

# Interprofessional Education: Making Our Way Out of the Silos

Interprofessional collaboration and education have been discussed for decades, but there is no universal model to prepare students and practitioners to collaborate across health care disciplines. The delicate and complex work of caring for patients requires the expertise of many health care disciplines working together to achieve a common goal. However, we often hear the phrase “working in silos” to describe how many health professionals tend to go about providing patient care. My experience in working with other health professionals started over 30 years ago as a student during clinical rotations. While the concept of interprofessional collaboration, or what was often referred to as multidisciplinary care or interdisciplinary care, had not yet taken hold, it quickly became common in our vocabulary when the tidal wave of managed care swept across the United States in the early to mid-1990s. The general consensus was that managed care in the form of health maintenance organizations would change the way health care did business, and that coordinated and collaborative care would become the standard. Yet we remained in our silos. How did we get to be in silos? More importantly, how do we get out them? I believe many of the answers can be found in education.

The essence of interprofessional education (IPE) requires interaction and active engagement among different health disciplines. It simply is not enough to teach students and practitioners about collaboration; rather, we need to create learning environments and experiences that place them in the context of realistic clinical situations to understand and appreciate differences and contributions of other disciplines.<sup>1</sup> In this issue of *RESPIRATORY CARE*, Zamjahn and colleagues<sup>2</sup> described how IPE can be incorporated into the curriculum and improve student knowledge of roles and responsibilities of other health care disciplines to encourage future collaborative practices. There are many reasons why IPE is important to health care and the respiratory care profession.

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## Era of Accountability

While the first era of managed care did not necessarily live up to the hype it promised in terms of changing the

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way health care did business, it did pave the way for what was to come. The United States spends more on health care than any other industrialized country, with a record high of nearly 18% of the gross domestic product in 2016;<sup>3</sup> many of our health outcomes, however, lag behind other comparable countries who spend considerably less.<sup>4</sup> The rate of growth in health care spending has slowed, but it is expected to continue to rise over the next decade to consume more of the gross domestic product. Rising health care costs coupled with concerns over quality have sparked much debate on what to do about it. The Patient Protection and Affordable Care Act (ACA) law enacted in 2010 was designed to improve health care accessibility, affordability, and quality.<sup>5</sup> While controversial, the measure was the most significant change to the United States health care system since the passage of the Social Security Amendments of 1965, which gave us Medicare and Medicaid.<sup>5,6</sup> Many may argue that the promise of change to our health care system finally came with the enactment of the ACA.

The ACA expanded the ability of the Centers for Medicare and Medicaid Services to create new programs that reward cost-reduction measures while improving quality of care.<sup>7</sup> Two such programs include the Bundled Payments of Care Improvement and the Hospital Readmission Reduction Program. Under these programs, interprofessional collaboration is the hallmark feature that encourages health care professionals to work together to reduce hospital readmissions, duplication of services, and unnecessary treatments by coordinating care, promoting preventive care, and helping patients self-manage their chronic disease conditions.<sup>8</sup> COPD is among the leading causes of death in the United States and is included in the programs. Approximately 20% of Medicare beneficiaries admitted to the hospital for an exacerbation of COPD end up being readmitted within 30 d of discharge,<sup>9</sup> with up to 55% being preventable.<sup>10</sup> This is of significant relevance to our

profession, because the need to address these issues and the associated competencies were made evident as part of the American Association for Respiratory Care's 2015 and Beyond initiative.<sup>11,12</sup> Being successful in improving patient outcomes requires a shift in culture. The changing landscape of health care put into motion as a result of the ACA places a focus on value-based care and pay-for-performance over volume-based care and fee-for-service.<sup>8</sup> How do we change an ingrained culture that has predominantly been able to work in silos for so long? Legislative acts can force the hand of change, but convincing the mind for the buy-in of change is more complicated. Teaching students and practitioners how to collaborate is a crucial step.<sup>1</sup>

### Creating a Collaborative Practice-Ready Profession

Collaborative practice occurs when multiple professionals from different health disciplines work together with patients, their families and caregivers, and communities to deliver the highest quality of care.<sup>13</sup> IPE prepares learners to engage in collaborative practice using learning experiences in which 2 or more different health disciplines learn about, from, and with each other.<sup>13</sup> The important concept here is embracing the differences in the attributes, roles, and responsibilities of various disciplines as enabling factors to create better collaboration. Often these differences can be viewed as barriers because IPE discipline-specific models may be used to reflect varying requirements and expectations.<sup>14</sup> To complicate matters, many clinicians turned educators were trained and have practiced in the silos, which creates challenges in facilitating IPE.

