

Clinical Efforts Double Disparity for Nonphysician URiM Faculty: Implications for Academic Family Medicine

Stacy A. Ogbeide, PsyD, ABPP^a; Deepu George, PhD, LMFT^b; Adrian Sandoval, PharmD, EdD^b; Yajaira Johnson-Esparza, PhD^a; Maria Montanez Villacampa, MD^a

AUTHOR AFFILIATIONS:

^a University of Texas Health at San Antonio, San Antonio, TX

^b University of Texas Rio Grande Valley School of Medicine, Edinburg, TX

CORRESPONDING AUTHOR:

Stacy A. Ogbeide, University of Texas Health at San Antonio, San Antonio, TX, stacy.ogbeide@gmail.com

HOW TO CITE: Ogbeide SA, George D, Sandoval A, Johnson-Esparza Y, Montanez Villacampa M. Clinical Efforts Double Disparity for Nonphysician URiM Faculty: Implications for Academic Family Medicine. *Fam Med.* 2024;56(X):1-7. doi: [10.22454/FamMed.2024.553188](https://doi.org/10.22454/FamMed.2024.553188)

PUBLISHED: 26 April 2024

KEYWORDS: clinical effort, primary care, underrepresented in medicine

© Society of Teachers of Family Medicine

ABSTRACT

With a new definition of *high-quality primary care* and the shift in nonphysician faculty's role as core faculty members in family medicine residency programs, new attention is needed on the delineation of clinical efforts and clinical efforts disparities across disciplines (eg, psychology, marriage and family therapy, pharmacy) within departments of family medicine. Additionally, those who identify as underrepresented in medicine (URiM), specifically those who are nonphysician faculty, are dually impacted by the clinical efforts double disparity. This paper examines the current landscape of clinical efforts in academic family medicine for physician faculty and nonphysician faculty as well as discusses how to build equity in clinical efforts for nonphysician faculty and URiM faculty within academic family medicine impacted by the double disparity.

INTRODUCTION

A series of sweeping changes nationally will decisively impact the role of nonphysician faculty both in their clinical and academic medicine roles in family medicine (FM). The two primary contexts for these changes include the revised definition of *high-quality primary care* from the National Academies of Sciences, Engineering, and Medicine¹ and the shift in nonphysician faculty's role as core faculty members in FM. We outline current and historical clinical effort disparities—differentially weighted value on output from faculty—for nonphysician faculty and propose new directions to course correct toward equity. Specifically, we provide a snapshot of how the clinical effort disparities may further exacerbate historical disparities among nonphysician underrepresented minorities in medicine (URiM) faculty members.

Current State of Affairs

Our overall proposal, focused on recommendations toward course correction, is contextualized within three concepts: structural racism, structural thinking, and structural intervention.

Structural Racism

Structural racism in the United States is defined as “laws, policies and practices that produce cumulative, durable, and race-based inequalities, and includes the failure to correct previous

laws and practices that were explicitly racist.”² Structural racism impacts all of society³ and has impacted how URiM faculty advance in academic medical settings. A disproportionate number of URiM faculty experience differential treatment in a variety of their roles as faculty.⁴

Even though structural racism is defined and well-known, a gap exists between how Americans perceive it and the everyday realities of it in today's life.³ Such a gap exists in academic medicine settings and may be attributed to a denial of structural racism.⁵ Often, the denial of structural racism in daily life operates through lack of critical education; socialization within only majority, homogenous groups; racial group memberships; low critical view of history; and what McCarty et al described as “hierarchy legitimizing beliefs” that influence one's perception of racial inequality.³ Low critical socialization history impacts how people will advocate for reparative policy preference. Academic medical centers, while maybe acknowledging the existence of structural racism, may be more likely to uphold hierarchy legitimizing policies within the ranks of their faculty and professional realm.

