



# Strategic Clinical Workforce Planning and Forecasting Through Humber River Hospital's Nursing Resource Team

Derek Hutchinson, RN, MN; Jennifer Yoon, RN, MSc (QI/PS); Alisha Aggarwal, RN, MN; Scott Jarrett, BSc, MBA; Vanessa Burkoski, RN, MScN, DHA; Barb Collins, RN, MBA

Humber River Hospital is one of Canada's largest regional acute care hospitals, serving a catchment area of more than 850,000 people in the northwest GTA. The hospital currently operates out of its Wilson Avenue site with a total of 656 beds, 3,700 staff, approximately 600 physicians and 400 volunteers. Affiliated with the University of Toronto and Queen's University, the hospital is home to Ontario's first Centre of Excellence for laparoscopic bariatric surgery; Canada's first home nocturnal dialysis program and a major cancer program. The new Humber River is Ontario's first digital hospital, one that is a technological and environmental showcase. The Wilson site opened on October 18, 2015.



Hospitals have utilized Nursing Resource Teams (NRT) as a strategic staffing model to reduce overtime costs, manage short and long-term leaves, while maintaining standards for quality and safe care delivery. NRTs have also been utilized successfully to support and onboard new graduate nurses as they transition from academic to practice.

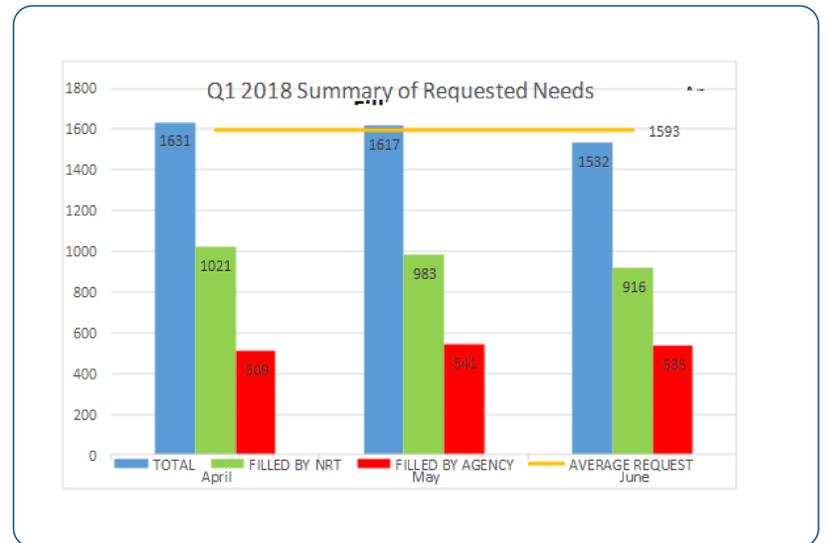
With a renewed Strategic Plan for 2017-2020, Humber River Hospital places patients first in our journey to become a High Reliability Hospital. With this in mind, The Manager of Clinical Workforce Planning and Forecasting position has continuously leveraged Ontario's Nursing Graduate Guarantee program as well as increasing staff compliance to safety behaviours through a renewed three month orientation. A current and future state workforce analysis was completed for all medical and surgical inpatient units. Baseline unit staffing structures were benchmarked against peer hospitals and other health care organizations across the province of Ontario. The average monthly organizational need for staffing support is approximately 1,500 per month in 2018. Regular forecasting and analysis supports the NRT's ability to flex staffing; for example, a 32 bed and 12 bed unit were opened in 2017 which impacted the NRT with an additional 300 requests per month in 2018. In early 2019 an additional 34 bed unit will become operational.

### AIM

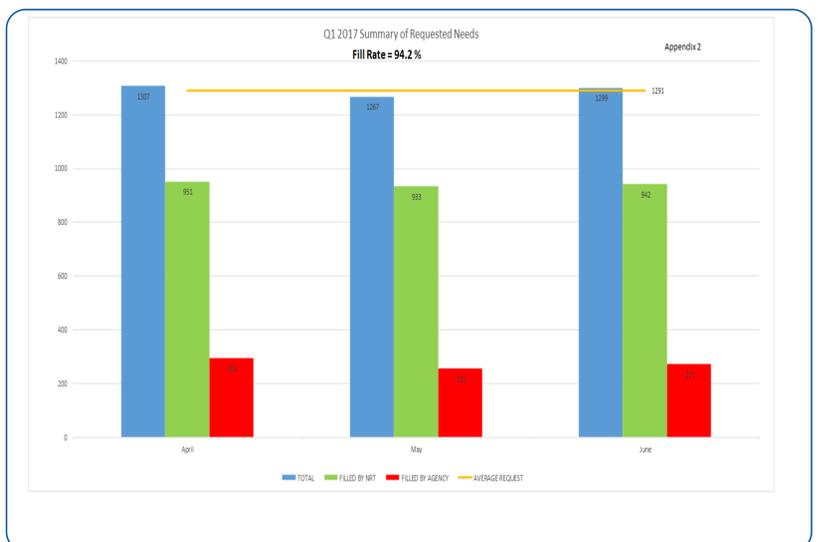
To implement a predictive workforce planning methodology, informing the development of a health human resources action plan responding to at least 90% of organizational staffing needs.

### Actions Taken

PDSA cycles were undertaken to collect and analyze data on a monthly basis from January 2017 to September 2018, to predict the impact on future organizational staffing demands.



As a result of the regular analyses, Humber River Hospital created 51 New Graduate Nursing positions to address the demands of opening 44 new beds and 34 soon to be open



beds in early 2019. Currently, NRT utilization/deployment, and strategic workforce planning data is used to inform continual discussions between Human Resources, Decision Support and senior leaders to address current and future organizational staffing models.

### Summary of Results

As a result of the predictive analysis, the NRT department has been able to respond to an additional 300 staffing requests per month and maintain quality and safe care delivery for patients. In fact in 2018/19 there have been no critical incidents reported within the organization. Fill rates have been maintained above 94% of requests. Leveraging the Nursing Graduate Guarantee allows Humber River Hospital to benefit from cost avoidance of orientation dollars, while supporting our new hires through an extended orientation. Ministry funding also supports the newest generation of learners transition from academia to practice, who benefit from the variety of clinical practice environments, foster clinical inquiry and support their personal career goals.