Towards Scalable Hospital-Based Palliative Care: Challenges and Opportunities for Hospitalists

Katherine R. Courtright, MD, MS[1,2,3]*, Nina R. O'Connor, MD, FAAHPM[2,3]

[1]Division of Pulmonary, Allergy, and Critical Care, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania; [2]Palliative and Advanced Illness Research (PAIR) Center, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania; [3]Palliative and Hospice Medicine, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania.

There is growing evidence that supports the ability of specialty palliative care to achieve the Triple Aim in healthcare: (1) improve patient and family experience of care, (2) improve health outcomes, and (3) reduce healthcare costs.[1,2] However, the full realization of this value remains elusive due, in large part, to the increasing demand for specialty palliative care services outpacing the supply of specialists.[3] Because expansion of the specialty palliative care workforce will never be sufficient to meet the needs of seriously ill patients, and nonspecialist physicians often fail to recognize palliative care needs in a timely manner,[4] innovative and systematic solutions are needed to provide high-quality palliative care in a manner that is sustainable.[5]

To close the gap between workforce and patient needs, experts have largely advocated for two care delivery models that aim to improve the organization and allocation of limited palliative care resources: (1) a tier-based approach in which primary palliative care (basic skills for all clinicians) and specialty palliative care (advanced skills requiring additional training) have distinct but supportive roles, and (2) a need-based approach where different types of palliative care clinicians are deployed based on specific needs.[5,6] In this issue, Abedini and Chopra propose a "Palliative Care Redistribution Integrated System Model" (PRISM) that combines these two approaches, with need-based care delivery that escalates through skill tiers to improve hospital-based palliative care.[7]

PRISM is attractive because it leverages the skill sets of clinicians across disciplines and is designed for the hospital, where the vast majority of specialty palliative care is provided in the United States. Moreover, it employs hospitalists who routinely care for a high volume of seriously ill patients, and are therefore well positioned to expand the palliative care workforce. The authors suggest several approaches to implement PRISM, such as designating certain hospitalist teams for palliative care, more interdisciplinary support, automated patient risk stratification or mandatory screening checklists, and strategic use of bedside nurses and social workers to facilitate early basic needs assessments. Although sound in principle, there are several foreseeable barriers to each of these approaches and potential unintended consequences of PRISM in the fields of hospital and palliative medicine.

Applying insights from behavioral economics will be essential for the successful implementation and dissemination of PRISM. Changing clinician behavior is not a challenge unique to palliative care interventions, but it may be particularly difficult due to misperceptions that palliative care is synonymous with end-of-life care and that such conversations are always time-intensive. Indeed, Abedini and Chopra acknowledge that all clinicians need to be well versed in basic palliative care skills for PRISM to succeed, yet most educational initiatives have shown modest results at best. The most promising clinician education programs, such as the Serious Illness Care Program and VitalTalk require intensive training simulations and are most effective when implemented on a system level to promote cultural change.[8,9] Thus, training hospitalists in preparation for PRISM will require considerable upfront investment by hospitals. While policy efforts to improve palliative care training in medical education are progressing (Palliative Care and Hospice Education and Training Act, H.R.1676), any evidence of impact is nearly a generation away.

The authors also advocate for a technology-driven solution for systematic and early identification of palliative care needs. However, ideal clinical decision support would not rely on checklists to be completed by bedside clinicians or "hard stop" alerts in the electronic health record, as both of these approaches rely heavily upon consistent and accurate data entry by busy clinicians. Rather, innovative predictive analytics with machine learning and natural language processing methods hold great promise to support an electronic precision medicine approach for palliative care delivery. Even after such prediction models are developed, rigorous studies are needed to understand how they can change clinician behavior and impact the quality and cost of care.