Structural Thinking

According to McCarty et al, a “structural thinker” would be able to identify structures and explain how they benefit and harm groups based on race, class, gender, ethnicity, sexual orientation, ability, citizenship status, and other social identi-

ties.³ A structural thinker, therefore, recognizes that privilege and oppression are a result of social structures and people with power and privilege who can advantage and disadvantage groups. With new changes in the definition of high-quality primary care that prioritize interprofessional teams, structural thinking is a useful framework for understanding traditional notions of the power and privilege influences that assign value to services based on professional identity. Therefore, we use a structural framework to analyze how existing clinical relative value units (RVUs) are used to measure productivity and discuss the use of educational value units (EVUs).

Structural Intervention

While academic health centers continue to invest in various methods of achieving diversity, equity, and inclusion (DEI) generally, our interest is in course correcting toward equity. Through this lens, we are proposing structural interventions targeting structural changes. McCarty et al described structural changes as either first order (ameliorative) or second order (transformative).³ First order change responds to problems and fails to consider structural thinking to intervene at the structural level. For example, an institution may have robust DEI initiatives, such as lectures, without placing emphasis on making changes to promotion and tenure standards to account for DEI-related work faculty members have completed. A second-order change, which targets transformational change, targets structures such as promotion and tenure policies to reward and value DEI efforts from faculty. Based on structural thinking, we recommend a change to EVUs as a transformative shift in accounting for clinical efforts from nonphysician faculty, as discussed later in this paper. We make this argument for nonphysician faculty particularly because of disparities in RVUs as currently determined by the billing and coding structures in the United States. Specifically, we focus here on behavioral health professionals and pharmacy professionals who are embedded in family medicine training settings as part of integrated care teams.

The 2021 National Academies of Sciences, Engineering, and Medicine report built on the recommendations made by the Institute of Medicine in 1996 and illuminated the importance of an interprofessional care team capable of addressing the needs of the patients, families, and communities they serve.¹ Primary care is the cornerstone of the health care system; creating a high-quality primary care team facilitates a patient's health care experience through interactions among the patients, families, communities, and all members of the interprofessional primary care team, thus creating more holistic and equitable health care delivery that is person-centered. Therefore, a high-quality primary care team is now diversified to include caregivers, community health workers, nurse practitioners, pharmacists, physician assistants, behavioral health clinicians, dental professionals, primary care physicians, and all supportive team members involved in a patient's overall care. We must ensure that equity is available for all FM faculty members who make important contributions to training, education, and clinical services.

Prior to the introduction of the definition of high-quality primary care and the recently proposed changes to include nonphysician faculty as core faculty, nonphysician faculty members have played significant roles in FM education.⁶ Even though their clinical and educational efforts are often highly valued, institutional and structural pathways that value their contributions often are unarticulated. This posture creates an environment that inadvertently supports clinical efforts disparity. Then comes the double disparity, which impacts URiM faculty members that are not physicians: Not only is the faculty member not of the majority discipline in their unit, but they also are URiM faculty in their unit. An academic medicine faculty role has the scope to course correct by valuing and rewarding clinical, educational, leadership, research, and other scholarly pursuits. Therefore, institutional leadership should consider (a) how previous policies and procedures inadvertently promote clinical efforts disparity, (b) how a variety of contributions from a faculty member can be valued, rewarded, and used for promotion as part of a faculty appointment, (c) how the persistent nature of structural racism and its related impacts have taxed minority nonphysician faculty who have traditionally filled these positions.

Recent ACGME Changes for Family Medicine

The Accreditation Council for Graduate Medical Education (ACGME) approved major revisions to the program requirements for graduate medical education in FM effective mid-2023.⁷ These new requirements recognize that the education of residents by nonphysician educators is critical to their development as physicians who are equipped to effectively manage patient care and often lead interprofessional teams. The inclusion of nonphysician educators within the core faculty requires that these faculty also play a significant role in the education and supervision of residents. Like their physician counterparts, nonphysician core faculty are also responsible for supporting the program leadership in “developing, implementing, and assessing curriculum, mentoring students, and assessing residents' progress toward achievement of competence.”⁷ Activities include, but are not limited to, didactic instruction, simulation exercises, and participation on the Clinical Competency Committee, among other graduate medical education committees.

