Family Presence During Trauma Resuscitation: An Eastern Association for the Surgery of Trauma Practice Management Guideline

Mae Ann Pasquale PhD, MSN, RN
Cedar Crest College / Lehigh Valley Health Network, maeann_a.pasquale@lvhn.org

Follow this and additional works at: http://scholarlyworks.lvhn.org/patient-care-services-nursing

Part of the Nursing Commons

Published In/Presented At

This Presentation is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.
Family Presence during
Trauma Resuscitation

An Eastern Association for the Surgery of Trauma
Practice Management Guideline

Mae Ann Pasquale, PhD, RN
Assistant Professor of Nursing, Cedar Crest
College

© 2017 Lehigh Valley Health Network
Presentation Objective

- To provide evidence-based recommendations that may be used to direct the decision-making processes related to family presence during trauma resuscitation (FPDTR).
  - Specifically, to synthesize the evidence to determine whether the presence of family during trauma resuscitation affects resuscitation quality, family member, and patient psychological outcomes.
Traumatic injuries constitute the third leading cause of death for people of all ages and is the number 1 cause of death for those younger than 46 years of age (National Trauma Institute, 2014).

More than 100,000 people of all ages in the US die from trauma each year, roughly half of them in MVC.

In 2014, the number of people injured in MVCs increased from 2.31 to 2.34 million (U.S. Department of Transportation, 2016).

Traumatic injury is one of the most important threats to public health and safety in the US, with an economic burden of $671 billion a year in healthcare costs and loss productivity (National Trauma Institute, 2014).
Family Impact

- Traumatic injury has a profound and sustained impact of the lives of patients and their family members.
- Traumatic injury requiring admission to critical care is a potential crisis situation for both patient and family members.
- Family members often feel helpless and vulnerable and have little knowledge of what to expect from the situation.
- Physical isolation occurs at a time when there is a strong need for both the patient and family to be close and available.
Usual scenario...

- pt comes in → team activates ACLS/ATLS to preserve life and function
- family waits until a decision about the outcome is made and families can “visit”
  - Death – “greeting the body”
  - Success – maybe a short visit before definitive treatment
- Care is appropriately focused on the pt but attending to the needs of family members must also be considered.
- Scene is changing as families exercise their right to be present during resuscitation – similar to L & D.
Prior Research about FPDR

- Presence of family during resuscitation has been debated in the literature for the last 30 years – concept remains controversial
  - Can be traced back to Foote Hospital, Jackson, MI (1982)
    - 2 incidents when FM demanded to be present: 1 riding in the ambulance; wife of slain police officer
    - Retrospective survey of FM who died – 72% wished they had been present (Doyle et al., 1987)
    - FPDR policy and F/U survey of 47 FM – death was easier, presence was beneficial and would do it again (Hansen & Strawser, 1992)

- Center of discussion
  - Family benefits
  - Concerns of healthcare providers (HCPs)
  - Family expectations

“Family members are often receptive to the idea of being present during resuscitation, HCPs were often adverse to the practice, citing concerns that family members’ presence would adversely effect the patient’s outcomes for resuscitation” (Porter, Cooper & Sellick, 2014, p. 71).
FPDR - Contested Issue

**In Favor**

- Helps the family realize the seriousness of the patient’s condition.
- Provides the family an understanding of what it means to “know everything” possible was done.
- Family members have a feeling of being supportive and helpful to the patient and staff.
- Allows closure to family members when they are guided through the resuscitation process, and orchestration of the best death possible, when death is inevitable.

**Opposed**

- Concerns about quality of care and interference with resuscitation efforts
- Repercussions and distraction to the health care team; risk of litigation
- Negative emotional and psychological consequences to the family member – depression and PTSD
  - “Witnessing resuscitation is non-therapeutic and traumatic enough to haunt surviving FM for the rest of their lives.”

(Downar & Kritek, 2013)
Concerns are NOT Supported

- Despite the concerns of HCPs, families report that they want to be present again if a similar event occurred.
  - Emphatically reported the right to be present but also that FPDR was important and helpful to them (Davidson et al. 2007; Leske, McAndrew & Brasel, 2013).

