

# The Evolving Role of Nurse Practitioners in Health Centers and Considerations for Provider Satisfaction

JUNE 2021



## ABOUT THE STAR<sup>2</sup> CENTER

The Solutions, Training, and Assistance for Recruitment and Retention (STAR<sup>2</sup>) Center is a division of the Association of Clinicians for the Underserved. The STAR<sup>2</sup> Center provides resources, training, and technical assistance to help Health Center Program grantees with their clinician workforce challenges and questions.

For more information and resources, please visit [www.chcworkforce.org](http://www.chcworkforce.org)

## ABOUT THE NATIONAL NURSE-LED CARE CONSORTIUM

The National Nurse-Led Care Consortium (NNCC) is a national leader supporting and advocating on behalf of nurse leaders. NNCC is a nonprofit member-supported organization, and provides a wide range of services to educate and support nurses on the frontlines of health care.

For more information and resources, please visit <https://nurseledcare.phmc.org/>

This publication is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of awards as follows: U30CS09736 totaling \$1,725,000 with 0 percent financed with non-governmental sources, U30CS26934 totaling \$625,000 with 0 percent financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit [HRSA.gov](http://HRSA.gov).

## INTRODUCTION

---

The establishment of Medicare and Medicaid into law in 1965 and the Affordable Care Act (ACA) in 2010 expanded access to affordable health care services through a variety of options. Those options include: 1) employer sponsored health insurance, 2) state or federally managed health care exchanges, 3) Medicaid, and/or 4) Medicare.<sup>1, 2</sup> In addition to the development of Medicare, Medicaid and the ACA, a growing aging population as well as an increase in the overall population has added additional demand for access to health care services. The authorization of these federal initiatives as well as the growing and changing population has increased the need for health care professionals to meet these demands.

Evidence suggests that nurse practitioner (NP) workforce rates are increasing at a significantly faster rate than physicians.<sup>3</sup> For example, from 2017 to 2019, the Uniform Data System (UDS) data demonstrates advanced practice registered nurses (APRN) full time equivalent (FTE)s has grown 18.76% (from 8,851.71 NP FTEs in the 2017 report to 10,512.54 NP FTEs in the 2019 report) among federally qualified health centers. One opportunity to meet the demand for primary care providers is to use NPs more effectively in health care delivery.

NPs play an important role in expanding the supply of primary care workforce and access to primary health care.<sup>4</sup> As the NP workforce continues to grow and evolve, focus on burnout prevention and workplace satisfaction is imperative to continue to recruit and retain health center providers.

The Association of Clinicians for the Underserved (ACU) and the National Nurse-Led Care Consortium (NNCC) conducted three focus groups with NPs and health center administrators to better understand the expanding and evolving role of NPs at health centers, the drivers of burnout, and factors that contribute to provider satisfaction. Nine participants were recruited from health centers within the ACU and NNCC health center network. Participants represented five NPs and four administrators (three of whom are NPs). The length of time that participants have been in their roles ranged from four months to 35 years. Findings suggest that the drivers of burnout and the kinds of support needed to improve satisfaction change throughout an NP's career. This paper describes these findings and offers additional insight gained from peer-reviewed literature.

## THE EXPANDING AND EVOLVING ROLE OF NPS

---

While the NP profession is fairly new in the United States – with its first formal education program established in 1965 – the NP role has a deep history rooted in poverty relief efforts. In the late 1890's, Lillian Wald, a nurse who graduated from New York Training School, established the Henry Street Settlement in the Lower East Side of Manhattan to deliver care to the growing and medically underserved immigrant community. Nurses at the Henry Street Settlement traveled to their patients' homes, often bringing medication and other necessities such as milk and meals. Similar traveling nurse programs were established in rural and remote communities that lacked access to physicians. The Frontier Nurses Service (FNS), founded in 1925 by certified nurse midwife Mary Breckenridge, deployed nurses to rural Appalachian communities in Kentucky. These nurses worked independently and administered medication and treatments as needed to improve the health of their patients.<sup>5</sup>

