



INSTITUTE FOR
HEALTHCARE
IMPROVEMENT

Leading Together

Tenth National Quality Colloquium

August 16, 2011

Maureen Bisognano

President and CEO

IHI



IOM's Six Aims

- *Safe* – no needless deaths
- *Effective* – no needless pain or suffering
- *Patient-Centered* – no helplessness in those served or serving
- *Timely* – no unwanted waiting
- *Efficient* – no waste
- *Equitable* – for all

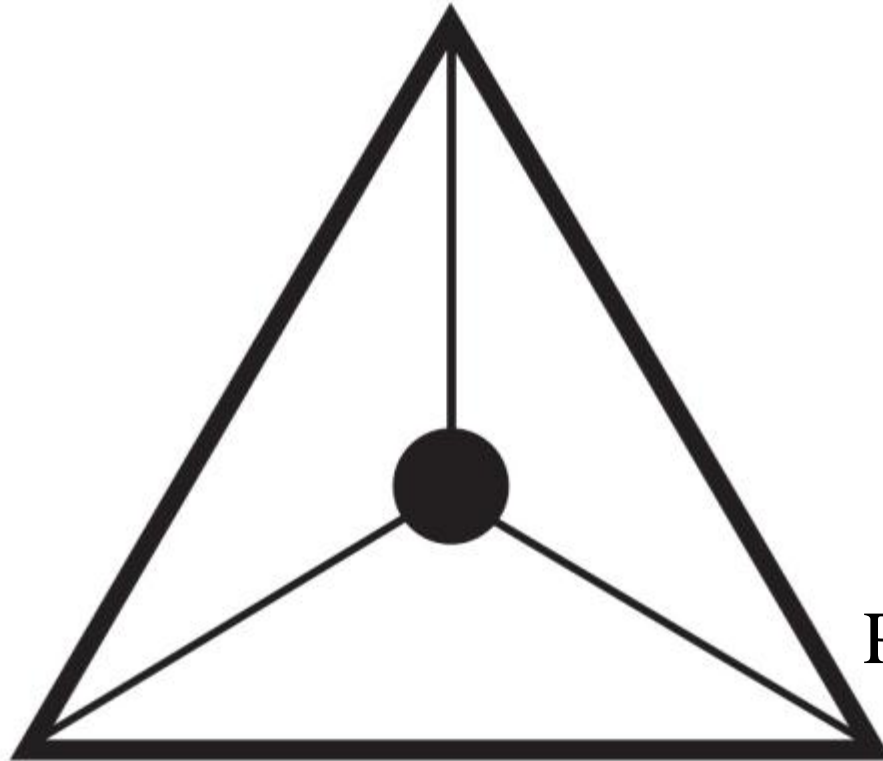
Ten “New” Rules to Redesign and Improve Care

1. Care is based on continuous healing relationships
2. Care is customized according to patient needs and values
3. The patient is the source of control
4. Knowledge is shared and information flows freely
5. Decision making is evidence-based
6. Safety is a system property
7. Transparency is necessary
8. Needs are anticipated
9. Waste is continuously decreased
10. Cooperation among clinicians is a priority

