NYC HEALTH + HOSPITALS: NURSE STAFFING TRENDS

The COVID-19 pandemic put stress on the health care workforce across the United States, particularly in New York City, the initial epicenter of the pandemic. While nurse staffing shortages are not a new problem, the issue was greatly amplified by the pandemic. This resulted in high turnover and employee burnout, increasing reliance on temporary staff to handle demand and driving up the cost of labor, and increased competition for nurses. In addition, faculty shortages at nursing schools across the country are limiting the number of available nursing candidates. New York City Health + Hospitals (H+H) was hard hit by these challenges, with a decline of nurses critical to H+H’s mission to provide quality care to City residents. To manage staffing pressures and service demand, H+H has continued to rely on temporary staff.

As an update to the Office of the State Comptroller’s (OSC) report, NYC Health + Hospitals Check-Up: The Impact of COVID-19, this brief analyzes H+H staffing trends, with a particular focus on nurses. The report includes a trend analysis of nurses in New York City and the rest of the State, challenges to hire more staff nurses nationwide and the experience of H+H nurse staffing during this time. The analysis also includes a review of staffing costs for H+H and the City based on the City’s most recent budget update, released in April. The decisions made by the City and H+H will be critical for ensuring the corporation can continue to deliver quality health care services for all New Yorkers.

Highlights

- Pandemic period data between February 2020 and September 2022, shows that RNs employed at H+H declined by 538 FTEs or 6 percent.
- H+H offset the decline in staff nurses by increasing patient care temporary staffing which grew by 860 FTEs or 83 percent between February 2020 and September 2022.
- A recent modification to the H+H financial plan reflected unexpected costs of $125 million in FY 2023 as a direct result of the increasing use of temporary staff. Elevated reliance on temporary staff is expected through at least FY 2024.
- Starting in FY 2015, the City elected to provide financial support to H+H by covering the costs for collective bargaining arrangements. By FY 2022, cumulative support to H+H reached almost $2.2 billion.
- The City recently settled a new collective bargaining agreement with DC 37. If this pattern were applied to nurses at H+H, the cost would reach about $196 million in FY 2029, when fully annualized, about 29 percent of the total cost of applying the pattern across the entire H+H workforce ($690 million in FY 2029).
- A review of the City’s most recent budget update and the NYSNA private sector pattern for its nurses suggests that if the NYSNA pattern were applied to H+H nurses, costs could be higher than budgeted over the financial plan period.
Nurse Staffing Trends Nationally, Statewide and Citywide

While the COVID-19 pandemic posed challenges to nurse staffing nationally, New York State experienced more substantial declines. Between 2019 and 2022, the number of registered nurses (RNs) nationally rose by 4.3 percent to reach almost 3.7 million, a moderate growth rate compared to the nearly 24 percent seen between 2010 and 2019. At the same time, New York City saw a reduction in RN employment during the pandemic of 1.1 percent to almost 57,000 in 2022; counties outside New York City saw a reduction of 5.3 percent (see Figure 1). RNs can provide a higher level of patient care and require more education toward their licenses than Licensed Practical Nurses (LPNs).

Among the City’s RNs, those employed in privately-run health care facilities increased by over 6 percent from 2010 to 2019, while RNs working for State and local governments increased by nearly 11 percent. The number of RNs employed declined between 2019 and 2022, by 3 percent in the private sector to reach 47,000 and by 11 percent in State and local government to reach 7,000. During the pandemic, turnover rates at health care facilities increased, fatigued nurses left the industry and others retired early, contributing to the overall decline.

By industry, the City’s RNs are largely employed by hospitals. Hospital RN employment increased by 12 percent between 2010 and 2019 and then declined by nearly 4 percent through 2022. In contrast, the number of RNs in nursing and personal care facilities declined by nearly 15 percent between 2010 and 2019 but increased by about 33 percent between 2019 and 2022 (see Figure 2).

Nationally, the RN workforce is expected to grow by 6 percent between 2021 and 2031, with over 200,000 job openings each year through 2031 to account for retirements and RNs exiting the workforce.¹ There is an increasing need for RNs to serve an aging population. However, challenges to hiring RNs persist nationally. A 2020 survey found the RN workforce is aging. The median age of RNs was 52 in 2020, an increase over prior years. Nineteen percent of the RN workforce was aged 65 years or older in 2020². Additionally, faculty shortages at nursing schools across the country are limiting the number of potential graduates, with vacancy rates for faculty positions of 8.1 percent in schools located in the North Atlantic region.³

FIGURE 1
Number of RNs in New York City and the Rest of New York State

![Chart showing the number of RNs in NYC and the rest of New York State from 2010 to 2022.]

