### Supplementary material 2: Evidence base for Schwartz Rounds

Adapted from Taylor C, Xyrichis A, Leamy MC, Reynolds E, Maben J. Can Schwartz Centre Rounds support healthcare staff with emotional challenges at work, and how do they compare with other interventions aimed at providing similar support? A systematic review and scoping reviews. *BMJ Open* 2018;8:e024254. This is an open access article distributed in accordance with the Creative Commons Attribution 4.0 Unported (CC BY 4.0) license, which permits others to copy, redistribute, remix, transform and build upon this work for any purpose, provided the original work is properly cited, a link to the licence is given, and indication of whether changes were made. See: [https://creativecommons.org/licenses/by/4.0/](https://creativecommons.org/licenses/by/4.0/)

#### Data extracted from included papers

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| Corless et al (2009)  | Educational, USA | Development, implementation and evaluation of Educational Rounds for an interdisciplinary group of graduate students to help them learn empathy, self-reflection and moral courage | Quantitative post-Round evaluation survey Graduate students. Over a 4-years comprising 11 Rounds (n=329 individual evaluations) | Survey included 7 statements about Rounds (according to agreement on a 5-point Likert scale) plus an overall rating of the quality of the Round they are evaluating. | **Overall**
High support and satisfaction with Rounds (e.g. 86% rated Rounds as excellent or exceptional).
67% stated intention to attend future Rounds (range 57-93% for individual Rounds). Lowest intention from a Round presented by lab scientists. Highlighted importance of topic to encourage attendance. | Quantitative:
Low/Moderate: due to many aspects unclear e.g. sampling, measures, not all data presented. |
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| Manning et al (2008)² | Hospitals, USA | To assess the impact of Rounds e.g. changes in attendees behaviours and beliefs about patient care, teamwork, stress and personal support | Mixed method evaluations                                                        | Study-specific (non-standardised/validate, though some adapted from published measures) Likert scale measures to investigate: 1) insights into psychosocial and emotional aspects of clinical care on patient interactions (15 items) 2) teamwork (9 items) 3) support for providers (number of items not mentioned) | Overall  
Found “dose” effect: more rounds attended, more impact they have.  
Self  
Attendance at Rounds associated with decreased stress and improved ability to cope with psychosocial demands/emotional difficulties at work.  
Others  
Rounds attendance led to increased patient interaction and teamwork scores. Interviews highlighted benefits including: getting to know colleagues and putting themselves in their shoes, and an improved sense of connection/shared purpose.  
Organisation  
Both samples (51% retrospective; 40% prospective) reported changes in practices/policies including: culture change (dialogue that doesn’t happened elsewhere); focus on patient-centred care; practice changes (e.g. increased/earlier palliative care use) | Quantitative: Moderate due to lack of control group (non-attenders) and non-standardised measures.  
Qualitative: Moderate due to limited reporting of theoretical underpinnings and strategies to improve rigour (e.g. deviant case analysis)  
Low for mixed method reporting |
<p>| Lown et al (2010)³ |            |                                                                              |                                                                                  |                                                                          |                                                                                                  |                                                                                               |</p>
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| Goodrich (2011)<sup>4</sup> | Two hospitals, UK       | Pilot study to evaluate introduction of Rounds to UK in 2 hospital sites.    | Mixed methods evaluation over 2 year period:                                       | Used same questionnaires as Lown et al. (2010)<sup>3</sup>            | **Overall**  
Majority (86% site A, 78% site B) rated rounds as excellent/good.  
**Self**  
- Increases (pre-post) in:  
  - confidence in handling sensitive issues  
  - beliefs in the importance of empathy  
  - confidence in handling non-clinical aspects of care  
  Also reported feeling less stressed and less isolated in their work.  
  Interview findings: increased compassion, reduced stress  
**Others**  
Increases (pre-post) in:  
- actual empathy with patients  
- openness to expressing thoughts, questions and feelings about patient care with colleagues  
  Interview findings: greater respect/empathy for colleagues, better teamwork/collaboration  
**Organisation**  
Interview findings:  
- Board/senior support important  
- Wider impacts: reduced hierarchy, help build shared values/support strategic vision.  
| Quantitative: Moderate due to limitations in measures used and lack of control group |
| Goodrich (2012)<sup>5</sup> | Two hospitals, UK       | Pilot study to evaluate introduction of Rounds to UK in 2 hospital sites.    | Mixed methods evaluation over 2 year period:                                       | Used same questionnaires as Lown et al. (2010)<sup>3</sup>            | **Overall**  
Majority (86% site A, 78% site B) rated rounds as excellent/good.  
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  Interview findings: greater respect/empathy for colleagues, better teamwork/collaboration  
**Organisation**  
Interview findings:  
- Board/senior support important  
- Wider impacts: reduced hierarchy, help build shared values/support strategic vision.  
| Qualitative: Moderate due to low reporting of strategies to improve rigour and theoretical underpinnings |