Family medicine and primary care professional organizations have reported a substantial presence of nonphysician members.⁸ Moreover, a 2017 general membership survey of nonphysician members conducted by the Council of Academic Family Medicine Educational Research Alliance found that nonphysician health care professionals identified themselves primarily as behavioral/social science specialists (37%), pharmacists (9%), physician assistants (1%), nurse practitioners (1%), nurse/medical assistants (<1%), health educator/dietitians (<1%), or physical therapists (<1%).⁹ Thus, we focus here on the top two nonphysician health care professional specialties reported in the survey (ie, behavioral health and pharmacy).⁹

Among the revisions likely to have a meaningful impact on resident training and education are the greater emphasis on behavioral health education and its integration into primary care, as well as the requirement that core faculty include non-FM physicians. Specifically, ACGME requires that residencies include faculty members dedicated to the integration of behavioral health. This requirement is based on the expectation that physicians are skilled in behavioral health and demonstrate the ability to apply knowledge about social-behavioral sciences to patient care. To this end, behavioral health is to be integrated throughout the curriculum to ensure adequate exposure for residents. These requirements speak to the role nonphysician faculty play in advancing their knowledge and in their professional development. Similarly, pharmacists continue to be mentioned in the ACGME's newest requirements; for example, clinical experiences "should include integration of multiple nonphysician professionals (eg, pharmacists) to augment education, as well as interprofessional team clinical services." Other areas where pharmacology or pharmacotherapy are highlighted include emphasis on "education of residents in the basic science of the specialty," psychopharmacology, substance use disorder, pain management, interprofessional training, and "safe, equitable, high-quality, cost-effective, patient-centered care."⁷

ACGME data shows that core faculty members expend a significant amount of time (27%) in nonclinical responsibilities, which are essential to a well-functioning graduate medical education program that meets accreditation requirements.¹⁰ Clinical responsibilities continue to rise in the current health care system, and therefore protected time for nonclinical responsibilities is essential to faculty academic productivity, well-being, professional development, and educational objectives. The 2023 ACGME program requirement revisions for FM were significant, and an important change was the inclusion of protected time for educational and administrative responsibilities that do not involve direct patient care—something that had not been quantified in the 2019 ACGME program requirements. The current revision recognizes that faculty members are a foundational element of graduate medical education and are critical to the success of resident physician education. As of July 2023, program leaders are allotted 10% full-time equivalent for nonclinical responsibilities.

PROPOSED RECOMMENDATIONS FOR THE DOUBLE DISPARITY

In addition to recommending increased funding to support high-quality primary care, addressing disparities impacting URiM faculty is also essential. Efforts to increase representation and ensure that URiM faculty are not disproportionately "gate-blocked"¹¹ from promotion are necessary. Developing mentoring programs to increase retention and promotion of URiM faculty is indicated.¹² Additionally, Edgoose and colleagues suggested that institutions and individuals leverage their White privilege to create leadership opportunities from which URiM faculty have been blocked.¹³ In doing so, insti-

tutions and individuals would acknowledge the role of racism within academic medicine.

1. Address the clinical efforts disparity among nonphysician academic family medicine faculty members

Behavioral Health

Behavioral health faculty members play a significant role in academic FM. The diversity in the duties of behavioral health faculty includes didactic training, curriculum development, evaluation, and precepting. Many behavioral health faculty also have clinical service responsibilities, which creates time management conflicts. Given the fee-for-service payment model under which most residency programs function, behavioral health faculty are under significant pressure to meet clinical service requirements.⁶ Balancing between direct patient care and resident education can be challenging for behavioral health faculty, because one is impacted as focus shifts to the other. Worth noting is that psychologists in academic health centers have identified clinical load and clinical productivity expectations, as well as insufficient protected time for teaching and education, as contributors to stress.¹⁴ Although that study investigated only burnout among psychologists across academic health centers, the findings point to the difficulty faculty face in balancing direct patient care with education and training.

