In Situ Simulation as a Readiness Tool for Hospital at Home: *Strengthening Workflows, Interdisciplinary Communication, and Patient Safety Before Go-Live*

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Madison Cripps, MHSA

Adam Achecar, MBA

Maya Vankineni, MD

Alexander Fortenko, MD, MPH

Amrita Markan, MSN, RNC- OB, C-EFM, CCE, CBC

Christy Defournoy, MSN, RN, FNP-BC, CEN

NewYork-Presbyterian

SHIELDS AT HOME



Conflicts of Interest



The authors report no relevant financial relationships or conflicts of interest related to this work.

Background & Objectives

Multiple Care Settings

NewYork-Presbyterian Hospital at Home

Variable Home Environments

Multiple Teams & Organizations

Remote Clinical Care

External Operational Dependencies

OBJECTIVES

- Stress-test workflows
- Identify operational vulnerabilities
- Improve interdisciplinary coordination
- Validate readiness before launch

Description Of Intervention

Program Scale

11
Simulations

120+
Hours of testing

40+
Participants

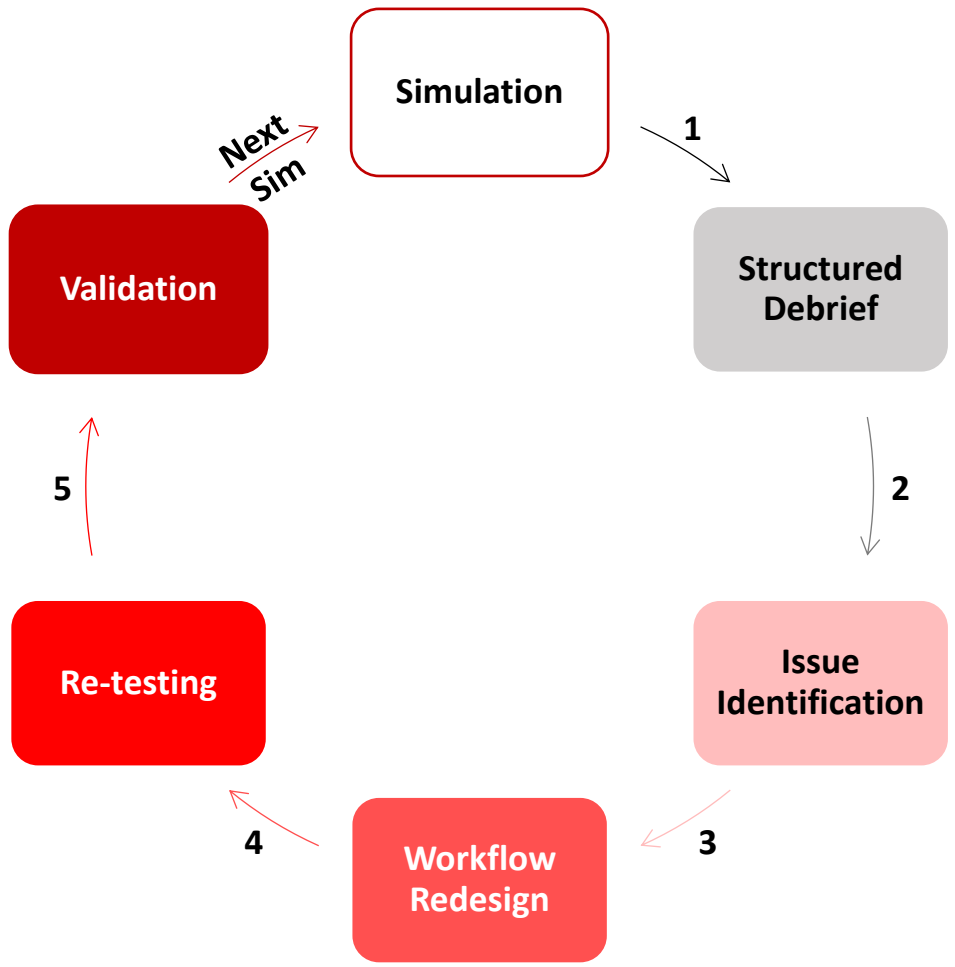
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Academic Medical Centers

Multiple
Care Settings

What Was Tested

- Admissions & Enrollment
- Home-Based Acute Care
- RPM & Telehealth
- Escalations & Bring-Backs
- Discharge & Care Transitions

Process



Measures Of Success & Impact

Success was evaluated using qualitative and process-based measures of operational readiness:

1. Ability to identify and mitigate latent safety threats and operational bottlenecks before live care.
2. Effective translation of findings into concrete workflow and infrastructure changes (reduced redundancies, improved role clarity, established escalation pathways).
3. Repeated retesting and continuous validation of revised processes in later simulations.
4. Team's collective ability to successfully execute end-to-end patient journey workflows while accounting for embedded complexities.

Observed Improvements Across Sessions

- Workflow failures and bottlenecks decreased over time
- Communication patterns (internal & external partners) standardized
- Technology platform & network reliability issues addressed and repeatedly validated
- Teams demonstrated ability to execute complete patient care workflows
- ★★★ Participant feedback reflected improved confidence and interdisciplinary coordination

Key Findings From 11 Simulations

Improvement Opportunities Identified



Workflow Design & Role Clarity

Key Improvements:

- Standardized admissions and screening workflows
- Clarified role ownership and escalation pathways
- Implemented documentation and discharge standards



Technology & Digital Infrastructure

Key Improvements:

- Improved connectivity, devices, and mobile workflows
- Optimized Epic, RPM, and telehealth processes
- Enhanced technology reliability and support tools



Communication

Key Improvements:

- Standardized team communication and handoffs
- Defined escalation and coordination processes
- Strengthened EMS, vendor, and provider collaboration



Transportation & Vendor Integration

Key Improvements:

- Streamlined medication and supply delivery workflows
- Improved transportation and laboratory coordination
- Enhanced vendor communication and accountability



Patient Safety & Care Delivery

Key Improvements:

- Strengthened patient identification and safety protocols
- Enhanced patient education and home readiness assessments
- Improved monitoring, care planning, and fall prevention

Conclusions

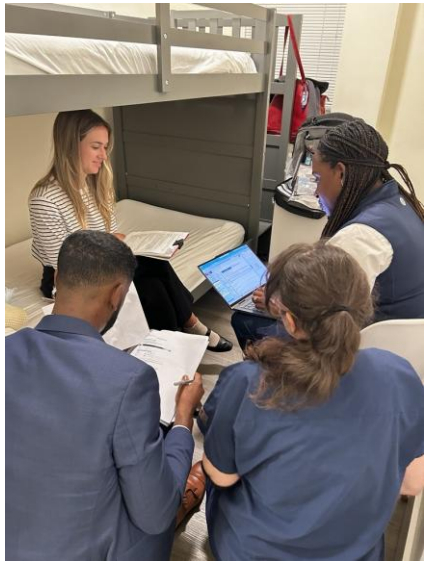
Key Takeaways

- Simulation uncovered system vulnerabilities before patient care was impacted
- Testing informed targeted workflow and infrastructure improvements
- Interdisciplinary collaboration strengthened program readiness and execution
- Simulating failure scenarios improved resilience and operational reliability
- Hospital at Home programs should treat simulation as system testing, not just staff training









Contact Information

Team Member	Email
Madison Cripps	zuc9007@nyp.org
Adam Achecar	aachecar@shieldsathome.com
Dr. Alex Fortenko	afortenko@gmail.com
Dr. Maya Vankineni	mv2560@cumc.columbia.edu
Amrita Markan	amm9177@nyp.org
Christy Defournoy	chd9135@nyp.org

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