Co-construction of the Family-Focused Support Conversation: A Participatory Learning and Action Research Study to implement support for family members whose relatives are being discharged for end-of-life care at home or in a nursing home

Sue Duke<sup>1</sup>, School of Health Sciences, University of Southampton, Highfield, SO17 1BJ England sd11@soton.ac.uk

Natasha Campling, School of Health Sciences, University of Southampton, Highfield, SO17 1BJ, England

Carl R May, Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine, 15-17 Tavistock Place, London, WC1H 9SH, England

Susi Lund, School of Health Sciences, University of Southampton, Highfield, SO17 1BJ, England

Neil Lunt, Department of Social Policy and Social Work, University of York, Heslington, York, YO10 5DD, England

Hospital to Home Co-researcher group

Alison Richardson, University Hospitals Southampton and School of Health Sciences, University of Southampton, Highfield, SO17 1BJ, England

<sup>&</sup>lt;sup>1</sup>Corresponding author

# **Abstract**

## Background

Many people move in and out of hospital in the last few weeks of life. These care transitions can be distressing for family members because they signify the deterioration and impending death of their ill relative and forthcoming family bereavement. Whilst there is evidence about psychosocial support for family members providing end-of-life care at home, there is limited evidence about how this can be provided in acute hospitals during care transitions. Consequently, family members report a lack of support from hospital-based healthcare professionals.

#### Methods

The aim of the study was to implement research evidence for family support at the end-of-life in acute hospital care. Informed by Participatory Learning and Action Research and Normalization Process Theory (NPT) we co-designed a context-specific intervention, the Family-Focused Support Conversation, from a detailed review of research evidence. We undertook a pilot implementation in three acute hospital Trusts in England to assess the potential for the intervention to be used in clinical practice. Pilot implementation was undertaken during a three-month period by seven clinical co-researchers - nurses and occupational therapists in hospital specialist palliative care services. Implementation was evaluated through data comprised of reflective records of intervention delivery (n=22), indepth records of telephone implementation support meetings between research team members and co-researchers (n=3), and in-depth evaluation meetings (n=2). Data were qualitatively analysed using an NPT framework designed for intervention evaluation.

#### Results

Clinical co-researchers readily incorporated the Family-Focused Support Conversation into their everyday work. The intervention changed family support from being solely patient-focused, providing information about patient needs, to family-focused, identifying family concerns about the significance and implications of discharge and facilitating family-focused care. Co-researchers reported an increase in family members' involvement in discharge decisions and end-of-life care planning.

#### Conclusion

The Family-Focused Support Conversation is a novel, evidenced-based and context specific intervention. Pilot implementation demonstrated the potential for the intervention to be used in acute hospitals to support family members during end-of-life care transitions. This subsequently informed a larger scale implementation study.

Trial registration n/a

# Key words

- End-of-life care
- Family support
- Family-Focused Support Conversation
- Family Sense of Coherence
- Acute hospitals
- Normalization Process Theory
- Participatory Learning and Action Research
- Implementation

## Background

For many, the end-of-life is characterised by movement between hospital and home or nursing home, particularly in the last few weeks of life<sup>1</sup>. End-of-life care transitions can be practically and emotionally difficult for family members<sup>2</sup>. They signify the certainty of impending death<sup>3</sup> and evoke many uncertainties about the future, including care after discharge<sup>4</sup>. Thus, care transitions are a 'critical time' during which family members need additional support and information<sup>5</sup> and an opportunity for health and social care professionals to identify and respond to this need.

However, family members rarely receive the support and help they need during end-of-life discharge planning. Qualitative research reporting their experiences demonstrate a focus on organisational needs rather than family concerns<sup>6,7</sup>. As a result, families lack the information and support they need to make informed decisions about their role in end-of-life care and how to harness family and community resources to provide and sustain care for their ill family member, once discharged<sup>6</sup>.

Whilst there is a growing body of research about effective family caregiver support interventions at the end-of-life<sup>8-28</sup> none of this evidence specifically addresses how to provide family support during hospital admission or during the transition of care from hospital to home or nursing home at the end-of-life. Despite this, the interventional content is considered potentially transferable to other contexts, providing consideration is given to the specific needs of family caregivers<sup>29</sup>, and their broader circumstances over time<sup>30</sup>. However, there is a paucity of research translating this evidence into realistic clinical applications<sup>31,32</sup>.

We therefore undertook a Participatory Learning and Action Research study to implement support for family members (those important to a dying person, irrespective of relationship), during the transition between hospital and home or nursing home, at the end-of-life. This paper provides an in-depth account of intervention development and pilot implementation, of a unique, brief intervention, the Family-Focused Support Conversation.

# Research approach

The study was informed by Normalization Process Theory (NPT), a structured and theoretically robust approach to understanding the factors that promote and inhibit implementation<sup>33,34</sup>. NPT proposes that implementation is a dynamic interactive process, influenced by the social actions of those involved. This process is described by four constructs: coherence, sense making work; cognitive participation, relational work; collective action, operational work; and reflexive monitoring, appraising work.