Note: Includes full-time and part-time RNs.
Encouragingly, in 2022, 30,458 RNs were licensed in New York State, up from 18,607 in 2018. However, the increase in RN licenses in New York State does not mean license holders are practicing in the State.

It is also worth noting the relatively different pandemic trajectory of employment for LPNs, which comprise a smaller group than RNs. Nationally, the number of LPNs declined by 14.5 percent between 2019 and 2022 to reach about 590,000, while in New York City, it grew by almost 31 percent (see Figure 3).

Staffing Trends

Since FY 2015, H+H has used what is known as the global Full-Time Equivalent (FTE) to report staffing trends. Global FTE is an H+H term that captures all types of work performed by its employees, affiliate personnel and temporary service workers. The model aims to utilize staff more efficiently and reduce overtime costs. Categories of FTEs include H+H salaried staff, hourly and per diem staff, overtime converted to FTEs based on the number of hours worked, affiliate staff, nursing agency staff and other temporary staff converted to a full-time equivalent. The FTE does not include temporary

Note: Includes full-time and part-time LPNs.
agency staff used during the hospital surges early in the pandemic.4

Most of the staff are full-time or part-time equivalent employees of H+H including all registered and licensed practical nurses, aides and orderlies, technical specialists, environmental services (housekeeping and janitorial), clerical and most of the medical residents. The system also has contractual arrangements with affiliates such as physician groups and private hospitals to provide clinical staff throughout its hospitals which includes most of the physicians and technical specialists, physician assistants, residents and nurse specialists.

Prior to the pandemic, H+H had made strides in expanding access to primary and preventative care largely by increasing FTEs in most clinical positions. As noted in our September 2021 report, early in the pandemic, declines occurred among RNs, LPNs, aides and orderlies. There was growth in technical specialist positions largely for staffing the NYC Test & Trace Corps, the City’s response to mitigate the spread of COVID-19 by identifying people who test positive for the disease, and assessing and recommending isolation for people that may have been in close contact to those people. This accounts for the large increases in total staffing between February 2020 and May 2021 (see Figure 4).

As the pandemic persisted, H+H increased total FTEs but saw further declines in RN and LPN staffing. Between February 2020 and September 2022 (the most current data available and the period impacted by the COVID-19 pandemic), total staffing increased by 1,793 FTEs or 3.9 percent. However, RNs declined by 538 FTEs or 6 percent and LPNs declined by 221 FTEs or 31 percent. The most notable increases have been in patient care temporary staffing, which is largely registered nurses, that increased by 860 FTEs or 83 percent to offset the decline in H+H staff nurses.

Hospitals such as H+H regularly utilize temporary agencies to fulfill their staffing needs and manage