- Prior research indicates no adverse psychological effects for family members and the operations of the HCPs are not disrupted (Porter et al., 2014).

- Participating in the FPDR option may not be appropriate for every family member, but most believe that they have the right to be present (Oczkowski et al., 2015).
Multiple professional societies and organizations endorse FPDR option

- 1993 - Emergency Nurses Association (ENA) resolution to support FP during resuscitation
- American Heart Association, American Association of Critical Care Nurses, American Society of Critical Care Medicine, American College of Surgeons, American College of Chest Physicians

Although paradigms are now shifting from family member separation, widespread acceptance is still lacking.

The practice of FP varies across hospitals in the US

- Only 9% of critical care areas indicated that they had written policies governing practice supportive of FPDR (Martin, 2010).
Most of the studies on FPDR are not conducted with trauma

- Too traumatic - “worst of the worst”
- Disrupt resuscitative efforts and become too emotional and out of control
- Misinterpret HCP actions, malpractice
- Undue stress on HCPs
- Not enough space to accommodate family
- Not enough staff to provide a designated family support person

ER physician in Vancouver stated:

- “To watch a team of strangers frantically shove tubes down the throat of a relative, pierce each arm with large-gauge needles or in extreme situations, crack open the chest, would not only be traumatic to observe but could also leave the relative with a horrifying final memory!” (Rosenczweig, 1998).
Why trauma?
And why trauma??
Why NOT trauma?

- Sudden life threatening injury has the potential to produce a crisis even within the most stable family system.
- Families are integrated systems in which an event affecting one member affects the family unit.
  - Families fear the WORST! – death
  - Anxiety centers on concern for the patient’s survival
  - Anxiety is exacerbated by the physical separation from their loved one
  - Uncertain outcomes – long term disability
  - Unfamiliar with the environment…so sudden and scared
- Physical isolation occurs during a time when there is strong need for patient and family to be close!
- FPDTR may help to alleviate some of those fears, stress and anxiety
- Opportunity to include the family in the care of the pt from the beginning.
- Good topic - limited research!
A Prospective Evaluation of Family Presence during Trauma Resuscitation: A Pilot Study

Purpose:

To examine the attitudes, benefits and problems expressed by family members and health care providers involved in family presence during trauma resuscitation.

(Funded by AACN’s FP Grant, 2005)
Methods

■ Prospective, descriptive design

■ Convenience sample of 50 family members of adult “Trauma Alert” patients who were present during resuscitation

■ Inclusion criteria:
  – One adult family member of adult trauma alert patients; single trauma alerts

■ Exclusion criteria:
  – Family members of do not announce, crime victims/perpetrators, code reds, burns, children

■ Definitions:
  – Trauma resuscitation - a series of events, including invasive procedures that are initiated to sustain life
  – Family member – relative of the patient or any person with whom the patient shares an established relationship
Family Presence during Trauma Resuscitation Protocol (FPDTR)

- Based on the ENA’s “Presenting the Option for Family Presence” Guidelines
- Consists of algorithm and nodes that guide care decisions
- Note: Accepted as a standard of care following the pilot study
Family Preparation

- At LVHN, the Chaplain is the “support person” and liaison with the trauma team
- Chaplain notifies the trauma team when the family arrives
- Trauma surgeon asks the patient if they would like a family member present
- Chaplain assesses family coping styles (Are they OK?), asks if they want to be present (only 1 family member), and conveys wishes to trauma team
- If OK from team, Chaplain prepares the family member:
  - Provides simple directions and validates the family’s level of understanding.
  - Describes sights, sounds, and smells that may be encountered by the family.
  - Remain with the family member at ALL times -- if they need to the leave - family member needs to leave also.
  - Encourages questions and clarifies ALL details with the trauma team.
  - Tells the family member where they will stand and guides them to the bedside.
  - They may be asked to step out of the room for a variety of reasons......
  - They should leave the room if they feel they need to step out and they are welcome to re-enter.
  - Presence is a request and privilege and they can be removed for their behavior.
  - The family member is allowed to stay as the patient’s condition warrants – trauma team decides.
**Data Collection**

- Within 72 hrs of the resuscitation or prior to d/c, the family member is asked to participate in a telephone interview
  - 20 min interview takes place in 4 weeks (2 wk call to schedule)
  - Family Presence Attitude Scale for Families

- Additionally, 50 healthcare providers who participated are asked to participate
  - Family Presence Attitude Scale for Healthcare Providers (FPAS – HP) 33 item survey
  - Survey needs to be completed within 72 hrs of the event, takes 10-15 minutes to complete
  - Surveys in locked drop box in the trauma room

- Patient consent needed for medical info
Results.....

