



Published in final edited form as:

Heart. 2016 July 15; 102(14): 1079–1080. doi:10.1136/heartjnl-2016-309385.

Homeward Bound, not hospital rebound: how transitional palliative care can reduce readmission

Dio Kavalieratos^{1,2}, Bruce L Rollman^{2,3}, and Robert M Arnold^{1,2}

¹Section of Palliative Care and Medical Ethics, Department of Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, USA;

²Department of Medicine, Center for Research on Health Care, University of Pittsburgh, Pittsburgh, Pennsylvania, USA;

³Center for Behavioral Health and Smart Technology, University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Despite therapeutic advances in the management of heart failure (HF), approximately 25% of hospitalised patients with HF are readmitted within 30 days.¹ These costly episodes of care have given rise to numerous policy initiatives, such as the Medicare Hospital Readmissions Reduction Programme which fiscally penalises hospitals with ‘excess’ readmissions.²

Transitional care programmes have emerged as a potential solution to avert HF readmissions by monitoring and supporting patients and caregivers for a limited period of time post-discharge. A recent meta-analysis of these interventions suggests that programmes which incorporate home visits are effective at reducing all-cause readmission and mortality, whereas less-intensive programmes of structured telephone support alone can reduce HF-related readmissions and mortality.³

In their *Heart* publication, Wong *et al* report the findings from their pilot trial of a transitional palliative care programme for patients with end-stage HF (TPC-ESHF).⁴ They demonstrate that patients randomised to their TPC-ESHF intervention experienced significantly fewer hospital readmissions at 12-week follow-up compared with their attention control (relative risk (95% CI) 0.55 (0.35 to 0.88)) along with significant improvements in health-related quality of life (QOL), satisfaction with care and symptom burden.

These results are striking, particularly for a study of its size. As the authors note, a comparative effectiveness trial is in order to confirm their findings and to address key limitations in their pilot. First, their study population vastly differs from similar HF trials, namely regarding social support and the low use of evidence-based therapy for an ‘end-

Correspondence to Dr Dio Kavalieratos, Department of Medicine, University of Pittsburgh, 230 McKee Place, Suite 600, Pittsburgh, PA 15213, USA; diok@pitt.edu.

Contributors DK conceptualised the article. All authors contributed substantially to the article and approved the final draft.

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.

stage' HF population (eg, only 4% on β -blockers and 4% with an implantable cardiac defibrillator). Indeed, the high proportion of patients living with family (92%) is perhaps a function of Asian social structure and has many implications for the intervention's dissemination in Western societies; furthermore, we consider the absence of family/caregiver outcomes in this study to be a missed opportunity.

Second, and on a more conceptual note, we caution that by indicating 'End Stage' in the name of the intervention ('Transitional Palliative Care for End Stage Heart Failure') the authors may be inadvertently reinforcing the pernicious stereotype that palliative care is an option only of last resort. Given that earlier receipt of palliative care is associated with greater benefit,⁵ we suggest that the TPC-ESHF be rebranded as an intervention for patients with 'advanced' HF instead of 'end-stage' HF, prioritising patient need over prognosis.

The beauty of the study by Wong *et al* is their ability to leverage an established transitional care model to address palliative needs among community-dwelling patients with HF. As such, the authors created a vehicle for palliative care that can support patients and families through the discharge transition, thereby bypassing the barriers and misperceptions that exist about palliative care. In addition, they were able to extend palliative care to the home setting, a crucial move given that most patients, even seriously ill ones, spend most of their time outside the hospital. Whereas transitional care for HF is not itself innovative, transitional *palliative* care (particularly for patients with HF) represents a new frontier in supportive care for individuals with life-limiting illness worthy of further exploration.

Mounting evidence supports that palliative care decreases the suffering experienced by patients with HF and their caregivers, including improvements in QOL,⁶ symptom burden,⁶ mood⁶ and decreased healthcare use.⁷ Yet, despite recommendations from all major cardiology societies that palliative care be involved in the care of patients with advanced HF, many barriers exist to patients with HF receiving palliative care, such as the misperception that palliative care is appropriate only for patients at the very end of life.⁸ In order for palliative care to be most effective, it needs to be divorced from false opposition of curative versus (not *and*) palliative care. Furthermore, access to palliative care for patients with HF is poor, given that the vast majority of HF palliative care is restricted to inpatient settings and outpatient palliative care clinics for patients with cardiac illnesses are exceedingly rare. While important for acute medical crises, an exclusive focus on inpatient palliative care consultation neglects the larger non-hospitalised population, such as patients recently discharged who are returning home with uncertainty, stress and unresolved palliative needs.

Our ability to 'scale up' and integrate palliative care into standard medical care will require studies focusing on understanding what is in the 'black box', generalisability, and scalability.

WHAT IS IN THE 'BLACK BOX?'

Although it is naïve to assume that a 'silver bullet' exists to remedy the breadth of suffering experienced by patients with HF and their families,⁹ multicomponent interventions, including the landmark palliative care trial by Temel *et al*,¹⁰ pose challenges related to isolating their mechanisms of action. Questions remain about what exactly the nurse case

managers or volunteers did and how these processes are associated with the observed outcomes. For example, given that advance care planning is not a typical component of transitional care programmes, what value did it add for patients in this study? Indeed, data regarding the effects of the intervention on advance care planning are absent from the article. Furthermore, are there other psychosocial supportive services (eg, meal support, home care) that, if added to the TPC-ESHF, might yield even better outcomes?