Up until the early 1900s, the scope of nursing practice was relatively unregulated. However, the rise of new treatments and pharmaceuticals during this time increased state and federal oversight. These regulatory changes restricted prescribing authority and ultimately increased physician oversight of nurse programs where narcotics were administered. Additionally, new regulations were enacted to establish criteria for becoming a practicing nurse. The first states to enact laws that required nurses to pass exams and receive licenses were enacted in 1903 in North Carolina, New Jersey, New York, and Virginia. New York was the first to define the scope of nursing in 1938.<sup>6</sup> In 1955, the American Nurses Association defined the practice of professional nursing which excluded nurses from diagnosing and prescribing.<sup>7</sup>

Loretta Ford, Assistant Professor at the University of Colorado School of Nursing in Denver and her colleague, Henry Silver, a pediatrician at the University of Colorado Medical Center, conceptualized a more intentional role for nurses to address the healthcare needs of underserved families and the need for continuity and coordination of care. Their work would lead to the establishment of the first pediatric NP training program in 1965.<sup>8</sup> The first master's-level NP program was established two years later at Boston College.<sup>9</sup>

Today, all NPs have a master's or doctoral degree and receive advanced clinical training beyond their initial professional registered nurse preparation.<sup>10</sup> State laws regulate the extent to which NPs can practice independently and may require additional training to practice without physician oversight and/or to prescribe controlled substances. In 23 states and the District of Columbia, NPs have full practice authority (that is, the ability to practice without physician supervision and with full prescribing privileges), and NP leaders are continuing to push for changes in state law to allow more independence in practice.<sup>11</sup>

### Nurse Practitioner Services

- Ordering, performing, and interpreting diagnostic tests such as lab work and x-rays
- Diagnosing and treating acute and chronic conditions such as diabetes, high blood pressure, infections, and injuries
- Prescribing medications and other treatments
- Managing patients' overall care
- Counseling
- Educating patients on disease prevention and positive health and lifestyle choices

NP training and practice focuses on the health and well-being of the whole person, with a focus on health promotion, disease prevention, and health education and counseling. NPs use these principles to support patients in their health and lifestyle choices.

*Source: American Association of Nurse Practitioners. [What's a nurse practitioner?](#)*

## NURSE PRACTITIONERS IN HEALTH CENTERS

---

Health centers are increasingly optimizing NPs to extend their capacity to deliver primary care. According to national health center data, FTE NPs have increased by nearly 19% from 2017 to 2019 compared to an 9% increase in FTE physicians during the same time period. Clinic visits conducted by NPs have increased by 18% from 2017 to 2019 compared to an increase of only 5% by physicians. In 2019, NPs also conducted more virtual visits than physicians (77,727 compared to 39,759 respectively).<sup>12</sup> Given physician shortages in primary care and as health centers increasingly continue to adopt multidisciplinary care team models, this trend will likely continue.

The value of NPs in multidisciplinary care teams cannot be understated. NPs perform as well as physicians in their clinical outcomes and patient satisfaction.<sup>13,14</sup> Additionally, given the nature of their work, they “do better than physicians in measures related to patient follow up; time spent in consultations; and provision of screening, assessment, and counseling services.”<sup>15, 16</sup> In a national survey conducted with NPs and physicians, both professions agreed that NPs in primary care elicit greater collaboration and team-based practice.<sup>17</sup>

The establishment of nurse managed health centers (NMHCs) has further evolved the NP role and has accelerated the move away from physician-centric healthcare models. NMHCs are defined in Title VIII of the Public Health Service Act as a “nurse-practice arrangement, managed by advanced practice nurses, that provides primary care or wellness services to underserved or vulnerable populations and that is associated with a school, college, university or department of

nursing, federally qualified health center, or independent nonprofit health or social services agency.”<sup>18</sup>

Studies dating back to 2015 indicate approximately 250 nurse-managed health centers in the United States alone.<sup>19</sup> More recently, NNCC sought to develop a working definition of NMHCs in order to better quantify the number of clinics utilizing a nurse-led care model nationally. Under NNCC’s working definition, a health center is considered a NMHC if they meet either of the following criteria:

- 60% or more of the provider FTEs (physicians, NPs, physician assistants, and certified nurse midwives) in the organization are NPs & certified nurse midwives (CNMs)
- 55% or more of the total number of provider visits were by NPs & CNMs (using lines 1 to 10 in UDS Table 5, columns b+b2)

