

anyone injured by research; and provisions must be made to engage communities throughout the course of research.

Routine preexposure prophylaxis in military personnel has resulted in observational studies of AVA in young adults, but additional data from adult populations — from dose-sparing studies, for example — are needed before pediatric testing can be ethically considered. With additional safety data, the level of risk to young adults could be inferred with increased statistical confidence. Such an inference, in turn, would influence a possible minimal-risk design of a series of age-deescalating safety and immunogenicity studies.

Sound science must always respect our ethical obligations to protect children from unnecessary risks. Medical countermeasure research warrants an ongoing national conversation to ensure an unwavering commitment to safeguard all children both from unacceptable risks in research and through research promoting their health and well-being.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

From the Presidential Commission for the Study of Bioethical Issues, Washington, DC, and the Office of the President and Department of Political Science, University of Pennsylvania, Philadelphia.

This article was published on March 19, 2013, at NEJM.org.

1. White R. Anthrax vaccine trials for children: precautionary or premature? Bioethics Forum. May 22, 2012 (<http://www.thehastingscenter.org/Bioethicsforum/Post.aspx?id=5852>).
2. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. Research involving children. Washington, DC: Department of Health, Education, and Welfare, 1977 (http://bioethics.georgetown.edu/pcbe/reports/past_commissions/Research_involving_children.pdf).
3. Code of Federal Regulations, Title 45, Public Welfare. Department of Health and Human Services. Part 46, Protection of human subjects, Section 407.
4. Code of Federal Regulations, Title 45, Public Welfare. Department of Health and Human Services. Part 46, Protection of human subjects, Section 406.
5. Presidential Commission for the Study of Bioethical Issues (PCSB). Safeguarding children: pediatric medical countermeasure research. Washington, DC: PCSBI, 2013.

DOI: 10.1056/NEJMp1302093

Copyright © 2013 Massachusetts Medical Society.

Generalist plus Specialist Palliative Care — Creating a More Sustainable Model

Timothy E. Quill, M.D., and Amy P. Abernethy, M.D.

Palliative care, a medical field that has been practiced informally for centuries, was recently granted formal specialty status by the American Board of Medical Specialties. The demand for palliative care specialists is growing rapidly, since timely palliative care consultations have been shown to improve the quality of care, reduce overall costs, and sometimes even increase longevity.^{1,2} The field grew out of a hospice tradition in which palliative treatment was delivered only at the end of life, but its role has expanded so that palliative care specialists now also provide palliative treatment in the earlier stages of disease alongside disease-directed medical care, improving quality of care and medical decision making regardless of the stage of illness. In an era when

health care organizations may soon receive capitated payments for all services that patients receive, many are investing in palliative care to improve overall value.

Although this trend has fostered rapid growth of the palliative care specialty, the current model adds another layer of specialized care for seriously ill patients on top of an already complex, expensive health care environment. As in any medical discipline, some core elements of palliative care, such as aligning treatment with a patient's goals and basic symptom management, should be routine aspects of care delivered by any practitioner. Other skills are more complex and take years of training to learn and apply, such as negotiating a difficult family meeting, addressing veiled existential distress, and managing re-

fractory symptoms. Now that the value of palliative care has been recognized, specialists are sometimes called on for all palliative needs, regardless of complexity.

Although it may theoretically seem optimal for palliative medicine specialists to take on all palliative aspects of care, this model has negative consequences. First, the increasing demand for palliative care will soon outstrip the supply of providers. Second, many elements of palliative care can be provided by existing specialist or generalist clinicians regardless of discipline; adding another specialty team to address all suffering may unintentionally undermine existing therapeutic relationships. Third, if palliative care specialists take on all palliative care tasks, primary care clinicians and other specialists may begin to be-

Representative Skill Sets for Primary and Specialty Palliative Care.