Health of a
Population

Experience of
Care

Per Capita Cost



The IHI *Triple Aim*

2 Choices?

Cut Costs

Ration Care

A Third Way

 Cut Costs

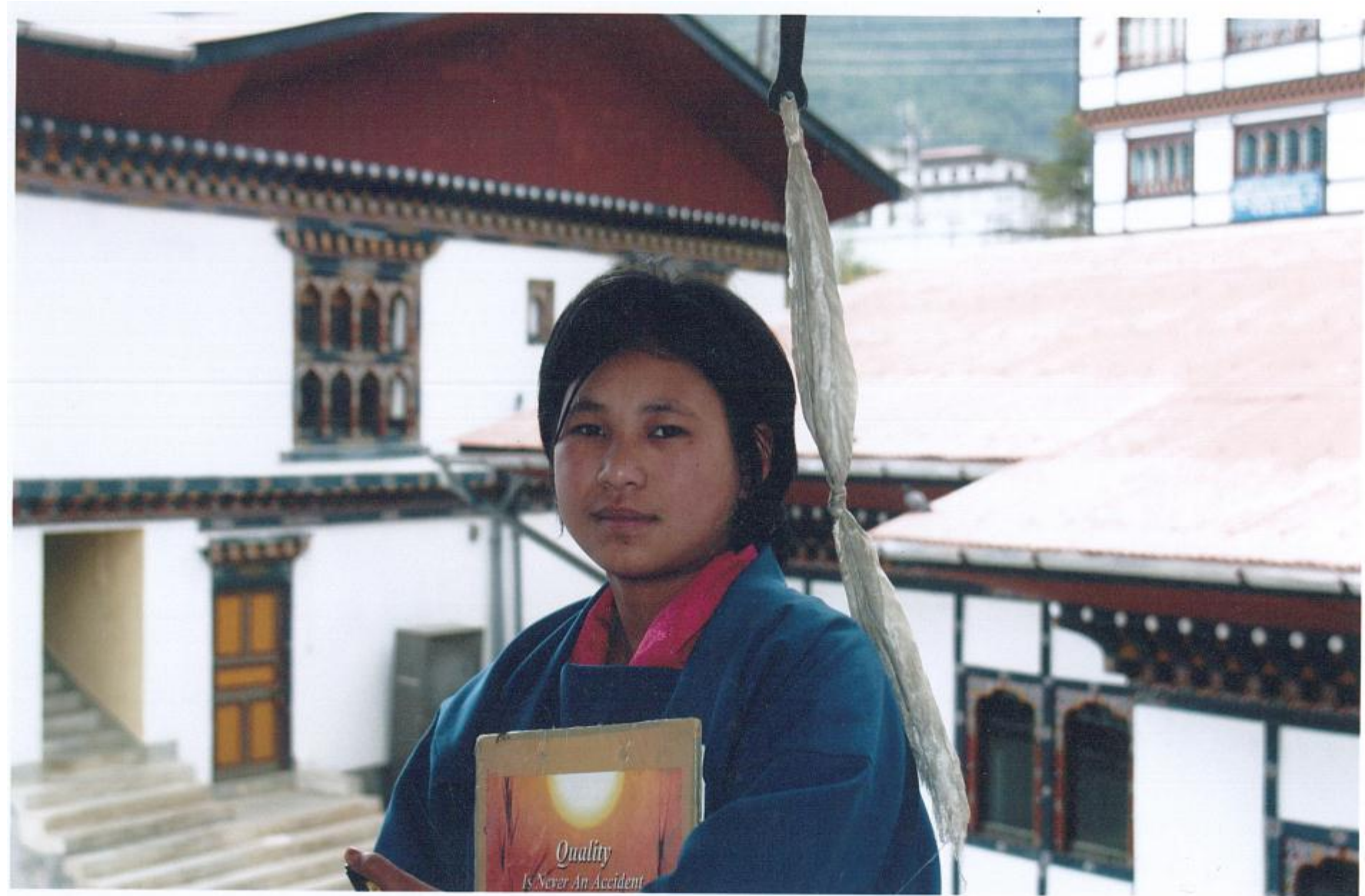
 Ration Care

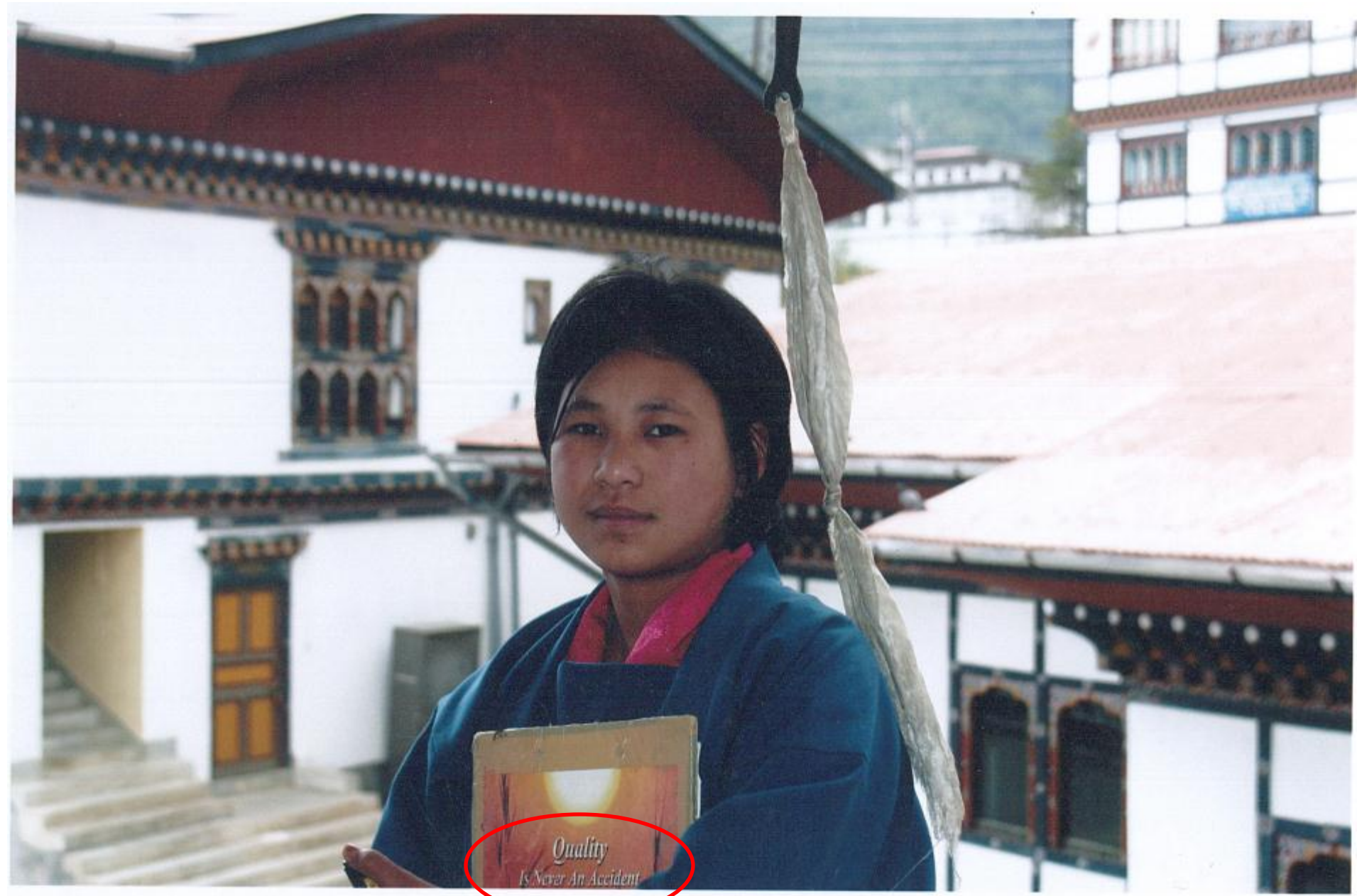
 New Designs

Discovery

“Discovery consists in seeing what everyone else has seen, and thinking what no one else has thought.”

-Albert Szent-Gyorgi





*Quality
Is Never An Accident*

Our Challenges

- **Structural challenges in this time of reform**
- Health needs and challenges in the populations we serve
- Managing the complexity in caring for patients