Based on the 2019 Uniform Data System (UDS) data, approximately 411 health centers out of 1385 (or 30%) qualified as nurse-managed health centers as defined by the criteria above. These organizations serve 5,430,328 patients out of 29,836,613 total health center patients (or 18%) nationally.<sup>20</sup>

While the growth of NPs in health centers is relieving some of the burden on physicians, NPs are taking on much more complex work and are experiencing burnout at the same rate as physicians.<sup>21</sup> Additionally, some studies show that the odds of burnout among NPs are higher in health centers than other health care settings.<sup>22</sup> To adequately address burnout and maintain a healthy NP workforce, health center leaders need to understand the different drivers of burnout across the NP career and plan retention strategies accordingly.

## DRIVERS OF BURNOUT AMONG NOVICE NPS

---

Studies indicate that younger advanced practice providers are at a higher risk of burnout than those who are more advanced in their careers.<sup>23,24, 25</sup> This aligned with focus group discussions in which NPs described feeling overwhelmed when entering the health center workforce immediately out of graduate school. One focus group participant shared:

*“When I graduated, I had never served as a nurse; there was an expectation that I would see 20 patients on my first day. I had patients coming from the streets with HbA1cs of 12 and I had no idea how to adjust insulin. It was a disaster so I sat in a corner and cried for a year.”*

New primary care providers to the health center setting are often overwhelmed with the complex health needs and social determinants of health of their patients. Despite these complexities, health center providers are under pressure to achieve the same health outcome measures as providers who care for higher-income patients. One NP focus group participant noted:

*“Seeing a patient with high blood pressure in a regular primary care office might be a 10- or 15-minute visit; however, my patient is going to have high blood pressure and diabetes and congestive heart failure and their thyroid is going to be out of whack and they’re on suboxone... but we are expected to produce at the same level as a peer working at a commercial entity, so that is draining.”*

*“I feel like patients who get care at a private practice might be more likely to attempt to solve an acute issue on their own, but my patients may come in not knowing what they can do ... Sometimes patients are on the cusp of needing to go to the ER.”*

When they do not see progress in their patients’ health outcomes, new providers struggle with their self-perceived skill level. For newer NPs, factors that contribute to job dissatisfaction when they are not confident in their own skill level include having to develop their own clinical skills without proper support and challenges related to learning and growing.<sup>26</sup>

One focus group participant noted that attending physicians are expected to provide consultation and support NPs in between their patient visits. As such, physicians may be rushed and unable to provide the level of support needed in their small windows of availability.

*“What happens is that the physicians are expected to see all their own patients and help me in between patients and that doesn’t work very well... Some of my friends didn’t ask for help and it became very unsafe and that jeopardizes our profession.”*

Nearly all focus group participants expressed the need for NP residency programs to better prepare NPs for the health center setting. One administrator noted that a residency program would be ideal, but that their health center lacked the capacity to implement a program. A regional nurse residency program may be one approach to support health centers that lack the resources needed to develop their own. Currently, there are 253 postgraduate NP & NP/PA (Physician Assistant) residency and fellowship training programs. Additionally, there are 36 HRSA Advanced Nurse Education-Nurse Practitioner Residency (ANE-NPR) awardees and 10 HRSA Advanced Nursing Education Nurse Practitioner Residency Integration Program (ANE-NPRIP) ANE-NPRIP awardees.

To prevent burnout among new NPs, health centers may need to establish structured consultation time with clinicians overseeing their work. Mentorships with senior clinicians can also be a helpful way to provide direct access to guidance and consultation. Health centers should also consider starting new NPs with smaller and more manageable caseloads and gradually build up as they gain experience.

## SUPPORTING NURSE PRACTITIONERS FURTHER INTO THEIR CAREERS

---

As NPs become more comfortable and established in their roles, they tend to have higher job satisfaction. At this point in their careers, satisfaction among NPs is often associated with time spent with patients, level of autonomy, ability to deliver quality care, sense of accomplishment, and finding challenge in the work performed.<sup>27</sup>

Further into their careers, NPs are likely to see patients with higher acuity levels and who need more education, care coordination, and support to address social determinants of health. Having the trust of their colleagues to see patients with more complex needs provides a sense of satisfaction, incorporates new challenges, and allows NPs to utilize their skill sets. However, many are not given adequate time to provide the care and support that their patients need.

