

Is North Carolina's Workforce Prepared for Team-Based Care?

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Evaluating the capacity of the health workforce to adopt team-based health care delivery models, nationally or in North Carolina, requires a nuanced approach that explores educational and clinical environments, payment, health systems, and regulatory levers. This paper discusses workforce challenges to team-based care and how best to train, prepare, and retool an equipped health workforce to meet the needs of team-based care.

Implementing Team-Based Care in North Carolina

Health care systems are undergoing unprecedented transformation to meet the Triple Aim of health care: better care, improved population health outcomes, and reduced costs [1]. These changes and movement toward integrated models of care that concurrently address patients' physical and behavioral health as well as the social determinants of health have led to new models of team-based health care [2-4]. Team-based care encourages health systems to work collaboratively and efficiently to promote the best outcomes for individuals and communities by combining the expertise of many types of providers [5, 6]. However, workforce researchers do not yet fully understand if the health workforce is prepared to adopt team-based health care delivery models either nationally or in North Carolina. Evaluating this workforce capacity requires a nuanced approach that explores educational and clinical environments as well as payment, health system, and regulatory levers. This article discusses workforce challenges to team-based care and the relation of those challenges to educational efforts to meet practice realities, changes in team composition, and health worker *plasticity*—a term used to define the practice scope and skill mix of health professionals as it relates to task-shifting among them [7].

Preparing the workforce for team-based care requires multisectoral strategies that target 3 points in the professional trajectory: 1) curricula for people currently enrolled in professional training programs, 2) retooling the current workforce, and 3) an intentional focus on existing team-based care efforts that need strengthening. As care moves away from acute settings and toward ambulatory sites, health care professionals must understand how team composition and functions of specific professionals will differ in ambulatory settings [8, 9].

Educational Efforts Promoting Team-Based Care

A 1972 Institute of Medicine of the National Academies publication helped lay the foundation for the growth of interprofessional education (IPE) and interdisciplinary efforts to improve health care delivery [10]. Since then, health education systems have struggled to move IPE beyond the classroom and incorporate IPE into clinical learning. The formation of the Interprofessional Education Collaborative (IPEC) in 2009 is one of the more recent efforts supporting team-based care through IPE within academia [11]. Today, IPEC represents 20 professional associations and accrediting bodies within the fields of dentistry, medicine, nursing, pharmacy, public health, social work, and allied health [12]. IPEC has established core competencies for interprofessional collaborative practice that help guide curricula and accreditation standards across disciplines. These competencies have helped push the transition of learning environments away from strict discipline-specific silos toward more inclusive environments grounded in cooperative, interprofessional, and symbiotic efforts.

From the Classroom to Practice: Challenges to Team-Based Care

Although many efforts have focused on the front end of education, little emphasis has been given to the professional development needs of providers already in the workforce. While IPE is now required as an accreditation standard across health affairs programs, no similar standard exists for the current health workforce. Consequently, a primary barrier to team-based practice is the challenge of how best to give current professionals who are already on teams additional training to routinely use team-based care competencies. Historically, interprofessional team-based approaches have been prioritized for new learners and not the existing workforce, a concept that Brandt and Fraher described as the *reverse megaphone effect* [13]. This concept reflects that solely focusing efforts on the next generation of prac-

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tioners, versus training current practitioners, will produce only a small change. To make the large changes needed to advance team-based care, the reverse megaphone calls for renewed emphasis on formal training and retooling for the current workforce. This approach is essential if changes to interprofessional team-based service delivery are to scale up in meaningful and sustainable ways [13].

Another barrier to team-based practice occurs when new professionals, who are well-prepared to work on interprofessional teams, enter the workforce but find the system has not yet adopted a team-based care model. Moreover, even when a team-based approach might exist, new professionals might find the models are not the most efficient or effective examples of collaborative practice. This practice gap forces new practitioners to bend to accommodate the system instead of practicing the gold standard of care they have been taught. This challenge is amplified by the limited opportunities available to current practitioners to learn new models of team-based care. If health systems are to maximize team-based care initiatives, and if new practitioners are to succeed, then it is critically important to focus on providing additional skills to the current workforce in the principles and competencies of team-based care.

Team-Based Care in Communities versus Hospitals

Health systems are moving away from hospital-centric care models and toward community based care models [14]. This change has led to the additional challenge of finding ways to educate both the new and current workforce for deployment in ambulatory and community settings. Traditionally, hospitals have provided clinical learning experiences for teams of students. However, team-based care is likely to look different when delivered in an ambulatory outpatient setting than in a hospital setting. For example, ambulatory outpatient settings might emphasize prevention, community linkages, and a stronger bridge between social factors and population health. Finding new ways to prepare students to work in communities versus hospitals is vital to preparing a workforce to deliver team-based care across health sectors.

The dramatic increase in health care delivered in communities has also led to amplified referral patterns among interdisciplinary providers, located in various community agencies, who are managing patients with multiple health needs [15]. As the social factors affecting health outcomes are better understood, harnessing the expertise of community organizations and their connections to community members becomes an important mechanism for managing health [9]. To leverage the resources and strengths of the community, teams are expanding across the boundaries of health systems to incorporate community members who are not employed by the health system [9].