Primary Palliative Care

- Basic management of pain and symptoms
- Basic management of depression and anxiety
- Basic discussions about
 - Prognosis
 - Goals of treatment
 - Suffering
 - Code status

Specialty Palliative Care

- Management of refractory pain or other symptoms
- Management of more complex depression, anxiety, grief, and existential distress
- Assistance with conflict resolution regarding goals or methods of treatment
 - Within families
 - Between staff and families
 - Among treatment teams
- Assistance in addressing cases of near fatality

lieve that basic symptom management and psychosocial support are not their responsibility, and care may become further fragmented.

Furthermore, there are nowhere near enough palliative care specialists to provide all palliative care services for every very ill patient. At a time when many people are living longer with an increased illness burden, many patients will need both primary and specialty palliative care. Current levels of new trainees will barely replace retiring palliative care clinicians. Part of the solution is to increase fellowship funding and develop alternative pathways to fellowship training and certification, and the American Academy of Hospice and Palliative Medicine and other organizations are working to address the workforce challenge. In the current cost-conscious environment, expanding workforce may be a tough sell, but the proven ability of palliative care to simul-

taneously improve quality and save money makes it a critical part of the care plan for the most seriously ill (and expensive) patients.^{1,2}

As part of this planned expansion of palliative care delivery, we need a care model that distinguishes primary palliative care (skills that all clinicians should have) from specialist palliative care (skills for managing more complex and difficult cases), so that they can coexist and support each other. Representative skill sets that might be required of each group are listed in the box. This distinction is not new: in the 1990s, there was a national focus on teaching basic palliative care skills to all practitioners (e.g., the Education in Palliative and End-of-life Care and End-of-Life Nursing Education Consortium courses), but the increased demand for palliative care warrants a reenergized, concerted effort spanning the health care system. We believe that each medical specialty (oncology, cardiology, critical care, geriatrics, primary care, surgery, and others) and health system needs to delineate basic expectations regarding primary palliative care skills to be learned and practiced by its members, plus a triage system for calling on palliative care specialists when necessary. The primary palliative care curriculum must be taught — even to mid-career clinicians — and reinforced by performance measurement and remediation as needed. Meanwhile, hospice and palliative medicine specialists must recognize that a growing primary palliative care practice, far from competing with us, will enable our discipline to flourish.

Education is the starting point, and we should draw from existing training workshops. For ex-

ample, Oncotalk is a program for oncology fellows to learn and practice basic palliative care skills under supervision.³ The Agency for Healthcare Research and Quality recently funded a grant to the American Society of Clinical Oncology to develop and disseminate, in collaboration with the American Academy of Hospice and Palliative Medicine, a primary palliative care curriculum for oncology based on current best evidence and to study its effect on the quality of care by embedding quality metrics in the oncology measure set. The aim is to enhance oncologists' understanding of the basic principles of palliative care, while acknowledging that complex scenarios and refractory suffering should be addressed by palliative medicine specialists.

Similar efforts can expand palliative care treatments and services to such seriously ill populations as patients with heart failure, chronic lung disease, Alzheimer's disease, or other conditions — and into primary care. Some basic palliative care skills (e.g., basic pain management and discussions of prognosis) are needed in any medical discipline, whereas others are more specific to a particular discipline (e.g., for pulmonologists, symptomatic management of severe dyspnea). Basic training programs and curricula are easily adaptable and exportable. We must also train all medical students and residents in basic palliative care skills, so training programs should extend across the career continuum.⁴

In a coordinated palliative care model, the primary care physician or treating specialist could manage many palliative care problems, initiating a palliative care consultation for more complex or refractory problems. When such

consultations are initiated, consideration should be given to returning the patient to the referring specialist or the primary care physician for ongoing palliative care management when that's deemed desirable by everyone involved. This model allows increased access to specialty palliative care consultation and reinforces delivery of primary palliative care by everyone caring for seriously ill patients.⁵

In addition, this model could simplify the health care system and reinforce existing relationships. It would enhance the skills of all clinicians, improving their ability to address basic palliative care needs. It could also increase their satisfaction, by enabling deeper, more meaningful relationships with patients across the continuum of care. Finally, it might help control costs by reducing the number of specialists routinely comanaging cases. In fact, generalist-plus-specialist palliative care, bridged by primary care clinicians, is the main model endorsed worldwide.

