Making the 5 Million Lives Campaign Real in the CAH Setting

August 21, 2008
Kathy Duncan, Faculty
Institute for Healthcare Improvement
100k lives Campaign

SOME IS NOT A NUMBER. SOON IS NOT A TIME.
The 100,000 Lives Campaign Scorecard

• An estimated 122,300 lives saved by participating hospitals

• Over 3,100 hospitals enrolled
  – Over 78% of all discharges
  – Over 78% of all acute-care beds
  – Over 85% of participating hospitals sending IHI mortality data

• Participation in Campaign interventions:
  Rapid Response Teams: 60%
  AMI Care Reliability: 77%
  Medication Reconciliation: 73%
  Surgical Site Infection Bundles: 72%
  Ventilator Bundles: 67%
  Central Venous Line Bundles: 65%
  All six: 42%
We are asking hospitals participating in the Campaign to prevent five million incidents of medical harm over the next two years.
Our Definition of Medical Harm

Unintended physical injury resulting from or contributed to by medical care (including the absence of indicated medical treatment), that requires additional monitoring, treatment or hospitalization, or that results in death.

Such injury is considered harm whether or not it is considered preventable, whether or not it resulted from a medical error, and whether or not it occurred within a hospital.

For more information, please reference detailed FAQs at www.ihi.org/campaign.
The 5 Million Lives Campaign

• Campaign Objectives:
  — Avoid five million incidents of harm over 24 months;
  — Enroll more than 4,000 hospitals and their communities in this work;
  — Strengthen the Campaign’s national infrastructure for change and transform it into a national asset;
  — Raise the profile of the problem – and hospitals’ proactive response – with a larger, public audience.
The Platform

The six interventions from the 100,000 Lives Campaign:

- Deploy Rapid Response Teams… at the first sign of patient decline
- Deliver Reliable, Evidence-Based Care for Acute Myocardial Infarction… to prevent deaths from heart attack
- Prevent Adverse Drug Events (ADEs)… by implementing medication reconciliation
- Prevent Central Line Infections… by implementing a series of interdependent, scientifically grounded steps
- Prevent Surgical Site Infections… by reliably delivering the correct perioperative antibiotics at the proper time
- Prevent Ventilator-Associated Pneumonia… by implementing a series of interdependent, scientifically grounded steps
The Platform

*New interventions targeted at harm:*

- **Prevent Pressure Ulcers**... by reliably using science-based guidelines for their prevention
- **Reduce Methicillin-Resistant *Staphylococcus aureus* (MRSA) Infection**... by reliably implementing scientifically proven infection control practices
- **Prevent Harm from High-Alert Medications**... starting with a focus on anticoagulants, sedatives, narcotics, and insulin
- **Reduce Surgical Complications**... by reliably implementing all of the changes in care recommended by the Surgical Care Improvement Project (SCIP)
- **Deliver Reliable, Evidence-Based Care for Congestive Heart Failure**... to reduce readmissions
- **Get Boards on Board**... Defining and spreading the best-known leveraged processes for hospital Boards of Directors, so that they can become far more effective in accelerating organizational progress toward safe care
The Platform

...plus numerous other interventions that hospitals must introduce in order to contribute to meeting our aim.
Campaign Field Operations
Structure

Ongoing communication

IHI and Campaign Leadership

Introduction, expert support/science, ongoing orientation, learning network development, national environment for change

NODES (approx. 75)

*Each Node Chairs 1 Network

Local recruitment and support of a smaller network through communication/collaboratives

Mentor Hospitals

FACILITIES (2000-plus)

*30 to 60 Facilities per Network

Implementation (with roles for each stakeholder in hospital and use of existing spread strategies)
Support Going Forward

• Detailed How-to Guides on each of the interventions, frequently-asked questions (FAQs), and lots of new material in the Campaign area of IHI.org

• Matrix describing alignment with other national improvement leaders and initiatives (e.g., JCAHO, AHRQ, CMS, CDC, NQF, Leapfrog, NPSF)

• Upcoming national educational calls on all of the existing and new interventions (schedule at IHI.org)