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**FIGURE 4**

Staffing Variances February 2020 through September 2022 by Employment Category

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>February 2020</th>
<th>May 2021</th>
<th>Feb 20-May 21 Variance</th>
<th>September 2022</th>
<th>Feb 20-Sep 22 Variance</th>
<th>Feb 20-Sep 22 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care Temporary Staff</td>
<td>1,038</td>
<td>386</td>
<td>(652)</td>
<td>1,898</td>
<td>860</td>
<td>82.9%</td>
</tr>
<tr>
<td>Environmental Services</td>
<td>4,918</td>
<td>5,079</td>
<td>161</td>
<td>5,488</td>
<td>570</td>
<td>11.6%</td>
</tr>
<tr>
<td>Clerical</td>
<td>5,840</td>
<td>5,915</td>
<td>75</td>
<td>6,265</td>
<td>425</td>
<td>7.3%</td>
</tr>
<tr>
<td>Technical Specialists</td>
<td>9,455</td>
<td>10,760</td>
<td>1,305</td>
<td>9,684</td>
<td>229</td>
<td>2.4%</td>
</tr>
<tr>
<td>Physicians</td>
<td>3,173</td>
<td>3,260</td>
<td>87</td>
<td>3,361</td>
<td>188</td>
<td>5.9%</td>
</tr>
<tr>
<td>Aides and Orderlies</td>
<td>5,061</td>
<td>4,906</td>
<td>(155)</td>
<td>5,243</td>
<td>182</td>
<td>3.6%</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>517</td>
<td>579</td>
<td>62</td>
<td>624</td>
<td>107</td>
<td>20.7%</td>
</tr>
<tr>
<td>Residents</td>
<td>2,663</td>
<td>2,705</td>
<td>42</td>
<td>2,765</td>
<td>102</td>
<td>3.8%</td>
</tr>
<tr>
<td>Nurse Specialists</td>
<td>226</td>
<td>239</td>
<td>13</td>
<td>288</td>
<td>62</td>
<td>27.4%</td>
</tr>
<tr>
<td>General Temporary Staff</td>
<td>969</td>
<td>935</td>
<td>(34)</td>
<td>1,017</td>
<td>48</td>
<td>5.0%</td>
</tr>
<tr>
<td>Licensed Practical Nurses</td>
<td>710</td>
<td>606</td>
<td>(104)</td>
<td>489</td>
<td>(221)</td>
<td>-31.1%</td>
</tr>
<tr>
<td>Managers and Supervisors</td>
<td>2,861</td>
<td>3,071</td>
<td>210</td>
<td>2,639</td>
<td>(222)</td>
<td>-7.8%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>8,939</td>
<td>8,612</td>
<td>(327)</td>
<td>8,401</td>
<td>(538)</td>
<td>-6.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46,370</strong></td>
<td><strong>47,052</strong></td>
<td><strong>682</strong></td>
<td><strong>48,163</strong></td>
<td><strong>1,793</strong></td>
<td><strong>3.9%</strong></td>
</tr>
</tbody>
</table>

Note: During the initial surge of the COVID-19 pandemic H+H also contracted with more than 30 staffing agencies to bring on an additional 4,000 nurses, 500 medical providers and more than 450 other temporary staff that is not included in its global FTE staffing model.

Sources: NYC Health + Hospitals; OSC analysis
service demand. During the pandemic, as hospital employment declined and demand for care increased, the reliance on temporary agency staffing grew as did the additional associated costs. For example, the average weekly travel nurse pay across the country was $1,896 in January 2020 and grew to $3,782 by December 2021, and some specialty nurses can command even higher salaries.\(^5\) In June 2022, the U.S. Senate introduced the “Travel Nursing Agency Transparency Study Act” bill to conduct a study of travel nurse agencies during the pandemic.\(^6\) Several states have proposed legislation to impose a cap on the rates charged by health care staffing agencies or impose regulations.

Similar trends were noted in New York State. It is estimated that contract labor costs across health care systems and hospitals in the State have increased by more than 110 percent of pre-pandemic levels and average temporary agency nurse salaries increased to about $3,300 per week in March 2022, from about $1,800 per week pre-pandemic. In February 2023, State legislation was proposed that would regulate nurse staffing agencies in response to the continuing challenges of increased agency labor costs and the fiscal pressures it has imposed on health care systems and hospitals. The legislation would set out registration requirements with the New York State Department of Health, regulate how agency staff can be recruited by the agency and apply a fee structure on how much these agencies can charge health care facilities.

**Impact on H+H**

Nurses have left the workforce due to general burnout and shifting to higher paying temporary employment. These factors have contributed to an increased use of patient care temporary staff. In addition, the City’s vaccine mandate, which meant that nurses who chose not to be vaccinated for the COVID-19 virus could not work, led H+H to incur about $55 million in costs. By 2022, however, over 99 percent of H+H nurses had completed their vaccination requirements, but elevated temporary staffing costs have remained necessary to manage capacity. The use of temporary staff not only increases salary costs by paying higher wages but operationally, as it takes resources to train staff that only remain for short periods, and temporary staff will likely not live in the communities of the patients they serve. H+H must maintain sufficient nurse staffing levels to ensure a safe patient care environment. Recent State legislation mandated that staff nurses be included in staffing committees at hospitals and be a part of developing safe staffing levels within all units. Further, the City Council has proposed a bill that would require H+H to improve nurse staffing levels at its hospitals and to post such plans on its website. These actions would put further pressure on H+H to hire additional nurses or require further utilization of temporary nurses.

