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Senate Committee on Health, Education, Labor and Pensions (HELP) Field Hearing
Title: *Overworked and Undervalued: Is the Severe Hospital Staffing Crisis Endangering the Well-Being of Patients and Nurses?*

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As Director of the Mullan Institute for Health Workforce Equity at the George Washington University School of Public Health, I appreciate the opportunity to speak with you today and share some of our research findings relating to nurse staffing and wellbeing. I will (1) review some of the background on nurse attrition and the so-called nursing shortage; (2) examine the evidence on why staffing is so important to both nursing and patient outcomes; (3) reflect on what may be driving unsafe staffing; and (4) discuss various policy approaches to addressing the problem of understaffing and moral injury.

Some of the research I will discuss was funded under a Health Workforce Research Center collaborative agreement with the Health Services Research Administration (HRSA), although the views expressed here are entirely my own.

The shortfall has been largely caused by attrition, not an insufficient pipeline

Registered nursing (RN) projections conducted by the Federal government suggest that the current national nursing shortage is largely a result of licensed nurses dropping out of healthcare, rather than a problem of production. Some describe this as a shortage of nursing *care,* rather than of nurses (Trang 2023).

Nationally, the HRSA estimates that while they expect a shortage of about 79,000 full time nurses in 2025, by 2035 there could be a surplus of 16,000 nurses (2022). Projection methodologies are always controversial, and certainly national numbers obscure geographic variation. However, we do know that the pipeline is robust. Currently we graduate about 185,000 new nurses a year, close to the 195,000 we are estimated to need in the future, and that rate is expected to increase each year, as it has in the past.

The unanticipated problem in nurse supply has been the massive attrition of early career nurses. Bureau of Labor Statistics data show that more than 100,000 FTE left nursing in 2021 alone, the largest exodus of nurses in forty years of tracking the profession. Even more concerning, the majority of those leaving were under the age of 35 (Auerbach et.al. 2022). We know that most of the problem is concentrated in

hospitals, where there was a 3.9% drop in employed nurses that year, while in other settings there was a slight increase (1.6 %).

In 2022, some nurses returned to the bedside, but according surveys, RN hospital turnover is still above 22 percent (NSI 2023). Forty percent of all new hires left within a year of hiring in 2022, and almost 60 percent of those quitting had less than two years of service.

The primary reason for these departures, as reported by nurses, is that understaffing and poor working conditions are resulting in patient harm (Medvec et. al. 2023). The experience of witnessing this harm is resulting in *moral injury,* a form of trauma associated with being unable to provide the care they believe patients deserve, and the feeling that they are powerless to make changes (Pittman 2021). Among the effects of this phenomenon are depression and suicide. Nurses commit suicide at twice the rate of the general population (Davis et. al., 2021).

There is robust evidence that staffing levels affect patient outcomes

Nurses' concern that understaffing results in poor patient outcomes has been born out in over twenty years of rigorous research in the U.S. and around the world (Pittman 2021). Outcomes associated with low staffing levels include patient mortality and failure to rescue, hospital acquired pneumonia, unplanned extubation, respiratory failure and cardiac arrest in ICUs, ulcers, falls, urinary tract and surgical site infection, as well as longer restraint application duration, more medication errors, and longer times to diagnosis in the emergency room. Studies also reveal a significant association with longer lengths of stay, higher rates of 30-day patient readmission and lower patient satisfaction.

In a recent study, our team showed that **nursing assistive personnel staffing levels also affect patient satisfaction,** in part, no doubt, because without sufficient support staff, nurses must also do their jobs (Delhy, Dor, Pittman 2020).

Additionally, the configuration of nurse staffing matters. In a study we are just completing, **we find the two most common hospital management strategies for handling short staff – increasing overtime hours and agency nurses – can help improve outcomes (in this case pressure ulcers) up to a point, but beyond a certain level, actually worsen outcomes.** Pressure ulcers are entirely preventable, yet there is a prevalence of 2.5 million cases in the U.S., and about 60,000 of these patients die annually, as a result (Afzali Borojeny et al 2020). In our study, the mean overtime nurse hours per patient day was 178% over the estimated safe threshold for pressure ulcers, and for agency nurse hours it was 211% over the estimated safe threshold. This corresponded to a 3.5% increase in pressure ulcers during the last five years. Interviews we have conducted with travel nurses suggest that this may be a result feeling disempowered to speak up when they see unsafe or unethical practices, precisely because they are temporary.

