

# An integrative review of the effect of Family Rounds in adult ICU on patient & family outcome

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# Background



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Patient, family-centred care interventions within the adult ICU setting: An integrative review

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## A Systematic Review of Evidence-Informed Practices for Patient Care Rounds in the ICU\*

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### PERSPECTIVE

#### Family Presence on Rounds in Neonatal, Pediatric, and Adult Intensive Care Units

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# Aims

To extend the knowledge and understanding of FCC by synthesizing empirical evidence of family ward rounds within the adult ICU setting.

## Research Questions:

1. What is the involvement of family members in the ward round in adult ICUs?
2. What is the impact of family members' involvement in the ward rounds in adult ICUs on patient and family care?



# Family Centre Care definition

- ▶ A dynamic, values-based approach to health care, respectful of and responsive to individual families' needs and values, where therapeutic relationships are formed and fostered between HCP, FM and patients (Davidson et al 2017)

# Methods

- Integrative Methodological Framework (Whitemore & Knafl 2005)
- 1st search June 2017, 2<sup>nd</sup> search August 2018
- Databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), U.S. National Library of Medicine (PUBMED and MEDLINE), Excerpta Medica database (EmBase), PROQUEST, Joanna Briggs, PsychInfo, Cochrane Library and Web of Science (Core collection and Current contents)
- No date restriction, no language restriction
- Hand searching of references
- Quality appraisal MMAT tool, version 2011
- Registered in Prospero

# Inclusion and exclusion criteria

Search elements	Inclusion criteria	MESH terms UNIVERSITY
Population	<p>Adults &gt; 18 years old, critically ill patients and/or their family regardless of LOS in ICU</p> <p>Family members in ward rounds in ICU. Family members were considered someone with a lasting relationship with the patient.</p> <p>Exclusion: Paediatric ICUs/ wards, General wards End-of-life care</p>	<p>“next of kin”, relative, “loved one”, carer, family, “family member”, “significant other” “critically ill patients”</p>
Intervention	<p>Any interventions identifiable as falling within the term family involvement in rounds. May include nursing interventions, bundles, QI initiatives, strategies, interactions</p>	<p>“round*”, “teaching round*”</p>
Comparison or control groups	<p>Usual care, normally described as clinicians’ ward round or medical ward round. May include a control/ usual care/comparison group.</p>	
Outcomes of interest	<p>All outcomes related to patient and/or family, staff, treatment, nursing care, clinical outcomes. Can include outcomes in ICU or any time after ICU.</p>	
Setting	<p>Any type of ICU/ HDU</p>	<p>“critical care unit”, “high dependency unit”, “critical care nursing”</p>
Study designs	<p>All designs including RCTs, non-RCTs, cohort studies, qualitative studies, mixed methods studies.</p>	

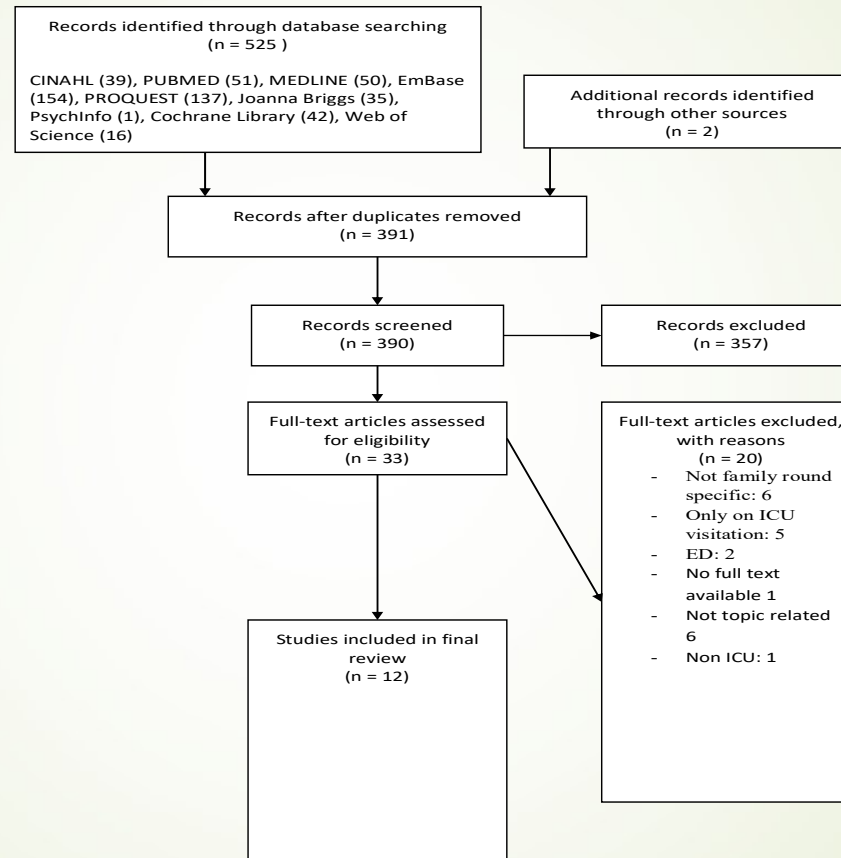
# Data collection & analysis

- Data extraction by KK & MT, 3<sup>rd</sup> reviewer MM
- Data extraction tool
- Methodological Quality assessment: MMAT score (Pluye et al 2011)
- Data analysis: Thematic analysis
- NVivo 10, coding framework

# Findings

Identification  
Screening  
Eligibility  
Included

## Systematic search results





# Findings

- 12 studies included
- MMAT score: 2 with 100% (Jacobowski et al, Santiago et al), 5 with 75% (Whysham et al, Ingram et al, Holodinski et al, Reeves et al, Stelson & Anderson), 4 with 50% (Allen et al, Au et al, Schiller et al, Mangram et al), 1 with 25% (Cao et al)
- All studies were from two countries: 8 from USA, 4 from Canada.
- Multiples designs: 3 before and after, 6 cross-sectional surveys, 2 qualitative studies, 1 prospective parallel group study.