The provision of clinical services can pose challenges for behavioral health faculty. Oftentimes, these services take place in the context of integrated primary care, where a significant number of visits for health-focused services (eg, chronic disease management, adjustment to medical conditions, health behavior change) are needed. Reimbursement for health-focused interventions requires the use of health and behavior current procedural terminology codes; however, these services might not always be reimbursed because some practices have contracts with mental health "carve outs" that do not reimburse for certain medical diagnoses. Such billing challenges might impact behavioral health faculty's ability to meet clinical requirements.

Clinical Pharmacy

Data on the prevalence, roles, responsibilities, and benefits of FM pharmacist faculty, who are uniquely trained and qualified to be clinicians, educators, researchers, and leaders, have been published.^{15–26} For example, a recent case report found that the prevalence of pharmacists as educators in North American family medicine residency programs rose to 53%,¹⁴ while another study found that 57% of program directors responding to the survey designated pharmacists as faculty members.²⁷

Nonetheless, pharmacist faculty in FM, like behavioral health faculty, are prone to clinical effort disparities that are influenced by the complex and fragmented US health care system.^{1,28–30} Before the onset of the COVID-19 pandemic, FM pharmacists struggled with obtaining protected time to participate in the FM curriculum;²² that struggle continued during the pandemic.³¹ Currently, FM pharmacists may be expected to dispense medications, deliver integrated and interprofessional

health care, teach a variety of learners, conduct research, obtain grant funding, and perform administrative duties¹⁰—all within the traditional 40-hour week.^{15,22}

Historically, pharmacists have faced difficulty billing payers and receiving adequate compensation for their health care services.^{32,33} Whether directly or implicitly, stakeholders encourage pharmacists to prioritize dispensing of medications over other clinical pharmacy services^{22,34} because of familiarity and a positive return on investment (ROI).³⁵ The expected ROI for academic FM pharmacists is unrealistic because of the multiple and persistent barriers associated with clinical pharmacy services.^{21,22,36,37} Therefore, previously proposed changes to ACGME's requirements on protected time and the definition of core faculty would have reversed the established benefits from the integration of pharmacy, behavioral health, and family physicians.^{34,38–43} Importantly, if we are to successfully recruit, retain, and develop URiM academic FM faculty, then we must properly support them, especially with equitable time and compensation for their efforts. The future of our country's health and health care depends on it.^{44–47}

2. Address the role and function of the RVU as a metric for clinical productivity of family medicine faculty.

Recognition of the growth of the clinical full-time equivalent has been long-standing as academic health centers and teaching centers face ongoing financial pressures to support the academic mission of the organization.⁴⁸ Other complicating factors, such as variations in the payer mix, increasing patient complexity with psychosocial issues, and lack of compensation for indirect patient care tasks, have negatively impacted revenue. The percentages of URiM academic family physicians versus URiM academic nonphysicians also add layers of complexity to the double disparity issue. Currently, within the following disciplines, those who identify as URiM are 6.7% of family physicians;⁴⁹ 10.5% of clinical pharmacists; and, within the behavioral health discipline,⁵⁰ 15.3% (13.5% Hispanic) of marriage and family therapists,⁵¹ 20.1% (11.8% Hispanic) of licensed professional counselors,⁵² 22% (13.5% Hispanic) of licensed clinical social workers,⁵³ and 10% of psychologists.⁵⁴ Moreover, difficulties with securing grant funding for research and teaching endeavors create an over-reliance on clinical service revenue and faculty practice plans. Lastly, reimbursement differences among disciplines within academic FM (eg, family physician reimbursement vs psychologist reimbursement) widen the disparities gap between physicians and other health care team members. Lack of parity with reimbursement rates between the disciplines (ie, higher reimbursement for procedural work compared to cognitive work) can make financial viability difficult for departments when hiring more behavioral health clinician faculty.⁵⁵

In 1988, the RVU was created to capture the fee-for-service payment for clinician work efforts.⁵⁶ The RVU model now has become an important variable for organizations in measuring their financial viability and the work effort from clinical faculty. The difficulty with the RVU model is that it typically does not incorporate variables such as the quality of care provided. And

what about educational responsibilities? The use of the RVU model to capture this variable has been nebulous and thus has contributed to clinical disparities for faculty, especially those in undergraduate medical education versus graduate medical education, which has different accrediting body requirements.