Shifting palliative care tasks to nonspecialists has implications beyond quality and access. First, there are likely to be reimbursement implications as nonbillable clinicians such as social workers provide palliative care services that were previously provided by physicians and advance practice providers. As value-based payment models grow, healthcare systems may be wise to invest in innovative palliative care delivery models such as PRISM, but obtaining financial support will require rigorous evidence of value. Second, it will be important to monitor the already high rates of burnout

Address for correspondence: Katherine Courtright, MD, MS, Perelman School of Medicine, 303 Blockley Hall, 423 Guardian Drive, Philadelphia, PA 19104; Telephone: 215-746-0253; E-mail: katherine.courtright@uphs.upenn.edu

Received: October 24, 2018; **Accepted:** October 27, 2018

 DOI 10.12788/jhm.3118

and emotional exhaustion among palliative care clinicians[10] when implementing care delivery models that select only the most complex patients for referral to specialty palliative care. Finally, new palliative care delivery models must fit within a larger national strategy to grow palliative care across the care continuum.[11] This is of particular importance with hospital-focused solutions such as PRISM due to concerns about the growing split in care coordination between inpatient and outpatient care. Since seriously ill patients spend the majority of time outside the hospital and evidence for the value of palliative care is most robust in home and ambulatory settings,[1] an important role for hospitalists could be to systematically identify and refer high-risk patients to community-based palliative care services after discharge from a sentinel hospitalization.

In conclusion, innovative palliative care delivery models such as PRISM are critical to ensuring that seriously ill patients have access to high-quality palliative care; however, more work is still needed to create the training programs, patient identification tools, scalable implementation, and evaluation processes necessary for success.

Disclosures: Dr. Courtright and Dr. O'Connor have nothing to disclose.

Funding: This work was funded in part by a career development award from the National Palliative Care Research Center (KRC). The views expressed herein solely represent those of the authors.

References

1. Kavalieratos D, Corbelli J, Zhang D, et al. Association between palliative care and patient and caregiver outcomes. *Jama*. 2016;316(20):2104. doi: 10.1001/jama.2016.16840.
2. May P, Normand C, Cassel JB, et al. Economics of palliative care for hospitalized adults with serious illness. *JAMA Intern Med*. 2018;178(6):820. doi: 10.1001/jamainternmed.2018.0750.
3. Dumanovsky T, Augustin R, Rogers M, Lettang K, Meier DE, Morrison RS. The growth of palliative care in U.S. hospitals: a status report. *J Palliat Med*. 2016;19(1):8-15. doi: 10.1089/jpm.2015.0351.
4. Heyland DK. Failure to Engage hospitalized elderly patients and their families in advance care planning. *JAMA Intern Med*. 2013;173(9):778. doi: 10.1001/jamainternmed.2013.180.
5. Courtright KR, Cassel JB, Halpern SD. A research agenda for high-value palliative care. *Ann Intern Med*. 2017;168(1):71. doi: 10.7326/m17-2164.
6. Billings JA, Bernacki R. Strategic targeting of advance care planning interventions. *JAMA Intern Med*. 2014;174(4):620. doi: 10.1001/jamainternmed.2013.14384.
7. Abedini NC, Chopra V. A Model to Improve Hospital-Based Palliative Care: The Palliative Care Redistribution Integrated System Model (PRISM). *J Hosp Med*. 2018;13(12):868-871. doi: 10.12788/jhm.3065
8. Bernacki R, Hutchings M, Vick J, et al. Development of the Serious Illness Care Program: a randomized controlled trial of a palliative care communication intervention. *BMJ Open*. 2015;5(10):e009032. doi: 10.1136/bmjopen-2015-009032.
9. Clayton JM, Butow PN, Waters A, et al. Evaluation of a novel individualized communication-skills training intervention to improve doctors' confidence and skills in end-of-life communication. *Palliat Med*. 2012;27(3):236-243. doi: 10.1177/0269216312449683.
10. Kamal AH, Bull JH, Wolf SP, et al. Prevalence and predictors of burnout among hospice and palliative care clinicians in the U.S. *J Pain Symptom Manag*. 2016;51(4):690-696. doi: 10.1016/j.jpainsymman.2015.10.020.
11. Meier DE, Back AL, Berman A, Block SD, Corrigan JM, Morrison RS. A national strategy for palliative care. Health Aff (Millwood). 2017;36(7):1265-1273. doi: 10.1377/hlthaff.2017.0164.