PfP NJ 2.0 Falls Learning Action Group
Webinar #1: Patient-centered fall prevention

December 1, 2015
Hosted by New Jersey Hospital Association

Lauren Rava, MPP
Shannon Davila RN, MSN, CIC, CPHQ

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Agenda

- Partnership for Patients-NJ 2.0 updates
- Presentation: Patient-centered fall prevention
- Q&A
- Next steps
Scope of Work – PfP:NJ 2.0

- 17 HENs nationally
- 69 New Jersey hospitals and post-acute organizations participating
- Rapid roll out and focus on “Reducing Harm Across the Board”
Goals

- Reduce HACs 40% from 2010 baseline
- Reduce preventable readmissions 20% from 2010 baseline

Build on results of 2010 – 2013:
- 17% decline in hospital-acquired infections
- 1.3 million adverse events, infections avoided
- 50,000 fewer patient deaths
- $12 billion in healthcare costs saved
Project Updates

Total Falls
NDNQI

- NJHEN Hospitals Combined
- National Benchmark (2.15)

Falls per 1,000 patient days

Project Updates

Falls with Injury
NDNQI

- NJHEN Hospitals Combined
- National Benchmark (0.5)
PFP NJ 2.0 Falls **Learning Action** Group Structure

- Evidence based strategies:
  - Patient-centered Fall Prevention
  - STRIDE (SStrategies to Reduce Injuries and Develop confidence in Elders)
  - PROSPECT (Promoting Respect and Ongoing Safety through Patient Engagement, Communication, and Technology)

- Peer to peer sharing and networking
  - Coaching calls
Patient-centered Fall Prevention

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December 1, 2015
Brigham and Women’s Hospital

• Center for Nursing Excellence:
  – Combines education, research, professional development and innovation to facilitate excellent care to patients and families by the very best staff and in the safest environment

• Department General and Internal Medicine
  – Evaluates quality and safety, and how they can be improved using information technology.
  – Center for Patient Safety Research and Practice: Developing knowledge and technology to safeguard patients.
Overview

• Describe the problem of patient falls.
• Review the evidence related to fall prevention in hospitals.
• Discuss the rationale for engaging patients in fall prevention efforts.
• Review available tools for engaging patients in the 3-step fall prevention process.
The Problem of Patient Falls

• Falls are a leading cause of death and disability.
  – ~33% of older adults fall each year

• Hospitalization increases the risk for falls.
  – ~3% hospitalized patients fall
  – ~30% of inpatient falls result in injury

• Patient falls and injurious falls are employed as national metrics for nursing care quality.
  – The incidence of patient falls and related injuries are publicly reported by acute care hospitals.
  – As of October 2008, costs associated with fall-related injuries in hospitals are no longer reimbursable under Medicare
Fall Prevention in Acute Care Hospitals: The Evidence


Fall TIPS (Tailoring Interventions for Patient Safety)

• 2 year mixed methods study funded by Robert Wood Johnson Foundation:
  – Qualitative phase:
    • why hospitalized patients fall?
    • what interventions are effective and feasible in hospital settings?
  – Randomized control trial: to test a fall prevention toolkit designed to address issues identified during qualitative phase.

Supported by the Robert Wood Johnson Foundation, Dykes PI
Fall TIPS Qualitative Results Summary

• Communication related to fall risk status and the plan to prevent falls is highly variable.
• Inconsistent communication across team members is a barrier to collaboration and teamwork.
  – Non-nursing team members do not view fall risk assessment/plan in medical record.
  – Inadequate, incomplete, or incorrect information at the bedside (i.e., generic “high risk for falls” signs are not useful).
• All stakeholders (care team members, patients and family members) must work together to prevent patient falls.
The Fall TIPS Toolkit Requirements