New Health Team Members

Recognizing or repositioning health teams in communities and giving renewed priority to addressing the “whole

person” has required increasing the number of interprofessional providers, thus expanding the typical team size. The heterogeneous composition of these teams presents not only opportunity for flexibility but also opportunity for confusion when team members lack clarity on their roles and when teams in different settings do not function in the same way or with the same composition [6]. The heterogeneity of teams in health settings presents a substantial challenge to consistently articulating, measuring, and defining the team’s composition, skill mix, and plasticity. The complex question of whether North Carolina’s health workforce is prepared to work in team-based settings is confounded by the variability in professionals who could comprise a health care team. Understanding which mix constitutes the “right” combination is complicated and likely dependent on context and patient needs. For example, teams in ambulatory surgical clinics likely differ from teams in primary care offices or emergency departments. Different settings also operate in different ways; telehealth might be paramount in some areas whereas other teams function primarily with face-to-face visits.

A consequence of current changes in payment policies and health system organization is the changing landscape of care, including increasing numbers of ambulatory health clinics and community- and home-based settings. This evolving landscape has triggered the expansion of the health workforce to include new roles in health care, new professions, and shifts within existing roles. Examples of these new or shifting roles include social worker, patient navigator, community health worker, panel manager, community paramedic, dietician, and medical assistant. In team-based models, the emergence of new roles often brings confusion regarding role definition and clarity in terms of who can do what for patient care [16].

Health Workforce Shortages

In addition to concern about whether we are adequately training and retooling the workforce to work effectively on teams, some question if we have enough providers to create interdisciplinary teams in communities. This question not only seeks to identify whether the workforce is prepared for team-based care but also seeks to identify the areas in which we have a misalignment of professionals that affects how team-based care is implemented and sustained. For example, one of the biggest problems facing North Carolina is the uneven distribution of health care workers. North Carolina has more physicians per population than the national average, but at least 3 North Carolina counties have no professionally active physicians [17]. Of North Carolina’s 100 counties, 26 have no general surgeons and 26 have no OB/GYN physicians.

One misalignment with the potential to affect team-based care is the limited number of behavioral health professionals in North Carolina. Compared with other states, North Carolina has fewer psychologists, psychiatric nurse

practitioners, and social workers. Although the number of physicians in North Carolina has risen steadily since 1995 (from 17 to 23 per 10,000 people), the number of psychiatrists has stagnated at 1.2 per 10,000 during this same time and 32 counties do not have a professionally active psychiatrist [17]. More than 54 areas in North Carolina are considered behavioral health shortage areas as defined by the US Department of Health and Human Services [18]. Providing “whole person” health care demands that teams include a behavioral health professional.

Moving Forward

The most important step in moving team-based care forward is to advance the skills of the current health workforce. As a group, providers already in practice have the power to transform care. A second step involves creating a mechanism within the feedback loop among academic institutions and medical centers, private and not-for-profit health sys-

tems, and communities that will connect education to practice and continually inform each system. Training efforts aimed at retooling the existing workforce and preparing for shortages of health professionals must take into account the ways in which these programs are accessed and funded. For example, the success of North Carolina social work programs in securing Health Resource Service Administration (HRSA) funding for the Behavioral Health Workforce Education and Training Program is an excellent model for connecting workforce training, education, funding, and interprofessional service delivery. In 2017, 5 programs in the state (University of North Carolina at Chapel Hill, University of North Carolina at Greensboro, North Carolina State University, University of North Carolina at Charlotte, and Western Carolina State University) received funding to expand the behavioral health workforce primarily through social work, but one school (UNC-CH) also includes psychiatric mental health nurse practitioners.

Because members of the current workforce serve as preceptors for student learners, and clinical sites become the training grounds for students, there is an imperative for clinical rotations to include *purposeful exposure* to high-performing teams in ambulatory settings [19]. Just as the clinical learning environment requires more exposure to community based ambulatory care settings, the onus is on educational systems to recruit and sustain appropriate clinical field sites to meet this charge.

Moving forward, academic systems not only need to train emerging workers on skills and competencies for their future careers, but also to focus on their alumni networks and those in the existing workforce who can benefit from continuing education in team-based care models. Ensuring that current providers have received the training and skills needed for team-based care can be carried out through licensure renewal and reinforcing team-based models

through continuing education and professional development. Recently developed resources from the Robert Wood Johnson Foundation and the American Medical Association are available but require an investment across system providers and leadership to fully integrate and incorporate team-based changes into practice [20, 21].

Challenges to Overcome

No doubt, existing challenges remain as we move toward value-based models of care. As Mitchell and colleagues noted, "Identifying best practices through rigorous study and comparison remains a challenge, and data on optimal processes for team-based care are elusive at least partly due to lack of agreement about the core elements of team-based care [6]." More research is warranted at the practice, organizational, and system levels to systematically evaluate the benefits, challenges, and cost-effectiveness of team-based

care. Additionally, rapid advances in technology and the Health Information Technology for Economic and Clinical Health Act of 2009 have incentivized the use of electronic health records (EHR), which are now used in approximately 75% of all health settings [22, 23]. With the increasing implementation of EHR, the ways in which teams communicate and share information to improve patient outcomes and population health remain an area ripe for future research and quality improvement.

Conclusion

Although team-based care is not a new phenomenon, its recent resurgence indicates an important shift in understanding that the collective team is greater than the sum of its individual members. While health care reforms continue at a dizzying pace, efforts are also underway to transform health systems to be more effective, cost-efficient, accountable, prevention-focused, and integrated [8, 24]. However, none of these changes will be possible without a well-prepared and well-trained workforce equipped to work within new care environments that take into account community, patients, and team-based perspectives. **NCMJ**

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