

Driving Nursing Outcomes Through Robotics

INPUTS	STRATEGIES	OUTCOMES			MEASUREMENT
<ul style="list-style-type: none"> • Funding from the RN Initiative • Current ChristianaCare Moxi Robot feasibility project provided by ChristianaCare Development group • Staff, Experience, Reputation, and Relationships of the site team • 100+ nurses who will inform technical specifications, specifically what tasks can be delegated to Moxi • 400+ nurses on 11 diverse units who will interact with Moxi and provide feedback • Six Moxi cobots • Partnerships with Cerner EHR; Diligent Robotics, creator of Moxi; and Peak Outcomes for Rauland Borg nurse call system, and Vocera • for notification and text • Nursing Technology & Innovations Council (NTIC) 	<ul style="list-style-type: none"> • Introduce Moxi cobots as nurses' consistent practice partners • Integrate cobots with electronic health records (EHRs) to identify when nurses need equipment, supplies, medications, and/or labs • Conduct an evaluation to assess how pilot activities were implemented, as well as the impact of the pilot on nurses, ancillary staff, patients, and systems • Conduct nursing research studies measuring impact to nursing practice, outcomes, and costs. • Develop a blueprint that other organizations can utilize to replicate the model 	<p>1–3 years</p> <ul style="list-style-type: none"> • Moxi executes tasks in a timely and efficient manner • Nurses' identified workflow is optimized, streamlined, and efficient with the use of Moxi • Nurses' repetitive tasks are reduced • Nurses spend increased time with patients – can begin to address SDOH • Nurses spend more time engaged in self-care • Increased nurse job role satisfaction • Moxi implementation shows a positive return on investment • Internal and external dissemination 	<p>3–6 years</p> <ul style="list-style-type: none"> • Moxi is sustained at ChristianaCare and expanded to additional practice areas • Continue conducting robust research that will build the evidence of robotics in nursing and that will inform policy changes affecting nursing practice • Project outcomes shared broadly • Other organizations adopt Moxi cobots utilizing the blueprint developed through the pilot • Publication and dissemination of blueprint 	<p>6–10 years</p> <ul style="list-style-type: none"> • The work environment for nurses is one where nurses can thrive, be recognized for their work and value, and practice at the full extent of their education/licensure • Practice Changes: <ul style="list-style-type: none"> – Increased efficiency – Decreased attrition from profession • Increased leadership opportunities for nurses • Patient Changes: <ul style="list-style-type: none"> – Decreased disparities – Decreased cost of care – Increased quality 	<ul style="list-style-type: none"> • Ongoing feedback from clinical nurses on ideas, pain points, and suggestions for improvements • Measurement of Moxi specific tasks (e.g., tasks completed, time from request to completion) to evaluate whether Moxi is executing tasks in a timely and efficient manner that contributes to optimizing nurses' workflow • Research study (TBD) measuring usability, acceptability, nurses' satisfaction, and experiences.

External Factors:

Healthcare Environment, Political Climate, Regulatory Climate, Pressures on Academic and Practice Environments