Leverage Existing Workflows

Surveillance

Tailoring

Teamwork

Communication
The Fall TIPS Toolkit: Fall Risk Assessment/Tailored Plan

**Fall TIPS**

**TAILORING INTERVENTIONS FOR PATIENT SAFETY**

**Patient Name:** Jane Doe

**MRN:** 12345678 (BWH)

**Location:** 14-10A

### Morse Fall Scale: For more info, scroll over each response below

<table>
<thead>
<tr>
<th>History of Falls past 3 months:</th>
<th>Yes (25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Diagnosis:</td>
<td>Yes (15)</td>
</tr>
<tr>
<td>Ambulatory Aid:</td>
<td></td>
</tr>
<tr>
<td>None / Bed Rest / Nurse Assist (0)</td>
<td></td>
</tr>
<tr>
<td>Crutch / Cane / Walker (15)</td>
<td></td>
</tr>
<tr>
<td>Furniture (30)</td>
<td></td>
</tr>
<tr>
<td>IV or Hep Lock Present:</td>
<td>Yes (20)</td>
</tr>
<tr>
<td>Cpt:</td>
<td></td>
</tr>
<tr>
<td>Normal / Bed Rest / Wheel Chair (0)</td>
<td></td>
</tr>
<tr>
<td>Weak (10)</td>
<td></td>
</tr>
<tr>
<td>Impaired (20)</td>
<td></td>
</tr>
<tr>
<td>Mental Status:</td>
<td></td>
</tr>
<tr>
<td>Oriented to own ability (0)</td>
<td></td>
</tr>
<tr>
<td>Overestimates, forgets limitations (15)</td>
<td></td>
</tr>
</tbody>
</table>

**Morse Fall Score:** 65

### Interventions

**Safety documentation**
- *Safety Precautions*
- Document previous fall
- Review Medication List

**Consultations**
- Consult with MD/Pharmacist
- PT consult

**Assistance with ambulating**
- Provide Ambulatory aid:
  - Crutches
  - Cane
  - Walker
  - Other Device
  - IV assistance when walking
  - Out of bed with assistance:
    - 1 Person
    - 2 Persons

**Assistance with toileting**
- Toileting schedule using:
  - Bed Pan
  - Commode
  - Assist to bathroom

**Bedside assistance**
- Bed/Chair alarm turned on
- Bed close to nurse station
- Frequent checks, re-orientation

**Print Documents**
- Bed Poster
- Plan of Care
- English

For more information about Fall prevention visit our website For Fall TIPS Training Guide Go To Status Dashboard

For more information about Fall TIPS project contact our team.
### Fall Prevention Plan of Care

**Problem:** ***Patient is at risk for falls***

- **Patient Name:** Jane Doe
- **MRN:** 12345678
- **Printed:** March 04, 2009

<table>
<thead>
<tr>
<th>Patient Characteristics</th>
<th>Interventions</th>
</tr>
</thead>
</table>
| Patient has a history of falls | □ Safety Precautions  
□ Document circumstances of previous falls |
| Patient uses ambulatory aid | □ Place WALKER at bedside |
| Patient’s gait is Weak | □ Patient needs AssistX1 |
| Patient overestimates ability; forgets limitations | □ Bed/Chair alarm turned on  
□ Move pt. close to nurse station  
□ Freq Checks; re-orientation; distractions |

**Total Morse Fall Score:** 65

**Sign/Credentials:** Patricia C. Dykes RN  
**Date/Time:** 3/04/09

*Fall T.I.P.S. Research Study Plan of Care Documentation Form October 1, 2008 - June 30, 2009  
Medical Record Copy*
• Findings:
  – Patient falls were significantly reduced on intervention units.

There were fewer falls in intervention units than in control units.

No significant effect was noted in fall related injuries.

Patients aged 65 or older benefited most from the Fall TIPS toolkit.
Fall Prevention Lessons Learned

• Fall prevention in hospitals is a 3-step process:
  2. Developing a plan of care that is tailored to patient-specific areas of risk.
  3. Implementing the plan CONSISTENTLY.

Strategies and tools to facilitate the 3-step fall prevention process will prevent patients from falling!
Fall Prevention Lessons Learned

• Fall TIPS reduced falls by 22% but >90% of falls are preventable...what happened?
  – Why did some patients with access to the Fall TIPS Toolkit fall?
    • What factors are associated with falls in younger patients?
    • What factors are associated with falls in older patients?
  – Secondary analysis of fallers (cases) n=48 and 144 matched controls exposed to the Fall TIPS toolkit*
  – Found that in all cases, planned interventions were not followed consistently by the patient (most frequently) or the nurse
    • i.e., Out of bed with assistance

How do we get patients to CONSISTENTLY follow their fall prevention plan?