# Findings

- Settings:
  - 1 ICU (Jacobowski et al, Wysham et al, Mangram et al, Stelson et al, Cao et al, Allen et al, Ingram et al, Santiago et al)
  - 2 ICUs (Schiller et al)
  - 4 ICUs (Au et al, Reeves et al)
  - 111ICUs (Holodinski et al)
- Sample: FM & patients (20 – 114), HCP (10 – 335)
  - 3 studies only FM (Jacobowski et al, Whysham et al, Mangram et al)
  - 5 studies only HCP (Allen et al, Ingram et al, Santiago et al, Holodinski et al, Reeves et al)
  - 4 studies both FM/patients & HCP (Au et al, Schiller et al, Stelson & Anderson, Cao et al)
  - Patients ICULOS>24h
  - Not distinguishing between MV and non-MV (only Cao et al mentioned 53% patients on MV)
  - FM were female (44% - 91%) and spouses (27% - 56%)

# Before/ After studies

Study	Intervention/ Practice	Main findings	MMAT score
Allen et al/ 2017/ USA	FM formally invited to round (8-12pm)	Communication with FM, FM satisfaction and FM knowledge of care improved significantly. FM meetings outside rounds decreased.	50%
Jacobowski et al/ 2010/ USA	FM formally invited to round. Opportunity to ask questions.	Frequency of communication and feeling supported in decision-making increased significantly. Time available for questions decreased. No changes to overall satisfaction of FM.	100%
Whysham et al/ 2014/ USA	Implementation of VALUE mnemonic to improve communication with FM in rounds.	Daily updates with FM, documentation of goals, FM conference rate increased significantly post-intervention and at 3 year follow-up. No change in FM satisfaction.	75%

# Cross-sectional surveys

Study	Intervention/ Practice	Main findings	MMAT score
Au et al/ 2017/ Canada	FM formally invited to rounds	FM expressed high interest to participate, unlike HCP estimation. HCP perceived FM involvement stressful and restricted FM role in listening & sharing information, no involvement in discussion and Decision-making	50%
Ingram et al/ 2014/ USA	No structured participation of FM in rounds	HCP participating in FR had positive experience and perception of effect on patient outcome. No differences regarding efficiency of rounds and teaching time between groups.	75%
Santiago et al/ 2014/ Canada	No structured participation of FM in rounds	Experienced RN expressed great reservation to involve FM in rounds compared to MD. Agreement that FR increase duration of rounds and reduce medical education.	100%
Schiller & Anderson/ 2003/ USA	Structured participation in rounds	Improved FM-HCP relationship, less stress for FM, less hostility and system dysfunction, improved FM knowledge of care, improved RN satisfaction with communication.	50%
Mangram et al/ 2015/ USA	Structured participation in rounds	Increased FM satisfaction with involvement, improved communication and FM-HCP relationship.	50%
Holodinski et al/ 2015/ Canada	Family rounding practices	Common issues: Inconsistencies in FM rounds, interruptions, reduced productivity, unidentified leadership and roles, inadequate communication tools, reduced time for teaching.	75%

# Qualitative studies

Studies	Intervention/ Practice	Main findings	MMAT score
Reeves et al/ 2015/ USA	FM invited to participate in rounds. No structured participation.	Factors impacting on teamwork during Family rounds are: Relational, Processual, Organizational, Contextual.	75%
Stelson et al/ 2016/ USA	FM invited to participate in rounds. No structured participation.	Barriers identified: Inconsistencies in rounding practices, medical terms comprehension, FM fear to be bothersome, logistical reasons, communication approaches, duration in ICU.	75%

# Prospective parallel group study

Study	Intervention/ Practice	Main findings	MMAT score
Cao et al/ 2018/ Canada	PCSIBR vs non-structured IBR	Total rounding and interruption time significantly shorter on PCSIBR compared to non-structured IBR. Improved communication of care plans, increased input from medical team, clarity on task assignments and teaching opportunities improved. No difference in FM satisfaction between the groups.	25%

# Themes

Theme	Sub-themes
Interactions	Situational awareness & involvement in decision-making Advancing emotional experience
Organization of rounds	Structure and processes of rounds Roles in rounds Use of Communication tools
Culture	Value in FCR Barriers in FCR (teamwork, Socio-economic elements, logistical considerations)

## Take home messages

- ▶ Limited emerging evidence highlighting increased variability in FCR practices.
- ▶ Commonly, family role is limited.
- ▶ Inexistent evidence to evaluate impact of FCR on patient outcome.
- ▶ Limited and moderate quality of evidence that support increased family satisfaction and communication with FCR.
- ▶ Our emerging conceptual framework may inform future practice and research.



Thank you!