NPT was integrated with a Participatory Learning and Action (PLA) Research approach, a combination previously demonstrated to positively influence the quality of intervention design and implementation, by ensuring inclusion of diverse sources of knowledge and expertise<sup>35</sup>. In this paper we describe three PLA cycles concerned with intervention development and pilot implementation. These cycles broadly followed an intervention development process described by Hawkins and colleagues<sup>36</sup> consisting of: evidence review; co-production of a conceptual framework and interventional structure and process; and pilot implementation.

#### Methods

#### The aims were to:

- Critically review the research evidence base for supporting family members caring for a dying person, to identify the theoretical and therapeutic mechanisms of effective interventions (PLA cycle 1);
- Design a conceptual framework, theoretically modelled on the evidence review, and from this co-produce the structure and process of an intervention suitable for the acute hospital context (PLA cycle 2);
- Undertake a pilot implementation, to assess the potential for the intervention to be
  used in acute hospitals and understand whether it created unexpected work or
  disruption for family members and staff (PLA cycle 3).

### PLA participants comprised:

- Patient and public involvement [PPI] participants, (n=5) members of the public with experience of caring for a dying relative, recruited through National Institute of Health Research (NIHR) networks;
- Clinical co-researchers (n=7), specialist nurses and occupational therapists, working
  in palliative and end-of-life care teams in 3 acute NHS Hospital Trusts in England (one
  in the South of England and two in the North). The teams were recruited through the
  National Nurse Consultant (Palliative Care) Group;
- Social care experts (n=6), members of local and national carers groups and social workers with expertise in end-of-life care, recruited through palliative care networks.

All PLA participants were involved in the co-construction of the intervention in PLA cycle 2. Clinical co-researchers led implementation in PLA cycle 3. All PLA participants were involved in the interpretation of implementation results for PLA cycle 3.

<u>Evidence review (PLA cycle/aim 1):</u> The evidence review focused on research reporting interventions to provide family caregiver psychosocial support during palliative and end-of-life care. Psychosocial support was defined as support concerned with the emotional and relational wellbeing of family members<sup>37</sup>.

There are a growing number of systematic reviews assessing psychosocial interventions for family caregivers during palliative and end-of-life care. However, systematic reviews rarely provide enough detail about interventions to allow implementation<sup>38</sup>, but they do provide rigorous assessment of the methodological quality of studies. We therefore identified studies to review from these sources. Systematic reviews were identified from the metareview by Thomas et al<sup>9</sup>, and from a search for systematic reviews published subsequently. All studies included by the review authors were assessed for relevance (box 1). They were included if focused on caregiver support during palliative and end-of-life care, if graded by the systematic review authors as being of good methodological quality and if the intervention was amenable to delivery by hospital-based registered practitioners. Identified studies were analysed to identify the theoretical framework(s) underpinning the reported interventions and the interventional mechanisms identified by authors responsible for the reported therapeutic outcomes.

Insert box 1 here

Co-production of conceptual framework and intervention design (PLA cycle/aim 2): The outcomes of the evidence review were synthesised into a conceptual framework from which the structure and process of the intervention was co-constructed with PLA participants. There is very little guidance about how to undertake this process in healthcare<sup>39,40</sup> but we previously found participatory theatre techniques<sup>41,42</sup> valuable in drawing out participants' cultural, clinical and social knowledge to inform the translation and synthesis of evidence into healthcare processes<sup>43</sup>. We integrated these approaches in the following steps:

- 1. Workshop with PPIs, clinical co-researchers and social care experts: 'theatre of language' and 'forum theatre'<sup>41</sup> techniques were used to discuss the evidence and from this identify key principles for the conceptual framework and then map the identified intervention mechanisms onto to the structure of a typical clinical conversation<sup>44</sup>.
- 2. The mapped clinical conversation was refined by developing conversational prompts through simulation and rehearsal of the intervention. The PI (SD) acted as clinician, an educational performative theatre expert as family member and the Senior Research Fellow (NC) as observer, providing reflective comments to guide simulation. The simulation was video-recorded and transcribed into a description of the interventional process.
- The transcribed interventional process was discussed with PLA participants and mapped to a theoretical framework. This process resulted in a conceptual framework and intervention.

<u>Pilot implementation (PLA cycle/aim 3):</u> Following ethical and local site research governance approvals (REC ref: 16/SC/0330) pilot implementation was undertaken over a three-month period by seven clinical co-researchers (described above), most of whom were involved in intervention development. In preparation, clinical co-researchers attended a half-day workshop where the intervention was reviewed, discussed and rehearsed. Given one of the purposes of pilot implementation was to assess potential disruption caused by implementation, each clinical co-researcher was asked to limit intervention provision to five interventions.

Data collection was informed by NPT and collected via reflective records of intervention delivery, detailed records of telephone conversations between the research team and clinical co-researchers discussing implementation progress and detailed records of evaluation meetings.

Data analysis was undertaken by three members of the research team (NC, SL, SD), following a Framework Analysis approach<sup>45</sup>. Data were initially coded, using the broad constructs of NPT, followed by a more detailed analysis, using NPT-generated questions designed by Murray et al<sup>46</sup> as an analytical framework. A workshop to discuss interpretation of data analysis was held with PLA participants.