■ Subject enrollment was difficult
  – REALLY good at resuscitation – limited family members
  – Many families lost in follow-up

■ 20 family members interviewed
  – FPAS scores all very good to excellent
  – Overwhelmed at the opportunity to be present
    – “Thank you for letting me here...to be with my wife. I'm not sure why I needed to
      be there. I just know I did....to hold her hand and let her everything was going to
      be OK! I told her I loved her, and we were in this together”.
  – Staff are just wonderful and outstanding!

■ 20 HCPs – FPAS scores are very good and comments are very positive

■ Needed to spread the word – Morning Call Op-Ed
Moving on.... 2 years later 😊

- Build on the pilot study methods and results
- Consider recruitment problems
- Update the literature (ugh...)
- New design
- New measures
- New model
- GRANT FUNDING!!!!
  - Fleming Trauma System Grant - $50,000
- Dissertation topic!
Anxiety, Satisfaction with Needs Met and Well-Being in Family Members Present during Trauma Resuscitation: A Comparative Study

Purpose:
1. To examine the effects of family presence during trauma resuscitation on family outcomes of anxiety, satisfaction, and well-being.
2. To compare those outcomes in families who are present, and not present, during the trauma resuscitation of their critically injured family member.

(Funded by Fleming Trauma System Grant, 2008)
Design, Setting and Sample

- Prospective, comparative, multivariate design based on the Resiliency Model of Family Stress, Adjustment, and Adaptation (McCubbin & McCubbin, 1993, 1996)

- Convenience sample of 50 adult (>18yo) family members of adult (>18yo) trauma patients, meeting study criteria, were given the option to be present and participate

- Family Member Inclusion Criteria:
  - (1) considered to be a family member of a trauma patient who underwent trauma resuscitation and admission to an ICU; (2) 18 years of age and older; (3) able to speak, read, and understand English; (4) is/are present in the hospital and freely willing to participate in the study, as demonstrated by returning their completed questionnaires

- Trauma Patient Inclusion Criteria:
  - Adults over the age of 18 who experienced a traumatic injury, meet the “Trauma Alert” criteria and undergo trauma resuscitation requiring ICU admission

- Exclusion Criteria:
  - (a) burns; (b) self inflicted injuries; (c) prisoners under police guard. There will be no restrictions based on gender, race, or ethnicity
Theoretical Thoughts

- When families have high levels of stress
  - Unable to cope with the situation
  - Unable to provide support
  - Transfer stress to the patient
  - Distrust the hospital staff and contemplate litigation

- Allowing families to be present
  - Help mobilize family strengths
  - Assist in coping with the crisis-producing situation
  - Decreases anxiety and improves satisfaction
  - Promotes family well-being, adaptation and functioning
Figure 1. Conceptual Model of Family Presence during Trauma Resuscitation

- Prior Stressors
  - FILE
- Severity of Injury
  - ISS
- Stressor
  - TRAUMATIC INJURY

- State Anxiety
  - S-STAI
- Satisfaction With Needs Met
  - R-CCFNI
- Family Well-being
  - FMWB