• Events with nodes, mentors, and hospitals around the country
Resources and Support

Ongoing national educational calls on all twelve interventions (schedule at IHI.org)

<table>
<thead>
<tr>
<th>Call Topic</th>
<th>Date and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using IHI’s Global Trigger Tool to Measure Harm</td>
<td>February 5, 2008</td>
</tr>
<tr>
<td>Improving Care for Acute Myocardial Infarction</td>
<td>February 7, 2008</td>
</tr>
<tr>
<td>Preventing Adverse Drug Events (Medication Reconciliation)</td>
<td>February 12, 2008</td>
</tr>
</tbody>
</table>
Resources and Support

Mentor Hospital Registry: High-Alert Medications

Use this table to quickly find a mentor for the prevention of harm from High-Alert Medications with demographics similar to your own, or use 'ctrl+f' in your web browser to search for specific key words on this page.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Teaching</th>
<th>Urban/Rural</th>
<th>Pediatric</th>
<th>Bed Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duke University Hospital</td>
<td>Durham, NC</td>
<td>Teaching</td>
<td>Urban</td>
<td>no</td>
<td>924</td>
</tr>
<tr>
<td>Fairview Health Services</td>
<td>Minneapolis, MN</td>
<td>one teaching, the rest non-teaching</td>
<td>both</td>
<td>no</td>
<td>41 - 1700</td>
</tr>
<tr>
<td>Missouri Baptist Medical</td>
<td>St. Louis, MO</td>
<td>no</td>
<td>Urban</td>
<td>no</td>
<td>419</td>
</tr>
<tr>
<td>Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSJ Saint James- John W. Albrecht Medical Center</td>
<td>Pontiac, IL</td>
<td>no</td>
<td>Rural</td>
<td>no</td>
<td>50</td>
</tr>
</tbody>
</table>
Improve Care for Acute Myocardial Infarction

One of the primary goals of the 5 Million Lives Campaign is to offer participants as many useful resources as we can. Please take advantage of these documents and tools. All Campaign materials are available for you to download for free. Note that certain documents require registration on IHI.org. Registration is quick, easy, and free.

Getting Started Kit

Updated How-to Guide with instructions for implementing this in your organization, including changes and measures. PowerPoint presentation with Facilitator Notes to introduce the intervention in your organization. Download a one page summary Updated Annotated Bibliography

Campaign Mentor Hospitals

The organizations on the Campaign Mentor Hospital Registry volunteered to provide support, advice, clinical expertise, a hospitals seeking help with their implementation efforts. Improve Care for Acute Myocardial Infarction Campaign Hospitals

Call Recordings

Recordings of Campaign calls on improving care for acute myocardial infarction.

March 9, 2005 - Informational Call

Improvement Stories

Read improvement stories and learn how others have succeeded in improving care for acute myocardial infarction. Learn how DuBois Regional Medical Center has improved outcomes for AMI patients. Read about hospitals delivering timely, reliable AMI care

Resources

Other resources available to help your quality improvement efforts. Join an Acute Myocardial Infarction Web Discussion CMS National Acute Myocardial Infarction Project JCAHO Core Measures: Change Announcement American College of Cardiology Improvement Methods Web-based Training: The Model for Improvement (there is a fee

Tools

Tools for hospitals working to improve care for acute myocardial infarction.

Cardiac Discharge Contract Acute Myocardial Infarction Checklist/Schedule Improve Care for Acute Myocardial Infarction: A Fact Sheet for Patients and Families Improve Care for Acute Myocardial Infarction: A Fact Sheet for Patients and Families - Spanish Translation

Measurement Information Forms

Detailed information on the process and outcome measures outlined in the How-to Guide. ACEI or ARB for LVSD AMI Inpatient Mortality Aspirin at Arrival Aspirin at Discharge
### Alignment with National Initiatives