When discussing the parts of their jobs that bring them most joy, focus group participants described being able to meaningfully and deeply address their patients' health care needs.

*"I love when I have time to provide wholistic care management and services. It gives me great joy to call a specialist and talk to them about my patients, and call the pharmacy and solve problems, and draw pictures of their meds on pieces of paper – these are all things unique to the nursing role."*

*"My role is to take care of the whole patient which means being able to provide those resources for them. I enjoy doing this; it also keeps me on my toes to know what's going on completely with my patients."*

Allowing NPs to lean into the parts of their jobs that they are most passionate about requires that health center leaders utilize resources and supports to balance productivity expectations. This may mean that NPs are given access to resources to reduce the amount of time spent doing administrative work. Among focus group participants, some NPs had access to scribes and medical assistants, while others did not have these resources available to them. Providing logistic support through certified nursing assistants can also help reduce stress. Health centers should consider the job demands of NPs and assess of the need for clinical support.

Increasing the amount of time that NPs can spend with patients also requires that health center leaders understand and provide guidance to other providers and administrators around role clarity.<sup>28</sup> As primary care providers, NPs are often held to similar practice expectations as physicians.

*"Sadly, some see us as cheaper than hiring physicians. In my role, there was really no differences in what roles we would take versus physicians. We took on similar acuities but received different levels of respect."*

While NPs may enjoy the challenge of seeing higher acuity patients, they need sufficient time to work at the top of their license and utilize the skills and training that make their profession



unique. A 2012 National Sample Survey of NPs found that autonomy, specifically feeling one's NP skills were fully utilized, was the factor most predictive of satisfaction.<sup>29</sup>

## SUPPORTING NURSE LEADERS

---

NPs are increasingly stepping into leadership roles ranging from nurse managers to chief medical officers at their health centers. In these roles, NPs are expected to have additional business, financial, and policy acumen. In 2019, the National Association of Community Health Centers published Clinical Leadership Development Competencies Domains and Skills/Tasks.<sup>30</sup> The publication includes a vast number of skills that clinical leaders should develop, including the ability to:

- work fluidly with governmental units and other funding sources that support health centers
- actively guide the clinical team toward patient self-management and true patient-centered, integrated care, wellness and health promotion
- align clinical, tactical operations with the health center's mission, vision, and values
- the ability to manage change among the clinical staff as the health center moves into new care models
- actively work to integrate Public/Population Health issues with routine delivery of primary care
- actively advocate for appropriate provider compensation
- create, implement, and maintain high-performing clinical processes and systems

In one study of burnout among nurse leaders, the authors note that committee overload and expectations to be accessible all the time contribute to burnout. Without the ability to “turn off” at the work at the end of the day, nurse leaders may be unable to recharge both emotionally and physically. Proposed strategies to reduce burnout among nurse leaders include creating manageable spans of control, setting boundaries around accessibility expectations, initiating peer coverage so leaders can be off technology when their workday ends, and strategic management of internal and external advisory committee responsibilities with end dates.<sup>31</sup>

In focus group interviews, respect was a key theme that arose when discussing nurse leaders. Nurse leaders were more satisfied in their roles when they knew other leaders in their organization respected them. In addition to their clinical and leadership prowess, clinical leaders who were respected in their organizations possessed emotional intelligence, good communication skills, and relationship building skills. Keeping with the theme of respect, nurse leaders participating in the focus group described the importance of compensation equal to that of other leaders in the organization. While compensation did not arise as a concern when discussing NPs in non-leadership roles, equitable pay for nurse leaders was seen as a sign of respect and being valued in the organization.