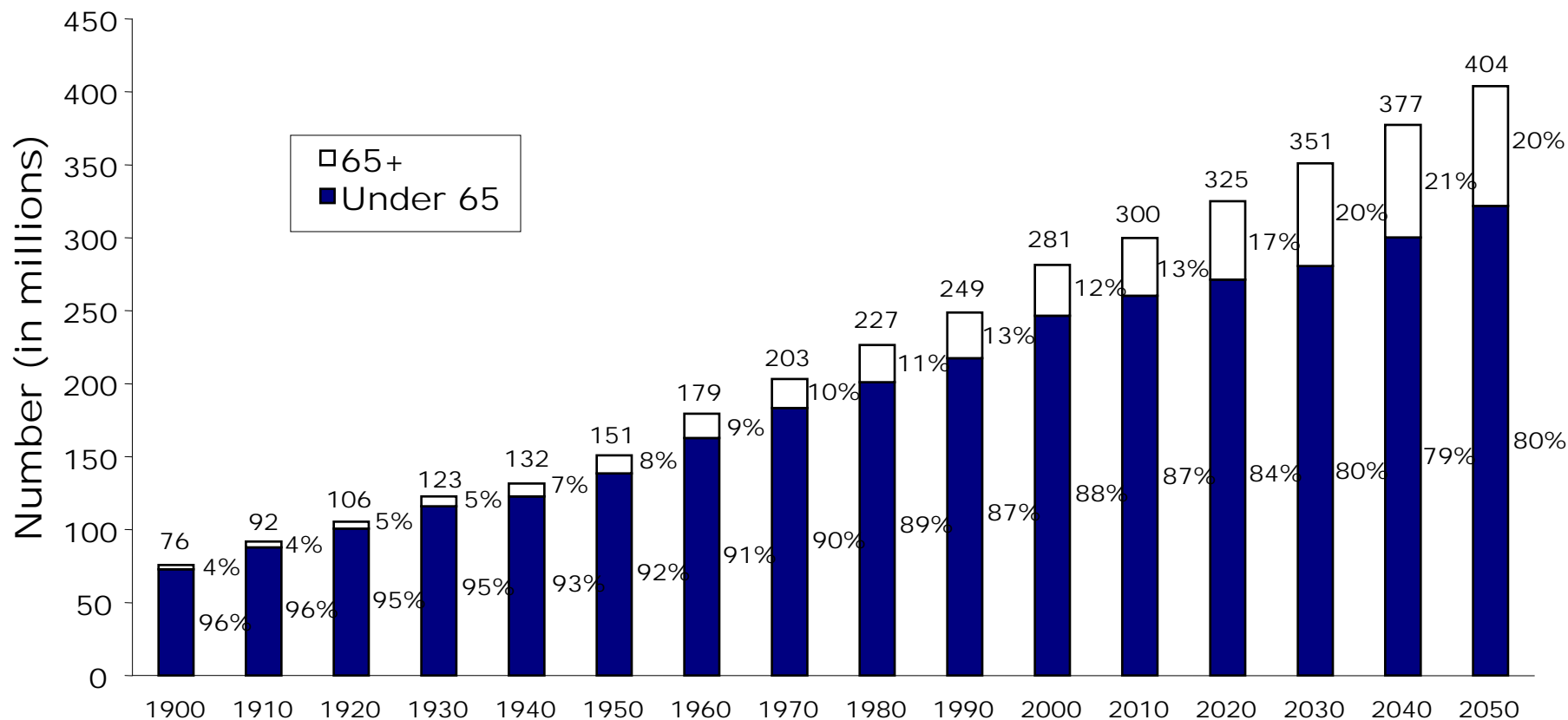
Making Sense of It All



Our Challenges

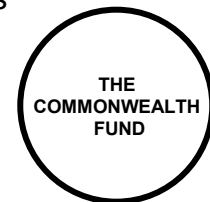
- Structural challenges in this time of reform
- **Health needs and challenges in the populations we serve**
- Managing the complexity in caring for patients

Figure 1. Growth in the Number of People Age 65 and Older



Note: The total population data for 1900 to 2000 include unknown age data. Therefore, the data used to determine the proportion of the population under age 65 and age 65 and older does not sum to equal the total population.

Sources: 1900 to 2000 data are from Hobbs, F., & Stoops, N. (2002). *Demographic Trends in the 20th Century* (Census 2000 Special Reports, CENSR-4). Washington, DC: U.S. Census Bureau. Available at <http://www.census.gov/prod/2002pubs/censr-4.pdf>. 2010 to 2050 data are from Population Projections Program (2000). *Projections of the Resident Population by Age, Sex, Race, and Hispanic Origin: 1999 to 2100 (Middle Series)*. Washington, DC: U.S. Census Bureau. Available at <http://www.census.gov/population/www/projections/natdet.html>. Source: R. Friedland and L. Summer, *Demography Is Not Destiny, Revisited*, The Commonwealth Fund, March 2005.



A Youth Bulge

- The world is in a demographic transition – from high rates of fertility and mortality, to lower birthrates and longer lives.
- But since mortality rates are falling before fertility rates are, a “youth bulge” results.
- We need new designs to ensure the health of these growing populations.

Southcentral Foundation, Anchorage, AK

The “Five Year Gestation”

Southcentral Foundation Nuka System of Care

Customer Owned and Driven Alaska
Native redesign built on changed
community and primary care platform

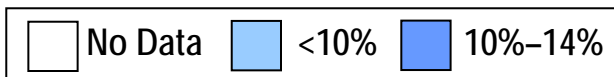
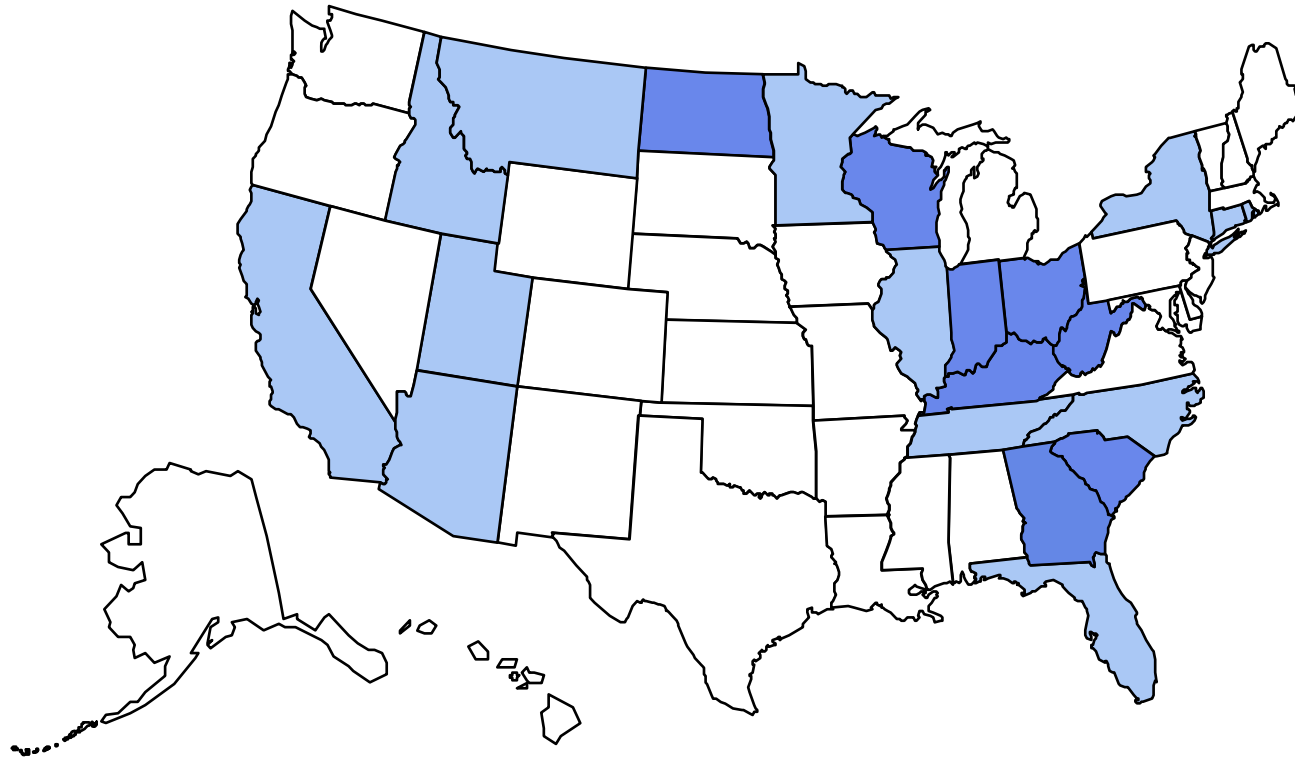
December 2010