*Full document available on www.ihi.org*

<table>
<thead>
<tr>
<th>Organization</th>
<th>Areas of Focus Aligned with Campaign Aims</th>
</tr>
</thead>
</table>
| Institute of Medicine (IOM) | 3 of 20 “priority areas for transforming health care”:
  - Ischemic heart disease—prevention, reduction of recurring events, and optimization of functional capacity
  - Medication management—preventing medication errors and overuse of antibiotics
  - Nosocomial infections—prevention and surveillance |
| Agency for Healthcare Research and Quality (AHRQ) | 6 of 25 patient safety practices with “the greatest strength of evidence regarding their impact and effectiveness” or “high strength of evidence regarding their impact and effectiveness”:
  - Appropriate prophylaxis to prevent venous thromboembolism
  - Use of perioperative beta-blockers
  - Use of maximum sterile barriers during insertion of central lines to prevent central line infections
  - Appropriate use of antibiotic prophylaxis to prevent SSIs
  - Use of pressure relieving bedding materials to prevent pressure ulcers
  - Semi-recumbent positioning to prevent VAP |
| Centers for Medicare & Medicaid Services (CMS) | 3 of 4 conditions targeted by the Hospital Quality Initiative:
  - Acute Myocardial Infarction (AMI) / Heart Attack
  - Heart Failure
  - Surgical Infection Prevention |

- IOM
- AHRQ
- CMS
- Joint Commission
- National Hospital Quality Measures
- SCIP
- GWTG (AHeartA)
- NPSF
- CDC
- NQF
Campaign Snapshot

- Enrollment eclipsing 3,900 facilities (70-75% of all US hospital beds), including over 1,056 rural hospitals
- Nodes in all 50 states, DC, and Puerto Rico (62 in total)
- 190+ mentor hospitals
- Outstanding national call attendance (250-500 lines/call)
- More than 50,000 downloads of intervention materials (very strong interest in MRSA, Pressure Ulcer and “Boards on Board” interventions)
- Increased action in rural/CAH, pediatric and public affinity groups
- 4,000 lines engaged on National Action Day
- Over 40 million new media impressions
Pressure Ulcers: The Goal is Zero
Prevent Pressure Ulcers

The Goal:
Reduce the incidence of hospital-acquired pressure ulcers by December 2008.

Focus on “getting to zero.”
What Do we know?


- The prevalence of pressure ulcers has remained constant at about 7% over the past 20 years, even though considerable time and money has been invested in various prevention strategies.
What Do we know?

• 1.3 million to 3 million adults have a pressure ulcer
• Estimated cost of $500 to $40,000 to heal each ulcer.
• The incidence of pressure ulcers varies greatly by clinical setting. Incidence rates of 0.4% to 38.0% for hospitals, 2.2% to 23.9% for long-term care, and 0% to 17% for home care have been reported.
• Pressure ulcers in elderly persons have also been associated with increased mortality rates.
What Do we know?


- OSF Saint Francis Medical Center initiated the implementation of the Six Sigma methodology which led to the development of the Save Our Skin (SOS) project, an effort that boasted an ambitious goal of reducing the number of hospital-acquired pressure ulcers in adult patients by 50% within one fiscal year.
What Do we know?


- A study designed to determine the effect of dietary protein on healing of pressure ulcers in malnourished patients. The authors conclude that high protein diets may improve the healing of pressure ulcers in malnourished nursing home patients.
What Do we know?


• Low-air-loss beds provide substantial improvement compared with foam mattresses.
What Do We Know?

- Risk is predictable.
  - Risk factors include age, immobility, incontinence, poor nutrition, sensory problems, circulation problems, dehydration, and poor nutrition.
- Skin integrity can deteriorate in hours.
  - Frequent assessment prevents minor problems from becoming major ulcers.
- Wet skin is more vulnerable to skin disruption and ulceration.
  - Dry skin is a risk factor as well.
- Continual pressure, especially over bony prominences, increases risk.
- Pressure-relieving surfaces may help.

Burden of Pressure Ulcers

- Prevalence in acute care = 15 %
- Incidence in acute care = 7 %
- 5-7% of all acute hospital admissions
- 2.5 million patients treated each year
- Nearly 60,000 die each year from complications
- $11 billion dollars per year

Sources: How-to-guide & JAMA systematic review by Reddy 2006, referenced a national pressure ulcer Advisory panel 2001
“Pressure Ulcers in America: Prevalence, Incidence, and Implications for the Future: An Executive Summary Of the National Pressure Ulcer Advisory Panel Monograph
An Example of What Is Possible...

