
- **Delphi Participant:** Participated in the 4-step modified Delphi process by completing electronic survey.
- **Reviewer:** Assisted in the analysis, dissemination and review of data gathered. Could not be a Delphi participant.

From the initial group, 27 followed through with their participation. The first series of Delphi questions gauged: whether or not the institutions have a formal process in place for debriefing after critical events; barriers encountered when establishing a formal process; what circumstances trigger a debrief; what the debrief process entails; who participates and leads the events; what type of training is provided; how staff are supported throughout the process; what if any data is collected from the debriefs; and other related details specific to their institutions. The questions were both quantitative and qualitative, allowing participants to comment via free text.

From Round One of the Delphi, descriptive data was compiled from the group and organized into a set of Likert scales for prioritization. Each topic or question was scored to reveal the consensus of the overall group. After analysis, there were four areas where the results were either contradictory or contained a "tie" scenario which needed additional discussion, conducted by the review team during Round Three of the Delphi.

The Delphi consensus data was then used to create a draft of this toolkit, which was reviewed and edited before delivery to the ACEP, who branded and published the final document.

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