#### **Ethics**

In addition to research ethics and site governance approvals required for implementation (REC ref: 16/SC/0330), PLA raises ethical concerns about the location of 'power' in researcher and participant relationships and how this is managed to achieve the collaborative relationship intended<sup>35</sup>. Detail of how we approached these concerns is provided in supplementary information 1.

#### Results

<u>Evidence review results (PLA cycle/aim1):</u> Full details of the evidence review is provided in supplementary information 2. The process is summarised in fig 1.

A total of 20 systematic reviews were identified; 18 reviews graded as good or medium quality by Thomas et al<sup>9</sup>, focused on end-of-life care or cancer care<sup>8,10-26</sup> and 2 systematic reviews published subsequently<sup>27,28</sup>. Nine reviews were excluded because they focused on evaluation of services<sup>10,11</sup>, bereavement interventions<sup>12</sup>, communication<sup>13</sup>, or interventional approaches not amenable to hospital provision, such as art therapy<sup>14</sup>, physical activity<sup>15</sup>, web-based delivery<sup>18</sup> and mindfulness<sup>27,28</sup>. The remaining 11 systematic reviews<sup>8,17-26</sup> comprised 103 studies of which 96 were excluded.

Insert fig 1 here

The seven papers identified for analysis, related to 6 studies focused on psychosocial support for family members, during end-of-life care<sup>47-53</sup>. Two of these studies related to the FOCUS<sup>49,50</sup> and COPE<sup>51,52</sup> interventions and therefore manuals for these interventions were obtained from the authors.

# Insert table 1 here

Four studies explicitly stated the theoretical framework(s) adopted<sup>47-50</sup>, in one it was implicit<sup>50,51</sup> and in another not stated<sup>53</sup>. Five studies were underpinned by stress and coping frameworks derived from the work of Lazarus and Folkman and aimed to mitigate uncertainty, distress and carer burden, enhance family communication and increase access to resources<sup>47-52</sup>. One study also drew on Horowitz's work <sup>47</sup>, which emphasised the importance of meaning-making in adaptation to difficult life events (table 1). Thus, collectively, the reviewed studies were theoretically modelled on stress, coping and meaning making, and focused on quality of life.

The interventional processes identified from the review included the provision of information, sense-making, problem-solving, resource networking and self-care. All interventions were delivered over successive consultations, for example FOCUS and COPE were provided in three structured visits of at least 30 minutes each. There was insufficient detail in the reviewed studies to assess the effectiveness of proposed therapeutic mechanisms on outcomes. Therefore, in consultation with PLA social care experts and clinical co-researchers, we considered it prudent to adopt recommendations from Northouse and colleagues<sup>17</sup> to focus intervention processes on mitigating uncertainty and from Candy and colleagues<sup>8</sup> to at 'the very least healthcare practitioners should enquire about the concerns of family and friends caring for a loved one' (p23) and incorporate information and problem-solving coaching processes, to buffer psychological distress.

## Conceptual framework and intervention structure and process (PLA cycle/aim2):

PLA participants stressed the importance of the intervention being equally applicable to any family member, irrespective of their role in future care, and deliverable as the opportunity arose. Use of a pre-existing intervention such as FOCUS or COPE was therefore considered impractical and inappropriate. Therefore, to ensure the intervention could be delivered flexibly, depending on family and clinical circumstances, we used a structured conversation

design, a brief intervention design considered clinically feasible for provision of evidence-based psychosocial support<sup>54</sup>.

In addition, PLA participants emphasised the importance of involving family members in end-of-life care decisions, recognising their knowledge of the ill person and 'how they do things as a family'. Therefore, the intervention was theoretically modelled on Family Sense of Coherence<sup>55</sup>. Family Sense of Coherence is theoretically congruent with the stress, coping and adaptation theories underpinning the reviewed studies, but rather than focusing on ill health (distress) and quality of life, it focuses on family strengths, resilience (coherence) and salutogenesis (wellness). Coherence is influenced by whether life events are considered comprehensible, manageable and meaningful and congruent with 'how we do things as a family'<sup>55</sup>. Family Sense of Coherence was also theoretically consistent with the interventional processes of meaning-making, problem-solving and harnessing resources, identified in the evidence review.

Importantly, the meaningfulness component of FSC is considered key to family coherence<sup>55</sup>. Meaning focused approaches are particularly helpful in situations characterised by uncertainty<sup>56</sup> by helping to realign priorities and create or renew a sense of purpose<sup>57</sup>. This approach therefore suited end-of-life care transitions where family priorities move towards the care of a dying member, when there is limited time to make decisions about place of care and where there is uncertainty about care provision and the future. Thus, addressing uncertainty by focusing on meaningfulness is likely to strengthen family coherence. Family members with strong family coherence are likely to have positive caring experiences<sup>58-60</sup>, and confidence in end-of-life care provision<sup>61</sup>.

