Exploring New Paradigms for Team-Based Care

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In this issue of the North Carolina Medical Journal we have focused on team-based care and recognized some of the innovative models of true collaboration aiming to improve patient and population health outcomes. This issue offers examples for integrating care in behavioral health, hospice, and primary care as well as strategies for creating unique partnerships with churches, legal services, and public health workers. We will also explore the role technology plays as a team member and the financial implications of team-based care.

Our health care system is constantly changing, with increased emphasis on outcomes of the care we provide. A great deal of attention has been paid to the Triple Aim—focused on improving quality, access to care for all populations, and reduced costs—and our day-to-day work has shifted from a fee-for-service model to one that is value based [1]. In 2014, with mounting evidence of an increase in provider burnout, Bodenheimer and Sinsky introduced the concept of the 4th Aim—improving the work life of care providers [2]. While evidence suggests that a team-based, patient-centered approach can increase patient and health care provider satisfaction, few providers are formally trained to share skills, responsibilities, and roles that maximize both personal and patient outcomes and satisfaction. Instead, health care professionals are trained to work as team members "on the job" where each microsystem, unit, or clinic may have different cultures, values, and expectations around team-based care. In other words, not all interprofessional collaboration is created equal.

Interprofessional education occurs when students from 2 or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes [3]. Interprofessional education is a necessary step in preparing health care professionals to be "collaborative practice-ready," and to address patient and population health needs. An important distinction in these definitions is that in order to be collaborative practice-ready, the individual must have *learned how* to be in an interprofessional team and *demonstrate competence* to do so. Interprofessional collaboration is achieved when "multiple individuals from different professional backgrounds work together with patients, families, caregivers, and communities to deliver the highest quality of care. It allows health workers to engage any indi-

vidual whose skills can help achieve local health goals [3]." I challenge you, as you read the articles in this issue, to really ask yourself, "Is my practice collaborative-ready?"

In addition to the need for team-based training opportunities for students and post-graduate health professionals, workforce research demonstrates a great need for practicing health professionals in North Carolina to build skills in team-based care. This is especially true in rural settings, which is how the majority of NC counties are classified. A 2018 map from the Office of Rural Health identified 82 counties as having a primary care provider shortage, while 59 counties lack primary care, dental, and behavioral health resources [4]. Evidence shows that a health care professional's desire to practice in a rural area is predicated on either growing up in a rural area or having a training experience in such a community. Longitudinal training opportunities with community health exposure, along with experiences that are cohort focused, have also shown to increase practice in rural areas. Residency training programs in rural communities need to add strong components and experiences addressing and assuring team-based competencies.

There is a tremendous opportunity for North Carolina to address the needs of the populations and communities we serve. In order to reach our goals for a healthy North Carolina, we will need to approach our health care system from multiple angles [5]. In my team's work through the Rural Interprofessional Health Initiative, we train students didactically as team members and immerse the student teams in community practices to work together to address population health needs. The challenge with this is that while students have been trained with the competencies of interprofessional education and collaboration, there is a great variation of team-based collaboration once they enter clinical practice. Although students gain knowledge and skills to serve as leaders and change agents, they alone cannot change practice. In order to truly advance interprofessional collaboration and practice, we will need to educate our health professions students while also enhancing the

teamwork skills of our current workforce.

In this issue, de Saxe Zerden, Lombardi, and Richman highlight the strategy of the *reverse megaphone effect*, in which interprofessional education of our current health care team occurs [6]. In order to achieve this, established competencies and training programs are needed as part of continuous professional development for the existing workforce, rather than only as part of health professions education. In "Let's Work Together: Interprofessional Training of Health Professionals in North Carolina," Derouin and colleagues describe faculty development opportunities through Duke AHEAD, the UNC Office of Interprofessional Education and Practice, and the resulting "Blending the Blue," a collaborative effort to train professionals from both institutions [7]. Opportunities for faculty engagement like this are the beginning step in practice change to move from silos to true interprofessional collaboration.