3. Consider current models of valuation to improve inclusiveness of disciplines within the family medicine department.

As mentioned earlier, the RVU model for faculty compensation falls short due to factors such as quality of care not being considered as well as disparities in reimbursement rates among disciplines that practice within FM, such as behavioral health clinicians and clinical pharmacist.⁴⁸ Having alternative faculty compensation plans can (a) promote equity in compensation, and (b) recognize and reward excellence in all aspects of faculty positions (eg, service, teaching, research). Because faculty positions are more complex with their mix of responsibilities, having compensation plans that account for position complexity is important. Consequently, the EVU was created and defined as “a unit of time spent in education of students and residents.”⁵⁷ More work needs to be done to incorporate behavioral health clinicians and clinical pharmacists, as well as physicians into the discussion of EVUs.

The Association of American Medical Colleges has projected a primary care physician shortage in the United States by 2034 between 17,800 and 48,000.⁵⁸ The Affordable Care Act aimed to increase access to health care in an effort to bridge this projected gap of providers in the United States. Primary care shortage is even greater in underserved communities. To address these needs, the Teaching Health Center Graduate Medical Education (THC GME) program initiative provides community-based primary care residency training. THC GME programs educate physicians in all specialties; however, 65% are family medicine training sites.⁵⁹ THC GME programs depart from Medicare graduate medical education (GME) funding systems; also, their funding is contingent on specific outcomes, such as number of primary care providers trained and willingness to practice in communities that are often underserved and in vulnerable areas.⁶⁰

Medicare GME funding is usually hospital-affiliated; therefore, THC GME programs, which are community-based, are not equally compensated, making EVUs an attractive alternative that may improve faculty members' compensation in a more equitable manner.

Table 1 summarizes EVU models that have been used in academic medicine. These serve as examples for organizations to consider as means to improve equity for URiM faculty, especially those who are not physicians, as well as to give weighted values to activities that may support DEI-related initiatives.

FINAL CONSIDERATIONS FOR ACADEMIC FAMILY MEDICINE

For URiM faculty in general, structural racism operates through a phenomenon called minority tax. Minority tax includes

TABLE 1. EVU Model Examples^{4,8}

Name	Purpose	Specific features
Mission-Based Management Model	To align the organization's mission and the following revenue streams: (1) RVU calculations based on clinical productivity, (2) grant funding for research activities, (3) institutional funding for both teaching/training duties, and (4) funds for administrative responsibilities	Educational activities are defined by the organization's mission; EVU is defined as time spent in an educational activity (eg, didactic teaching).
Relative Value Scale for Teaching	To assign similar value for educational activities when paralleled with clinical RVUs	Weights are assigned to each activity according to a set of criteria—namely, identification of labor intensity, amount of teaching preparation required, amount of patient responsibility assumed, and the task's educational value.
Relative Value Unit Teaching Multiplier (TVM)	To develop a customizable system that calculates clinician teaching productivity with a basis in clinical RVUs	This multiplier was created to assign weight to a teaching task, examining both educational value and teaching complexity.
Comprehensive Relative Value-Based Incentive Plan	To uniformly capture clinical RVUs, teaching, and scholarly efforts	Specific weights are assigned to clinical RVUs for patient complexity; a separate base rate was created to capture resident precepting; a point system was developed for teaching as well as scholarly activity and preparation for teaching activities.
Faculty Practice Plan Design to Reward Educational and Research Productivity	To recognize and reward scholarly activities, research grant attainment, and research productivity	This credit system assigns weights to various educational activities that are applied to the percentage of the faculty member's time allocated to various departmental activities, which then affects the overall total compensation package.
The Academic RVU (aRVU)	To account for quality assessments that incorporate estimations of effort, the impact of these activities, and their value to the department's goals	This model attempts to account for quality assessments in the activities undertaken and extends beyond a focus on teaching in faculty positions (ie, moving beyond volume of publications and number of grants to include the importance of what these professional/community activities contributed to a department).

