The Journey towards zero avoidable pressure ulcers...

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It’s time...

- A little less conversation a little more action
Transformation

Metanoia:

• Reorientation of one’s way of life  
  *(The New Economics. Deming, p. 95, 1993)*

• Begins with individuals
• More than a change
• Develop new habits of mind
Getting to Goal

- Will
- Ideas
- Execution
Core Principles

- Transformational Leadership
- Safety and Reliability
- Patient and Family centred care
- Teamwork and Vitality
- Value-added Care
Fundamental safety principles

- Prevention
- Detection
- Mitigation
Methods and Tools
QUALITY IMPROVEMENT METHODOLOGY
All improvement will require change, but not all change will result in improvement.

Therefore we need to ‘test’ change.
We must become masters of improvement
We must learn how to improve rapidly
We must learn to discern the difference between improvement and illusions of progress

“Of all changes I’ve observed, about 5% were improvements, the rest, at best, were illusions of progress.”

W. Edwards Deming
S + P = 0

- S = Structure
- The environment in which health care is provided
- P = Process
- The method by which health care is provided
- O = Outcome
- The consequence of the health care provided

Avedis Donabedian Physician
Improvement requires a clear aim

Measurement & Action
Definition: A driver diagram is used to conceptualize an issue and determine its system components which will then create a pathway to get to the goal.

Primary drivers are system components which will contribute to moving the primary outcome. Secondary drivers are elements of the associated primary driver. They can be used to create projects or change packages that will affect the primary driver.
Eliminate hospital acquired pressure ulcers in UCLH by December 2012

**Content Area**

**Drivers**

- Identification, grading of pressure ulcers existing on admission /transfer & appropriate intervention

**Interventions**

- Assess pressure ulcer risk on admission for ALL patients
- Re-assess skin DAILY/ or where there is a change in pt/skin condition

**Risk Identification**

- Reliable Implementation of the SSKIN ‘bundle’
  - ‘Ascension health’s initiative 2004’

**Risk Assessment**

- Assess pressure ulcer risk on admission for ALL patients
- Re-assess skin DAILY/ or where there is a change in pt/skin condition

**Reliable Implementation of the SSKIN ‘bundle’**

- Address these areas:
  - Surface
  - Skin Inspection
  - Keep Moving
  - Incontinence
  - Nutrition

- Utilise locally agreed grading tool
- Initiate and maintain correct and suitable treatment
- Utilise local tissue viability nursing expertise

**Education**

- Staff education –
- Educate patient and family – utilise Patient/Carer leaflet
- Utilise relevant tools/guides
Model for Improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Act  Plan
Study  Do

Associates in Process Improvement
What are you trying to accomplish?

- Reduce Pressure Ulcers by 30%, 50%, or get to zero? How much…? By when…?
- Increase the number of days between a hospital acquired pressure ulcer?
- Preventing pressure ulcers isn't difficult!
- It just requires attention to the details and re-establishing good habits.
- Our Premise- use bundles/rounding to implement new habits and ways of thinking can and will ultimately impact outcomes.
What are we trying to accomplish?

- Well designed targets help to provide focus
- A clear statement of aim with numerical goals
- How much …? By when…?
- Unambiguous
- To reduce Avoidable Pressure Ulcers by ...% by April 2011
- The difference between data for performance / improvement
Repeated Use of the PDSA Cycle

Model for Improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Hunches
Theories
Ideas

Very Small Scale Test

Follow-up Tests

Wide-Scale Tests of Change

Implementation of Change

Changes That Result in Improvement

Data
Small Scale Tests of Change on:

- One nurse
- One patient
- One day / shift
Multiple PDSA Ramps

Overall Aim – To reduce pressure ulcers by 80%
AIM

Change concepts, Theories, Ideas
This is a story about 4 people named everybody, somebody, anybody and nobody. There was an important job to be done and Everybody was asked to do it. Everybody was sure somebody would do it. Anybody could have done it but nobody did it. Somebody got angry about that because it was Everybody's job. Everybody thought anybody could do it, but nobody realized that everybody wouldn't do it. It ends up that everybody blames somebody when nobody did what anybody could have done.
“Reliability is failure free operation over time.”