Consequently, the internal logic of the resulting conceptual framework proposed that family members' uncertainties about end-of-life care could be reduced by identifying and addressing their concerns, by providing information and coaching problem-solving. As a result, family members would make informed decisions about their role in care and harness family and community resources. Thus, the intervention would foster family coherence (resilience) (fig ii).

Insert fig ii here

The structure and process of the intervention, resulting from the participatory theatre workshops, are outlined in table 2 and fig iii. This description includes a revision made by clinical co-researchers during implementation training, to use an empathetic phrase at the beginning of the intervention to orientate participants to the family focus of the conversation, followed by a pause. This combination of empathetic statement and pause, increases the likelihood that concerns are raised and addressed in clinical consultations<sup>62</sup>.

Insert table 2 and fig iii intervention process here

#### <u>Implementation results (PLA cycle/aim3):</u>

Data consisted of n=22 reflective records of intervention delivery (site 1: n=5; site 2: n=10; site 3: n=7), n=3 records of discussion of implementation progress and n=2 records of evaluation meetings.

Table 3 provides a summary of analysis, constructed from data coded against NPT-generated questions for intervention evaluation<sup>46</sup>. The table provides the source of data quoted in italics below. All quotes were provided by clinical co-researchers - specialist nurses and occupational therapists in palliative care.

#### Insert table 3 here

a) The potential for the intervention to be used in acute hospitals

All clinical co-researchers implemented the intervention. Some needed to see the intervention delivered or to deliver it themselves, 'to get it'. Most needed to practice how to phrase the interventional prompts so that the intervention 'flowed' and was consistent with their communication style and patient population. Some approached implementation by delivering the intervention whenever they spoke to a family member about discharge care plans, irrespective of circumstances. Others initially selected opportunities to use the intervention, starting with more straightforward discharge situations. As co-researchers gained confidence, the intervention was incorporated into practice, irrespective of the complexity of discharge.

Some clinical co-researchers were initially concerned the intervention would take more time than normal care but found it enabled focused discussions and quickly identified family concerns, and thereby saved time. As they gained confidence they moved backwards and forwards between the comprehensibility and manageability components of the intervention to address family concerns. Nevertheless, implementation was influenced by contextual challenges such as resource constraints and organisational pressures on their work, for example when organisational pressures resulted in 'late referrals' and insufficient time to meet with family members before discharge. Some managed these pressures by splitting delivery over successive consultations, introducing the focus of the intervention (meaningfulness) in the first meeting (in person or by telephone) and completing delivery at a second meeting.

b) Did the intervention create unexpected work or disruption for family members and staff?

Co-researchers described how the intervention disrupted and 'pulled apart their practice' by 'flipping conversations to focus on the family'. They described a shift in their understanding of family support as something professionally focused and 'done to families' to practice centred on 'the meaning for the family and their concerns'. They also discriminated the intervention from 'discharge itself' or 'bits of kit' or 'a checklist'. They reported a deeper understanding and respect for family care and increased satisfaction with discharge work and provided examples of how the intervention enhanced family care (see table 3).

Implementation was also influenced by the local working arrangements for discharge between specialist and ward teams. When discharge was considered a ward team responsibility, clinical co-researchers were worried the intervention would disrupt these arrangements and create ambiguity about their role. Some clinical co-researchers therefore restricted use of the intervention to occasions when discharge conversations had been commenced with family members by ward staff. Others used the intervention to clarify concerns family members had previously raised with ward staff or by delivering the intervention in collaboration with ward staff.

### Discussion

In the three PLA cycles reported above, we co-constructed and implemented the Family-Focused Support Conversation. This structured conversation is underpinned by a robust review of research evidence, family members' experiences and clinical expertise, and theoretically informed by Family Sense of Coherence, a theory which emphasises family strengths and resilience.

The evidence review identified the importance of modelling interventions for family support on uncertainty<sup>17</sup>, and therefore asking family members about their concerns<sup>8</sup>. Consistent with other reviews we found a lack of interventions adopting a family centred or family systems approach<sup>2</sup> and a lack of translation of research evidence into feasible clinical interventions<sup>31,32</sup>. Similarly, with respect to intervention reporting, we found inconsistent detail about the theoretical frameworks underpinning interventions<sup>63</sup> and insufficient evidence about the effectiveness of intervention mechanisms on outcomes<sup>8,9,29,63</sup>.

Pilot implementation demonstrated the potential for the Family-Focused Support Conversation to be adopted in acute hospitals. Clinical co-researchers made sense of the intervention (coherence), actively engaged in implementation (cognitive participation), worked together to provide the intervention (collective action) and reflected on its benefits and costs (reflexive monitoring).

The reported shift in co-researchers' practice, as a consequence of implementing the intervention, is notable. All co-researchers valued family support as part of their palliative care role but described how their practice was subject to the organisational constraints and priorities experienced by most hospital practitioners<sup>6,7</sup>. Thus, some described how previously they focused on discussing discharge arrangements with family members rather than family concerns. The intervention enabled a shift in focus to family concerns about the meaning, significance and implications of discharge, and how family caregiving might be managed.