Obesity Trends* Among U.S. Adults

BRFSS, 1985

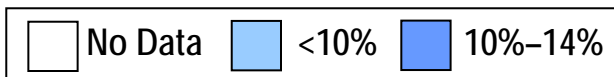
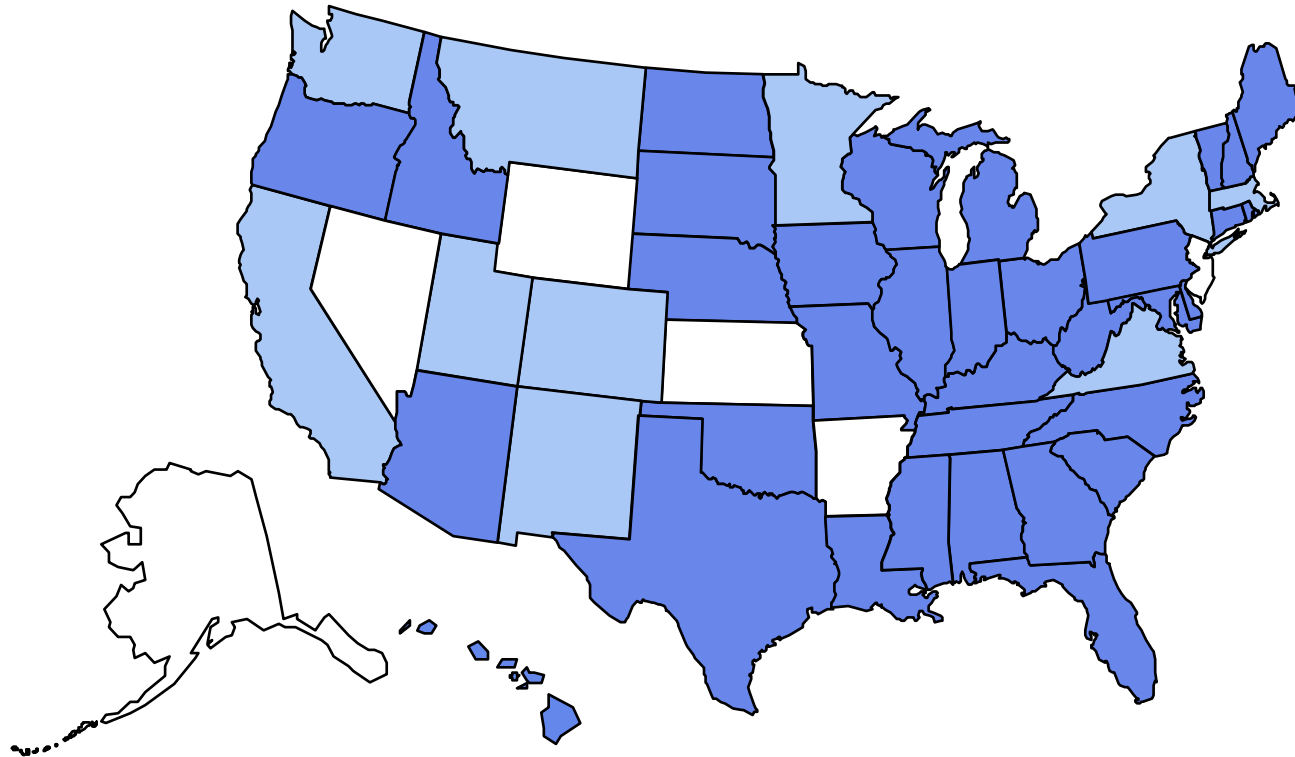
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1990

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



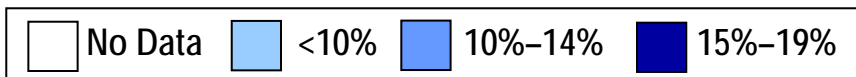
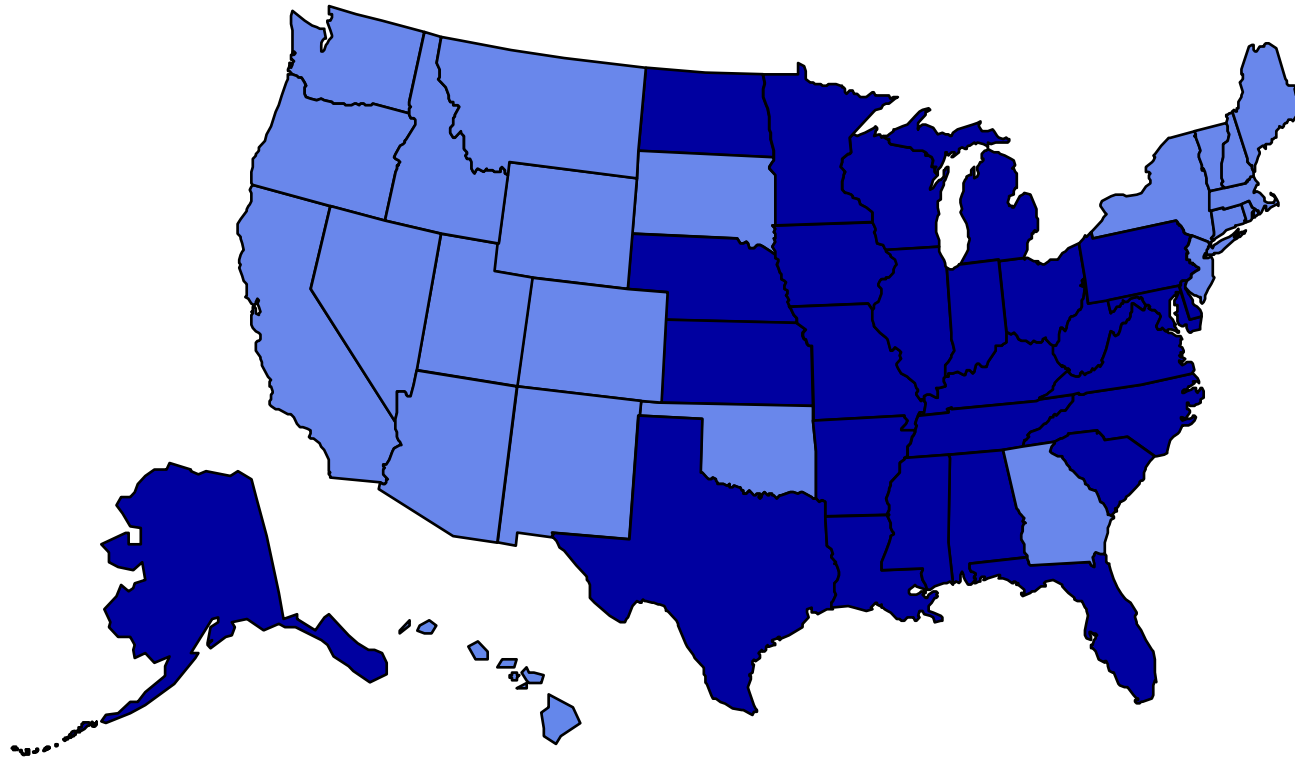
Source: Behavioral Risk Factor Surveillance System, CDC.