Fall TIPS Next Steps

• Develop tools to engage patients and families in the 3-step fall prevention process.
Fall TIPS (Tailoring Interventions for Patient Safety) Research Team/Funding Support

- **Investigators**
  - Patricia C. Dykes, PhD, RN
  - Diane Carroll, PhD, RN
  - Ann Hurley, DNSc
  - Stuart Lipsitz, ScD
  - Blackford Middleton, MD, MPH, MSc

- **Support/HIT Team**
  - Angela Benoit, BComm
  - Frank Chang, MSE
  - Jan Horsky PhD
  - Seth Meltzer
  - Lana Tsurikova, MSc, MA
  - Luba Zuyev, MA
Primary Aim:
To engage patients and their family caregivers as well as providers in the design and development of a fall prevention toolkit.

This project was supported by grant number P30HS023535 from the Agency for Healthcare Research and Quality. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Agency for Healthcare Research and Quality.
Mixed Methods/Participatory Design Approach

- Surveys, observations, semi-structured interviews
  - Nurses, patients, families
- Interviews recorded, analyzed for themes
- Focus end-user requirements for patient participation in 3-step fall prevention process
- Feedback on prototype tools
  - Paper
  - Electronic
### Fall Risk Assessment

**Why you are at risk for falling while in the hospital**

1. You have fallen recently.

2. You have a medical condition and are taking medications that may make you dizzy, unsteady, or cause you to urinate frequently.

3. You need a walking aid to walk safely.

4. You have an intravenous ("IV") or other equipment attached to you.

5. Your walk is unsteady.

6. You may forget or not want to call for help to get out of bed.

### Evidence-Based Fall Interventions

**How can we work together to prevent you from falling while you are in the hospital?**

- **History of Falls**
  - Tell your nurse about recent falls.

- **Bed/Chair Alarm**
  - The bed/chair alarm is on to remind you and your nurse that you need help to get out of bed.

- **Intravenous (IV)**
  - Call for help to get out of bed.
  - You may need assistance to get up safely.
  - We will stay with you while you use the toilet or commode.

- **Frequent Turning/Repositioning**
  - Call for help to use the commode.
  - We would be happy to help you up to the commode.

- **Suctioning/Trach**
  - Call for help to use the bathroom.
  - We would be happy to help you to the bathroom.

- **Other Plans?**
  - Other plans?

---

**Patient Comfort Rounds, Because we care**

We are coordinating & formalizing the excellent care we give you by anticipating your needs. We are rounding every ___________ to make sure:

- Your path is controlled
- Assist you with toileting
- Make sure you are comfortable
- Your Personal items are within reach
- Environment is safe

We are coordinating the care we give you by anticipating your needs.
### Fall TIPS Electronic Tool Prototype

**Patti Prospect's Plan of Care**

**Room #: NO NAME Phone #:**

**Wednesday 11/12/2014**

49°  **Fog**

<table>
<thead>
<tr>
<th>MY CARE TEAM</th>
<th>SAFETY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MESSAGES</strong></td>
<td><strong>TEST RESULTS</strong></td>
</tr>
<tr>
<td><strong>MEDICATIONS</strong></td>
<td><strong>FOOD AND DIET</strong></td>
</tr>
<tr>
<td><strong>DISCHARGE</strong></td>
<td><strong>INFO</strong></td>
</tr>
<tr>
<td><strong>FEEDBACK</strong></td>
<td><strong>LOG OUT</strong></td>
</tr>
</tbody>
</table>

#### Safety Reminders

<table>
<thead>
<tr>
<th>Fall Risk Factor</th>
<th>Present?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have fallen within the last 6 months.</td>
<td>![History of Falls]</td>
</tr>
<tr>
<td>I have a medical condition and am taking medications that can make me dizzy, unsteady, or cause me to urinate frequently.</td>
<td>![Medication]</td>
</tr>
<tr>
<td>I need a walking aid to walk safety.</td>
<td>![Walking Aid]</td>
</tr>
<tr>
<td>I have an intravenous (&quot;IV&quot;) or other equipment attached to me.</td>
<td>![Equipment Attached]</td>
</tr>
<tr>
<td>My walking is unsteady, I need assistance.</td>
<td>![Walking Assistance]</td>
</tr>
<tr>
<td>Sometimes I forget to call for help getting out of bed.</td>
<td>![Calling for Help]</td>
</tr>
<tr>
<td>When I toilet I need:</td>
<td>![Toilet]</td>
</tr>
</tbody>
</table>

