

Strategies in Education

Breaking Down Silos, Building Up Teams

By KATHLEEN A. KALB, Ph.D., RN and SUSAN O'CONNOR-VON, Ph.D., RN

How we educate health care professionals during these times of change and opportunity has a profound impact on how we are able to provide patient-centered care that is effective, safe and promotes desired health outcomes. Research shows that effective interprofessional education results in effective collaborative practice, and effective collaborative practice results in better health outcomes; improved efficiency, safety, and quality of health care; greater patient satisfaction; increased job satisfaction; and strengthened health systems.^{1,2}

It's time to break down silos and build up teams.

WHAT'S THE PROBLEM?

To be succinct: the education of health care professionals has not kept pace with the health care needs of a changing society, nor has it met the challenges of our rapidly evolving health care system. The persistence of educational silos in the health care professions hampers efforts to address glaring gaps and gross inequities in health and health care; emerging infectious, environmental and behavioral risks; and escalating epidemiological and demographic transitions.

All health care professionals need an integrative education that connects learning in the classroom to learning in clinical and community practice settings. Therefore, academic structures that effectively facilitate team-based learning in interprofessional education

need to be determined, implemented and then evaluated.

The tendency of health care faculty to educate their students in isolation from — or even in competition with — each other interferes with the graduates' ability to engage in collaborative practice and provide care that is holistic and patient-centered. The graduates have missed out on opportunities for experiences that bring together students from multiple health professions to learn from and with each other, exchange the knowledge, science and points of view of their various disciplines and contribute to a more holistic understanding of the human person.

The educational culture often potentiates professional independence rather than interdependence among the health professions, and outdated and static curricula focus on competencies that do not address the needs of real patients and populations. The

result is a mismatch between what students learn and what they need to know to engage effectively in practice.

Faculty and clinical preceptors need to model effective interprofessional communication that builds relational trust and contributes to the formation and function of collaborative teams that improve the quality of care delivery and promote health outcomes. However, faculty who teach in health professions programs often have little experience with multidisciplinary teaching and may fail to value the potential benefits of interprofessional education and collaborative practice. Faculty from different health professions also may not be allowed the time to develop interprofessional courses. What's more, licensing and accreditation requirements often perpetuate silos of learning in the health professions.

TOWARD NEW MODELS

Interprofessional education, as defined by the World Health Organization, occurs "when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes."³ However, according to the 2010 conference and workshop called "Educating Nurses and Physicians: Toward New



Horizons,” sponsored by the Josiah Macy Jr. Foundation and the Carnegie Foundation for the Advancement of Teaching,

Very rarely do health professions students interact with students or faculty from any other health professions. The problem with this model is that it does not adequately expose students to what they will need when they go into practice. When students are taught such autonomy and independence, they don't generally learn that they are responsible not only for the health and safety of their own patients, but also accountable for the overall functioning of the health care delivery system. Teaching students in teams will help them learn that they can work together to not only improve patient care, but to improve the processes and systems that support patient care.⁴

Indeed, the problems in health professions education are systemic — and so are the challenges and opportunities. Our evolving health care system is changing much more rapidly than are the teaching models currently used to educate

health care professionals. Redesign of health professions education is necessary and timely, especially in view of the opportunities for collaborative learning created through harnessing technological innovations.

This is precisely the task being undertaken by multiple foundations and organizations that are working to redesign the education of health care professionals so that they are prepared to engage in collaborative practice in an interdependent, global health care environment.

For the past 10 years, interprofessional education and team-based health care have been the focus of extensive investigations and collaborative research. Multiple foundations, institutes, professional organizations and government agencies engaged in these research efforts are consistently reporting similar themes and recommendations: Collaboration between health professionals improves the quality and safety of patient care and increases access to health care services.