Currently the vacancy rate for nurses at H+H is 15 percent systemwide, with these vacancies filled by temporary staff. In recognition of the budgetary and operational volatility associated with temporary staffing, H+H has implemented systems to recruit and retain nurses such as student loan relief, retention bonuses and a clinical ladder program. H+H anticipates returning to a 5 percent vacancy rate.

A recent modification to the H+H financial plan reflects unexpected costs of $125 million in FY 2023 as a direct result of the increasing use of temporary staff to manage service demand, contributing to its budget shortfall in FY 2023. H+H assumes they will be successful in hiring staff nurses in FY 2024 and does not account for increased temporary staffing costs in FY 2024 through FY 2027 in its financial plan. However, given the difference between target and actual nurse staffing, it is likely that the extended use of temporary nurses by H+H will continue until at least FY 2024.

**City Financial Support**

The City has a history of providing financial support to H+H. The City funds the non-federal share of supplemental Medicaid payments that
H+H receives for providing care to a large share of the City’s uninsured and Medicaid patients. Additionally, the City finances most of H+H’s capital needs, reimburses H+H for the delivery of health and mental health services on behalf of City agencies and funds the NYC Care program, which provides health care services to uninsured residents. Starting in FY 2015, the City began providing financial support to the New York City Housing Authority and H+H by covering the costs for collective bargaining arrangements. By FY 2022 the cumulative support to H+H reached almost $2.2 billion.

The City recently announced a new collective bargaining agreement with DC 37 which was ratified by members on March 31, 2023. Under the agreement, wages will increase by 16.21 percent (on a compound basis) over a five-year period. The agreement includes funding to provide a one-time ratification bonus of $3,000 per union member. The City, which has a long history of pattern bargaining, assumes that the terms of the agreement with DC 37 will set the wage pattern for all other unions, including those employees covered by H+H. Based on the tentative wage pattern, a review of the City’s labor cost projections suggests increased labor costs when applied to the entire workforce at H+H would reach approximately $392 million in FY 2023 (including retroactive pay and the one-time ratification bonus), $287 million in FY 2024, $424 million in FY 2025, $562 million in FY 2026, and $641 million in FY 2027. Once fully annualized, the recurring additional budgetary impact could total $690 million. Reflecting the timing of the expiration of prior collective bargaining agreements, the portion of higher than projected labor costs attributable to nurses would be $9.4 million in FY 2023, $38.2 million in FY 2024, $75.8 million in FY 2025, $114.4 million in FY 2026, and $155.0 million in FY 2027. The fully annualized cost would be $196.3 million or about 29 percent of the total cost of the DC 37 pattern for H+H. Recently released projections by the City suggest it will provide H+H with funding to support these additional costs above the amounts already provided for prior agreements.

However, the costs could be higher. Nearly 8,700 nurses represented by NYSNA, who work for H+H, have union contracts that expired in March 2023 and are in active collective bargaining discussions. If the contract for the nurses replicates what has been settled in recent contract negotiations with other non-public hospitals in the City, and H+H is able to hire to levels last seen in 2020, labor costs could be higher than the DC 37 costs by $12.5 million in FY 2023, $48.5 million in FY 2024, $88.0 million
in FY 2025, $102.2 million in FY 2026 and $76.2 million in FY 2027. Once fully annualized, the additional costs thereafter could total $34.9 million. It is unclear what, if any, portion of costs the City would take on if the agreed upon pattern were to exceed the DC 37 pattern.

H+H will have to balance any potential additional labor costs with the additional costs from temporary staffing, which is likely to remain elevated at least over the near-term to manage service demand, and with its ability to execute on its revenue generating initiatives, which require being able to service patients with complex care needs. Nurses are critical contributors in the provision of care at H+H, whose role as a provider of health care services to all New Yorkers, regardless of their ability to pay, is more critical than ever in the current economic and health environment.
ENDNOTES

4 Headcount reported to the City will differ from the FTE analysis because it includes staffing at H+H programs that are not included in its budget such as MetroPlus, contracted employees and employees in programs that are reimbursed by the City like Correctional Health.
7 In March 2023, members of 1199 S.E.I.U. United Healthcare Workers East reopened contract negotiations for about 80,000 of its members in nonprofit hospitals, medical centers and nursing homes through the greater New York metropolitan area.