In part this shift occurred because of the strong coherence between the value coresearchers placed on family support and the purpose and design of the intervention. Coconstruction meant co-researchers' values were integrated within the design of the intervention. However, because these values were combined with those of family

members, social care experts and research evidence, and integrated through theoretical modelling and clinical simulation, the intervention provided a structured communication process by which the inherent tensions in purpose between hospital organisational priorities and family support could be reconciled<sup>64</sup>. Thus, the structured conversation weaves intervention components in a clinical conversation and provides a clinically feasible<sup>54</sup> means of providing family support and to optimizing family outcomes<sup>64</sup>.

However, the results also demonstrated how organisational discharge priorities were embedded within the distribution of work between practitioners. Where ward teams had responsibility for end of life discharge, implementation threatened to disrupt previously negotiated roles between ward and specialist teams and co-researchers were concerned about creating role ambiguity. In these instances, the noted shift in practice was also due to the negotiation strategies used by co-researchers to implement the intervention, and sustain their relationships with ward teams, without causing ambiguity about their respective roles. However, it is important to recognise this account does not include the impact of implementation on ward staff or their experience of the negotiation strategies used by co-researchers.

Our decision not to involve ward teams in the study was a consequence of the role we wished co-researchers to play in the reported phases of the study. We considered it important for co-researchers to have palliative care expertise and communication, reflective and service development skills to influence the design of the intervention and lead implementation. The rich knowledge generated by co-researchers, discussed above, is testament to these skills and to their adaptation to a research leadership role, something which markedly contrasted with most co-researchers' previous experiences of research. This reversal of roles reinforced the importance of a research team having pedagogic skills to support co-researchers in this leadership role.

The knowledge generated in the three PLA cycles described in this paper was used to further implement the Family-Focused Support Conversation in 12 NHS acute hospitals in England and to qualitatively evaluate its usability, acceptability and accessibility and will be reported elsewhere.

# Conclusion

Discharge from hospital at the end-of-life is complex and organisational priorities often result in family members lacking the support needed to make informed decisions about their role in end-of-life care on discharge. Through a process of co-construction, we designed an evidence-based structured conversation, the Family-Focused Support Conversation. Pilot implementation demonstrated the intervention has the potential to be adopted in acute hospitals, and addresses family concerns about the meaning and significance of discharge, implications about end-of-life care needs and how family caregiving can be managed and enhanced.

# Abbreviations

FSC: Family Sense of Coherence

PLA: Participatory Learning and Action (Research)

NPT: Normalization Process Theory

#### **Declarations**

### Ethics approval and consent to participate

Ethical approval was gained via the NHS Health Research Authority from the South Central – Hampshire A Research Ethics Committee REC ref: 16/SC/033; IRAS Number 208275

#### Consent for publication

Not applicable

### Availability of data and materials

All data generated or analysed for this study are included in this published article [and its supplementary information files].

## **Competing interests**

The authors declare that they have no competing interests

## **Funding**

Funding for this study was provided by NIHR School of Social Care Research. The funders had no role in the design of the study and collection, analysis, and interpretation of data and in writing the manuscript

## Authors' contributions

Implementation was undertaken by the co-researcher group. Data collection and analysis was undertaken by NC, SD, SL. All authors contributed to interpretation of the data. The study was supervised by AR. SD drafted the paper, NC, SL, CM, NL and AR made significant contributions to its development and refinement and commented on subsequent drafts of the text. All authors have read and approved the final manuscript.

#### <u>Acknowledgements</u>

We acknowledge the contribution made by our colleague Pam Firth, independent advisor in psychosocial palliative care, to the development of the Family-Focused Support Conversation and to our understanding of family care at the end of life.

Co-researchers: We acknowledge with thanks and respect the expertise and contribution made to the co-construction, implementation and evaluation of the Family-Focused Support Conversation, during the PLA cycles reported in this paper: Gemma Bartlett, Lucy Harris, Elizabeth Flannery, Michael Connolly, Pam Booth, Gillian Galpin, Emma Wells, Elizabeth Price, Alison Faulkner-Butcher, Leanne Petch, Chris Ward.

We thank Professor Anne-Sophie Darlington for her thoughtful comments on an earlier version of the paper.