Family Presence during Trauma Resuscitation
Procedures for Data Collection

- Trauma admission logs reviewed on a daily basis
- Eligible families/pts were contacted within the first 48 hours
- Research Coordinator introduced herself to family at or during visiting hrs
- Data collected on 3 variables: state anxiety, satisfaction, well-being
- Complete 3 instruments (take about: 30 - 45 min to complete)
  - **State Anxiety:** Spielberger State - Trait Anxiety Inventory (S-TAI) (Spielberger, 1977)
  - **Satisfaction with Needs Met:** Revised Critical Care Family Needs Inventory (R-CCFNI) (Johnson et al., 1998)
  - **Family Well-being:** Family Member Well-being Index (FMWB) (McCubbin & McCubbin, 1996)
## Results: Overall Family Members (n = 50)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>Range = 18 - 84</td>
</tr>
<tr>
<td></td>
<td>Mean 50.2 yrs, SD 17.25 yrs</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Female = 56%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>98% Caucasian</td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td>36% children</td>
</tr>
<tr>
<td></td>
<td>28% spouses</td>
</tr>
<tr>
<td></td>
<td>28% parents</td>
</tr>
<tr>
<td></td>
<td>2% each sibling, boyfriend, friend, granddaughter</td>
</tr>
</tbody>
</table>

Family member characteristics showed an older, primarily Caucasian population. The relationship of family members was fairly evenly balanced between children, spouses, and parents.
# Results: Family Member Characteristics

<table>
<thead>
<tr>
<th>Family Member Indicator</th>
<th>Present (N=25)</th>
<th>Not Present (N=25)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>51.1 (18.9)</td>
<td>49.3 (15.7)</td>
<td>.722</td>
</tr>
<tr>
<td>Gender (% F)</td>
<td>40</td>
<td>72</td>
<td>.023</td>
</tr>
<tr>
<td>Relationship (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>28</td>
<td>28</td>
<td>.522</td>
</tr>
<tr>
<td>Parent</td>
<td>24</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Child</td>
<td>32</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Groups pretty even: There were a greater percentage of female family members in the not present group but no differences in age or relationship to the patient.
Results: Overall Patients (n = 38)

- Age
  - Range 18-87 years
  - Mean 54.4 yrs, SD 24.2 yrs

- Gender
  - 52.6% Female

- Mechanism of Injury
  - 47.3% Falls
  - 36.8% MVC
  - 7.9% MCC
  - 7.9% Other

- ISS 18.54 (SD 9.5)
- GCSa 13.1 (SD 3.2)

The patient population was older with a mean age of 54.4 years and the predominant mechanism was blunt with a high percentage of falls.
## Results: Patient Characteristics and Outcomes

<table>
<thead>
<tr>
<th>Patient Indicator</th>
<th>Present (N=20)</th>
<th>Not Present (N=18)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>56.9 (22.6)</td>
<td>52.8 (23.0)</td>
<td>.526</td>
</tr>
<tr>
<td>GCS</td>
<td>14.24 (1.76)</td>
<td>11.96 (4.64)</td>
<td>.029</td>
</tr>
<tr>
<td>ISS</td>
<td>16.88 (9.42)</td>
<td>20.20 (9.52)</td>
<td>.221</td>
</tr>
<tr>
<td>Time to CT Scan (min)</td>
<td>43.65 (24.17)</td>
<td>45.33 (17.77)</td>
<td>.826</td>
</tr>
<tr>
<td>Vent Days</td>
<td>1.41 (4.46)</td>
<td>2.67 (5.17)</td>
<td>.384</td>
</tr>
<tr>
<td>ICU-LOS</td>
<td>3.50 (5.28)</td>
<td>4.33 (5.62)</td>
<td>.608</td>
</tr>
<tr>
<td>HOS-LOS</td>
<td>8.00 (6.86)</td>
<td>10.92 (6.97)</td>
<td>.160</td>
</tr>
</tbody>
</table>

Looking at the patient data there appeared to be a lower admission GCS in the 18 patients with no family members present, however, age and ISS were not different. Outcome data were not different between the two groups.
RESULTS!!!!!!!!!!!

- Anxiety, satisfaction, and well-being **were not statistically** different in family members present compared to those not present during resuscitation 😞

- Trend towards less anxiety, greater satisfaction and well-being in the present group

- There were NO untoward events or interferences with care during resuscitation efforts.
Results: Family Member Outcomes (Anxiety, Satisfaction, Family Well-Being)