WHAT WILL IT TAKE TO IMPLEMENT TRANSITIONAL PALLIATIVE CARE IN OTHER CONTEXTS?

Although Wong *et al* successfully implemented their intervention in Hong Kong, variations in the structure, practice cultures and reimbursement policies of healthcare systems elsewhere may complicate international translation of this intervention. To improve the likelihood of adoption, interested health systems must strive to align intervention structure and processes with local regulatory exigencies, while respecting patient, caregiver and healthcare provider preferences. Eliciting stakeholder priorities will no doubt require additional effort, yet it will ensure a patient-centred, clinically relevant and policy-focused product.

HOW DO WE DEVELOP MODELS OF TRANSITIONAL PALLIATIVE CARE THAT ARE FEASIBLE AND SCALABLE?

As is the status quo of palliative care practice, the TPC-ESHF intervention centres around a palliative care nurse specialist. Given the increasing shortages in the specialty palliative care workforce,¹¹ we posit that true innovation for transitional palliative care will disrupt the reliance on this scarce resource. Indeed, all clinicians should arguably possess a rudimentary palliative skillset to address suffering (eg, basic physical and emotional symptom management, eliciting goals of care), reserving specialty-level palliative care clinicians to manage complex or refractory concerns.¹² The next generation of palliative care research in HF should study: (1) strategically integrating palliative principles across settings (eg, outpatient cardiology clinics, primary care, home care) and within systems that are linked across common electronic health record platforms and (2) enhancing the palliative care workforce by promoting more sustainable generalist-plus-specialist models of palliative care.¹³

The study by Wong and colleagues reaffirms the positive impact HF palliative care interventions have on a variety of patient and system outcomes, including hospital readmissions, that are a major challenge for health systems worldwide and advances our understanding of how transitional care programmes can be leveraged to extend palliative care to patients beyond the hospital's walls. Their hopeful findings should motivate researchers and health system administrators alike to investigate opportunities for upstreaming and normalising palliative care for patients with serious illness, including advanced HF.

Funding

DK received research support from the Agency for Healthcare Research and Quality (K12HS022989), as well as a Junior Faculty Career Development Award from the National Palliative Care Research Center.

REFERENCES

1. Dharmarajan K, Hsieh AF, Lin Z, et al. Diagnoses and timing of 30-day readmissions after hospitalization for heart failure, acute myocardial infarction, or pneumonia. *JAMA* 2013;309:355–63. [PubMed: 23340637]
2. Centers for Medicare & Medicaid Services. Readmissions Reduction Program (HRRP). Secondary Readmissions Reduction Program (HRRP), 2013 <https://www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps/readmissions-reduction-program.html>
3. Feltner C, Jones CD, Cené CW, et al. Transitional care interventions to prevent readmissions for persons with heart failure: a systematic review and meta-analysis. *Ann Intern Med* 2014;160:774–84. [PubMed: 24862840]
4. Wong FK, Ng AY, Lee PH, et al. Effects of a transitional palliative care model on patients with end-stage heart failure: a randomised controlled trial. *Heart* 2016;102:1100–8. [PubMed: 26969631]
5. Bakitas MA, Tosteson TD, Li Z, et al. Early versus delayed initiation of concurrent palliative oncology care: patient outcomes in the ENABLE III randomized controlled trial. *J Clin Oncol* 2015;33: 1438–45. [PubMed: 25800768]
6. Sidebottom AC, Jorgenson A, Richards H, et al. Inpatient palliative care for patients with acute heart failure: outcomes from a randomized trial. *J Palliat Med* 2015;18:134–42. [PubMed: 25479182]
7. Brumley R, Enguidanos S, Jamison P, et al. Increased satisfaction with care and lower costs: results of a randomized trial of in-home palliative care. *J Am Geriatr Soc* 2007;55:993–1000. [PubMed: 17608870]
8. Kavalieratos D, Mitchell EM, Carey TS, et al. “Not the ‘grim reaper service’”: an assessment of provider knowledge, attitudes, and perceptions regarding palliative care referral barriers in heart failure. *J Am Heart Assoc* 2014;3:e000544. [PubMed: 24385453]
9. Kavalieratos D, Kamal AH, Abernethy AP, et al. Comparing unmet needs between community-based palliative care patients with heart failure and patients with cancer. *J Palliat Med* 2014;17: 475–81. [PubMed: 24588568]
10. Temel JS, Greer JA, Muzikansky A, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010;363:733–42. [PubMed: 20818875]
11. Lupu D, American Academy of Hospice and Palliative Medicine Workforce Task Force. Estimate of current hospice and palliative medicine physician workforce shortage. *J Pain Symptom Manage* 2010;40: 899–911. [PubMed: 21145468]
12. Quill TE, Abernethy AP. Generalist plus specialist palliative care--creating a more sustainable model. *N Engl J Med* 2013;368:1173–5. [PubMed: 23465068]
13. Schenker Y, Arnold R. The Next Era of Palliative Care. *JAMA* 2015;314:1565–6. [PubMed: 26334719]