No matter how collaboration is fostered or in what setting, collaborative learning in the health professions prepares students to engage in collaborative, interprofessional practice. And collaborative practice enables health care teams to work

INTERPROFESSIONAL EDUCATION AND THE INSTITUTE OF MEDICINE

Since its foundation 40 years ago, the Institute of Medicine has published many reports echoing the theme of educating health care professionals who are prepared to provide high-quality, safe, effective, evidence-based and patient-centered care. In *Health Professions Education: A Bridge to Quality*, the Institute of Medicine describes the interprofessional education of health professionals as a bridge to quality care that promotes safety, quality and health care outcomes. Stressing the need for outcome-based education in the health professions, the institute identified five core competencies with specific knowledge, skills and attitudes consistent with interprofessional practice:

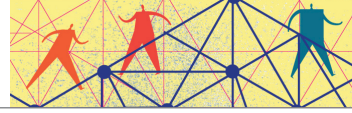
- Provide patient-centered care
- Work in interdisciplinary teams
- Employ evidence-based practice
- Apply quality improvement approaches
- Utilize informatics

These five core competencies provide the organizing framework for the core competencies identified by the Quality and Safety Education for Nurses (QSEN), an initiative funded by the Robert Wood Johnson Foundation to

improve nursing care. QSEN also specifies both pre-licensure and graduate competencies.

More recently, the Institute of Medicine calls on all health care professionals and health care decision-makers to collaborate and enact the changes needed for a more accessible and equitable health care system. In *The Future of Nursing: Leading Change, Advancing Health*, the institute stresses that collaboration among health professionals is critical to improving quality and safety and increasing access to health care services.

Although the key messages and recommendations described in this report focus on the profession of nursing, their implications are much broader than a single profession. Specific recommendations related to interprofessional education and collaborative practice emphasize the need to design and implement early and continuous interprofessional learning experiences in joint classroom and clinical education opportunities, expand opportunities to lead and diffuse collaborative improvement efforts and build an infrastructure for the collection and analysis of interprofessional health care workforce data.



together with patients, families and communities to deliver the highest quality of care designed to achieve specified health goals based on desired health outcomes. It is all about learning together to work together to promote health.

The theme of “learning together to work together” is not new. Forty years ago, the Institute of Medicine asserted that a major barrier to “health care that is efficient, effective, comprehensive, and personalized is our lack of a design for the synergistic interrelationship of all who can contribute to the patient’s well-being.”⁵ In its 2001 report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, the Institute of Medicine called on academic institutions to promote quality and safety in health care by educating health care professionals to work collaboratively.⁶ Two years later, the institute released its landmark report, *Health Professions Education: A Bridge to Quality*, and identified five core competencies integral to the education of all health care professionals.⁷ Focusing on the need for outcome-based education in the health professions, this report concluded that all health care professionals must be prepared to provide patient-centered care as members of interdisciplinary teams, employ evidence-based practice, apply quality improvement approaches and use informatics.

Over the last decade, the Preparation for the Professions Program undertaken by the Carnegie Foundation for the Advancement of Teaching investigated the professional education of clergy, engineers, lawyers, nurses and physicians.⁸ Findings of this comprehensive program of research emphasized themes addressing the scholarship of teaching and the formation of professionals. These themes centered on three essential apprenticeships:

- Cognitive: knowledge of relevant science, technology, literature and theory
- Practical: skilled know-how and judgment in professional and clinical practice
- Normative: ethical comportment and formation.

Following publication of these studies, the Josiah Macy Jr. Foundation joined the Carnegie Foundation for the Advancement of Teaching to convene a conference in Palo Alto, Calif., to advance new models of interprofessional education within academic health centers: “Educating Nurses and Physicians: Toward New Horizons.”⁹ This conference engaged selected universities in designing strategies that promote opportunities for health professions students in nursing and

CARNEGIE FOUNDATION CALLS FOR NEW MODELS

The Preparation for the Professions Program was a multiyear comparative study of professional education in the United States conducted by the Carnegie Foundation for the Advancement of Teaching. The purpose of this extensive program of research was to understand how professionals are prepared to practice and educated for their responsibilities in the communities they serve.

The Preparation for the Professions Program examined common themes and identified practices distinct to various forms of professional education. Over the last decade, national studies were conducted to understand the demands of learning and identify the most effective strategies for educating clergy, lawyers, engineers, physicians and nurses. Focusing on the issues of teaching, learning, assessment and curriculum in professional education, the findings of these studies emphasize the need to create new educational models that intentionally and effectively integrate the cognitive (knowledge), practical (skills) and normative (moral integrity and ethical comportment) apprenticeships found in all forms of professional education.