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Mean (SD) Overall</th>
<th>Possible range</th>
<th>Mean (SD) Present</th>
<th>Mean (SD) Not Present</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAI</td>
<td>45.76 (14.9)</td>
<td>20-80</td>
<td>43.84 (14.4)</td>
<td>47.68 (15.5)</td>
<td>0.368</td>
</tr>
<tr>
<td>R-CCFNI</td>
<td>48.37 (5.5)</td>
<td>16-84</td>
<td>49.04 (4.3)</td>
<td>47.65 (6.6)</td>
<td>0.398</td>
</tr>
<tr>
<td>FMWB</td>
<td>37.80 (15.3)</td>
<td>0-80</td>
<td>39.52 (17.2)</td>
<td>36.09 (13.2)</td>
<td>0.431</td>
</tr>
</tbody>
</table>

STAI - State-Trait Anxiety Inventory; R-CCFNI - Revised-Critical Care Family Needs Inventory; FMWB – Family Well-being Index
Aaaahaa moment..........

- They were NOT statistically different😊
18 of the 25 family members who were present during resuscitation commented positively on the experience while none provided negative comments

- “I know my Mother was comforted with me being there”.
- “I held my son’s hand and told him I was here”.
- “My grandmother relaxed when she saw me’.
- THANK YOU for letting me be there!! I would do it again and again!”

In those family members not present - 12 commented that they would have liked to have been present; 1 stated that they would not want to be present.
In Conclusion…………….

- Family members present during trauma resuscitation **suffered no ill psychological effects and scored equivalent** to those family members who were not present on anxiety, satisfaction, and well-being.

- Quality of care during trauma resuscitation was **maintained!!!**

- The fact that all the family members would repeat the experience again supports the idea that FPTR was not too traumatic for those who chose to be present!
Finally... EAST Practice Management Guideline

- EAST Presentation and Journal of Trauma publication in 2010
- “Family Presence During Trauma Resuscitation: Ready for Primetime?”
- 2012- Guideline Chair FPDTR
EAST PMG Development

▪ Purpose: Develop and disseminate evidence-based information to increase the scientific knowledge needed to enhance patient and clinical decision-making and improve the care of injured patients.

▪ Over 50 published PMGs

  • Screening for Blunt Cardiac Injury; Triage of Geriatric Trauma; Management of Adult Pancreatic Injuries; Pain Management for Blunt Thoracic Trauma; Stress Ulcer Prophylaxis
EAST Practice Management Guidelines (PMG)

- Past two decades – clinical guidelines have increased in number and importance for a wide spectrum of conditions
- Many organizations - ACS, SCCM, ACEP, ACCP, AACN, ENA all issue guidelines that impact the care of trauma and critical care patients
- Until 2004 – no universal framework but a working group know as the Grading of Recommendations Assessments, Development and Evaluation (GRADE) group proposed a new single system for the development of PMGs
- 2008 – first GRADE comprehensive guide
- 2012 – Over 90 international societies and organizations use GRADE including EAST!
GRADE Framework

- Systematic and transparent framework for clarifying questions, determining outcomes of interest, summarizing evidence, and moving from evidence to recommendations.
- Evidence is rated for specific clinical outcomes that are important to patients.
- Recommendation strength and direction are based on quality and the balance between outcomes, patient values, and preferences.
- One of the goals of GRADE is to move away from PMGs that rely on expert opinion or biased interpretation of evidence-- towards a single system based upon transparent, systematic literature assessment.
GRADE Stepwise Approach

1. Define a topic of high clinical relevance.

2. Assemble a multidisciplinary and well-balanced team of experts in the relevant clinical topic.
   - All of the team members do not need to have GRADE experience. A GRADE methodologist should be included in the working group. The team subsequently should be educated on GRADE methodology.

3. Frame a PICO (P-patient, I-intervention, C-comparators, O-outcome[s]) question.

4. Conduct a systematic review and meta-analysis of relevant literature each PICO question.

5. Rate evidence using dimensions defined by GRADE: risk of bias, inconsistency, imprecision, indirectness, publication bias, large effect or dose effect of the intervention.

6. Summarize findings in a table format providing an overall quality of evidence rating for each outcome as well as across outcomes.