**Message Care Team**
Results Summary

• Nurses lack awareness of evidence-based fall prevention practices and potential benefits of patient engagement in 3-step fall prevention process
• Patients lack awareness about personal fall risk factors and interventions
• Nurses perceive some barriers to completing fall risk assessment and planning at the patient bedside
• Hospitals that lack resources for electronic Fall TIPS solution have no tool for evidence-based fall prevention with decision support
• Electronic version of Fall TIPS did not adequately engage patients and family in the 3-step fall prevention process (1-assessment, 2-developing tailored plan, 3-consistently executing the plan)
Requirements for Patient Engagement

• Icons: Not patient friendly
  – Validate with patients
• Paper tool: Visual display too busy, not optimized for patient/family,
  – Simplify
  – Add decision support to link areas of risk to interventions
  – Develop Spanish version
• Electronic tool: User interface unappealing, difficult to use, perceived as double work/documentation
  – Simplify
  – Link with Morse Fall Scale/fall prevention interventions in EHR
Patient-centered Fall Prevention

PAPER TOOL
## Requirement: Validate Icons with Patients

<table>
<thead>
<tr>
<th>Fall Interventions Concepts</th>
<th>Initial Mean CVI Score (Patient)</th>
<th>Initial Icon</th>
<th>Dislikes</th>
<th>Suggested Improvements</th>
<th>Final Icon</th>
<th>Final Mean CVI Score (Patient)</th>
<th>Final Mean CVI Score (Nurse)</th>
</tr>
</thead>
</table>
| Call for help with frequent toileting. We will give you a bedpan.                         | 1.8                             | ![Bedpan Icon]     | - clock is confusing  
- too busy  
- image does not resemble bedpan | - remove clock, maybe have person drawn as well  
- indicate assistance  
- clock suggests specific time rather than frequency | ![Final Bedpan Icon] | 3.1                          | 3.0                         |
| Call for help with frequent toileting. We will help you up to your commode.               | 3.3                             | ![Toilet Icon]     | - clock is confusing  
- too busy  
- clock suggests specific time rather than frequency | - remove clock  
- indicate assistance  
- show toileting schedule | ![Final Toilet Icon] | 3.3                          | 3.5                         |
| Call for help with frequent toileting. We will help you walk to the bathroom.            | 3.2                             | ![Bathroom Icon]   | - clock is confusing  
- too busy  
- clock suggests specific time rather than frequency | - remove clock  
- indicate assistance  
- show toileting schedule | ![Final Bathroom Icon] | 3.2                          | 3.4                         |
| Call for help to get out of bed. You need 1 person to help you get up safely.             | 3.4                             | ![Bed Icon]        | - draw person lying in bed or sitting  
- draw person assisting with nurse’s hat (or otherwise indicate nurse with red cross or symbol)  
- include call bell | - draw person lying in bed  
- represent nurse with red cross/nurse symbol  
- include call bell | ![Final Bed Icon] | 3.4                          | 3.6                         |
| Call for help to get out of bed. You need 2 people to help you get up safely.            | 3.4                             | ![Two People Icon] | - draw person lying in bed  
- represent nurse with red cross/nurse symbol  
- include call bell | - draw person lying in bed  
- represent nurse with red cross/nurse symbol  
- include call bell | ![Final Two People Icon] | 3.4                          | 3.7                         |
| Ask for help to move the IV pole or other equipment.                                     | 2.9                             | ![IV Pole Icon]    | - have care provider/nurse helping patient  
- include call bell | - have care provider/nurse helping patient  
- include call bell | ![Final IV Pole Icon] | 3.5                          | 3.4                         |
| The bed/chair alarm is on to remind you and your nurse that you need help to get out of bed. | 3.1                             | ![Alarm Icon]      | - far too busy  
- looks like street sign  
- looks like morning alarm clock | - draw person in bed with alarm going off  
- use different alarm signal | ![Final Alarm Icon] | 3.1                          | 3.4                         |
| Use your crutches.                                                                        | 3.8                             | ![Crutches Icon]   | - consider adding “use” before “crutches”  
- draw person using crutches | - consider adding “use” before “crutches”  
- draw person using crutches | ![Final Crutches Icon] | 3.6                          | 3.5                         |
| Use your cane.                                                                            | 3.8                             | ![Cane Icon]       | - consider adding “use” before “crutches”  
- draw person using crutches | - consider adding “use” before “crutches”  
- draw person using crutches | ![Final Cane Icon] | 3.6                          | 3.5                         |
| Use your walker.                                                                          | 3.8                             | ![Walker Icon]     | - consider adding “use” before “crutches”  
- draw person using crutches | - consider adding “use” before “crutches”  
- draw person using crutches | ![Final Walker Icon] | 3.6                          | 3.6                         |
**Fall Risks**
*(Check all that apply)*