The program identified three apprenticeships for professional education that contribute to professional formation, the process in which a person is prepared for a particular task or made capable of functioning in a particular role. They are:

- A cognitive, intellectual apprenticeship of knowledge and science that focuses on learning the academic knowledge base and developing the capacity to think in ways important to the profession
- A practical, skill-based apprenticeship that focuses on professional and clinical judgment
- An apprenticeship that focuses on the ethical standards, ethical comportment, social roles and responsibilities of the profession, through which the student is introduced to the meaning of an integrated practice of all dimensions of the profession and grounded in the profession’s fundamental purposes

The program emphasized providing transformative learning experiences that integrate these three apprenticeships as an integral dimension of professional education.

In June 2010, the Josiah Macy Jr. Foundation and the Carnegie Foundation for the Advancement of Teaching convened a conference, “Educating Nurses and Physicians: Toward New Horizons,” to advance interprofessional education in academic health centers and disseminate initiatives that focus on integration, systems improvement and professionalism.

Seven academic health centers participated in this conference held in Palo Alto, Calif. They are currently implementing and evaluating models of interprofessional education that promote team-based learning across classroom, clinical and community settings. These models focus on improving the quality of health care by engaging in “serious and rigorous efforts to fully integrate team-based learning as a core component of health professions education.”

medicine to learn collaboratively in both academic and clinical settings.

More recently, the Interprofessional Education Collaborative, a partnership of six professional associations, published the “Core Competencies for Interprofessional Collaborative Practice”¹⁰ and strategies designed to build a shared foundation for health professions education and clinical practice.¹¹ These competencies and strategies reflect the need for increased collaboration and teamwork across the health professions to improve quality, safety and access, and the need to prepare health care professionals to actually work together in teams.

In recent months, the Institute of Medicine launched the “Global Forum on Innovation in Health Professional Education” to bring together leaders from academia, professional associations, public service, industry and the nonprofit world to share perspectives on instructional and institutional reform by focusing on multifocal, interprofessional and global “innovation collaboratives.”¹² The forum purposes to reimagine the future of health professions education by facilitating discussion and fostering ideas for redesigning curriculum and transforming the education of health professionals to meet the challenges of an interdependent, global health environment.

WHAT ABOUT CATHOLIC HEALTH CARE?

What does Catholic health care have to do with all of this? Everything. By its nature, identity, and mission, Catholic health care is universal: it is multifocal, interprofessional and global. The education of health care professionals has a rich and distinguished history in Catholic colleges and universities and health care institutions. The relationship of Catholic health care to the recommendations promulgated in many of these interprofessional initiatives was beautifully expressed by Pope Benedict XVI in his first encyclical, *Deus Caritas Est*:

In addition to their necessary professional training ... Those who ... dedicate themselves to others with heartfelt concern ... need a “formation of the heart”: they need to be led to that encounter with God in Christ which awakens their love and opens their spirits to others. The program of the Good Samaritan, the program of Jesus — is

“a heart which sees.” This heart sees where love is needed and acts accordingly.¹³

Formation, one of the essential themes addressed in the recommendations of the Carnegie Foundation’s “Preparation for the Professions Program,” is frequently described in papal teachings and church documents. “Formation of

No matter how collaboration is fostered or in what setting, collaborative learning in the health professions prepares students to engage in collaborative, interprofessional practice.

the heart,” expressed by Pope Benedict, is a particularly expressive phrase that captures the integration of the three apprenticeships related to the cognitive, practical and normative dimensions of professional education and learning — apprenticeships of thought, of practice and the spirit.

In the *Charter for Health Care Workers*, the Pontifical Council for the Pastoral Assistance of Health Care Workers states that the charter’s purpose is to “become an integral part of the initial and ongoing formation of health care workers, so that their witness may be proof that the Church, in its defense of life, opens its heart and its arms to all people since Christ’s message is addressed to all people,¹⁴ for “to serve life is to serve God in the person: it is to become ‘a collaborator with God.’”¹⁵ Addressing the education of health care professionals in the context of formation, the charter affirms the need for “a thorough preparation and ongoing formation so as to ensure, also by personal studies, the required competence and fitting professional expertise,” as well as a solid “ethico-religious formation” which “promotes in them an appreciation of human and Christian values, an authentic faith, and a true sense of morality.”¹⁶