Abbreviations: EVU, educational value units; RVU, relative value units

collective experiences disproportionately felt by URiM faculty that are labeled as a tax due to the burden URiM faculty carry in comparison to nonminority faculty. Rodriguez et al documented examples of the minority tax, such as URiM faculty engaging in unpaid DEI efforts, experiencing targeted racism, being absent of mentorship, having low social support, being promoted less and later, and carrying more clinical responsibilities than their nonminority peers.⁶¹ From a structural thinking perspective, this oppressive experience leads to a privilege for the majority, and Rodriguez et al referred to this as a majority subsidy.⁶¹ Experience of such taxation, by design, increases stress and often leads URiM faculty to leave their positions. Perhaps more equity-related issues are experienced by URiM faculty who are not physicians: behavioral health disciplines and pharmacists.

Examples of structural intervention include:

- ▶ Pairing URiM faculty mentors with other URiM faculty;
- ▶ Locating external faculty mentors if the institution does not have adequate senior URiM faculty;
- ▶ Changing promotion and tenure guidelines to value and give equal weight to DEI work and initiatives;
- ▶ Giving value to EVUs for faculty advancement; and
- ▶ Examining innovative payment models to support EVUs, especially for training programs that are not directly

affiliated with a medical school (ie, undergraduate medical education).

As health care continues to evolve alongside the ever-changing landscape of medical education, reducing the clinical efforts double disparity among URiM FM faculty who are not physicians is of importance. That team-based care has better health outcomes compared to silos care—especially in primary care—has been well-documented. We need our other team members in FM to thrive. Therefore, our faculty needs to reflect the teams we need in primary care as well as reflect the diverse populations we serve. We cannot do this work without acknowledging the role of structural racism in academic FM. We can answer this call to action through structural interventions to improve equity for URiM faculty in FM.

REFERENCES

1. Mccauley L, Phillips RL, Meisnere M, Robinson SK. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. National Academies Press; doi: [10.17226/25983](https://doi.org/10.17226/25983)
2. Yearby R. Structural racism and health disparities: reconfiguring the social determinants of health framework to include the root cause. *J Law Med Ethics*. 2020;48(3):518–526.
3. Mccarty S, Liskey M, George D, Cook NE, Metzl JM. Toward a moral reckoning on structural racism: examining structural