Obesity Trends* Among U.S. Adults

BRFSS, 1995

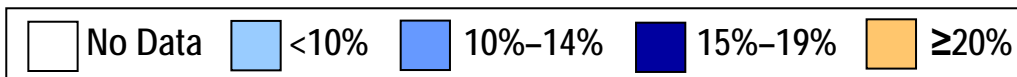
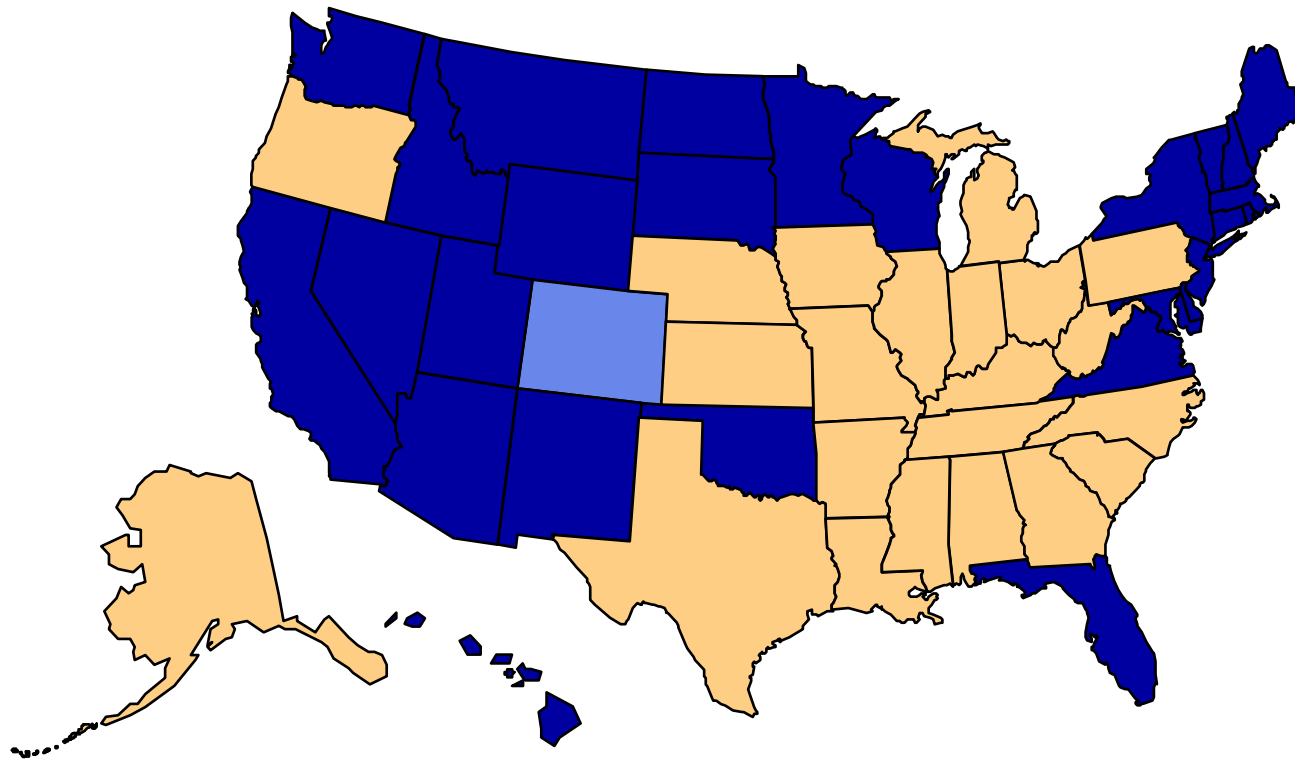
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Obesity Trends* Among U.S. Adults

BRFSS, 2000

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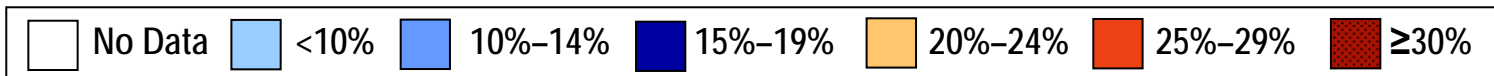
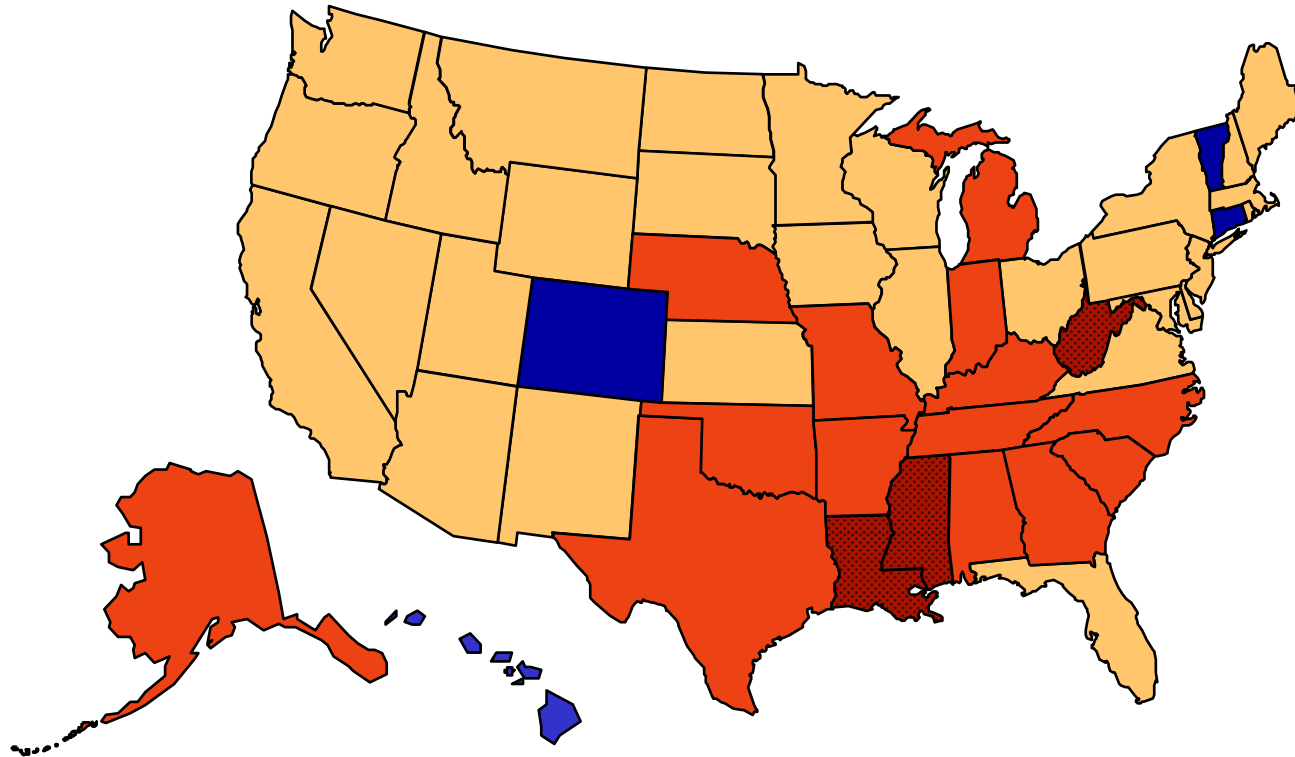


Source: Behavioral Risk Factor Surveillance System, CDC.