Interprofessional education, collaborative practice and team-based health care are powerful expressions of Catholic social doctrine in the contexts of education and health care that promote the integral development of individuals, peoples and nations. These concepts are informed by the permanent principles of respect for human dignity, the common good, subsidiarity and solidarity.¹⁷

Although the *Ethical and Religious Directives for Catholic Health Care Services (ERDs)* do not



From Campus to Practice

EXEMPLARS OF INTERPROFESSIONAL EDUCATION IN OUR BACKYARD

The University of Minnesota Academic Health Center

Minneapolis, Minn.

The University of Minnesota Academic Health Center has a long history of interprofessional education. Established in 1970, the Academic Health Center's international reputation is built upon a legacy of leadership in health care which began decades before the University's six health professions schools and colleges were institutionally joined: the Medical School, School of Dentistry, School of Nursing, School of Public Health, College of Pharmacy and College of Veterinary Medicine. Graduating nearly 1,000 students annually from its schools and colleges, the Academic Health Center's primary goal is to educate the next generation of doctors, nurses, pharmacists, dentists, public health professionals and veterinarians. In 2006, the deans of the Academic Health Center's health professions schools issued a joint leadership statement identifying new priorities and creating the Center for Interprofessional Education. These priorities are currently being enacted through a bold initiative that requires all health professions students to achieve a defined set of collaborative competencies in the areas of professionalism/ethics, communication and teamwork.

In 2010, the University of Minnesota Academic Health Center participated in the interprofessional education conference sponsored by the Josiah Macy Jr. Foundation and the Carnegie Foundation for the Advancement of Teaching, "Educating Nurses and Physicians: Toward New Horizons," and launched a three-phase initiative called "1Health" to ensure graduates of the health professions schools are prepared to engage in interprofessional practice.

In Phase I, at the start of their aca-

demically program, all health professions students complete a full-day orientation to patient-centered, team-based care and take a required course that introduces the core concepts of interprofessional collaboration. In Phase II, during the middle of a student's educational program, students engage in interprofessional courses that advance basic knowledge and defined collaborative competencies related to professionalism/ethics, communication and teamwork. In Phase III, students practice these collaborative competencies in clinical settings by participating in interprofessional learning experiences.

The Henrietta Schmoll School of Health at St. Catherine University

Saint Paul, Minn.

Launched in 2007, the Henrietta Schmoll School of Health at St. Catherine University advances excellence in health care education that is rooted in the liberal arts, Catholic social teaching and a 150-year tradition in health care of the Sisters of St. Joseph. Building on a legacy of excellence in health care, the Henrietta Schmoll School of Health provides a cohesive home for over 35 health care programs at St. Catherine University and emphasizes relationship-centered care, socially responsible leadership and interprofessional learning and initiatives designed to reshape the education of health care professionals; influence health, health systems and health policy; and engage regional and national partners to meet urgent health care and workforce challenges.

In November 2011, more than 175 leaders in health care and health care education convened to launch the first Clinical Education Health Care Summit sponsored by the Henrietta

Schmoll School of Health, examining the changing landscape of health care, providing exemplars of interprofessional learning and identifying strategies to align higher education and health care practice. Formation in teamwork, patient care and professionalism that students need to be effective in interprofessional practice was addressed, challenging participants to "think outside of the box" and engage in a culture shift that focuses on better health outcomes through interprofessional learning and strong relationships between institutions of higher education, health care centers and communities.

Collaborating with the Center for Clinical Excellence at North Memorial Medical Center in Robbinsdale, Minn., the Henrietta Schmoll School of Health launched an interprofessional clinical scholars program in January 2012 designed to provide evidence-based care that calls for students, faculty and health care professionals to work together to evaluate existing evidence for a specific population of patients and resolve issues relevant to patient care for that patient group. Undergraduate and graduate students in library and information science, nursing, respiratory care, holistic health and occupational therapy collaborate with professionals in the practice setting to evaluate existing research in their chosen study areas. Integral to this program is a comprehensive course on evidence-based practice that focuses on using best practices and best evidence to provide the highest quality and most effective patient care.

