



An Implementation Assessment of the Virtual Acute Care for Elders Program

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Disclosures

- None

Acute Care for Elders (ACE) Model Improves Outcomes for Older Patients

- **150,000 Americans aged 65 years & older will have major gastrointestinal surgery annually: high risk of functional decline**
- **Poor functional recovery can be improved by ACE units**
- **Benefits of ACE model**
 - Improved functional status & lower institutionalization rates
 - Decreased readmissions by 5%
 - Shorter hospitalization (1 day)
 - >20% cost savings



Flood et al. JAMA IM 2013
Landefeld et al. NEJM 1995

Barriers to Dissemination of ACE Care

- Shortage of geriatric specialists



- Existing resources inadequate



- Costs



Potential Solution: Virtual ACE

- Measuring recovery



- Training



Other Components

- Protocols

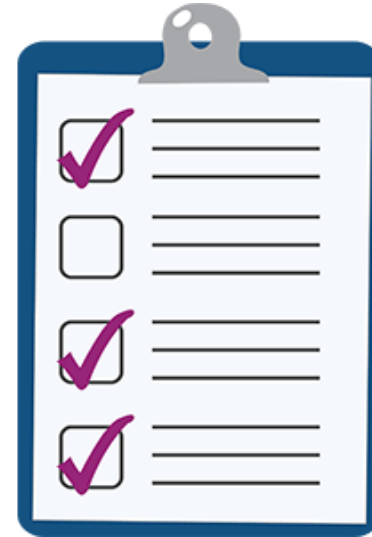


- Equipment



Last But Not Least

- Postoperative order sets



- Virtual ACE Tracker



Gaps We Needed to Fill to Implement & Disseminate Virtual ACE

- **Rigorous assessment of inpatient outcomes**
 - Cognitive & physical function
 - Readiness for discharge
- **Measurement of post-discharge outcomes**
 - Cognitive & physical recovery
 - Use of post-acute care & other resources
- **Plan for implementation & dissemination**
 - Why/how does the intervention work?
 - What doesn't work?
 - What can we do to improve the intervention?
 - How can we effectively implement at other sites?

Methods

- Semi-structured interviews

Stakeholder Type	Description	Count
Leadership	Physician and Nurse Leaders involved in the design of Virtual ACE	4
Administration	Individuals in charge of implementing and managing Virtual ACE trainings, supplies, and ongoing activities.	4
Management	Nurse Managers, Assistant Nurse Managers, and Unit Educators who assisted in unit implementation activities and have more extensive experience using tools like the ACE Tracker and Delirium Toolbox.	5
IT	IT staff involved in the development of the Virtual ACE Tracker and inclusion into the medical record processes.	2
Allied Health	Health professionals like social workers, pharmacist, physical therapist, and occupational therapist who had some level of exposure to Virtual ACE concepts and materials such as Virtual ACE Tracker.	4
Bedside Nurses	Surgical Unit bedside nurses grouped into two major groups: 1) nurses who attended Virtual ACE Training and, 2) nurses who did not receive any Virtual ACE Training.	11
Total Interviews		30

Designing & Analyzing Interviews

- Interview guide
 - Based on Consolidated Framework for Implementation Research (CFIR)
 - Included all primary domains due to lack of prior data
 - Developed after observation of Virtual ACE activities
- Analysis
 - Codebook based on CFIR + inductive coding
 - Two independent coders
 - Training: team coded common transcripts & discussed results to ensure consistency
 - Iterative approach: constant comparative method

Results

Program Strengths

Virtual ACE is Care Enhancing by Organizing Information

Hospital Administrator #14: *"You could zone in on the things that you needed to do. And it was all right here as opposed to looking every little place on the chart ... this was really huge, because it just puts everything out there that you ... need to know."*

Virtual ACE Aligned With Hospital Goals

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Hospital Leadership #1: "I think that's the power of geriatric care of ACE care in general, is that it's interdisciplinary ... Because I think where we get in trouble is when we work in isolation. And that's what ... the hospital as an organization, we're really trying to foster that in everything we do"

Importance of Geriatric Scholars for Successful Implementation

Hospital Leadership #7: “And that's how we got a lot of the NuDESC, the six item screener, the Katz, sort of all of those processes for Virtual ACE kind of got pilot tested or implemented”

End Users Believed in Positive Impact of Virtual ACE

Bedside Nurse #7: *“(The impact of Virtual ACE is) decreased length of stay for the patient ... Increased mobility leads to leaving here faster almost 100% of the time”*

Results

Areas For Improvement

Visual Design & Accessibility of Tracker is Suboptimal

Bedside Nurse #10: “I don’t even remember how to print it off. I usually have to dig around for it, and I remember asking some of our supervisors how to, and they couldn’t even remember.”

Nurse Manager #16: *“I can’t say they’ve tried to make it as...eye-friendly as [they can].”*

Difficulty Finding Time for Nurses to Train & Implement Virtual ACE

Bedside Nurse #3: "I know the biggest issue was trying to implement any type of training that involved ... the nursing staff is you have to be able to allow them to do stuff away from the bedside. And that is very difficult. And a lot of people do not like to come in on their off days"

Need More Reinforcement of Virtual ACE Principles

Bedside Nurse #6: *“So bedside nurses are creatures of habit ... So I think that we just need to be constantly reminded, like children, that this exists.”*

Bedside Nurse #4: *“I mean if they just maybe explained it a little bit better every six months or something like that.”*

Summary

- Virtual ACE Tracker can be helpful, but
 - Need to improve design
 - Consider different views for different roles
- Virtual ACE fits well with existing culture
 - Helped significantly by Geriatric Scholars Program
- Time is a critical resource
 - Need to find ways to fit more training & reinforcement into schedules

Next Steps

- Finish quantitative aim
- Work to redesign Virtual ACE tracker interface
- Apply for funding to more thoroughly implement & study program
- Consider role for Geriatric Scholars in preparing the ground for implementation & changing culture

Thank you

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- Virtual ACE team
- Qualitative Health Research Consultants