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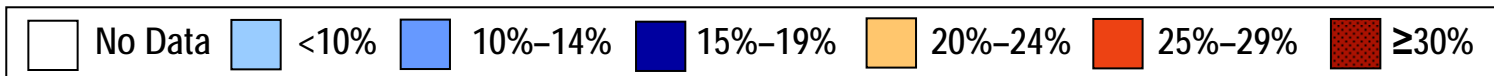
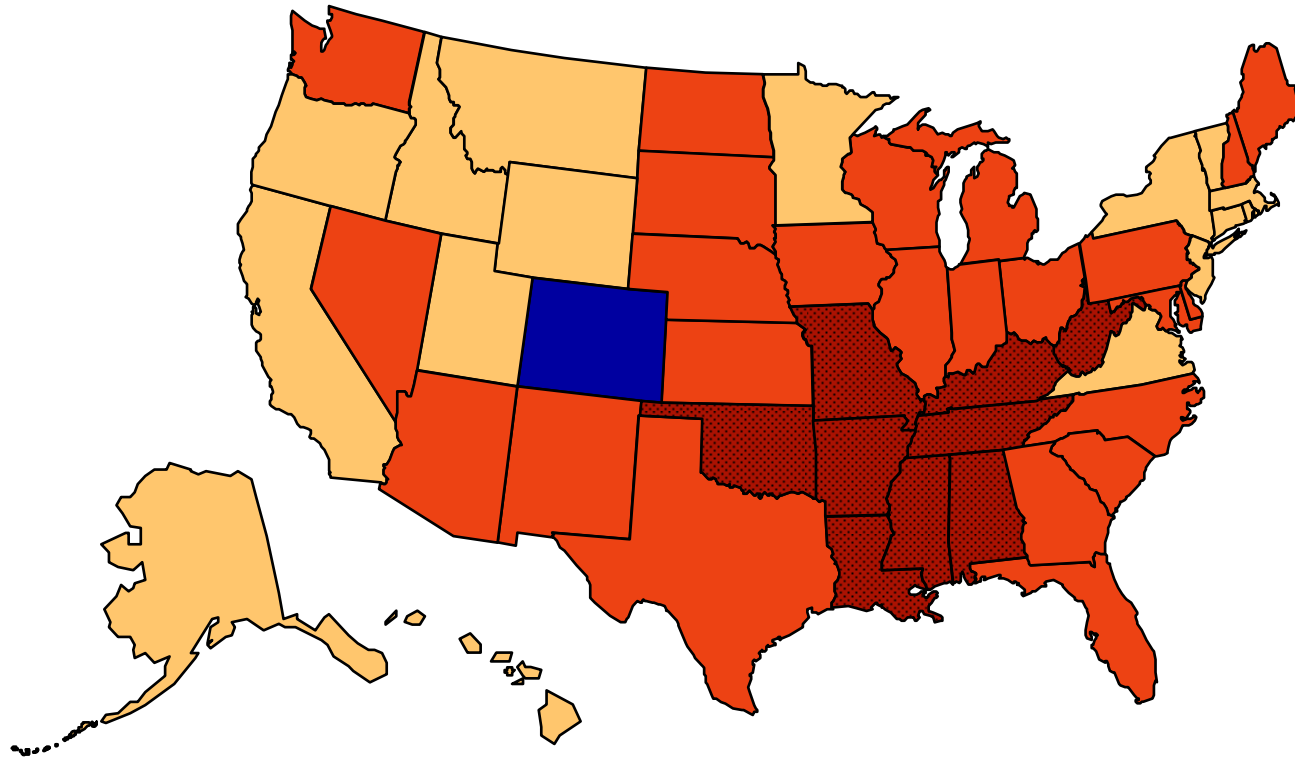


Source: Behavioral Risk Factor Surveillance System, CDC.

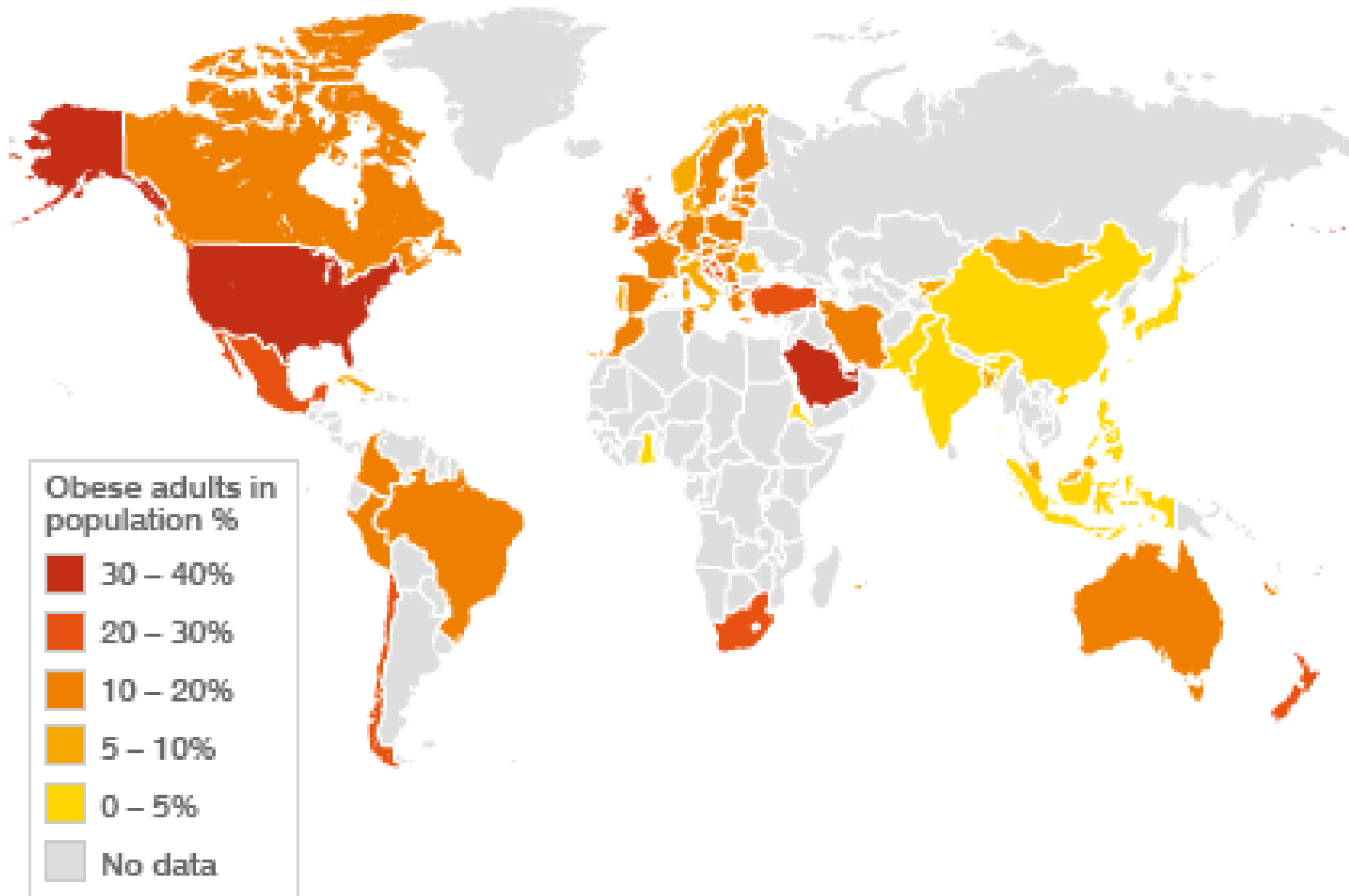
Obesity Trends* Among U.S. Adults

BRFSS, 2009

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



THE GLOBAL OBESITY PROBLEM



An obese adult is classified as having a Body Mass Index equal to or greater than 30