- History of Falls
- Walking Aid
- IV Pole or Equipment
- Medication Side Effects
- May Forget or Choose Not to Call
- Unsteady Walk

**Fall Interventions**
*(Circle selection based on color)*

- Communicate Recent Falls
- Use Ambulatory Aid
  - Crutches
  - Cane
  - Walker
- IV Assistance When Walking
- Toileting Schedule: Every __ hours
  - Bed Pan
  - Commode
  - Bathroom
- Bed Alarm On
- Assistance Out of Bed
  - None
  - 1
  - 1
  - 2

*Requirement: Simplify, add decision support*
Requirements: Add Spanish Version

Requirements: Simplify, add decision support to link areas of risk to interventions

<table>
<thead>
<tr>
<th>Nombre: Riesgos de Caídas</th>
<th>Fecha: Intervenciones Para Caídas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historia de Caídas previas</td>
<td>Comuníquese caídas recientes</td>
</tr>
<tr>
<td>Efectos adversos a medicamentos</td>
<td>Muletas</td>
</tr>
<tr>
<td>Ayudante para caminar</td>
<td>Bastón</td>
</tr>
<tr>
<td>Equipos para intravenosas (IV)</td>
<td>Caminador</td>
</tr>
<tr>
<td>Marcha inestable</td>
<td>Ayudante con IV/Equpos para caminar</td>
</tr>
<tr>
<td>Olvida llamar o decide no pedir ayuda</td>
<td>Horario para ir al baño: Cada ___ horas</td>
</tr>
</tbody>
</table>

Fall risk assessment

Tailored plan based on patient’s determinants of risk
Usability Results: Fall T.I.P.S Paper Tool Tool

~60% more nurses would like to use the redesigned Fall T.I.P.S over the existing version

~90% of nurses believe the redesigned Fall T.I.P.S toolkit is easy to use

~50% more nurses are satisfied with using the redesigned Fall T.I.P.S to support fall prevention
…Personalized fall prevention assessment, planning and patient education
Patient-centered Fall Prevention

ELECTRONIC TOOLS
Please select all fall risk factors present.

- History of Falls
- Medication Side Effects
- Walking Aid
- IV Pole or Equipment
- Unsteady Walk
- May Forget or Choose Not to Call

Continue >>
Your selected Fall risk factors...

History of Falls  Medication Side Effects  Walking Aid  IV Pole or Equipment  Unsteady Walk  May Forget or Choose Not to Call

Your suggested Plan of Care...

Communicate Recent Falls  Cane  IV Assistance When Walking

Assist to Bathroom Every 3 hours  Bed Alarm On  2 People Assist Out of Bed
Your selected Fall risk factors…

- History of Falls
- Medication Side Effects
- IV Pole or Equipment
- May Forget or Choose Not to Call

Your suggested Plan of Care…

- Communicate Recent Falls
- IV Assistance When Walking
- Assist to Commode Every 3 hours
- Bed Alarm On

Print Your Plan
Use this mobile app with your nurse to complete your fall risk assessment and to develop a personalized fall prevention plan. This app is part of a research project called Patient-centered Fall Prevention. Thank you for agreeing to participate in this study to improve patient safety at our hospital.

View Your Plan
Future Work

• Continue to apply this user-centered design cycle to the development of the electronic suite of Fall T.I.P.S patient engagement tools.
• Expand redesigned paper Fall T.I.P.S toolkit to partnering institutions.
• Evaluate falls and fall-related injury rates.
Fall TIPS Circa 2015: A Suite of Tools...
Thank You: BWH/NEU Patient Safety Learning Lab Team

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- Kumiko Schnock

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- Gennady Gorbovitsky

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- Corey Balint
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- Nicholas Fasano
- Zachary Katsulis
- Meredith Clemmens
- Lindsey Baldo
- Awatef Ergai
- Dominic Breuer
- Jillian Hines
- Jessica Cleveland
Questions?
Next Steps

• Please complete survey to receive your attendance certificate
• Continue to submit data
• Next webinar: Coaching Call for patient-centered fall prevention with Dr. Dykes, February 2nd, 1 pm
• Registration link:
  https://njha.webex.com/njha/onstage/g.php?MTID=e49661eaa6c63493d33d30d0ef1842de8