7. Formulate recommendations as strong or weak/conditional, for or against a management strategy. Consider not only the quality of evidence but also the balance of benefit to harm, patients’ values and preferences as well as resource utilization.
First Step: Deciding on a PMG Topic

- Define a topic of high clinical relevance
  - FP during Resuscitation....OR...
  - FP during Trauma Resuscitation
    - There is a difference!!
    - Are there enough trauma specific studies?
    - Hmmm....several studies conducted with pediatric trauma patients- is this a consideration?
    - Always examined responses with adult patients.
    - Should we include pediatrics?
## Step 2: Assemble a Guideline Team

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Affiliation and expertise (i.e. methodology, trauma, emergency med, ortho, etc.)</th>
</tr>
</thead>
</table>
| Rachel Applebaum, MD, PGY3 | Lehigh Valley Health Network
- trauma, methodology         |
| Michael Pasquale, MD, FACS       | Lehigh Valley Health Network
- trauma, methodology         |
| Tricia Bernecker, PhD, RN       | DeSales University; Lehigh Valley Heath Network
- trauma, methodology         |
| Jane Leske, PhD, RN            | University of Wisconsin, Milwaukee
- trauma, methodology         |
| Stanley Kurek, MD             | University of Southern Florida
- trauma, methodology         |
| Kristine Petre, MLS, AHIP     | Lehigh Valley Health Network
- Senior Medical Librarian    |
Step 3: Formulate the PICO Question

- **P**: Critically injured patients (adult or pediatrics)
- **I**: Presence of family during trauma resuscitation
- **C**: No presence of family
- **O**: Outcomes
  - Resuscitation quality/Interference of care
  - Psychological outcomes (family member and patient)

In critically injured patients, adult and pediatric, (P), does the presence of family during trauma resuscitation (I) as compared to no presence of family (C) affect resuscitation quality and psychological outcomes of family members and patients? (O)?
Step 4: Systematic Review

**Information Sources**
- Medline, CINAHL, DARE, Cochrane Database of Systematic Review, PsycINFO, and Psychology and Behavior Sciences databases; Google Scholar search engine.

**Search Terms**
- Resuscitation, cardiopulmonary resuscitation, presence, present, witness, family, parent, relative, family centered care, visitors to patients, attitude of health professionals, nurse attitudes, professional-family relations, and patient-family relations
- “Family” included individuals who were biologically related, spouses, or close friends

**Study Eligibility**
- Not limited by date; English only articles
- Research studies (RCTs, quasi-experimental and qualitative design, prospective observational, retrospective, or case control) meta-analyses, systematic reviews, existing guidelines
- Studies of adult and pediatric populations (hand review later)
- Studies not limited to trauma resuscitation - also included patients receiving resuscitation for shock and cardiac arrest; included ICUs and EDs
Step 4: Systematic Review cont’d

- Search produced 540 titles from 1987 – 2017; 200 were eliminated because they did not meet study eligibility.

- Case studies, editorials and literature review articles were further excluded.

- Studies conducted in acute care settings with adult patients were included along with relevant studies conducted with pediatric patients. Perceptions of FP conducted outside the hospital (field or home) were excluded.

- 117 studies deemed appropriate for full-text review - focused on FP during resuscitation involving adult (>18 yo) and pediatric patients, their family, physicians and nurses in ICUs, EDs, trauma rooms and general nursing floors in acute care settings.

- Four team members independently assessed the 117 studies for eligibility based on PICO applicability: adult or pediatric trauma patients, FP during TRAUMA resuscitation, and primary outcomes (quality of resuscitation/interference with care, family member and patient psychological outcomes).

- End result - 16 published studies
  - Studies performed nationally and internationally - United States, London, Canada
  - Primarily prospective, cross-sectional, comparative, descriptive designs; 2 RCT's and matched cohort designs; 2 qualitative, 2 observational
GRADE Process

- Translate all data to Evidence Summary Table
- Enter all data into GRADEproGT
  - Tool/software to help with analysis
  - Leads the user through the process of a GRADE assessment by entering the study data and produces a table for quality interpretation
  - 4 specific quality categories: High, Moderate, Low and Very Low (confident in the effect size and findings may be misleading due to study design)

Create recommendations

- The strength of a recommendation “reflects the extent to which we can be confident that the desirable effects of an intervention outweigh the undesirable effects” and quality is assessed
- Implications of recommendations have clinical as well as medico-legal
- GRADE offers only two levels of action strength: Strong or Weak (conditional) recommendation