#### References

- Van den Block L, Pivodic L, Pardon K, Donker D, Miccinesi G, Moreels S, Alonso TV,
   Deliens L, Onwuteaka-Philipsen B (2015) Transitions between care settings in the final
   three months of life in four EU countries European Journal of Public Health 25(4): 569
- Payne S and Morby H Supporting Family Carers: report on the evidence of how to work with and support family carers to inform the work of the commission into the future of hospice care 2013 London: Help the Hospices file:///C:/Users/sd11/Downloads/supporting-family-carers.pdf accessed May 2019
- 3. Penrod J, Hupcey JE, Shipley PZ, Loeb SJ & Baney B A Model of Caregiving Through the End of Life: Seeking Normal *Western Journal of Nursing Research* 2012;34(2), 174–193. <a href="https://doi.org/10.1177/0193945911400920">https://doi.org/10.1177/0193945911400920</a>
- Fringer A, Hechinger M and Schnepp W Transitions as experienced by persons in palliative care circumstances and their families a qualitative meta-synthesis BMC Palliative Care 2018;17(22): <a href="http://doi.org/10.1186/s12904-018-0275-7">http://doi.org/10.1186/s12904-018-0275-7</a>
- 5. Carers UK Evidence for the Carers Strategy 2016; London: Carers UK
- 6. Hanratty B, Lowson E, Grande G, Payne S, Addington-Hall J, Valtorta N and Seymour J (2014) Transitions at the end of life for older adults patient, carer and professional perspectives: a mixed-methods study *Health Services Delivery Research* 2014; 2(17) NIHR <a href="https://www.ncbi.nlm.nih.gov/books/NBK263541/">https://www.ncbi.nlm.nih.gov/books/NBK263541/</a> accessed May 2019
- 7. Ewing G, Austin LM, Jones D and Grande G Who cares for the carers at hospital discharge at the end of life? A qualitative study of current practice in discharge planning and the potential value of using the Carer Support Needs Assessment Tool (CSNAT) approach *Palliative Medicine* 2018;32(5): 939-949
- 8. Candy B, Jones L, Drake R, Leurent B and King M Interventions for supporting informal caregivers of patients in the terminal phase of disease *Cochrane Database of Systematic Reviews* 2011;15(6): DOI: https://doi.org/10.1002/14651858.CD007617.pub2
- Thomas S, Dalton J, Harden M, Eastwood A and Parker G Updated meta-review of evidence on support for carers *Health Services and Delivery Research* 2017;5(12) https://www.ncbi.nlm.nih.gov/books/NBK425177/
- 10. Gomes B, Calanzani N, Curiale V, McCrone P and Higginson IJ Effectiveness and costeffectiveness of home palliative care services for adults with advanced illness and their

- caregivers *Cochrane Database* Issue 6 2014; https://doi.org/10.1002/14651858.CD007760.pub2
- 11. Pottie CG, Burch KA, Thomas LP and Irvin SA Informal caregiving of hospice patients

  Journal of Palliative Medicine 2014;17: 845-856
- 12. Gauthier LR and Gagliese L Bereavement interventions, end of life care care and spousal well-being: a systematic review *Clinical Psychology Science and Practice* 2012;19: 72-92 https://doi.org/10.1111/j.1468-2850.2012.01275.x
- 13. Walczak A, Butow PN and Clayton JM A systematic review for evidence of end of life communication interventions: who do they target, how are they structured and how do they work? *Patient Education and Counselling* 2016;99: 3-16
- 14. Lang D and Lim LC Effects of art therapy for family caregivers of cancer patients: a systematic review *JBI Database Systematic Reviews and Implementation Reports* 2014;12(4):374-394
- 15. Liu Z, Sun YY, & Zhong BL Mindfulness-based stress reduction for family carers of people with dementia. *The Cochrane Database of Systematic Reviews*, 2018;8(8), CD012791. <a href="https://doi.org/10.1002/14651858.CD012791.pub2">https://doi.org/10.1002/14651858.CD012791.pub2</a>
- 16. Kaltenbaugh DJ, Klem ML, Hu L, Turi E, Haines AJ and Lingler JH Using web-based interventions to support caregivers of patients with cancer: A systematic review *Oncology Nursing Forum* 2015;42(2): 156-164
- 17. Northouse LL, Kapapodi M, Song L, Zhang L, and Mood D Interventions with family caregivers of cancer patients: meta-analysis of randomized controlled trials *CA Cancer Journal Clinic* 2010;60(5): 317-339
- 18. Regan TW, Lambert SD, Girgis AF, Kelly B, Kayser K and Turner J Do couple-based interventions make a difference for couples affected by cancer?: A systematic review *BMC Cancer* 2012;12: 279 <a href="https://doi.org/10.1186/1471-2407-12-279">https://doi.org/10.1186/1471-2407-12-279</a>
- 19. Waldron EA, Janke EA, Bechtel CF, Raminez M and Cohen A A systematic review of psychosocial interventions to improve cancer carer quality of life *Psycho-oncology* 2013;22: 1200-1207
- 20. Nevis I Education interventions in end of life care: an evidence-based analysis *Ontario*Health Technology Assessment Series 2014;14(27): 1-30

- 21. Harding R, List S, Epiphaniou E and Jones H How can informal caregivers in cancer and palliative care be supported? An updated systematic literature review of interventions and their effectiveness *Palliative Medicine* 2012;26(1): 7-22
- 22. Chambers SK, Pinnock C, Lepore SJ, Hughes S and O'Donnell DL A systematic review of psychosocial interventions for men with prostate cancer and their partners *Patient Education and Counselling* 2011;85:e75-88
- 23. Caress A-L, Chalmers K and Luker K A narrative review of interventions to support family carers who provide physical care to family members with cancer *International Journal of Nursing Studies* 2009;46(11): 1516-1527
- 24. Ussher JM, Perz J, Hawkins J and Brack M Evaluating the psychosocial interventions for informal carers of cancer patients: a systematic review of the research literature *Health Psychology Review* 2009;3(1): 85-107
- 25. Glasdam S, Timm H and Vittrup R Support efforts for caregivers of chronically ill persons Clinical Nursing Research 2009;19:233-265
- 26. Hudson PL, Remedios C and Thomas K A systematic review of psychosocial interventions for family carers of palliative care patients *BMC Palliative Care* 2010;9:17