## PRIORITIZING WELLNESS THROUGHOUT THE CAREER SPAN

---

Regardless of where NPs are in their careers, studies indicate that wellness activities are critical to job satisfaction and preventing burnout. Kapu, et al. (2019) conducted a study utilizing a 78-question survey to assess the prevalence of burnout among advanced practice registered nurses (APRNs). Participants were asked to indicate whether they were currently experiencing burnout, formerly burned out, or had never experienced burnout. The majority of the never burned out group that responded to open-ended questions identified taking time off or vacation as essential to avoiding burnout.<sup>32</sup> For NPs who have a hard time balancing work-life activity, organizational commitment may deter workers from taking time off. To encourage NPs to take time off, health centers should proactively work to eliminate any guilt related to taking time off and ensure that time off does not impact the organization's need for care delivery.<sup>33</sup>

Flexible scheduling options may be needed for workers who struggle to with work-life balance. For some workers, alternative schedules such as four 10-hour shifts, half-days, or work from home may be an approach to create more balance across work and personal life.<sup>34</sup> Health center leaders may also want to look into job sharing and offer sabbaticals as other alternatives to promote work-life balance.

In Kapu's study, APRNs who had never burned out reported strong family support, close friends, and involvement in group activities. One theory is that individuals who have these supports and resources have different ideas on what success looks like compared to those who attribute success with work performance.<sup>35</sup> Health centers may want to promote these kinds of supports and activities by developing benefit packages that include membership to fitness programs, time off for volunteering, and discounts to local museums, zoos, and sport events. Health centers can also promote community activities like local book clubs and cooking classes.

Many resources addressing burnout emphasize the importance of restorative (or self-care) activities such as yoga and meditation. However, participating in restorative activities is difficult for practitioners who work long hours and find themselves exhausted by the end of the day. Additionally, those who are caregivers to their children or aging parents may find it hard to find time for self-care. Health centers can support workers in engaging in self-care activities by building time for self-care into the workday.

## CONCLUSION

---

NPs are more likely to work in primary care and serve Medicaid recipients and other vulnerable populations compared to physicians.<sup>36, 37</sup> While NPs generally find their work in health centers satisfying and meaningful, the complexities of the work environment (partly due to the productivity and administrative requirements of the multi-payer system) can impede time spent with patients as well as autonomy – both of which are critical to job satisfaction.

As NPs assume more primary care responsibilities in health centers, leaders must consider retention strategies that allow NPs to spend time on the parts of their work that bring them joy and reduce those aspects that contribute to burnout. Strategies to increase satisfaction and reduce burnout should consider where NPs fall in their career trajectory. For new NPs, manageable patient caseloads and structured access to senior practitioners for consultation are likely to increase job satisfaction. NPs who are more experienced have a higher job satisfaction when they can spend more time with patients and have greater autonomy in making clinical decisions. Nurse leaders may need smaller spans of control (i.e., fewer responsibilities) and assistance in setting boundaries so they can leave work behind when they go home. Given the impact of burnout on patient outcomes, safety, and satisfaction, addressing burnout and increasing job satisfaction should be a strategic priority.

## **SUMMARY OF RECOMMENDATIONS TO IMPROVE JOB SATISFACTION AND PREVENT BURNOUT AMONG NPS**

---

NPs at all levels should be encouraged and supported in fostering work-life balance. When planning work schedules, time “on the clock” should consider administrative tasks, time needed with patients, participation in committees, professional development, time need to coordinate care and services, etc. Additionally, organizations should provide resources to promote resilience and mental well-being among all providers and staff.

### **Recommendations for reducing burnout among novice NPs**

- Consider the feasibility of a paid nurse residency program
- Start new NPs with a smaller case load and gradually build up as they gain experience
- Provide a mentor to serve as a direct resource for support and guidance
- Build in structured time with senior clinicians overseeing their work for consultations

### **Recommendations for reducing burnout among seasoned NPs**

- Clarify NP and other care team roles and responsibilities when new staff members are onboarded
- Consider the level of clinical support needed to allow NPs to reduce administrative work and allow more time spent with patients
- Include NPs in organizational decisions that impact health care delivery
- Regularly share patient satisfaction and clinical outcomes metrics and recognize high performance

### **Recommendations for reducing burnout among senior nurse leaders**

- Create smaller spans of control so that nurse leaders are not overwhelmed
- Set boundaries around expectations for when nurse leaders should be available off hours
- Initiate peer coverage so leaders can be off technology after work hours
- Help nurse leaders manage internal and external advisory committee responsibilities by implementing term limits
- Ensure that salaries are comparable to other leaders in the organization