- Need to achieve consensus to move forward
## GRADE Summary of Findings – Resuscitation Quality

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Conclusion</th>
<th>No of Participants (studies)</th>
<th>Quality/Importance of the evidence (GRADE)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Resuscitation Quality/Interference of Care | One justification cited for not allowing FP is the potential for the interference of care by family at the bedside. No difference between the groups for the time required for key critical care intervention: log-rolling, radiographs, IV access, central line placement, intubation, CT insertion, ‘time to cat scan, or duration in resuscitation times. No differences in time to completion of key components of trauma resuscitation. 2 minor family interruptions reported. **ped lit** No cases of interference were found. HCPs surveyed agreed there was minimal effect on resuscitation. FP was rarely believed to have a negative impact on the ability of the team to make medical decisions, institute patient care, or communicate with patients and families. | 1207 758 Present 449 No FP | Moderate³ ¹⁴ | 7 studies: prospective, observational, cross-sectional designs

Moderate quality evidence suggests that offering FPDTR does not affect resuscitation quality.

The concern of parental/family interference with the delivery of care was unsubstantiated.

Excluding FM as a routine due to provider concerns about the negative impact on clinical care is not warranted.

Limited by small number of trials, their sample sizes and quality. |
## Grade Summary of Findings – Family Member Psych Needs

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Conclusion</th>
<th>No of Participants (studies)</th>
<th>Quality/Importance of the evidence (GRADE)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Family Member Psychological Outcomes | No cases of psychological adverse effects among family members (FMs) who were present, with most satisfied with their decision to remain with the patient. 49 - 97% of FM surveyed expressed desire to be present, stating that it is their right to be present, they would recommend it to others, and would do it again. One large RCT reported that FM who were present had less anxiety, depression and PTSD-related symptoms up to one year (conducted in the home setting). FM describe their presence as an opportunity to provide comfort and be comforted and facilitates the need to be physically near their FM. Believed everything that could have been done for their FM had been done and promoted family bonding. **Critical that FMs are escorted to the resuscitation room by a designated support person that is a separate member of the resuscitation team, therefore they can remain with the FM throughout the event. It is questioned if this support person needs additional training on FP. | 406 369 Present 37 Not Present (6) | ▲ ▲ ▲ ▲ low | 6 studies: prospective, descriptive, survey, observational  
FM desire to be present during during resuscitation.  
Low quality evidence reported no adverse psychological effects among FM present during trauma resuscitation.  
FM satisfied with their decision to remain with the patient and their presence is not detrimental.  
Need adherence to a well-structured FP protocol and family support person.  
Limited by small number of trials, their sample sizes and quality. |
### GRADE Summary of Findings – Patient Psych Needs

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Conclusion</th>
<th>No of Participants (studies)</th>
<th>Quality/Importance of the evidence (GRADE)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Patient Psychological Outcomes | Majority of patients favor having FM present during their resuscitation, even when the fear of traumatic effects is considered. | 216 160 Present 42 Not Present (4) | ☐☐☐☐ low
4 | 4 studies: 1 was of patients who had a resuscitative event (case/control cohort). The other 3 captured the patient’s perceptions via survey or interview. Low quality evidence documents the powerful voice of the patient and their desire to have and choose if they want family present. Raises minor concern about having an open policy of routinely allowing family members into a resuscitation without prior knowledge of patient’s preferences. Limited by small number of trials, their sample sizes and quality. |
<p>|         | Limited concern for confidential matters being discussed when FM are present.             |                              |        |
|         | Patients believe it is their right and want the option to “CHOOSE”, if possible, if they want family present and to select which FM. Patients recognized that FM have emotional, informational and proximity needs, but these have to be balanced with allowing the resuscitation team to manage the resuscitation and make decisions. |                              |        |
|         | Patients believe that FP is beneficial to the FM. It provides them comfort and helps them cope with the situation. FP promotes family bonding. |                              |        |
|         | The FM’s presence also reminds caregivers of the patient’s personhood. Family can act as advocates and provide important information to the HCP. |                              |        |</p>
<table>
<thead>
<tr>
<th>Outcome</th>
<th># of Studies/Design</th>
<th>Risk of Bias</th>
<th>Inconsistency</th>
<th>Indirectness</th>
<th>Imprecision</th>
<th>Quality</th>
<th>Importance</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation Quality/Interference with Care</td>
<td>N = 7 2 Survey 3 Qual</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Low</td>
<td>Critical</td>
<td>High support for family presence</td>
</tr>
<tr>
<td>Family Member Psychological Outcomes</td>
<td>N = 6 2 Survey 2 Qual</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Low</td>
<td>Important</td>
<td>High support for family presence</td>
</tr>
<tr>
<td>Patient Psychological Outcomes</td>
<td>N = 3 2 Survey 2 Qual</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Not serious</td>
<td>Low</td>
<td>Important</td>
<td>Moderate support for family presence</td>
</tr>
</tbody>
</table>
Recommendations