Zamjahn et al<sup>2</sup> have provided more evidence that IPE can be successfully implemented into respiratory therapy curriculum by using interprofessional clinical simulation. Clinical simulation is one of several different models that can facilitate IPE, with evidence supporting its use in addressing the collaborative practice competencies established by the IPE Collaborative Expert Panel.<sup>2,15</sup> The use of IPE can further support the development of skills and practices that address competencies needed by respiratory therapists. The collaborative practice competencies of team and teamwork, roles and responsibilities, communication, and values/ethics<sup>16</sup> can be found embedded in the respiratory care competency areas of leadership and disease management,<sup>12</sup> which provide a framework to help us achieve a competent and collaborative practice-ready profession. Another important aspect of IPE is the role it has in facilitating the development of professional identity.

### Creating an Identity

There is a general consensus regarding the clinical scope of practice for our profession, but the ability of respiratory

therapists to operate within this scope may vary from state to state or even hospital to hospital, resulting in different experiences and expectations of roles and responsibilities. This variation may be a contributing factor that leads to a lack of confidence in the future of the profession as opportunities for professional growth and expanding the scope of practice are perceived as limited when compared to other health disciplines.<sup>17</sup> Such variation and the perception of limitation can cause uncertainty regarding one's professional identity. Professional identity is shaped by our perceptions of ourselves as practitioners<sup>18</sup> and the impressions we form regarding the roles and responsibilities of other members on the health care team,<sup>19</sup> which is particularly important as a student or early in one's professional career. Professional identity is how we create a sense of our profession, including its language, norms, responsibilities, boundaries, values, and aspirations. Professional socialization is an interactive learning process that starts when students enter into a respiratory therapy program, and this process continues into professional practice. An important outcome of professional socialization is an adaptable professional identity that is ready to respond to the ever-changing health care system and the evolving respiratory care profession.<sup>20</sup>

Another defining characteristic of IPE is the socialization of learners through knowledge and value sharing that occurs within respiratory care and across different health disciplines.<sup>21</sup> The importance of IPE in this process involves bringing together the right mix of learners in an appropriate and realistic clinical situation to encourage understanding and interactions among the different health disciplines.<sup>1</sup> Approaching IPE haphazardly could result in unproductive learning experiences and hinder the professional socialization process, thus reinforcing the silo mentality. Zamjahn et al<sup>2</sup> constructed IPE learning experiences that required involvement from all the participating health disciplines using commonly encountered procedures and equipment. Students who engaged in the IPE experience reported having a meaningful learning experience, demonstrated increased knowledge of the other health disciplines, and felt they were more likely to collaborate in the future. The resulting outcome of IPE learning experiences such as this can contribute to developing a positive professional identity through learning a mutual respect and understanding of each other's roles and responsibilities. As mentioned earlier, professional identity is developed in part by our perceptions of other health disciplines and may promote a sense of belonging as a result of the learning experience itself. Making these connections early in a student's learning process may support the development of positive attitudes toward their own and other health disciplines.

IPE is not new, nor is it intended to stand alone as an addition to the long list of teaching strategies. IPE can be

used as the platform to transform common interactive teaching strategies, such as clinical simulation, problem-based learning, case-based learning, role playing, reflective practice, and small-group collaborative learning, into meaningful experiences that occur within and across health disciplines to lead us out of the silos. However, there must be a willingness and commitment from the respiratory care profession to change our approach to education and practice. There is no doubt that challenges exist in the form of limited time and resources, but can often be accomplished with using some creative adaptation. I am encouraged by recent research conducted using IPE in our profession and by my personal conversations with respiratory therapy faculty on their desire and intent to implement IPE into curriculum. The effective integration of IPE into respiratory therapy curricula and in the practice setting through continuing education can move us forward to a collaborative, practice-ready profession so we can leave the silos behind.