SOURCE: World Health Organization, 2005

The “Hot Spots”

- “Super” utilizers of health services
- 5% of patients account for 49% of US health spending
- Patients at the end of life need improved palliative and hospice care

Our Challenges

- Structural challenges in this time of reform
- Health needs and challenges in the populations we serve
- **Managing the complexity in caring for patients**

Increasing Complexity

- In the mid 1970s, the average patient in a hospital required 2.5 staff FTEs for care...
- ...20 years later, the average patient needs 19.5 FTEs[†]
- A physician today has over 13,600 possible diagnostic options and the opportunity to select from over 6000 prescription options in the US

The Path Forward

- **New ways to lead**
- Vibrant and important aims
- More ways to learn

The Four Leadership Questions

- Do you know how good you are?
- Do you know where you stand relative to the best?
- Do you know where the variation exists?
- Do you know the rate of improvement over time?

New Leadership Skills

Personal

Leading Through:

- Attention
- Listening
- Sensing
- Learning
- Action
- Signs and symbols

Structural

Leading With:

- Structural huddles
- Gemba walks
- Cultural changes
 - Safety
 - Harm
 - Patient-centered
 - Improvement and innovation
- Spread strategy

Structured Huddles

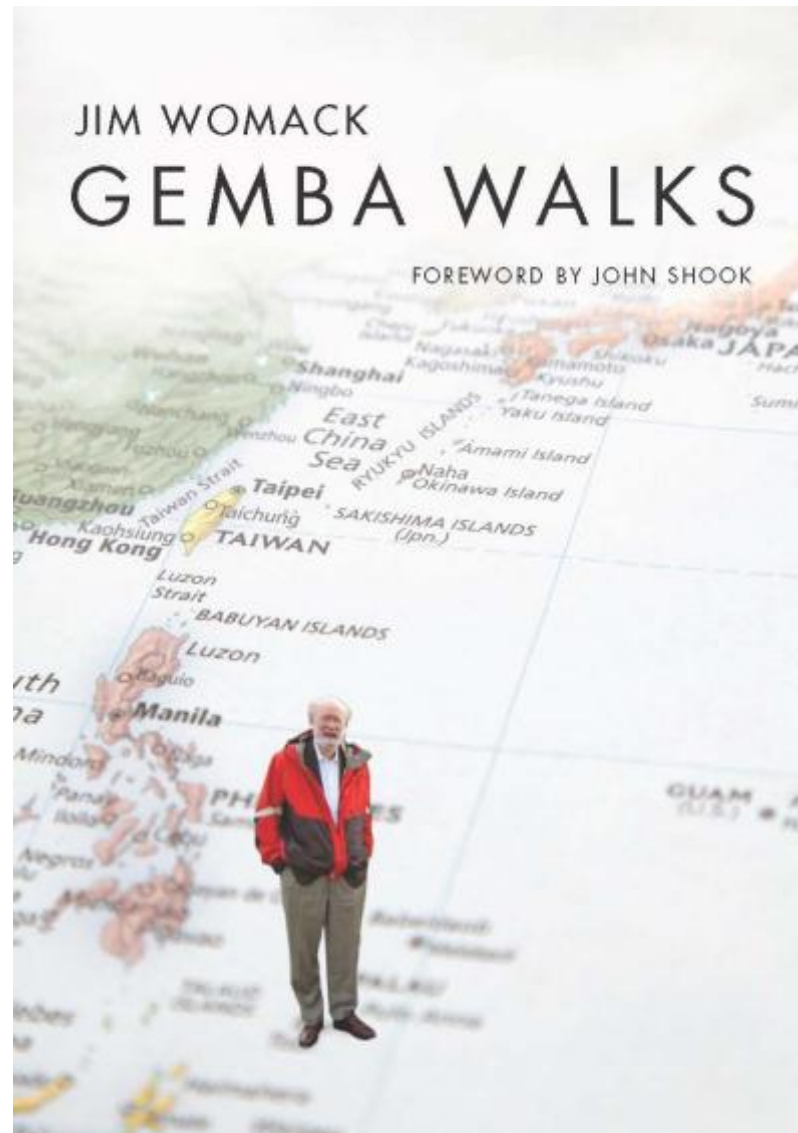
- A huddle is a “communication vehicle...a fast, focused, highly collaborative process.”†
- Huddles should be frequent and short.
- They enhance communication; generate and help manage knowledge; and help continuously improve care delivery.

Huddles

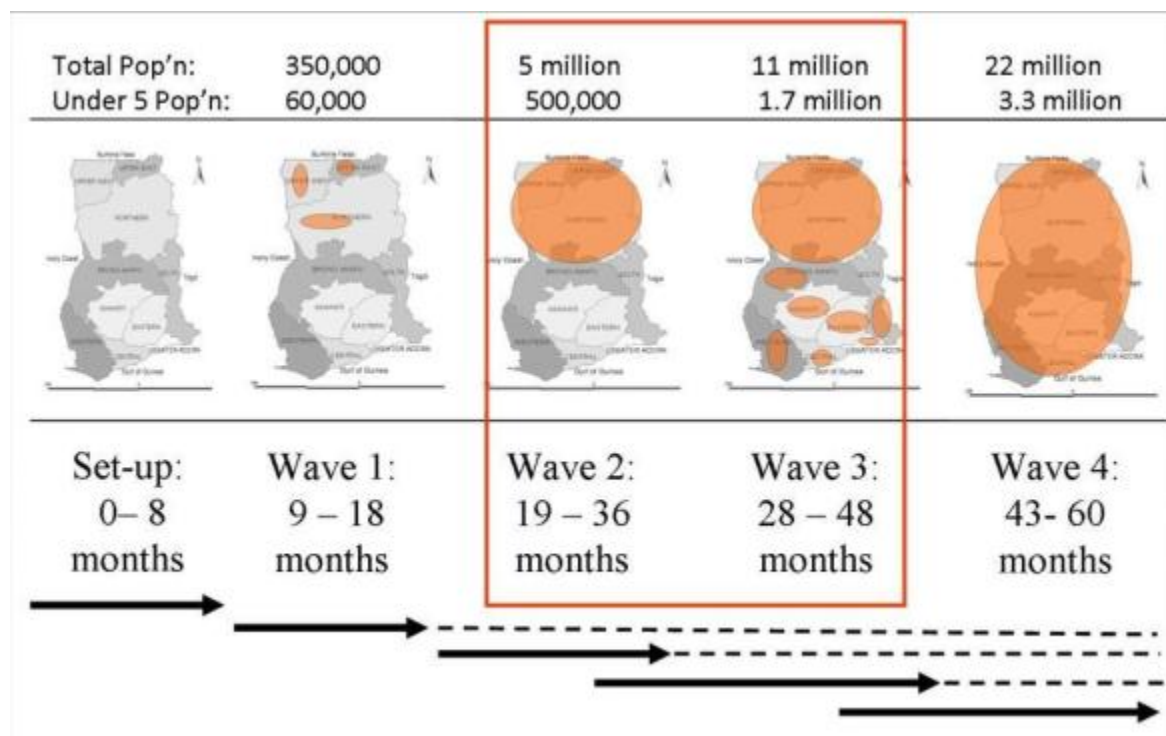
at Cincinnati Children's Hospital Medical Center