David Garvin
Harvard Business School

Getting it right, for every patient, every time…!
Framework for Reliable Design

Reliability occurs by design not by accident
The Truth is we all make mistakes!

- System design
- System failures
- Communication failures/styles
- Inherent human limitations
  - Limited short term memory
  - Negative effects of stress
  - Fatigue
  - Multitasking, interruptions, distractions
Health Care Processes

**Current** - Variable, lots of autonomy not owned, poor if any feedback for improvement, constantly altered by individual changes, performance stable at low levels.

**Desired** - variation based on clinical criteria, no individual autonomy to change the process, process owned from start to finish, can learn from defects before harm occurs, constantly improved by collective wisdom - variation.

Terry Borman, MD Mayo Health System
Variations Occur...

- There is little variation when there is a clear consensus about the best way to prevent, treat or manage a condition.
- Variations occur where there is not a clear consensus about the best way to prevent, treat or manage a disease
  - 17 year lag between the discovery of proven effective treatment and incorporation into routine care
WOULD YOU BE SATISFIED IF:

Your car started 70% of the time?

You received a paycheck 80% of the time?

The light-switch worked 90% of the time?

clean.

Hand Hygiene...
What Are You Satisfied With?
Improvement Concepts Associated with < 95% Performance

(intent, vigilance, and hard work)

- Common equipment, multiple choice protocols, and written policies/procedures
- Personal check lists
- Feedback of information on compliance
- Suggestions of working harder next time
- Awareness and training
Improvement Concepts Associated with 95% or Better Performance

(Uses human factors and reliability science to design sophisticated failure prevention, failure identification, and mitigation)

- Decision aids and reminders built into the system
- Habits and patterns known and taken advantage of in the design
- **Standardisation** of process
Process Eyes

- Make the process for preventing Pressure Ulcers **visible** to **ALL**

- Measure it - so we can ‘see’ if it is adhered to and whether it is effective

- Make it easy for others to do the right thing (simple checklists, reminders)

- The right process with high percentage compliance **WILL** influence outcomes
Developing a systems-based approach to the prevention of adverse events

- Risk Identification
- Risk Assessment
- Communication of Risk status
- Appropriate preventative strategy implemented
- Evaluation of outcome
“In God we trust. All others bring data.”

W. E. Deming
Research vs Measurement for Improvement
Three Types of Measures

**Outcome Measures:** Voice of the customer or patient. How is the system performing? What is the result?

**Process Measures:** Voice of the workings of the system. Are the parts/steps in the system performing as planned?

**Balancing Measures:** Looking at a system from different directions/dimensions. What happened to the system as we improved the outcome and process measures? (e.g. unanticipated consequences, other factors influencing outcome)
We have 2 quarterly data points - is this an improvement?

Higher is better.
**Data over time**

*Figure 2.1* Annotated time series chart. Note the changes directly on your graph. This will help you identify the changes that made the greatest difference.
Measures

• Safety Cross
  ◦ Raises awareness at the frontline & is easy to use

• Time between events-
  ◦ Time between chart & safety cross
  ◦ Aim to increase the number of days between events

• Outcome measures
  ◦ Pressure Ulcer rate (per 1000 days)
    • Enables comparison between sites
  ◦ Pressure Ulcer count
    • More meaningful as it relates to people!
    • Aim to reduce the incidence by….?
Process Measures

- Percentage compliance with risk assessment (aim > 95%)
- Percentage compliance with ALL elements of the Pressure Ulcers bundle components (ALL or None Composite measure)
- Percentage compliance with 2hourly care rounds
Ward 11

NHS Borders Scotland
Risk Assessment Compliance
April 2010 – March 2011

Change 1: Real Time Education
Change 2: PURA & SSKIN in Admission Forms

Compliance Percentage

Date

4/21/10 5/5/10 5/26/10 6/14/10 6/29/10 7/14/10 7/27/10 8/10/10 8/24/10 9/7/10 9/20/10 10/8/10 10/16/10 10/25/10 11/15/10 11/29/10 12/13/10 12/27/10 1/10/10 1/24/11 2/7/11 2/21/11 3/7/11 3/21/11

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Change 1: Real Time Education
Change 2: PURA & SSKIN in Admission Forms
Change 3: Visual Cues
Change 4: Real Time Education
Change 5: Real Time Education
Change 6: Visual Cues