- factors, encouraging structural thinking, and supporting structural intervention. *Am J Community Psychol*. 2023;71(1-2):33–42.
4. Rodríguez JE, Figueroa E, Campbell KM. Towards a common lexicon for equity, diversity, and inclusion work in academic medicine. *BMC Med Educ*. 2022;22(1):703.
 5. Rucker JM, Richeson JA. Toward an understanding of structural racism: implications for criminal justice. *Science*. 2021;374(6):286–290.
 6. Baird MA, Hepworth J, Myerholtz L, Reitz R, Danner C. Fifty years of contributions of behavioral science in family medicine. *Fam Med*. 2017;49(4):296–303.
 7. ACGME Program Requirements for Graduate Medical Education in Family Medicine. *Accreditation Council for Graduate Medical Education*. 2023. https://www.acgme.org/globalassets/pfassets/programrequirements/120_familymedicine_2023.pdf.
 8. Mainous AG, Iii, Rahmanian KP, Ledford C, Carek PJ. Professional identity, job satisfaction, and commitment of nonphysician faculty in academic family medicine. *Fam Med*. 2018;50(10):739–745.
 9. 2017 general membership survey results. *Society of Teachers of Family Medicine*. 2017. <https://stfm.org/publicationsresearch/cera/pasttopicsanddata/2017generalmembershipsurvey>.
 10. Jarrett JB, Griesbach S, Theobald M, Tiemstra JD, Lick D. Nonclinical time for family medicine residency faculty: national survey results. *PRiMER*. 2021;5:45–45.
 11. Amaechi O, Foster KE, Tumin D, Campbell KM. Addressing the gate blocking of minority faculty. *J Natl Med Assoc*. 2021;113(5):517–521.
 12. Rodriguez JE, Campbell KM, Fogarty JP, Williams RL. Underrepresented minority faculty in academic medicine: a systematic review of URM faculty development. *Fam Med*. 2014;46(2):100–104.
 13. Edgoose J, Carvajal DN, Reavis K, Yogendran L, Echiverri AT, Rodriguez JE. Addressing and dismantling the legacy of race and racism in academic medicine: a socioecological framework. *J Am Board Fam Med*. 2022;35(6):239–240.
 14. Williams AM, Reed B, Self MM, Robiner WN, Ward WL. Psychologists' practices, stressors, and wellness in academic health centers. *J Clin Psychol Med Settings*. 2020;27(4):818–829.
 15. Erstad B. Surviving and thriving in the academic setting. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:21–38.
 16. Goode JV. Community pharmacy practice. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:69–92.
 17. Haase K. Inpatient/acute care practice. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:39–56.
 18. Hammer D. Teaching in the classroom environment. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:127–142.
 19. Harris I. Clinic/office-based practice. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:57–68.
 20. Hurd P. Personal leadership. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:285–293.
 21. Jarrett JB, Lounsbery JL. Trends in clinical pharmacist integration in family medicine residency programs in North America. *Pharmacy (Basel)*. 2020;8(3):126–126.
 22. Lounsbery JL, Jarrett JB, Dickerson LM, Wilson SA. Integration of clinical pharmacists in family medicine residency programs. *Fam Med*. 2017;49(6):430–436.
 23. Nappi J. Effective precepting. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:143–152.
 24. Phillips B. Research and scholarship for practitioner-educator faculty. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:242–258.
 25. Saseen J. Credentialing of pharmacists. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:111–128.
 26. Zlatic TD. Reaffirming the human nature of professionalism. *Clinical Faculty Survival Guide. American College of Clinical Pharmacy*;2010:3–20.
 27. Jarrett JB, Lounsbery JL, Amico D, F. Clinical pharmacists as educators in family medicine residency programs: a CERA study of program directors. *Fam Med*. 2016;48(3):180–186.
 28. Bazemore A, Grunert T. Sailing the 7c's: Starfield revisited as a foundation of family medicine residency redesign. *Fam Med*. 2021;53(7):506–515.
 29. Beaulieu ND, Chernew ME, McWilliams JM. Organization and performance of US health systems. *JAMA*. 2023;329(4):325–335.
 30. Dzau VJ. Anticipating the future of health and medicine—the National Academy of Medicine prepares for its next 50 years. *JAMA*. 2023;329(17):446–446.
 31. Schafer M, Harris K, Lounsbery I, Philbrick J, Moon AM, J. Shifts in pharmacists' responsibilities in family medicine residency programs during COVID-19. *Innov Pharm*. 2022;13(1):15.
 32. Kliethermes M, Brown T. *Building a Successful Ambulatory Care Practice: A Complete Guide for Pharmacists*. 2011. .
 33. Weber ZA, Skelley JW, Riche DM, et al. Frontline perspective on credentialing and privileging of ambulatory care pharmacists. *Int J Pharm Pract*. 2020;28(4):408–412.
 34. Hazen A, Bont AAD, Boelman L. The degree of integration of non-dispensing pharmacists in primary care practice and the impact on health outcomes: a systematic review. *Res Social Adm Pharm*. 2018;14(3):228–240.
 35. Chen Y, Gernant SA, Upton CM, Nunez MA. Incorporating medication therapy management into community pharmacy workflows. *Health Care Manag Sci*. 2022;25(4):710–724.
 36. Kliethermes M, Leal S. Billing and reimbursement for clinical pharmacist services. *Clinical Pharmacy*;2019:1–18.
 37. Nguyen E, Walker K, Adams JL, Wadsworth T, Robinson R. Reimbursement for pharmacist-provided health care services: a multistate review. *J Am Pharm Assoc*. 2021;61(1):27–32.
 38. Dickinson WP. Strategies to support the integration of behavioral health and primary care: what have we learned thus far?. *J Am Board Fam Med*. 2015;28(1):102–106.
 39. Gallimore CE, Fondow M, Schreiter Z, A E. Pharmacy and behavioral health: how can we collaborate in primary care. *J Am Pharm Assoc*. 2020;60(6):105–108.
 40. Miller-Matero LR, Dykuis KE, Albujoq K. Benefits of integrated behavioral health services: the physician perspective. *Fam Syst Health*. 2016;34(1):51–55.
 41. Nutting R, Ofei-Dodoo S, Wipperman J, Allen AD. Assessing family medicine physicians' perceptions of integrated behavioral health in a primary care residency. *Fam Med*.

