### Diligent Robotics:

# Moxi Case Study

### NorthShore - Edward-Elmhurst Health

N orthShore – Edward-Elmhurst Health is the third largest health system in Illinois, with 25,000 team members and 6,000 physicians. With an unwavering commitment to serving an area of more than 4.2 million residents in communities across Illinois, the health system comprises nine hospitals and more than 300 ambulatory locations. The system, which includes Edward Hospital and Elmhurst Hospital, is known for excellent care and services across numerous specialties and subspecialties supported by leading-edge technology, research and Magnet-level nursing care.

#### The Challenge

In January 2022, as continued labor shortages impacted health systems in the US and in the midst of the COVID pandemic, NorthShore – Edward-Elmhurst Health turned to their Innovation department for solutions to support their clinical teams and address burnout among nursing staff, as well as other teams in the pharmacy and labs. They were also looking for ways to have their clinical teams spend more time on the unit so they could continue to provide more safe, seamless and personalized care. Recognizing the urgent need to give time back to overworked clinicians caring for patients during this critical time, the health system turned to automation for assistance.

#### The Impact

NorthShore - Edward-Elmhurst Health partnered with Diligent Robotics to enlist a fleet of Moxi robots to support their clinical staff. The health system started with two robots each at Edward Hospital in Naperville, IL, and Elmhurst Hospital in Elmhurst, IL. Moxi's automated and predictable nature minimizes risk and redundancy, allowing clinical staff time to focus on more patient-centered tasks. Choosing automation for these tasks has created a predictable, reliable, and cost-effective workflow, providing a long-term and successful solution to multiple roles across the integrated care team,many of which have been experiencing high turnover and vacancies.

Where NorthShore - Edward-Elmhurst Health is seeing the impact:

- The robots perform routine, non-patient-facing tasks such as fetching and delivering medications and lab specimens.
- Moxi has been particularly helpful for nurses and staff who work closely with the inpatient pharmacy and lab, taking care of routine deliveries of lab samples and medications.

We're able to be with our patients more at their bedside instead of having to run off the unit to get something. Moxi is part of the team!

> Suzy Garcia, Patient Care Technician, Edward Hospital

We've really been looking for creative and cost-effective ways to make the lives of our staff easier. A health care work can spend about 30% of their day with these mundane, routine, time-consuming tasks. The fact that Moxi can take over some of that is a huge efficiency for us.

> Hiral Patel, Innovation Program Manager, Edward-Elmhurst Hospital

If One of the things I noticed when shadowing nurses during their day-to-day work is how often they get pulled away from patient care to go and run tasks, to go and get things. This is a huge dissatisfier for nurses. They like to be with their patients and Moxi doing the running around for them is just super cool.

> **Trish Fairbanks,** Chief Nursing Officer, Edward Hospital

### By The Numbers: Moxi's Impact at Northshore – Edward-Elmhurst Health

### From August 3, 2022 – March 14, 2023 at Edward Hospital:

- Moxi made 7,298 deliveries
- Moxi gave back 4,125.5 hours to clinical staff
- Moxi traveled 1,242.8 miles
- Moxi saved staff 3,611,553 steps

## From June 2, 2022 – March 15, 2023 at Elmhürst

• Moxi made **9,813** deliveries

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- Moxi gave back 5,345 hours to clinical staff
  - Moxi traveled
    - 1,671 miles Moxi saved staff
      - 4,856,148 steps

- At Edward Hospital, nursing teams utilize Moxi the most for delivery tasks to and from inpatient pharmacy, central supply, and the lab.
- Edward Hospital securely transports items between units, such as transporting tele-boxes from floor to floor in the Heart Hospital.

The use of innovative technology like Moxi has enhanced NorthShore -Edward-Elmhurst Health's clinical teams' ability to provide exceptional patient care. Moxi has given nurses more time to focus on patient care, while also minimizing the need for licensed professionals to perform routine tasks. By freeing up time and reducing the burden of non-patientfacing tasks, the Moxi robots helped to support the health system's mission of delivering high-quality care to those who needed it most.

#### **The Future**

With the success of Moxi, Elmhurst Hospital is planning to expand its fleet with additional robots dedicated to automating infusion deliveries at their outpatient cancer center. This will support the center's staff and improve patient care and patient experience. With the successful impact demonstrated at Edward and Elmhurst Hospital, Northshore - Edward Elmhurst Health is continuing to pursue deploying Moxi to further expand its impact and support to the care teams across the system.