## WORKS CITED

---

- <sup>1</sup> Berkowitz E. (2005). Medicare and Medicaid: the past as prologue. *Health Care Financing Review*, 27(2), 11–23.
- <sup>2</sup> Rosenbaum, S., & Thorpe, J. H. (2016). The Affordable Care Act at Six: Reaching for a New Normal. *The Journal of Law, Medicine & Ethics*, 44(4), 533–537. <https://doi.org/10.1177/1073110516684781>
- <sup>3</sup> Mark, B. A., & Patel, E. (2019). Nurse Practitioner Scope of Practice: What Do We Know and Where Do We Go? *Western Journal of Nursing Research*, 41(4), 483–487. <https://doi.org/10.1177/0193945918820338>
- <sup>4</sup> Kleinpell, R. M., Hudspeth, R., Scordo, K. A., & Magdic, K. (2012). Defining NP scope of practice and associated regulations: focus on acute care. *Journal of the American Academy of Nurse Practitioners*, 24(1), 11–18. <https://doi.org/10.1111/j.1745-7599.2011.00683.x>
- <sup>5</sup> Keeling A. W. (2015). Historical Perspectives on an Expanded Role for Nursing. *Online Journal of Issues in Nursing*, 20(2), 2.
- <sup>6</sup> Russell, K. A. (2017). Nurse Practice Acts Guide and Govern: Update 2017. *Journal of Nursing Regulation*, 8(3), 18–25.
- <sup>7</sup> Keeling A. W. (2015).
- <sup>8</sup> Russell, K. A. (2017).
- <sup>9</sup> Brennan, C. (2020). Tracing the History of the Nurse Practitioner Profession in 2020, the Year of the Nurse. *Journal of Pediatric Health Care*, 34(2), 83–84.
- <sup>10</sup> American Association of Nurse Practitioners. What's a Nurse Practitioner? <https://www.aanp.org/about/all-about-nps/whats-a-nurse-practitioner>
- <sup>11</sup> National Nurse-Led Care Consortium. Full Practice Authority. <https://nurseledcare.phmc.org/advocacy/full-practice-authority.html>
- <sup>12</sup> Health Resources and Services Administration. National Health Center Data. Table 5: Staffing and Utilization. <https://data.hrsa.gov/tools/data-reporting/program-data/national>
- <sup>13</sup> Kurtzman, E. T., & Barnow, B. S. (2017). A Comparison of Nurse Practitioners, Physician Assistants, and Primary Care Physicians' Patterns of Practice and Quality of Care in Health Centers. *Medical care*, 55(6), 615–622. <https://doi.org/10.1097/MLR.0000000000000689>
- <sup>14</sup> Swan, M., Ferguson, S., Chang, A., Larson, E., & Smaldone, A. (2015). Quality of primary care by advanced practice nurses: a systematic review. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care*, 27(5), 396–404. <https://doi.org/10.1093/intqhc/mzv054>
- <sup>15</sup> Buerhaus, P. I., DesRoches, C. M., Dittus, R., & Donelan, K. (2015). Practice characteristics of primary care nurse practitioners and physicians. *Nursing outlook*, 63(2), 144–153. <https://doi.org/10.1016/j.outlook.2014.08.008>
- <sup>16</sup> Cassidy, A. (2013). Nurse Practitioners and Primary Care (Updated). *Health Affairs Health Policy Brief*. DOI: 10.1377/hpb20130515.65357
- <sup>17</sup> Buerhaus, P. I., et al. (2015).
- <sup>18</sup> Title VIII Nursing Workforce Reauthorization Act of 2016, H.R.2713, 114th Congress (2015–2016)
- <sup>19</sup> Holt J, Zabler B, Baisch MJ. Evidence-based characteristics of nurse-managed health centers for quality and outcomes. *Nurs Outlook*. 2014 Nov-Dec;62(6):428–39. doi: 10.1016/j.outlook.2014.06.005. Epub 2014 Jun 30. PMID: 25085326
- <sup>20</sup> Health Resources and Services Administration. 2019 UDS Health Center Grantee data.
- <sup>21</sup> Edwards, S. T., Marino, M., Balasubramanian, B. A., Solberg, L. I., Valenzuela, S., Springer, R., Stange, K. C., Miller, W. L., Kottke, T. E., Perry, C. K., Ono, S., & Cohen, D. J. (2018). Burnout Among Physicians, Advanced Practice Clinicians and Staff in Smaller Primary Care Practices. *Journal of General Internal Medicine*, 33(12), 2138–2146. <https://doi.org/10.1007/s11606-018-4679-0>
- <sup>22</sup> Edwards, S. T., et al. (2018).
- <sup>23</sup> Dyrbye, L. N., Johnson, P. O., Johnson, L. M., Halasy, M. P., Gossard, A. A., Satele, D., & Shanafelt, T. (2019). Efficacy of the Well-Being Index to identify distress and stratify well-being in nurse practitioners and physician assistants. *Journal of the American Association of Nurse Practitioners*, 31(7), 403–412. <https://doi.org/10.1097/JXX.0000000000000179>
- <sup>24</sup> Edwards, S. T., et al. (2018).