In addition to competencies and training opportunities for existing professionals, organizations should feel comfortable assessing their teamwork and collaborative processes. For example, the language that we use can have great implications and set the culture of the organization. Being mindful of how one may receive the language we use is also important. While terms like "mid-level provider" may have been initiated to describe our non-physician practitioners, these generalizations can be interpreted incorrectly. As a result, education to use precise titles when referring to all clinicians (such as PAs or NPs) can go a long way toward influencing practice change. Many health care organizations have already made language changes as a way to encourage a collaborative approach, such as Duke's "Advancing Health Together" movement in which Duke Health's name was changed from Duke University Medical Center. The interprofessional collaborative organizational map and preparedness assessment (IP-COMPASS) is a great resource for assessing your organizational culture and helps you identify where your organization's values, structure, processes, practices, and behaviors can be aligned to promote interprofessional education and collaboration [8]. As a beginning exercise, take a moment and assess the language used in your organization and engage someone in conversation. Together you can learn from, with, and about each other.

With the changing landscape of the health system, and the shortages of many types of health professionals across our state, many of our defined roles have changed. We encourage everyone to "work at the top of their license," but this can be difficult if we cannot articulate our roles. Additionally, to address workforce needs, new positions in health care are being developed every day. Technology is growing at a rapid pace and the electronic medical record has changed the way we practice. Population-focused care has encouraged us to expand our capacity to address health care needs outside of the traditional workplace, and as a result we are engaging with more community partners than ever before. While this is exciting, it can also be incredibly

frustrating when roles feel blurred or are not clarified. In the sidebars of this issue, we have highlighted several examples in which the deviation from these traditional roles benefits patient care.

As we move forward, we are going to need to consider the workforce and skills needed in order to accomplish our goals. We need to utilize workforce data to make informed, data-driven decisions about these skill sets and ask tough questions about our current roles and responsibilities. In some clinics, especially in rural areas, not every team member can be present. While beginning to ask ourselves, "Who are we missing and why?" is a nice first step to including the right make-up of the team, our ultimate goal may be to reimagine the roles of the team by asking ourselves, "What skills are essential to addressing the needs of this patient or population?"

In the sidebar, "Faith-Based Assets and Multi-Sector Community Teams: Tapping in the Deeply Woven Roots," Gunderson identifies 8 strengths of religious organizations and how these strengths can be used to engage patients and form partnerships in the community [9]. This engagement is critical if we are to understand and address the social determinants of health for the populations we serve. We cannot underestimate these team members in this engagement; they have powerful tools to establish trust, increase patient and community engagement, and allow us to engage in conversations that will help us to approach health disparities in the most appropriate way. Rachel and Jean Williams remind us of the importance of involving the patient and family as part of the care team in their case example of Wesley and his wife Catherine [10].

I would be remiss if I did not mention public health professionals as critical members of the team, as we need their knowledge now more than ever. Those specially trained in public health, including public health nurses, have long focused on the impact of social determinants of health and the need to address these issues across the individual, family, community, and system levels, as Kansagra et al explain in this issue [11, 12]. If we focus too narrowly on population health from a clinical standpoint, we may miss opportunities to change policy and advocate for patients on these multiple levels through individual or stratified approaches, care coordination, or case management [13].

The team member that is changing at the fastest pace is technology. Mani and her team provide multiple strategies for how we can utilize technology more efficiently to integrate health care delivery and improve learning for the patient [14]. "Strategies for Integrating Technology as a Team Member" is a great resource for health care professionals who desire to utilize technology to improve patient and population outcomes without compromising human contact.

I am hopeful that you will identify many models, resources, and strategies in this issue that address the care of individuals and communities in North Carolina. Campbell

and Richard-Eaglin's implementation of the Patient Aligned Care Teams (PACT) model demonstrates the value of team-based care to reducing the fragmentation of care, increasing access to care, improving care coordination, and improving patient self-management for veterans [15]. "The Team-Based Approach to Delivering Person-Centered Care at the End of Life" also speaks to these needs through organized hospice care and also addresses the importance of caring for the caregiver [16].