  <a href="http://www.biomedcentral.com/1472-684X/9/17">http://www.biomedcentral.com/1472-684X/9/17</a>
- 27. Loi SM, Dow B, Ames D, Moore K, Hill K, Russell M and Lautenschlager N Physical activity in caregivers: what are the psychological benefits? *Archives of Gerontology and Geriatrics* 2014;59(2):204-210
- 28. Jaffray L, Bridgman H, Stephens M and Skinner T Evaluating the effects of mindfulness interventions for informal palliative caregivers *Palliative Medicine* 2016;30(2):117-131 https://doi.org/10.1177%2F0269216315600331
- 29. Hudson P and Payne S Family caregivers and palliative care: current status and agenda for the future *Journal of Palliative Medicine* 2011;14(7): 864-869
- 30. Brimblecombe N, Ferandez J-L, Knapp M, RedhillA and Whittenberg R Review of the international evidence on support for unpaid carers *Journal of Long Term Care* 2018;September 25-40
- 31. Ferrell B and Wittenberg E A review of caregiving intervention trials in oncology *CA A Cancer Journal for Clinicians* 2017;67: 318-325
- 32. Ugalde A, Gaskin CJ, Rankin NM, Schofield P, Boltong A, Aranda S, Chamber S, Krishnasamy M and Livingston P A systematic review of caregiver interventions:

- Appraising the potential for implementation of evidence into practice *Psycho-Oncology* 2019;28: 687-701
- 33. May C Towards a general theory of implementation *Implementation Science* 2013;8, 18 <a href="https://doi.org/10.1186/1748-5908-8-18">https://doi.org/10.1186/1748-5908-8-18</a>
- 34. May C, Cummings A, Girling M, Bracher M, Mair F, May C, Murray E, Myall M, Rapley T and Finch T Using normalization process theory in feasibility studies and process evaluations of complex interventions: a systematic review *Implementation Science* 2018;13:8 <a href="https://doi.org/10.1186/s13012-018-0758-1">https://doi.org/10.1186/s13012-018-0758-1</a>
- 35. de Brùn T, O'Reilly T, de Brùn M, O'Donnell CA Learning from doing: The case for combining normalisation process theory and participatory action and learning research methodology for primary healthcare implementation research *BMC Health Services*\*\*Research 2016;16(346) DOI: 10.1186/s12913-016-1587-z
- 36. Hawkins J, Madden K, Fletcher A, Midgley L, Grant A, Cox G, Moore L, Campbell R, Murphy S, Bonell C and White J Development of a framework for the co-production and prototyping of public health interventions. *BMC Public Health* 2017;17, 689 (2017). https://doi.org/10.1186/s12889-017-4695-8
- 37. Oliviere D, Hargreaves R and Monroe B (1998) *Good Practices in Palliative Care A Psychosocial Perspective* London: Routledge
- 38. Rychetnic L, Frommer M, Hawe P and Shiell A Criteria for evaluating evidence on public health interventions *Epidemiology and Community Health* 2002;56(2) <a href="https://jech.bmj.com/content/56/2/119">https://jech.bmj.com/content/56/2/119</a>
- 39. Corry M, Clarke M, While A and Lalor J Developing complex interventions for nursing: A critical review of key guidelines *Journal of Clinical Nursing* 2013;22(17-18): 2366-2386
- 40. Colquhoun H, Squires J, Kolehmainen N, Fraser C and Grimshaw J Methods for designing interventions to change healthcare professionals' behaviour: a systematic review *Implementation Science* 2017;12(30) <a href="https://doi.org/10.1186/s13012-017-0560-5">https://doi.org/10.1186/s13012-017-0560-5</a>
- 41. Boal A Theater of the Oppressed 1979; London: Pluto Press
- 42. Quinlan, E New action research techniques: Using participatory theatre with health care workers *Action Research* 2010;8(2): 117–133
- 43. Duke S, Anstey S and Latter S Using ethnodrama to create an interactional intervention as part of modelling a complex intervention in a phase I-II research study 12<sup>th</sup>

  International Conference on Communication in Healthcare Amsterdam, 2014; 30/9/14

- 44. Duke S and Bailey C Communication in *Textbook of Palliative Nursing* (eds Payne S, Seymore J, and Ingleton C Maidenhead: OUP Press 2008;pp121-145
- 45. Ritchie J and Lewis J *Qualitative Research practice. A Guide for social science students and researchers* London: Sage 2003
- 46. Murray E, Treewick S, Pope C, MacFarlane A, Ballini L, Dowrick C, Finch T, Kennedy A, Mair F, O'Donnell C, Ong BN, Rogers A and May C Normalisation Process Theory: a framework for developing, testing and implementing complex interventions *BMC Medicine* 2010;8(64) <a href="https://doi.org/10.1186/1741-7015-8-63">https://doi.org/10.1186/1741-7015-8-63</a>
- 47. Manne S, Babb J, Pinover W, Horwitz E and Ebbert J Psychoeducational group intervention for wives of men with prostate cancer *Psycho-oncology* 2004;13: 37-46
- 48. Hudson P, Aranda S, Hayman-White K A psych-educational intervention for family caregivers of patients receiving palliative care: A randomised clinical trial *Journal of Pain and Symptom Management* 2005;30(4): 329-341
- 49. Northouse L, Kershaw T, Mood D and Schafenacker A Effects of a family intervention on the quality of life of women with recurrent breast cancer and their family caregivers

