

## 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/>

### Data extracted from included papers

Authors	Setting	Aims/purpose	Design/methodology	Measures	Main findings	Quality
Corless et al (2009) <sup>1</sup>	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.	<b>Overall</b> 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) <sup>2</sup> Lown et al (2010) <sup>3</sup>	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  - Retrospective survey of 256/413 (62%) attenders at 6 experienced Rounds sites (offering Rounds for 3+years) plus 44 interviews with providers, Rounds leaders, facilitators and hospital administrators.  - Prospective pre-post web-based survey of 222/399 (56%). Rounds attenders from 10 hospitals newly implementing Rounds (had held 7 or more Rounds)	Study-specific (non-standardised/validated, 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)	<b>Overall</b> Found “dose” effect: more rounds attended, more impact they have. <b>Self</b> Attendance at Rounds associated with decreased stress and improved ability to cope with psychosocial demands/emotional difficulties at work. <b>Others</b> 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. <b>Organisation</b> 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

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Goodrich (2011) <sup>4</sup> 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:  1) Pre-post pilot surveys  2) Evaluation forms from each Round (quality, logistics, demographics, plans to attend future Rounds). Each site held 10 Rounds (n=301 attenders site A, 74% completed evaluation form; n=949 at site B, 69% completed evaluation form).  3) Qualitative interviews: Experience of attenders, steering group, panellist, facilitators (n=23). Second interview at end with n=13.	Used same questionnaires as Lown et al. (2010) <sup>3</sup>	<p><b>Overall</b></p> <p>Majority (86% site A, 78% site B) rated rounds as excellent/good.</p> <p><b>Self</b></p> <ul style="list-style-type: none"> <li>- Increases (pre-post) in:</li> <li>- confidence in handling sensitive issues</li> <li>- beliefs in the importance of empathy</li> <li>- confidence in handling non-clinical aspects of care</li> </ul> <p>Also reported feeling less stressed and less isolated in their work.</p> <p>Interview findings: increased compassion, reduced stress</p> <p><b>Others</b></p> <p>Increases (pre-post) in:</p> <ul style="list-style-type: none"> <li>- actual empathy with patients</li> <li>- openness to expressing thoughts, questions and feelings about patient care with colleagues</li> </ul> <p>Interview findings: greater respect/empathy for colleagues, better teamwork/collaboration</p> <p><b>Organisation</b></p> <p>Interview findings:</p> <ul style="list-style-type: none"> <li>- Board/senior support important</li> <li>- Wider impacts: reduced hierarchy, help build shared values/support strategic vision.</li> </ul>	<p>Quantitative: Moderate due to limitations in measures used and lack of control group</p> <p>Qualitative: Moderate due to low reporting of strategies to improve rigour and theoretical underpinnings</p> <p>Low for mixed methods reporting</p>

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Reed et al (2015) <sup>6</sup>	Hospice, UK	Evaluate the impact of Rounds on staff and the organisation	Longitudinal mixed methods evaluation (1 year): survey and focus groups  Exit survey: 398/535 (74% attendees)  4 interprofessional focus groups (n=33, including attendees, non-attendees and presenters)	5-point Likert scale assessing:  Topic relevance, knowledge gained, impact on individual, facilitation and working relationships  <i>(Similar questions to Lown &amp; Manning, 2010/Goodrich, 2011).</i>	<p><b>Overall</b> 78% rated Rounds as excellent or exceptional</p> <p><b>Self</b></p> <ul style="list-style-type: none"> <li>- Focus groups:</li> <li>- Validation of experiences</li> <li>- Honesty, openness and vulnerability allowed others to see person on human level</li> </ul> <p><b>Others</b> 87% gained insight into how others think/feel in caring for patients</p> <ul style="list-style-type: none"> <li>- Focus groups:</li> <li>- Fostered understanding of importance of non-clinical staff contribution</li> <li>- 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.</li> </ul> <p><b>Organisation</b></p> <ul style="list-style-type: none"> <li>- Focus groups:</li> <li>- More connected, shared purpose</li> </ul>	<p>Quantitative: Moderate, key issues included non-validated measures and lack of control</p> <p>Qualitative: Moderate due to lack of elements of rigour in qualitative component (e.g. reflexivity, contradictory/deviant cases other than non-attenders)</p> <p>Low for mixed method reporting</p>