The "Spotlight on the Safety Net" and "Philanthropy Profile" highlight 2 important North Carolina initiatives aimed at addressing specific community needs. Opportunities Industrialization Center, Inc. (OIC) and the Cone Health Foundation have utilized teamwork to expand integrated care through mobile vans and developed partnerships to offer health promotion and prevention services to those in greatest need [17, 18]. These examples are driven by the community, addressing the needs of those who often need care the most, and who ultimately may become super-utilizers of the health care system. Currently super-utilizers account for nearly 50% of all health care costs, with 1% accounting for more than 20% of costs [19]. In addition to super-utilizer patients, we also have super-utilizer clinicians, with evidence that if you train in a high-utilizer system, you will practice as a high-utilizer regardless of where you work [20]. As part of a team-based approach to care, we should be having discussions about the impact of cost on the patient, family, and the health care system.

New models are needed to identify interventions that create quality care that is cost-effective and equitable for all populations. Interventions aimed at reducing costs while not compromising quality should be the goal. Interprofessional service learning options such as hotspotting can educate student teams while also allowing them to partner with organizations to address the needs of super-utilizer patients [21, 22]. The medical-legal partnership embedded in Mountain Area Health Education Center (MAHEC) is another example, recognizing attorneys as members of the health care team to provide legal advice for housing issues, connecting patients to community resources, and assisting with health care applications [23]. MAHEC and others in this issue have developed models to reduce health disparities and address social determinants of health needs, but more attention needs to be paid on a state and national level. Perrin and his team at WakeBrook Primary Care identify the 3 components to move this work forward in behavioral health [24]. They suggest structured and planned communication with patients, appropriate time for patient visits, and established relationships with specialists.

These examples demonstrate the impact of team-based care, but the sustainability of this work is always of concern. Jones and Mose engage us in conversation about the value and cost of teamwork on health care and offer strategies for addressing team-based care as a cost-savings model [25]. Increased options for billing of services and discussions about sustainable reimbursement models are much needed in the current health care environment. Members of the team should not have to justify their roles in order to remain on the team, yet many members are on the team without the ability to bill for services. The same is true if only one member of the team is being reimbursed or incentivized for the collective work being done. While these discussions may feel futile, they are important because workarounds of the system will occur if team members are trying to meet metrics for sustainability and reimbursement rather than focusing on improving patient care.

In terms of outcomes, we do have evidence that team-based care improves the knowledge, skills, and attitudes of health care professionals, but now work must focus on the impact of teamwork on patient care and system change. This should be a research priority. Research examining team member roles, intervention dose, and collaboration outcomes are also warranted. Research is also needed on the impact of team-based care on the workforce, as the majority of work has been focused on health professions students.

We need to explore what interventions are needed to effectively engage the existing workforce to be collaborative-ready. Organizations may need to redesign workflow processes to address the flexibility and blending of responsibilities in our workforce. We need to move past the slow and sometimes adversarial process of addressing scope of practice. We need to create a competent and productive workforce that allows for professional efficiency and supports the overlap in scope of practice that naturally occurs [26]. For example, research has shown that an expansive scope of practice for dental hygienists is positively correlated with improved oral health. The NCMJ has previously explored this in its November/December 2017 issue on oral health [27]. When 73 of 100 counties indicate a shortage in dentistry, it is time to consider ways to increase scope of practice for all in order to improve access to care and improve oral health [4]. We need to engage in critical conversations about authority and scope of practice for all professions, and lead discussions with interprofessional peers about how these might be restricting access to care, ultimately adding to the cost of using our health care system.

The article "Primary Care Behavioral Health Integration: Promoting the Quadruple Aim" discusses how behavioral health training is important for all providers and provides examples for how the integrating of roles through a truly team-based approach can improve provider satisfaction and promote the Quadruple Aim [28].

This issue of the NCMJ covers a variety of team-based and workforce-focused issues from a variety of disciplines and perspectives. The editorial team has worked collaboratively to highlight exemplars of team- and population-focused care to share strategies that health care professionals and students in interprofessional education can use to identify the skills needed to train our current workforce. Additionally, you will see articles exploring new members of the team—

stepping outside our traditional health professions make-up. Engaging in dialogue like this is the first step in developing a new mindset for team-based care in the health professions. I am thankful for the opportunity to serve as guest editor for the NCMJ, and to have the variety of disciplines represented here work together to address the health needs of North Carolina. NCMJ

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