Incidence Rates 10/05 - 10/06

- Acute Care
- Long Term Care
- Home Health
- Other
Reducing Pressure Ulcers

For All Patients:
1. Conduct a pressure ulcer admission assessment for all patients
2. Reassess risk for all patients daily

For High Risk Patients:
3. Inspect skin daily
4. Manage moisture – keep the patient dry and moisturize skin
5. Optimize nutrition and hydration
6. Minimize pressure
Conduct a Pressure Ulcer Admission Risk Assessment; Reassess Daily

• Use visual cues in admission documentation for completion of skin and risk assessment.
• Standardize risk assessment tool/checklist across the institution.
  — Incorporate action steps linked to risk.
• Use multiple methods to visually identify patients at risk.
  — Place stickers on chart, use visual cues on door and bed.
• Post compliance rates to motivate staff.
• Improve processes to ensure risk assessment is conducted within four hours of admission and reassess daily.
• Assess surgical patients.
Inspect Skin Daily

- Daily skin inspection is required for high-risk patients.
- Skin integrity can deteriorate in a matter of hours.
  - Always look at sacrum, back, buttocks, heels, and elbows every time the patient is assessed.
Manage Moisture

• Cleanse skin at time of soiling and at routine intervals.
  — Watch for excessive moisture due to perspiration and wounds.
  — Use gentle cleansing agent.
• Use moisturizers for dry, fragile skin.
• Provide under-pads that wick moisture away from skin.
• Keep kit of needed supplies at bedside for at-risk incontinent patients.
Optimize Nutrition/Hydration

• Respect patient’s dietary preferences.
• Involve dietician, use supplements as needed.
• Monitor hydration.
  —Offer water (when appropriate) whenever patient is turned.
Minimize Pressure

• Turn/reposition patient at least every two hours.
  — Use alerts and cues to remind staff to turn patient.
  — Protect skin when turning patient (use lift devices or “drawsheets,” heel and elbow protectors, sleeves and stockings; do not “drag”).

• Use pillows and cushions strategically.

• Use static and/or dynamic pressure-relieving support surfaces.
  — Static surfaces include well-designed mattresses, mattress overlays filled with water, air, gel, foam, or a combination of these.
  — Dynamic surfaces include devices that vary pressure beneath the patient, reducing duration of pressure at any given skin site.
Strategy

• Reliability is the Key
  — Prevent errors and harm through standardization
    ➢ Use protocols and checklists
  — Detection
    ➢ Improve methods to detect harm and errors
  — Mitigation
    ➢ Have rescue protocols and antidotes available
    ➢ Engage patients and families
Tips for Getting Started

• Rapid Cycle Change (PDSA)
  — Small tests of change
  — Meet Weekly

• Form a multidisciplinary improvement team.
  — Nursing
  — Education
  — Quality
  — Dietary
  — Materials management staff
  — Patient
Tips for Getting Started

• Set Up a Pilot
• Start on a ward with high-risk patients and a clinical champion
• Standardize
  – Use standard assessment tools, checklists, cues, alerts, and reminders.
  – Allow staff to build tools
  – Build reminders and monitors into routine documentation.
Tips for Getting The Community Involved

• Search for opportunities to work together
  — Referral facilities
  — Look for people who what to play ball with you

• Test, test, test,
  — Wise Investment
  — For example, one unit in each facility
  — Weekly meetings between pilot units – discuss tests and plan for next week

• Do not make it harder than it is
Additional Resources

• ihi.org
  – Campaign Materials
    ➢ Getting Started Kit
    ➢ Annotated Bibliography
    ➢ Tools
  – National Calls
  – Mentor Network Hospitals
  – Discussion Groups
  – kathydduncan@comcast.net
5 Million Lives Campaign

- America’s Blue Cross and Blue Shield health plans
- Cardinal Health Foundation
- Blue Shield of California Foundation
- Aetna Foundation
- Baxter International, Inc.
- Abbott Fund