



Hospital-to-Homecare Videoconference Handoff Improved Communication, Coordination of Care, & Patient/ Family Engagement

Acknowledgements

Project Lead: Suzanne Knight, DNP, RN

DNP Committee: Dana Tschannen, PhD (Chair); Deena Costsa, PhD; Rhonda Schoville, PhD

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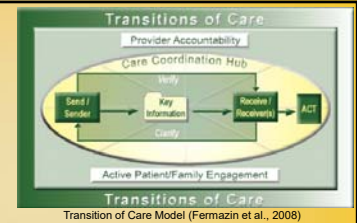
Setting

- Academic Medical Center
- Initial Pilot: Two pediatric units, care management, and hospital-based homecare visiting nurses
- Additional Pilots:
 - Pediatric unit
 - Two SNFs
 - One external homecare agency



Gaps

Transitions of Care



Transition of Care Model (Fermazin et al., 2008)

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Gaps/ Challenges with Transition of Care

Inpatient Challenges:

- Patient/Family anxiety
- Nurses' concerns
- Handoffs

MVN Challenges:

- Communication of critical information
- Shared understanding of plan of care
- Trust
- Coordination of supplies, equipment, and first visit
- Time spent reviewing EHR

Why is this important?

80% of serious healthcare errors

Transitions and handoffs:

- Miscommunication during handoff leads to errors
- Coordination of care issues
- Limited communication between settings
- Complex care at home
- Patient/family anxiety

Failure to coordinate care cost ~ \$45 billion



VIDEO EMBEDDED HERE

Identifying and Selecting an Innovative Solution

Project Goals

- Determine the feasibility and effectiveness of the videoconference handoff
- Improve communication and coordination of care, and engage the patient/family the transition handoff

Literature Review

- Transition of care interventions
 - Handoffs (best practices)
 - Structured
 - Face-to-face
 - Patient/family engagement
 - Technology
 - Videoconference handoffs

The literature and issues shared by patients, families and nurses provided the impetus to pilot videoconference handoffs

Design

Feasibility Pilot

- Feasibility
 - Implementation – conducted as planned
 - Acceptability – reaction to intervention
 - Practicality – able to carry out intervention
- Effectiveness
 - Communication
 - Coordination of care
 - Patient/family engagement

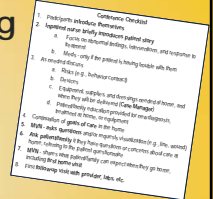
Sample (convenience sample)

All patients/families discharged from pilot units to visiting nurses over two months (no exclusion criteria):

- 4 females, 5 males
- Ages 8 days to 17 years
- Primary diagnoses: congestive heart failure, heart transplant, total anomalous pulmonary venous return, congenital diaphragmatic hernia, gastrointestinal dysmotility, and prematurity

Implementation Planning

- Partnerships
- Toolkit (electronic and paper)
 - Patient/Family Guide
 - Questionnaire
 - Flowchart
 - Demonstration Video
 - Handoff Checklist
 - Documentation Template (MVN)



Nurse Sample (based on patient assignment)

Nurses:

- 4 pediatric visiting nurses (3 participated)
- 5 case managers
- 5 unit leads
- 10 bedside nurses

Implementation Process

- BlueJeans (HIPAA Compliant)
- Tablet (inpatient)
- "Just-in-time" education



Implementing the Innovation

Videoconference Handoff

Partnering with HITS

Videoconferencing

- Equipment recommendations
- Device set-up
- Connectivity
- Troubleshooting

Nursing Informatics

- EHR

Methods

- Observation
- Chart review
- Informal interviews
- Surveys
 - Patient/Family Pre-Conference Questionnaire (paper)
 - Patient/Family Post-Conference Survey (paper)
 - Nurse Post-Conference Survey (Qualtrics)
 - Nurse Post-Pilot Survey (Qualtrics)

Feasibility: Acceptability

Patient/Family Post-Conference (n=9)

Question	Result
How reassuring was it to meet the homecare nurse?	Reassuring/very reassuring (100%)
Were your questions/concerned addressed?	Yes (100%)
Overall experience	Good/very good (89%)

Evaluating the Innovation

Results

Acceptability and Effectiveness

Nurses Post-Conference (n=25)

Category	Visiting Nurse (n=10)	Case Managers (n=5)	Bedside (n=10)
Technology	70%	100%	70%
Nurse-to-Nurse Communication	100%	100%	90%
Engagement of Patients/Family	80%	80%	100%
Ease of Process	90%	100%	70%
Overall Experience	90%	100%	90%

Feasibility: Implementation

Planned	Actual
All patients discharging to Visiting Nurses receive a videoconference	10 of 16 (63%)
Case manager participation	6 of 10 (60%)
Patient/family participates in the room	9 of 10 (90%)
Videoconference the day before discharge	7 of 10 (70%)
Held between 8:00am-3:00pm, Monday-Friday	9 of 10 (90%)
Videoconference duration 5-10 minutes	3-12 minutes (average 8 minutes, SD 2.72)
The same nurse attends videoconference and first home visit	9 of 10 (90%)

Effectiveness

(MVN Post-Pilot n=3)

Overarching Goals	Goals Met (Met 100% for each item respectively)
Communication	<ul style="list-style-type: none"> ■ Able to visualization of the wound, line, etc. prior to the first visit ■ Accuracy and specificity of information received about patient and discharge was appropriate ■ Received information about safety concerns when applicable ■ Spent less time looking for and reviewing information in the EHR
Coordination of Care	<ul style="list-style-type: none"> ■ Achieved greater shared understanding of procedures, post-discharge visits, etc. ■ Coordinated timing of the first visit, or fewer first visits rescheduled ■ Received the correct address for first visit ■ Discussed coordination of equipment/supplies needed in the home (e.g., what will be delivered) ■ Discussed coordination with the case manager when they participated in the room
Patient/Family Engagement	<ul style="list-style-type: none"> ■ Created a connection between the patient/family and visiting nurse prior to the first visit

Success Stories

Results

Discussion

Transition handoffs between settings are challenging due to the physical distance between sending and receiving clinicians, fragmented information systems, difficulties in coordinating care, and inconsistent goals between the patient, family and nurses. This project provides initial findings related to effectiveness and feasibility of videoconference handoffs.

How could you use videoconference handoffs?

PDCA to Improve Practicality (Fit into workload)

1. Focus intervention on higher risk patients and develop less resource-intensive option for lower risk patients
2. Streamline the logistics
3. Schedule handoffs between 12:00-1:00 pm
4. Work with MiChart on handoff documentation

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Summary

- Videoconference handoffs were feasible and improved communication, coordination of care, and patient/family engagement as patients transitioned from the hospital to homecare
- Handoffs have continued on pilot units
- Videoconference handoffs are being used with additional populations

Thank you!