specifically address the education of health care professionals, the *ERDs* assert that “Catholic health care should be marked by a spirit of mutual respect among caregivers that disposes them to deal with those it serves and their families with

Perhaps this is the most precious lesson our patients and our students teach us: One cannot heal in a silo; one cannot teach in a silo.

the compassion of Christ...”¹⁸ Ultimately, interprofessional education is an expression of solidarity that affirms subsidiarity and is enacted to promote the common good that is predicated on respect for human dignity. In many ways, Catholic social doctrine, with its roots in the natural moral law, is at the foundation of all the recommendations and initiatives being undertaken to ensure health care professionals are prepared to engage in collaborative practice that is patient-centered and outcome-focused.

WHAT NEXT?

Evidence confirms that the present content, organization and delivery of health professions education fails to serve the needs of patients and populations; evidence also confirms that students who engage in interprofessional education are better prepared to work more collaboratively, communicate more effectively and provide safe and high-quality health care.

Leadership at all levels is needed — local, national and global — to enact the recommendations and achieve the reforms that will ensure students in the health professions are educated in interprofessional learning environments that prepare them for collaborative practice and team-based health care. Leaders in academic and professional practice are needed — educators, practitioners and administrators — to collaborate in designing integrated curriculum and clinical experiences that ensure students have multiple and sustained opportunities to engage in interprofessional practice and evaluate the outcomes of team-based health care.

Interprofessional collaboration and team-based care will not be broadly achieved until students in diverse health professions are educated together. This will only be achieved through interprofessional education that requires committed partnerships across health care professions and across academic and practice settings.

Sharing and valuing different professional perspectives is critical to this educational objective. Students educated in interprofessional learning environments that stress knowledge of each other’s professions, effective communication, conflict resolution and shared decision-making are more likely to collaborate in future work settings.¹⁹

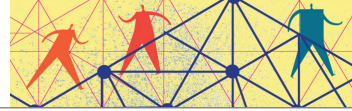
When students graduate and begin working, opportunities for interprofessional learning need to be sustained in practice settings through joint continuing education programs provided by health care organizations.

How we prepare faculty to educate students in the health professions also needs to be a focus of these instructional and institutional reforms. Faculty in the health professions are “hybrids”; that is, they are both health care professionals and they are educators. In health professions education, for example, faculty bring together the best of both in their roles as educators of future health professionals. They are health care professionals; they are educators. They are healers; they are teachers. They are privileged witnesses of the mystery of healing; they are privileged witnesses of the mystery of learning.

But even more, as health professions educators, they are privileged participants in healing and in learning. For in our work of healing, we are healed; in our work of teaching, we are taught. And this is one of the greatest privileges of being health professions educators — we are caught up in a work that transcends ourselves, a work which requires us to engage in relationships with our patients as healers and in relationships with our students as co-learners who teach us what we most need to learn.

Perhaps this is the most precious lesson our patients and our students teach us: One cannot heal in a silo; one cannot teach in a silo. As we applaud the initiatives that are being undertaken to break down silos and build up teams in the education of health care professionals, we also need to look with new eyes at how we prepare faculty who educate these future health care professionals.

Changing the way health professionals are educated requires changing the way faculty teach.²⁰ Indeed, interprofessional educator programs that prepare faculty to teach with other health professions faculty may be the best way to ensure that students in the health professions are prepared to practice collaboratively in interprofessional teams that provide safe, high-quality, patient-centered care — from the very beginning.



The new realities in health care present new challenges and new opportunities in health professions education. Creating new partnerships across academic, practice and community settings that promote the delivery of efficient, effective and ethical patient-centered care is a good start and an essential beginning. As the preacher in the Book of Ecclesiastes reminds us, there is “a time to break down and a time to build up.” (Ecclesiastes 3:4) This is the time to break down the silos that create barriers to patient-centered care; contribute to inefficient and ineffective care delivery; and compromise the safety, quality and outcomes of health care. This is the time to build up teams at all levels in health care, teams that bring health professions students and faculty together, teams that bring patients and health care professionals together, teams that bring providers and administrators together, teams that bring systems and communities and peoples together.