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#### REFERENCES

- Bainbridge L. Interprofessional education in allied health: is this yet another silo? *Med Educ* 2014;48:225-223.
- Zamjahn JB, Beyer EO, Alig KL, Mercante DE, Carter KL, Gunaldo TP. Increasing awareness of the roles, knowledge, and skills of respiratory therapist through an interprofessional education experience. *Respir Care* 2018;63(5):510-518.
- Centers for Medicare & Medicaid Services. National health expenditures 2016 highlights. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpend-Data/Downloads/highlights.pdf>. Accessed January 2, 2018.
- Claxton G, Cox C, Gonzales S, Kamal R, Levitt, L. Measuring the quality of healthcare in the U.S. Kaiser Family Foundation. <https://www.healthsystemtracker.org/brief/measuring-the-quality-of-healthcare-in-the-u-s/#item-start>. Accessed January 2, 2018.
- Obama B. United States health care reform progress to date and next steps. *JAMA* 2016;315(5):525-532.
- Berkowitz E. Medicare and Medicaid: the past as prologue. *Health Care Financ Rev* 2005;27(2):11-23.
- Hardin L, Kilian A, Murphy E. Bundled payments for care improvement. *J Nurs Admin* 2017;47(6):313-319.
- Nester J. The importance of interprofessional practice and education in the era of accountable care. *N C Med J* 2016;77(2):128-132.
- Bhatt SP, Wells JM, Iyer AS, Kirkpatrick DP, Parekh TM, Leach LT, et al. Results of a Medicare bundled payments for care improvement initiative for chronic obstructive pulmonary disease readmissions. *Ann Am Thorac Soc* 2017;14(5):643-648.
- Shah T, Press VG, Huisingh-Scheetz M, White SR. COPD readmissions: addressing COPD in the era of value-based health care. *Chest* 2016;150(4):916-926.
- Kacmarek RM, Durbin CG, Barnes TA, Kageler WV, Walton JR, O'Neil EH. Creating a vision for respiratory care 2015 and beyond. *Respir Care* 2009;54(3):375-389.
- Barnes TA, Gale DD, Kacmarek RM, Kageler WV. Competencies needed by graduate respiratory therapists in 2015 and beyond. *Respir Care* 2010;55(5):601-616.
- World Health Organization. Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organization 2010. [http://www.who.int/hrh/resources/framework\\_action/en/](http://www.who.int/hrh/resources/framework_action/en/). Accessed January 5, 2018.
- Olson R, Bialocerkowski A. Interprofessional education in allied health: a systematic review. *Med Educ* 2014;48:236-246.
- Sergakis G, Clutter J, Holthaus V, Nahikian-Nelms M, Rohrig L, Legg J, et al. The impact of interprofessional clinical simulation on attitudes, confidence, and professional identity: the influence of respiratory therapy participation. *Respir Care Educ Ann* 2016;25:11-16.
- Pinar G. (2015). Simulation-enhanced interprofessional education in health care. *Creat Educ* 2015;6:1852-1859.
- Smith SG, Endee LM, Benz Scott LA, Linden PL. The future of respiratory care: results of a New York state survey of respiratory therapists. *Respir Care* 2017;62(3):279-287.
- Ibarra H. Provisional selves: experimenting with image and identity in professional adaptation. *Adm Sci Q* 1999;44(1):764-791.
- Lingard L, Reznick R, DeVito I, Espin S. Forming professional identities on the health care team: discursive constructions of the 'other' in the operating room. *Med Educ* 2002;36:728-734.
- Dinmohammadi M, Peyrovi H, Mehrdad N. Concept analysis of professional socialization in nursing. *Nurs Forum* 2013;48:26-34.
- Olenick M, Allen LR, Smego RA. Interprofessional education: a concept analysis. *Adv Med Educ Pract* 2010;1:75-84.