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Deppoliti et al (2014) <sup>7</sup>	Hospital, USA	<ul style="list-style-type: none"> <li>- Learn why people attend Rounds</li> <li>- Understand what is gained from the experience</li> <li>- Identify key elements to use in measuring effectiveness</li> </ul>	<p>Qualitative: 4 focus groups (n=27) and 3 telephone interviews</p> <p>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).</p>	N/A	<p><b>Overall</b></p> <p>Rounds viewed as beneficial.</p> <p><b>Self</b></p> <ul style="list-style-type: none"> <li>- personal impact (on behaviour/attitudes “think differently”)</li> </ul> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>- exposing emotions (increased appreciation, awareness and sensitivity of what others in the healthcare team experience)</li> <li>- walking in another’s shoes (empathic awareness)</li> </ul> <p><b>Organisation</b></p> <ul style="list-style-type: none"> <li>- culture change (strong message that staff matter; values/beliefs/ norms evolved positively; not about productivity; improved teamwork due to level playing field).</li> </ul> <p><b>Other findings:</b></p> <ul style="list-style-type: none"> <li>- inequality of topics (some topics more than others lead to increased learning, growth)</li> <li>- influence of rules and boundaries (spoken/unspoken rules about what is acceptable to share)</li> </ul> <p><i>Suggested improvements:</i></p> <ul style="list-style-type: none"> <li>- providing list of upcoming topics so staff can plan attendance</li> <li>- providing anonymised method to contribute (eg Qs on cards)</li> </ul>	Qualitative: High

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George (2016) <sup>8</sup>	Hospital, UK	To examine the impact of Schwartz Rounds on staff wellbeing and patient care	<p>Mixed methods</p> <p>Interviews with staff (nurses and HCAs) about stress (n=11, 10 were female, 10 were white British)</p> <p>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.</p>	<p>The Organisational Response to Emotions Scale (ORES) (investigator-designed): 9 scales</p> <p>Analysis controlled for whether it was first ever Round, length of time in role, session attended.</p>	<p><b>Self</b></p> <ul style="list-style-type: none"> <li>- Emotional Labour: significantly reduced in staff where pre-round was their first round.</li> <li>- Self-reflection increased pre-post</li> </ul> <p>Compared SCR attenders with 10/11 interviewees who also completed ORES (did not attend Rounds). Found non-attenders had higher burnout and emotional labour, and more negative appraisal of organisation.</p> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>- More negative appraisal of line manager</li> </ul>	<p>Quantitative:</p> <p>Moderate because of small biased sample, lack of control group, measure based on limited staff group input (nurses/HCA only).</p> <p>Qualitative: Moderate due to limited reporting of elements of rigour (e.g. audit trail, theoretical saturation)</p> <p>High for mixed methods reporting</p>

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Shield et al (2011) <sup>9</sup>	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) <sup>3</sup>	<p><b>Overall</b></p> <p>93% of faculty and 83% of students rated the sessions as good, excellent or exceptional</p> <p><b>Self</b></p> <p>80% of students and 96% of faculty believe students gained knowledge that will help them care for patients</p> <p><b>Others</b></p> <p>75% of students and 96% of faculty believe the sessions will help students communicate better with patients and family members</p>	Quantitative: Moderate due to lack of clarity regarding sampling/sample and measures

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Gishen et al (2016) <sup>10</sup>	Medical school, UK	Examine the potential of Rounds within the undergraduate curriculum	<p>Mixed method evaluation</p> <p>2 student-focused Rounds were piloted at a medical school (1 Round each for year 5 and 6 students)</p> <p>Evaluation questionnaire immediately following the Rounds: 258/334 (77%) year 5 students attended the Round and 247 (94%) responded.</p> <p>180/343 (52%) year 6 students attended the Round and 126 (70%) responded.</p> <p>Focus group (n=7 year 5 students) to explore student views on the Round</p>	<p>Feedback form from the Point of Care Foundation; plus free text comments.</p> <p>Questions either Yes/No or 5-point Likert rating scale (1= poor to 5 = exceptional)</p>	<p><b>Overall</b></p> <p>Mean student ratings of a session were 3.5/5 (year 5) and 3.3/5 (year 6)</p> <ul style="list-style-type: none"> <li>- 81% agreed/strongly agreed the presentation of cases was helpful</li> <li>- 80% would attend a future Round</li> <li>- 64% agreed Rounds should be integrated into the curriculum</li> </ul> <p>Focus group finding: Feelings about the Round (response to round, size of audience- large inhibiting, positive comparison to current reflective practice; post event peer discussions)</p> <p><b>Self</b></p> <ul style="list-style-type: none"> <li>- 69% year 5 vs 87% year 6 students were worried about compassion fatigue or burnout</li> <li>- 92% agreed/strongly agreed that they appreciated hearing stories demonstrating human side of medicine</li> <li>- Focus group finding: Psychological aspects of SCR (psychological pressures of medicine, how session encouraged positive processing of emotion, sharing personal stories between health professionals).</li> </ul>	<p>Quantitative:</p> <p>Moderate due to convenience sampling approach and lack of control group</p> <p>Qualitative:</p> <p>Moderate due to limited reporting of measures taken to enhance rigour</p> <p>Low for mixed methods reporting.</p>



Authors	Setting	Aims/purpose	Design/methodology	Measures	Main findings	Quality
Gishen et al (2016) contd					Others 82% agreed/strongly agreed that attending Round gave insight into how others feel/think about caring for patients	

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