

Hospital Inpatient Rooms: Does the Seating Matter?

Exploring the Use of Therapeutic Chairs Through the Outcomes of a Trial

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BACKGROUND & INTRODUCTION

Patient mobilization and performance of ADL's in the neuro patient population presents unique challenges and risks.

- Neuro patients are at higher risk for falls due to a variety of deficits including physical weaknesses, cognitive impairments, and postural, truncal and spatial deficits.
- These deficits can lead to improper positioning and a higher fall risk, particularly from standard inpatient recliner chairs. 25-33% of falls on the neuro unit were linked to these chairs, even with a comprehensive fall prevention program.
- With increased awareness of the dangers of falling, nursing staff admitted to being fearful for their patients' safety when in the chair, contributing to a decline in patient mobilization.
- Decreased mobilization has been show to contribute to poorer functional outcomes, increased risk of secondary complications, and even hospital associated disability (HAD.)
- Furthermore, decreased mobilization can accentuate the loss of independence related to neurological deficits and may contribute to sadness, mood changes, and depression.

SMARTER OBJECTIVE

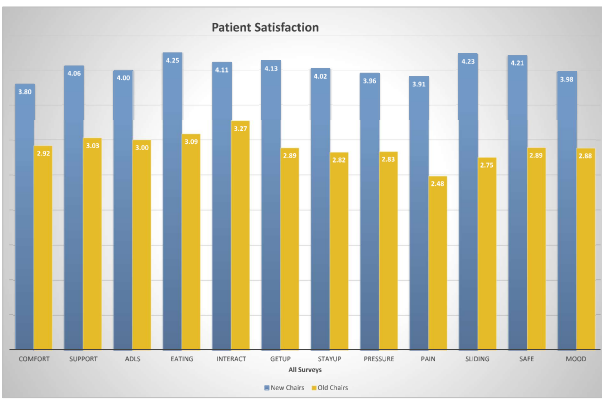
Objectives of the Specialty Chair Trial were to:

- I. Explore the use of therapeutic seating on an inpatient neuroscience unit during an **8-week trial period** and measure the [potential] effect on patient outcomes and patient safety, including:
 - A. Falls associated with chairs
 - B. Patient mobility, both:
 1. Out of bed opportunities, and
 2. Time spent up in the chair each day
- II. Assess the experience of patients, families, and the interprofessional care team using a survey with 11 questions and a 5-point Likert scale to understand how the therapeutic chair compared to the regular recliner chair and measure perceptions related to:
 - A. Comfort, support, and sliding
 - B. Eating meals and completing ADLs
 - C. Getting up and staying up
 - D. Pain and/or pressure
 - E. Mood, social interaction, and feeling safe

Evaluating the trial process frequently was essential with a short timeframe of only 8 weeks with access to the chairs.

Data collection and lessons learned from ongoing evaluation provided an opportunity to pivot quickly in response to information received.

Revisions included comparing the different types of chairs and considering further study of the potential impact with therapeutic seating, completed over a longer term.



RESULTS

Patient satisfaction scores for the new chairs were significantly better for all elements during the intervention phase compared to the pre-intervention phase.

“It helped calm my nerves.”
“Everything’s great. Most comfortable chair I’ve ever sat in.”
“This makes me feel safe, now I can sleep.”

Care team members’ **satisfaction was higher for all elements** including transfer, sliding, support, ADLs, and interaction.

SCALE UP PLAN

Education on safe and appropriate use of the chairs can be provided to other units.

Information on the process for ordering and obtaining the chairs through a rental agreement can be shared with other depts.

The Rehab Services Dept staff are trained and can use the chairs for appropriate patients.

A study is being considered by the Speech and Language Pathologists to examine use of the chairs for therapeutic feeding in patients with dysphagia.

SUSTAINABILITY PLAN:

Epic now has an order in place for “Specialty Chair”

The Seating Matters© chairs can be utilized for a patient through a rental agreement.

Value analysis will determine the potential for ROI if chairs are purchased rather than rented.



IMPROVEMENT ACTION PLAN WITH ACTIONS TAKEN

The chair trial was not a classic QI project with multiple PDSA cycles. There was only one cycle, for the 8-week period that the company provided chairs on a trial basis.

Improvement Plan was focused on increasing patient mobility and maintaining patient safety.

Actions Taken included Team Formation, Stakeholder Involvement, Education, Training & Support, and Trial & Evaluation

An interprofessional team was formed, including nurses, nursing assistants, safe patient handling specialists, physical therapists, occupational therapists, advanced practice professionals, physicians, nurse educators, and leaders.

Key stakeholders were involved from Safety Management, Center for Quality Outcomes, Rehab Services, Education and Training, Safe Patient Handling, Equipment Management, Clinical Informatics/IT, Advanced Wound Care, and Clinical Ancillary & Support Services.

Education was provided by the company’s PT and OT education specialists.

- o Included interactive demo/return demo format for nursing staff, PTs, and OTs.
- o Handouts and QR codes linked to short training videos were available on the unit.
- o Safe Patient Handling Specialist and data collection nurse supported the nightshift team at 5:30am, increasing staff comfort with the process.



“My patients have loved this chair and noticed a big difference in posture, comfort, and duration of time in the chair.”
“Chair helped with positioning for using eye gaze communication device.”
“Patient is aphasic and had a big smile getting into the chair.”

LESSONS LEARNED

The objective did not include a comparison of the four different chairs used in the trial; however, patterns emerged for chairs most appropriate based on a patient’s mobility deficits. This is an area for further exploration.

We were limited by availability of the product.

Given the positive response and lack of negative outcomes, more PDSA cycles are indicated.

A longer evaluation process will give a better idea of the impact of seating on the more infrequent outcomes of falls, HAPIs, and staff injuries.

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