Current incentives for safe staffing are insufficient

Labor economists have long identified the counter cyclical relationship of nurse attrition and unemployment (Buerhaus, Auerbach, Staiger 2009). Historically, poor working conditions and wages have led nurses to leave their jobs when their families are fully employed, 401Ks are flush, or maybe they can find work elsewhere. During recessions, however, many licensed nurses return to healthcare jobs. With the average cost of turnover for a bedside RN an estimated $52,35 today, hospitals

understand the importance of improving retention (NSI 2022). The question then becomes, what can hospitals do to stabilize the workforce?

One might assume that hospitals with more financial resources would use some of that money to increase staffing, so fewer nurses would leave. Indeed, that is likely the assumption that policymakers made during the pandemic when they allocated provider relief funds to help hospitals make up for revenue losses and address the staffing crisis.

In a forthcoming study, however, my team found that not to be the case. We found that in the year prior to the covid-19 pandemic there was no relationship between hospital finance levels, measured as days cash on hand, and nurse hours per patient day, either positive or negative. We then looked at the four waves of covid-19 and found that in wave 2 and 3 there was an inverse relationship. In other words, an increase in days cash on hand was associated with a decline in nurse staffing. We were surprised by that, and so we applied a lag time analysis to account for the time needed to use new resources to hire, but found that our results still held. This means that **not only are hospitals that are traditionally better resourced not using those funds for increased staffing, but that, even with an influx of cash, there is no evidence is was used for staffing.**

This finding suggests that labor market dynamics do not entirely explain the problem of nurse attrition; it seems likely that the current hospital payment system has created a perverse incentive to understaff. Nurse and support staff labor are a significant portion of hospital budgets, and because their hours are not billed this has been the easiest place to control expenses. And despite the proven relationship with patient outcomes, value-based payment incentives tied to patient safety do not appear to be high enough to change the predominate financial calculations on staffing.

Combining mandatory and incentive-based policy solutions

Fixing the problem of unsafe staffing in this country may require a multi-tiered approach. Policy options will likely require both a mandatory component, for minimum thresholds, as well as economic incentives that reward those that go beyond that minimum.

Among the mandatory strategies, three general approaches have been used: (1) directly mandating nurse to patient ratios, (2) requiring that staffing committees include bedside nurses (in the hopes that their perspectives will be considered by hospital administrators), and (3) public reporting of staffing levels, (in the hopes that consumers will “vote with their feet” and put market pressure on hospitals). Just three states have used nurse to patient minimum ratios, California, Massachusetts in their intensive care units, and just recently Oregon. **We conducted a national study comparing these approaches over time and found that only the minimum ratios laws were associated with increased staffing** (Han, Barnow, Pittman, 2021).

Another mandatory approach that has gained attention recently, but has yet to be attempted, would be to require hospitals paid by Medicare to adhere to minimum nurse to patient ratios as a condition of participation (Aiken, Faigin 2022).

Incentive-based approaches may also have an important role in addressing unsafe staffing. While they are unlikely to solve the problem alone, in conjunction with mandatory thresholds they could motivate hospitals to go beyond the minimum. At the Federal level, this could begin with required public reporting of nurse staffing hours per patient day and turnover rates, and the inclusion of these

measures in Hospital Compare (CMS a, 2023). Currently, Hospital Compare includes nurse sensitive patient outcome measures, but no process measures tracking nurse staffing or turnover. Requiring standardized reporting of staffing and turnover could also lead to their inclusion in the Hospital Value Based Payment Program (CMS b, 2023), a voluntary reward program. Long term, the main payment structure could be reformed. Scholars have been interested in exploring whether nurse labor hours could be incorporated into Diagnostic Related Groups (DRGs), hopefully without driving up costs to payers or consumers (Pittman et al 2021; Yakusheva & Rambur 2023).

In closing, I do want to acknowledge that while safe staffing will help reduce nurse turnover, other factors relating to nurse practice environments are also important. Studies show that improvements in team dynamics and greater trust in management are also key to reducing departures (Lasater et al 2021). A reduction of violence and harassment of health care workers is also imperative (CDC 2023).

From a policy perspective, however, fixing unsafe staffing in U.S. hospitals is both feasible and an essential first step. If achieved, it would not only improve patient outcomes, but also contribute to the retention of the hundreds of thousands of nurses that drop out of the workforce due to moral injury.

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