This approach seems unlikely to undermine the field of special-

ty palliative medicine. There are far too many seriously ill patients with unaddressed palliative care needs to have specialized palliative care teams caring for all of them. There are currently about 5000 board-certified palliative care specialists, about half of whom work less than full time providing palliative care. As the Baby Boomers age and the number of patients with serious chronic illnesses increases, even if it were a good idea for palliative care specialists to care for all such patients, the gap between demand and supply would be too large to close. Furthermore, it is not a good idea, in terms of cost or quality, to always require adding a palliative care team to all the other teams managing their fragments of care.

We hope that every medical field will define a set of basic palliative skills for which they will be primarily responsible and distinguish them from palliative care challenges requiring formal consultation. Such a model might be better and more sustainable than our current system, as we strive to make high-quality health care available to all Americans.

The opinions expressed are those of the authors and do not necessarily represent those of the American Academy of Hospice and Palliative Medicine.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the Department of Medicine, Palliative Care Division, University of Rochester Medical Center, Rochester, NY (T.E.Q.); the Duke Center for Learning in Health Care and the Duke Cancer Care Research Program, Duke University School of Medicine, Durham, NC (A.P.A.); and the American Academy of Hospice and Palliative Medicine (T.E.Q., A.P.A.).

This article was published on March 6, 2013, at NEJM.org.

1. 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.
2. Morrison RS, Dietrich J, Ladwig S, et al. Palliative care consultation teams cut hospital costs for Medicaid beneficiaries. *Health Aff (Millwood)* 2011;30:454-63.
3. Back AL, Arnold RM, Baile WF, et al. Faculty development to change the paradigm of communication skills teaching in oncology. *J Clin Oncol* 2009;27:1137-41.
4. Quill TE, Dannefer E, Markakis K, et al. An integrated biopsychosocial approach to palliative care training of medical students. *J Palliat Med* 2003;6:365-80.
5. Kamal AH, Currow DC, Ritchie CS, Bull J, Abernethy AP. Community-based palliative care: the natural evolution for palliative care delivery in the U.S. *J Pain Symptom Manage* 2012 November 15 (Epub ahead of print). DOI: 10.1056/NEJMp1215620
Copyright © 2013 Massachusetts Medical Society.

A Path Forward on Medicare Readmissions

Karen E. Joynt, M.D., M.P.H., and Ashish K. Jha, M.D., M.P.H.

October 1, 2012, marked the beginning of the Hospital Readmissions Reduction Program (HRRP), an ambitious effort by the Centers for Medicare and Medicaid Services (CMS) to reduce the frequency of rehospitalization of Medicare patients. The program consists primarily of financial penalties levied against hospitals with readmission rates that are deemed to be excessive. To assign penalties, CMS calculated expected readmission rates for all hospitalizations for acute

myocardial infarction, congestive heart failure, and pneumonia from July 2008 through June 2011, adjusting for age, sex, and coexisting conditions such as diabetes and hypertension. These expected rates were then compared with the actual readmission rates over the same period, and penalties were assessed against hospitals whose observed rate exceeded the expected rate. According to CMS, approximately two thirds of U.S. hospitals will receive penalties consisting of up to 1% of their

reimbursement for Medicare patients; these penalties will increase to 3% by 2015. CMS expects to recoup \$280 million from the 2217 hospitals penalized in 2013 alone.

Penalizing hospitals for high readmission rates has been controversial since the idea was introduced, with criticism primarily focused on two main areas. The first point of contention is whether the hospital is the appropriate entity to be held accountable for readmissions, given