3) Qualitative interviews: Experience of attenders, steering group, panelist, facilitators (n=23). Second interview at end with n=13.
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<tr>
<td>Reed et al (2015)</td>
<td>Hospice, UK</td>
<td>Evaluate the impact of Rounds on staff and the organisation</td>
<td>Longitudinal mixed methods evaluation (1 year): survey and focus groups</td>
<td>5-point Likert scale assessing:</td>
<td><strong>Overall</strong> 78% rated Rounds as excellent or exceptional</td>
<td>Quantitative: Moderate, key issues included non-validated measures and lack of control</td>
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<td>Exit survey: 398/535 (74%) attendees)</td>
<td>Topic relevance, knowledge gained, impact on individual, facilitation and working relationships</td>
<td><strong>Self</strong> - Focus groups: - Validation of experiences - Honesty, openness and vulnerability allowed others to see person on human level</td>
<td>Quality: Moderate due to lack of elements of rigour in qualitative component (e.g. reflexivity, contradictory/deviant cases other than non-attenders)</td>
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<td>4 interprofessional focus groups (n=33, including attendees, non-attendees and presenters)</td>
<td>(Similar questions to Lown &amp; Manning, 2010/Goodrich, 2011).</td>
<td><strong>Others</strong> 87% gained insight into how others think/feel in caring for patients - Focus groups: - Fostered understanding of importance of non-clinical staff contribution - BUT non-attenders felt responsibility to smooth running of hospice and felt they contributed to wider team without needing to hear stark realities of care/work.</td>
<td>Low for mixed method reporting</td>
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<td><strong>Organisation</strong> - Focus groups: - More connected, shared purpose</td>
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| Deppoliti et al  | Hospital, USA   | - Learn why people attend Rounds  
- Understand what is gained from the experience  
- Identify key elements to use in measuring effectiveness | Qualitative: 4 focus groups (n=27) and 3 telephone interviews  
Purposive sampling of attenders by steering group to represent those that were active contributors and included range of roles/professions and frequency (low and high attenders). | N/A      | **Overall**  
Rounds viewed as beneficial.  

**Self**  
- personal impact (on behaviour/attitudes “think differently”)  

**Others**  
- exposing emotions (increased appreciation, awareness and sensitivity of what others in the healthcare team experience)  
- walking in another’s shoes (empathic awareness)  

**Organisation**  
- culture change (strong message that staff matter; values/beliefs/ norms evolved positively; not about productivity; improved teamwork due to level playing field).  

**Other findings:**  
- inequality of topics (some topics more than others lead to increased learning, growth)  
- influence of rules and boundaries (spoken/unspoken rules about what is acceptable to share)  

**Suggested improvements:**  
- providing list of upcoming topics so staff can plan attendance  
- providing anonymised method to contribute (eg Qs on cards) | Qualitative: High |
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<td>George (2016)</td>
<td>Hospital, UK</td>
<td>To examine the impact of Schwartz Rounds on staff wellbeing and patient care</td>
<td>Mixed methods</td>
<td>The Organisational Response to Emotions Scale (ORES) (investigator-designed): 9 scales</td>
<td><strong>Self</strong>&lt;br&gt;- Emotional Labour: significantly reduced in staff where pre-round was their first round.&lt;br&gt;- Self-reflection increased pre-post</td>
<td>Quantitative:&lt;br&gt;Moderate because of small biased sample, lack of control group, measure based on limited staff group input (nurses/HCA only). Qualitative: Moderate due to limited reporting of elements of rigour (e.g. audit trail, theoretical saturation)</td>
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<td>Interviews with staff (nurses and HCAs) about stress (n=11, 10 were female, 10 were white British)</td>
<td>Analysis controlled for whether it was first ever Round, length of time in role, session attended.</td>
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<td>High for mixed methods reporting</td>
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<td>Key themes extracted using grounded theory ➔ development of a new measure administered at the beginning and end of 2 Rounds (n=55 forms completed) Mostly female, white and only 2 were over 59yrs old.</td>
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| Shield et al (2011) | Medical school, USA | To improve communication skills, they designed “Schwartz Communication Sessions” Aimed to provide medical students with the rationale and proficiency for effective communication. | Quantitative: evaluation form (both quant and qual/content analysis). Sampling is unclear (a sample of 92, 99 and 94 are reported) but report having evaluation forms from 66-95% of students for all three sessions (71-80% for two sessions) and Faculty members (n=24) response rate 42-92% | Not specified (but appear similar to Lown & Manning, 2010)³ | **Overall**
93% of faculty and 83% of students rated the sessions as good, excellent or exceptional

**Self**
80% of students and 96% of faculty believe students gained knowledge that will help them care for patients

**Others**
75% of students and 96% of faculty believe the sessions will help students communicate better with patients and family members | Quantitative: Moderate due to lack of clarity regarding sampling/sample and measures |


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<td>Gishen et al (2016)</td>
<td>Medical school, UK</td>
<td>Examine the potential of Rounds within the undergraduate curriculum</td>
<td>Mixed method evaluation</td>
<td>Feedback form from the Point of Care Foundation; plus free text comments. Questions either Yes/No or 5-point Likert rating scale (1= poor to 5 = exceptional)</td>
<td><strong>Overall</strong>&lt;br&gt;Mean student ratings of a session were 3.5/5 (year 5) and 3.3/5 (year 6)&lt;br&gt;- 81% agreed/strongly agreed the presentation of cases was helpful&lt;br&gt;- 80% would attend a future Round&lt;br&gt;- 64% agreed Rounds should be integrated into the curriculum&lt;br&gt;&lt;br&gt;<strong>Self</strong>&lt;br&gt;- 69% year 5 vs 87% year 6 students were worried about compassion fatigue or burnout&lt;br&gt;- 92% agreed/strongly agreed that they appreciated hearing stories demonstrating human side of medicine&lt;br&gt;- Focus group finding: Psychological aspects of SCR (psychological pressures of medicine, how session encouraged positive processing of emotion, sharing personal stories between health professionals).</td>
<td>Quantitative:&lt;br&gt;Moderate due to convenience sampling approach and lack of control group&lt;br&gt;&lt;br&gt;Qualitative:&lt;br&gt;Moderate due to limited reporting of measures taken to enhance rigour&lt;br&gt;&lt;br&gt;Low for mixed methods reporting.</td>
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<td>Gishen et al (2016) contd</td>
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<td>82% agreed/strongly agreed that attending Round gave insight into how others feel/think about caring for patients</td>
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### References

   Goodman Research Group Inc: Boston USA; 2008.