Spread to SCOTLAND
SSKIN Compliance

April 2010 – March 2011

Date

Percentage Compliance

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Change 1: Real Time Education
Change 2: PURA & SSKIN in Admission Forms
Change 3: Visual Cues
Change 4: Real Time Education
Change 5: Real Time Education
Change 6: Visual Cues
Real Time Data for improvement – Process

<table>
<thead>
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<td>Compliance</td>
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Baseline Assessments

- Hospital: Pressure ulcer Incidence - 13%
- Anglesey Ward: spot audit March ’08 Incidence rate - 4.5%
- Anglesey Ward: spot audit March ’08 Nutritional assessment – 50%
- Pressure risk assessment - 80%
Outcome data

Outcome Measure - Pressure Ulcer Count
Ward 11 - BGH
Goal line = No new pressure ulcers for 100 days

380 days without a pressure ulcer
NHS Borders
Days Between Preventable Pressure Ulcers
April, 2010 - March 2011

Days Between

Date

Ward
Recorded on Safety Cross – no evidence in notes
Recorded on safety Cross – no evidence in notes
Patient on Care Pathway for the Dying (PC) G2
Patient refusing to turn – (PC) G1
Patient not receiving optimal nutritional support (S) G2

Reviewed Operational Definition
The PDSA Model

Components

- **Plan** an activity or improvement test
- **Do** the activity (implement the improvement plan)
- **Study** the Impact of the improvement plan (what was learned)
- **Act** determine what changes are to be made in light of what you have learned.
The Sequence for Improvement

**Act**
- Testing a change
- Developing a change

**Plan**
- Implementing a change
- Make part of routine operations

**Study**
- Test under a variety of conditions
- Theory and Prediction

**Do**
- Sustaining improvements and spreading changes to other locations

Theory and Prediction:
- Make part of routine operations
- Implementing a change
- Testing a change
- Developing a change
- Test under a variety of conditions
The approach

- Apply all core themes
- Sole focus on prevention
- Frontline engagement
- Quality Improvement methodology
- Testing of interventions used elsewhere
- Understanding the science of reliability
Key Take Homes

- We need to think more broadly than the parameters of tissue viability-remove silo mentality
- Quality Improvement skills are skills for live not just for pressure ulcer prevention
- Never “assume” safe care “assure” it!
- See the person in the patient
- SKIN Bundles and intentional rounding will get results …but don’t let fundamental care delivery be about ticking a box…!
Team Action Planning
What could you do by next Tuesday?

- Think of some changes you believe might enable you to get the results
- Think of 1 change
- Plan your first PDSA
The PDSA Cycle

Model for Improvement

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Changes That Result in Improvement

Very Small Scale Test

Follow-up Tests

Wide-Scale Tests of Change

Implementation of Change

Data
Report Out
Select Topic (develop mission)

Expert Meeting

Develop Framework & Changes

Planning Group

Participants (10-100 teams)

Prework

LS 1 → LS 2 → LS 3

Supports

- Email
- Visits
- Phone
- Assessments
- Monthly Team Reports

Website
Tools & Guidance, Publications
Patients as partners

“ If quality is to be at the heart of everything we do, it must be understood from the perspective of
It is the nature of systems that smaller systems are embedded in bigger systems.
You are this Hospital

You are what people see when they arrive here.

Yours are the eyes they look into when they’re frightened and lonely.
Yours are the voices people hear when they are in the lifts and when they try to sleep and when they try to forget their problems. You are what they hear on their way to appointments that could affect their destinies and what they hear after they leave those appointments.

Yours are the comments people hear when you think they can’t.
Yours is the intelligence and caring that people hope they’ll find here. If you’re noisy, so is the hospital. If you’re rude, so is the hospital. And if you’re wonderful – so is the hospital.

No visitors, no patients can ever know the real you, the you that you know is there — unless you let them see it. All they can know is what they see and hear and experience.

And so I have a stake in your attitude and in the collective attitudes of everyone who works at Cooley Dickinson Hospital. We are judged by your performance. It is judged by the care you give, the attention you pay and the courtesies you extend.
To conclude

- “Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life around”
- Leo Buscaglia
Thank You!

Questions?

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