- 
- <sup>25</sup> Orozco, J.M., Furman, J., McAndrews, K.K. et al. (2019). Assessing Burnout Among Advanced Practice Providers (APPs) Compared with APP Trainees. *Medical Science Educator*, 29, 1023–1031. <https://doi.org/10.1007/s40670-019-00799-x>
- <sup>26</sup> Han, R. M., Carter, P., & Champion, J. D. (2018). Relationships among factors affecting advanced practice registered nurses' job satisfaction and intent to leave: A systematic review. *Journal of the American Association of Nurse Practitioners*, 30(2), 101–113. <https://doi.org/10.1097/JXX.0000000000000006>
- <sup>27</sup> Han, R. M., et al. (2018).
- <sup>28</sup> Klein, C. J., Dalstrom, M., Lizer, S., Cooling, M., Pierce, L., & Weinzimmer, L. G. (2020). Advanced Practice Provider Perspectives on Organizational Strategies for Work Stress Reduction. *Western Journal of Nursing Research*, 42(9), 708–717. <https://doi.org/10.1177/0193945919896606>
- <sup>29</sup> Athey, E. K., Leslie, M. S., Briggs, L. A., Park, J., Falk, N. L., Pericak, A., El-Banna, M. M., & Greene, J. (2016). How important are autonomy and work setting to nurse practitioners' job satisfaction? *Journal of the American Association of Nurse Practitioners*, 28(6), 320–326. <https://doi.org/10.1002/2327-6924.12292>
- <sup>30</sup> National Association of Community Health Centers. Updated March 2019. *Clinical Leadership Development Core Competencies*. <https://cdn1.digitellinc.com/uploads/nachc/articles/a5463b3690ff2d5dc307d28a7c0a1666.pdf>
- <sup>31</sup> Kelly, L. A., Lefton, C. & Fischer, S. A. (2019). Nurse Leader Burnout, Satisfaction, and Work-Life Balance. *The Journal of Nursing Administration*, 49(9), 404-410.
- <sup>32</sup> Kapu, A. N., Borg Card, E., Jackson, H., Kleinpell, R., Kendall, J., Lupear, B. K., LeBar, K., Dietrich, M. S., Araya, W. A., Delle, J., Payne, K., Ford, J., & Dubree, M. (2019). Assessing and addressing practitioner burnout: Results from an advanced practice registered nurse health and well-being study. *Journal of the American Association of Nurse Practitioners*, Advance online publication. <https://doi.org/10.1097/JXX.0000000000000324>
- <sup>33</sup> Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work-family balance more than conflict and enrichment? *Human Relations: Studies Towards the Integration of the Social Sciences*, 62(10), 1459. <https://doi.org/10.1177/0018726709336500>
- <sup>34</sup> Klein, C. J., et al. (2020).
- <sup>35</sup> Kapu, A. N., et al. (2019).
- <sup>36</sup> Buerhaus, P. I., et al. (2015).
- <sup>37</sup> Swan, M., et al. (2015).