Indeed, this is the time to heal our broken, fragmented health care system and “rejoice in the challenge to be Christ’s healing compassion in the world.”²¹

KATHLEEN A. KALB is associate professor, nursing, Henrietta Schmoll School of Health, St. Catherine University, Saint Paul, Minn.

SUSAN O’CONNER-VON, is associate professor, nursing, University of Minnesota School of Nursing, Minneapolis, Minn.

NOTES

1. Josiah Macy Jr. Foundation and the Carnegie Foundation for the Advancement of Teaching, *Educating Nurses and Physicians: Toward New Horizons* (Conference Summary, 2010), 2. Retrieved from http://www.macyfoundation.org/docs/macy_pubs/JMF_Carnegie_Summary_WebVersion_%283%29.pdf
2. World Health Organization, *Framework for Action on Interprofessional Education & Collaborative Practice* (Geneva: World Health Organization, 2010), 7. Retrieved from http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf
3. World Health Organization, *Framework for Action*, 7.
4. Josiah Macy Jr. Foundation, *Educating Nurses and Physicians*, 5.
5. Institute of Medicine, *Educating for the Health Team* (Washington, DC: National Academy of Sciences, 1972), 4. Retrieved from http://www.ipe.umn.edu/prod/groups/ahc/@pub/@ahc/@cipe/documents/asset/ahc_asset_350123.pdf
6. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century* (Washington, DC: National Academy of Sciences, 2001). Retrieved from <http://www.iom.edu/Reports/2001/Crossing-the-Quality-Chasm-A-New-Health-System-for-the-21st-Century.aspx>.
7. Institute of Medicine, *Health Professions Education: A Bridge to Quality* (Washington, DC: National Academy of Sciences, 2003). Retrieved from <http://www.iom.edu/Reports/2003/Health-Professions-Education-A-Bridge-to-Quality.aspx>.
8. Carnegie Foundation for the Advancement of Teaching’s Professional and Graduate Education, *Preparation for the Professions Program* (2011). Retrieved from <http://www.carnegiefoundation.org/previous-work/professional-graduate-education>.
9. Josiah Macy Jr. Foundation, *Educating Nurses and Physicians*, 1.
10. Interprofessional Education Collaborative Expert Panel, *Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel* (Washington, DC: Interprofessional Education Collaborative, 2011). Retrieved from <http://www.aacn.nche.edu/Education/PDF/IPECReport.pdf>.
11. Interprofessional Education Collaborative, *Team-Based Competencies: Building a Shared Foundation for Education and Clinical Practice*. (Washington, DC: Interprofessional Education Collaborative, 2011). Retrieved from <http://www.aacn.nche.edu/Education/pdf/IPECProceedings.pdf>.
12. Global Forum on Innovation in Health Professional Education (2012). Retrieved from <http://www.iom.edu/Activities/Global/InnovationHealthProfEducation.aspx>.
13. Benedict XVI, *Deus Caritas Est* (2005), para. 31.
14. Pontifical Council for Pastoral Assistance to Health Care Workers, *The Charter for Health Care Workers* (1995), Introduction. Retrieved from <http://wf-f.org/healthcarecharter.html>.
15. *The Charter for Health Care Workers*, para. 4.
16. *The Charter for Health Care Workers*, para. 7.
17. Pontifical Council for Justice and Peace, *Compendium of the Social Doctrine of the Church* (Washington, DC: USCCB Publishing, 2004). Retrieved from http://www.vatican.va/roman_curia/pontifical_councils/justpeace/documents/rc_pc_justpeace_doc_20060526_compendio-dott-soc_en.html.
18. United States Conference of Catholic Bishops, *Ethical and Religious Directives for Catholic Health Care Services*, 5th edition (Washington, DC: USCCB Publishing, 2009), no. 2
19. Josiah Macy Jr. Foundation, *Educating Nurses and Physicians*, 6.
20. Josiah Macy Jr. Foundation, *Educating Nurses and Physicians*, 13.
21. *Ethical and Religious Directives*, Conclusion.

JOURNAL OF THE CATHOLIC HEALTH ASSOCIATION OF THE UNITED STATES

www.chausa.org

HEALTH PROGRESS®

Reprinted from *Health Progress*, May-June 2012
Copyright © 2012 by The Catholic Health Association of the United States