- 2022;54(5):389–394.
42. Yuet WC, Lounsbery J. Drug prescribing: clinical pharmacists in family medicine. *FP Essent.* 2021;508:11–17.
 43. Pausch R. *The Last Lecture [audio book]*. Hyperion audiobook; 2008.
 44. Newton WP, Mitchell K. Reenvisioning family medicine residency education. *Fam Med.* 2021;53(7):487–489.
 45. Newton WP. How should board certification evolve?. *J Am Board Fam Med.* 2020;33.
 46. Newton WP, Bazemore A, Magill M, Mitchell K, Peterson L, Phillips RL. The future of family medicine residency training is our future: a call for dialogue across our community. *J Am Board Fam Med.* 2020;33(4):636–640.
 47. Newton WP, Magill M, Biggs W. Re-envisioning family medicine residencies: the end in mind. *J Am Board Fam Med.* 2021;34(1):246–248.
 48. Angelo D, Gallagher EJ, K. Capturing psychologists' work in academic health settings: the role of the educational value unit (EVU). *J Clin Psychol Med Settings.* 2016;23(1):21–32.
 49. AAMC Physician Specialty Data Report. *Association of American Medical Colleges.* 2024. <https://www.aamc.org/data-reports/workforce/data/active-physicians-black-african-american-2021>.
 50. Ly DP, Jena AB. Trends in diversity and representativeness of health care workers in the United States. *JAMA Netw Open.* 2000;4(7):2117086–2117086.
 51. Marriage and family therapists. *Data USA.* 2023. <https://datausa.io/profile/soc/marriage-and-family-therapists#>.
 52. Counselors. *Data USA.* 2023. <https://datausa.io/profile/soc/counselors#demographics>.
 53. Social workers. *Data USA.* 2023. <https://datausa.io/profile/soc/social-workers>.
 54. Psychology's workforce is becoming more diverse. *Monit Psychol.* 2020;51(8):19.
 55. Sinsky CA, Dugdale DC. Medicare payment for cognitive vs procedural care: minding the gap. *JAMA Intern Med.* 2013;173(18):733–734.
 56. Goldman L. The academic health care system. Preserving the missions as the paradigm shifts. *JAMA.* 1995;273(19):549–550.
 57. Stites S, Vansaghi L, Pingleton S, Cox G, A P. Aligning compensation with education: design and implementation of the educational value unit (EVU) system in an academic internal medicine department. *Acad Med.* 2005;80(12):100–101.
 58. Reynolds R, Chakrabarti R, Chylak D, Jones K, Iacobucci W, Dall T. *The Complexities of Physician Supply and Demand: Projections from 2019 to 2034.* Association of American Medical Colleges; 2021. .
 59. Davis CS, Roy T, Peterson LE, Bazemore AW. Evaluating the teaching health center graduate medical education model at 10 years: practice-based outcomes and opportunities. *J Grad Med Educ.* 2022;14(5):599–605.
 60. Chen C, Chen F, Mullan F. Teaching health centers: a new paradigm in graduate medical education. *Acad Med.* 2012;87(12):752–753.
 61. Rodríguez JE, Tumin D, Campbell KM. Sharing the power of White privilege to catalyze positive change in academic medicine. *J Racial Ethn Health Disparities.* 2021;8(3):539–542.