- There is NO documented evidence that FPDTR does not affect resuscitation quality.
- The concern of parental/family interference with the delivery of care was unsubstantiated.
- Excluding FM as a routine due to provider concerns about the negative impact on clinical care is not warranted.

- **FPDTR should be offered as an option to appropriate FMs and should be based on written institutional policy.** (strong)
- **Comprehensive education and support training for staff and students should be developed that focus on providing the option of FP to FMs.** (strong)
- **An experienced and trained family support person should remain present with FM throughout and after the resuscitation, explaining procedures and answering any questions.** (strong)
- **Systematic and psychological debriefing of these events should be performed to allow HCPs to express possible stress.** (strong)
Recommendations

- Evidence shows that FMIs want to be offered the option to be present during resuscitation and/or invasive procedures of a FM.
- There is no evidence to indicate that FPDTR is detrimental to the FM.
  - **HCPs should provide family members with information to enable them to make an informed choice regarding FP and provide support in whatever choice they make.** (strong)
  - **Families may need to debrief afterwards and follow up counseling should be offered to FM who have witnessed resuscitation attempts.** (strong)
Recommendations

▪ Evidence indicates that patients desire the right to determine whether they would prefer to have FM present during resuscitation and/or invasive procedures as well as which FM.

▪ There is limited evidence that there may be perceived patient benefits related to personhood and comfort when FM are present.

▪ There is limited evidence that there may be perceived benefits related to the patient’s perception of family comfort and coping.

▪ **HCPs should strive to identify the wishes of the patients with respect to FPDTR and facilitate the presence of FM as deemed appropriate.** (strong)
Limitations

▪ Most of the studies in this review are descriptive, qualitative, or observational in nature.
▪ Sample sizes are small, demographics of the sample are not always described, and there are methodological flaws that make interpretation difficult.
▪ Research of an experimental design is needed to study the short and long term effects of FP on patients, families and quality of care.
▪ There are numerous variables that influence the results of each of the studies, thus the context for study eligibility may need to be refined prior to future interpretation of the findings.
▪ There is marked difference in HCP attitudes across the globe and it will need to be decided if this literature should remain in the development of this guideline. However, this practice continues to be debated internationally, therefore it was essential to provide a world’s lens for this review.
In conclusion...

- FPDTR is not detrimental to the patient care and may facilitate understanding and emotional adjustment of patients and FM.
- FPDTR is supported in the literature with evidence that the benefits outweigh any potential disadvantages.
- FPDTR should be offered as an option to appropriate family members and should be based on written institutional policy.
- Family support personnel should be present during FP.
- Institutional settings need to develop policies and procedures on FP to provide a clear path and minimize individual decision making by providers.
- Staff from multiple disciplines should be involved, and guidelines from professional organizations can serve as a starting point for discussion.
**Last thoughts**....

Family members must not be viewed as an added complication but as an extension and reflection of the patient’s life. The need to say goodbye before it is too late should be regarded as an innate response to the death of a family member.

Resuscitation teams seem to take for granted that they are often the last people to be in the presence of a dying person. Being present during these final moments is a privilege, not a side effect of an arrest protocol.

Sharing this privilege may be the greatest comfort healthcare professionals can offer a grieving relative.” (3<sup>rd</sup> year medical student)
Questions?

Contact Information:

Mae Ann Pasquale, PhD, RN
mpasqual@cedarcrest.edu
610-606-4606, ext. 3624