  \*Psycho-oncology 2005;14: 478-491
- 50. Northouse L, Mood D, Schafenacker A, Montie J, Sandler H, Foreman J, Hussain M, Pienta K, Smith D and Kershaw T Randomised clinical trial of a family intervention for prostate cancer patients and their spouses *Cancer* 2007;110(12): 2809-2818
- 51. McMillan S, Small B, Weitzner M, Schonwetter R, Tittle M, Moody L and Haley W Impact of coping skills intervention with caregivers of hospice patients with cancer. A randomised clinical trial *Cancer* 2006;106(1): 214-222
- 52. McMillan S and Small B Using the COPE intervention for family caregivers to improve symptoms of hospice homecare patients: A clinical trial *Oncology Nursing Forum* 2007;34(2): 313-321
- 53. Walsh K, Jones L, Tookman A, Mason C, McLoughlin J, Blizard R and King M Reducing emotional distress in people caring for patients receiving specialist palliative care *Journal of Psychiatry* 2007;190: 142-147
- 54. Applebaum AJ and Breitbart W Care for the cancer caregiver: a systematic review *Palliative and Supportive Care* 2012;11(3), 231-52.
- 55. Antonovsky A and Sourani T Family sense of coherence and family adaptation *Journal of Marriage and Family* 1988;50(1): 79-92

- 56. Mishel MH and Braden CJ Finding meaning: Antecedents of uncertainty in illness *Nursing*\*Research 1988;37(2): 98-103
- 57. Folkman S and Moskowitz JT Positive affect and meaning focused coping during significant psychological stress Chapter 12 in *The Scope of Social Psychology* (eds Hewstone M; Schut H, de Wit J, van den Boss K, Stroebe M) East Sussex: Psychology Press 2007; pp193-208
- 58. Stensletten K, Bruvik F, Espehaug B and Drageset J Burden of care, social support, and sense of coherence in elderly caregivers living with symptoms of dementia *Dementia* 2016;15(6): 1422-1435
- 59. Pottier F, Degryse J-M, Henrard S, Aubouy G and de Saint-Hubert M A high sense of coherence protects the burden of caregiving to older spousal caregivers *Archives of Gerontology and Geriatrics* 2018;75: 76-82
- 60. Möllerberg M-L, Arestedt K, Swahnberg K, Benzein E and Sandgren A Family sense of coherence and its association with hope, anxiety and symptoms of depression in persons with cancer in palliative phase and their family members: A cross-sectional study *Palliative Medicine* 2019;33(10): 1310-1318
- 61. Tang S, Cheng C, Lee K, Chen C and Lui L Mediating effects of sense of coherence on family caregivers' depressive distress while caring for terminally ill cancer patients

  Cancer Nursing 2013;36(6) <a href="https://doi.org/10.1097/NCC0b013e31826fc90d">https://doi.org/10.1097/NCC0b013e31826fc90d</a>
- 62. October TW, Tizen ZB, Arnold RM and Rosenberg AR Characteristics of physician's empathetic statements during pediatric intensive care conferences with family members. A qualitative study *JAMA Network Open* 2018;1(3) DOI: 10.1001/jamanetworkopen.2018.0351
- 63. Grande G, Stajduhar K, Aoun S, Toye C, Funk L, Addington-Hall J, Payne S and Todd C Supporting lay carers in end of life care: current gaps and future priorities *Palliative Medicine* 2009;23:339–344
- 64. Omilion-Hodges LM and Swords NM Communication matters. Exploring the intersection between family and practitioner end of life communication *Behavioural Sciences* 2017 7(1):15 <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5371759/pdf/behavsci-07-00015.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5371759/pdf/behavsci-07-00015.pdf</a> (2
- 65. Hoffman T, Glasziou P, Boutron I, Ruairidh M, Perera R, Moher D, Barbour V, Johnston M, Lamb S, Dixon-Woods M, McCulloch P, Wyatt J, Chang A-W and Michie S Better

reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide *British Medical Journal* 2014;348:g1687

https://doi.org/10.1136/bmj.g1687

# Figure Legends

Figure 1 Evidence review process

Figure 2 Family-Focused Support Conversation: Conceptual Framework and Logic Diagram

Figure 3 Family-Focused Support Conversation – process

# Table Legends

Table 1 Summary of review of intervention studies of family support during palliative and end of life care

Table 2 Structure and process of intervention and underpinning theoretical framework

Table 3: Implementation results – summary of analysis using NPT generated questions for interventions (Murray et al, 2010)

# Box legend

Box 1: Inclusion and exclusion criteria for evidence review