Gemba Walks



Ghana: Rapid scale-up of systems improvement across nation's health facilities



Project is ahead of schedule, with simultaneous spread in northern regions (NCHS and Ghana Health Service) and middle regions (NCHS hospitals Collaborative).

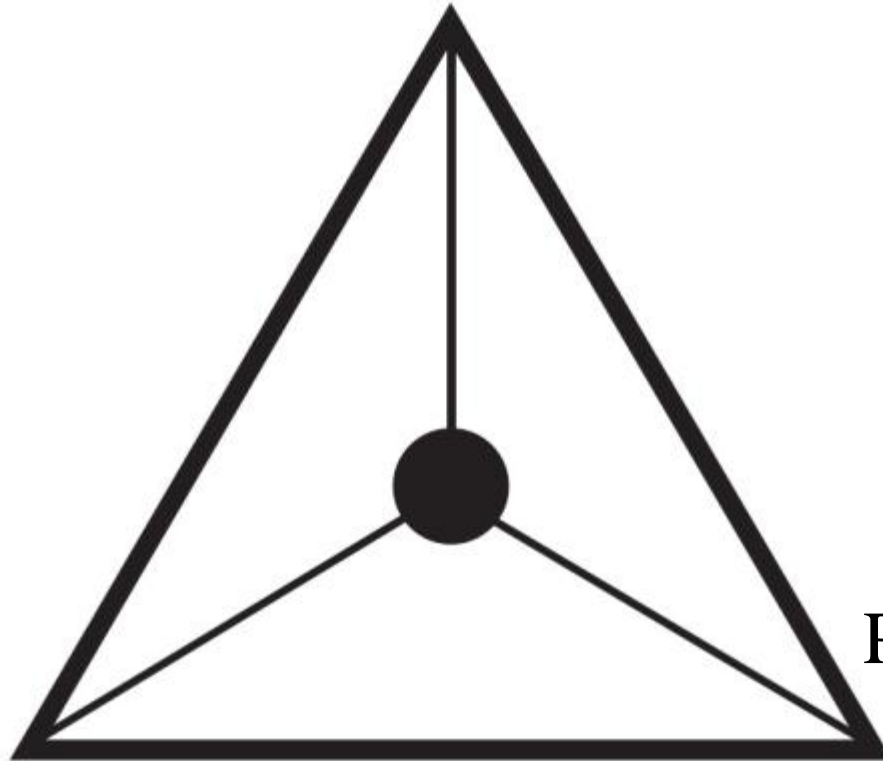
The Path Forward

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Health of a
Population

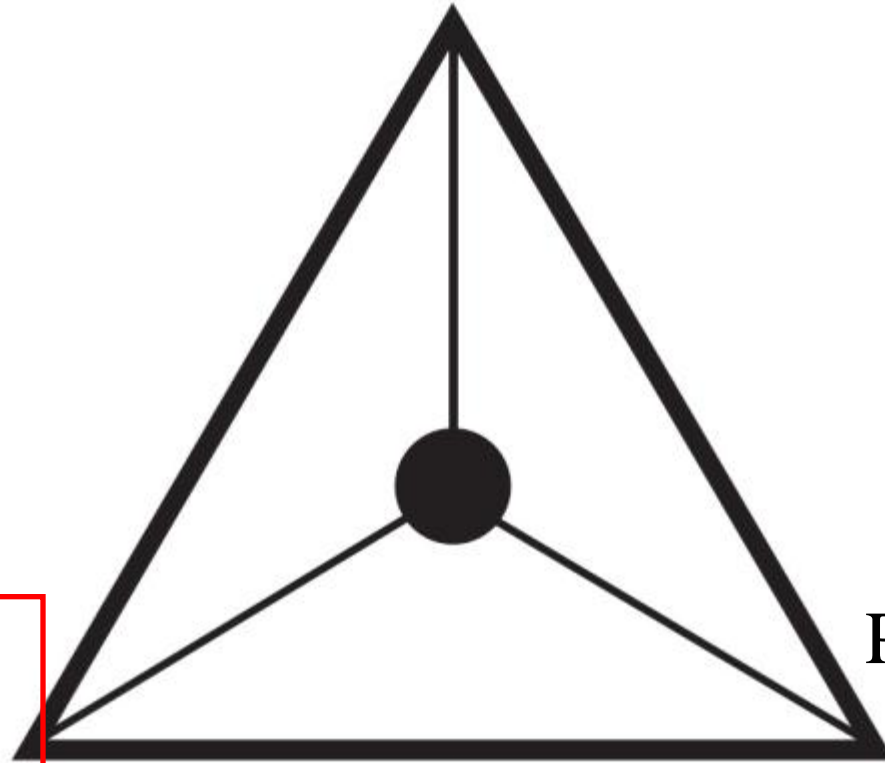
Experience of
Care

Per Capita Cost



The IHI *Triple Aim*

Health of a
Population



Experience of
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Institute of Medicine's Six Aims

- ***Safe*** – no needless deaths
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Patient Safety Alliance (PSA) Driver Diagram

Improve Safety of Healthcare Services in Scotland

Primary Drivers

Scottish Government Sets PSA as Strategic Priority

Boards Endorse Safety as Key Strategic Priority

Deliver the programme

Build a Sustainable Infrastructure for Improvement

Align SPSP with national improvement programmes and measures

Secondary Drivers

National leaders openly endorse SPSP aims, failure is not an option for execs

- Time and space given for improvement (not a target)
- Royal Colleges serve in official capacity
- Safety is an element of all programmes

-National Board development strategy

-Ownership of agreed upon set of outcomes and measures

-Quality and safety comprises 25% of agenda

--Development of infrastructure that supports improvement and measurement

-Clear improvement aims in strategic plan

-Segment hospitals , customize approach

-Work with IST, QIS and HES to develop unified improvement approach

-In-country support for Boards

-Spread strategy community hosp., primary care One Team

-Develop experts in imp. methods and coaching

-In-country measurement system, culture survey

-Safety work migrates to appropriate agency

-Training programmes developed in Scotland

-Work with IST, QIS and HES to develop unified improvement approach

-One Team

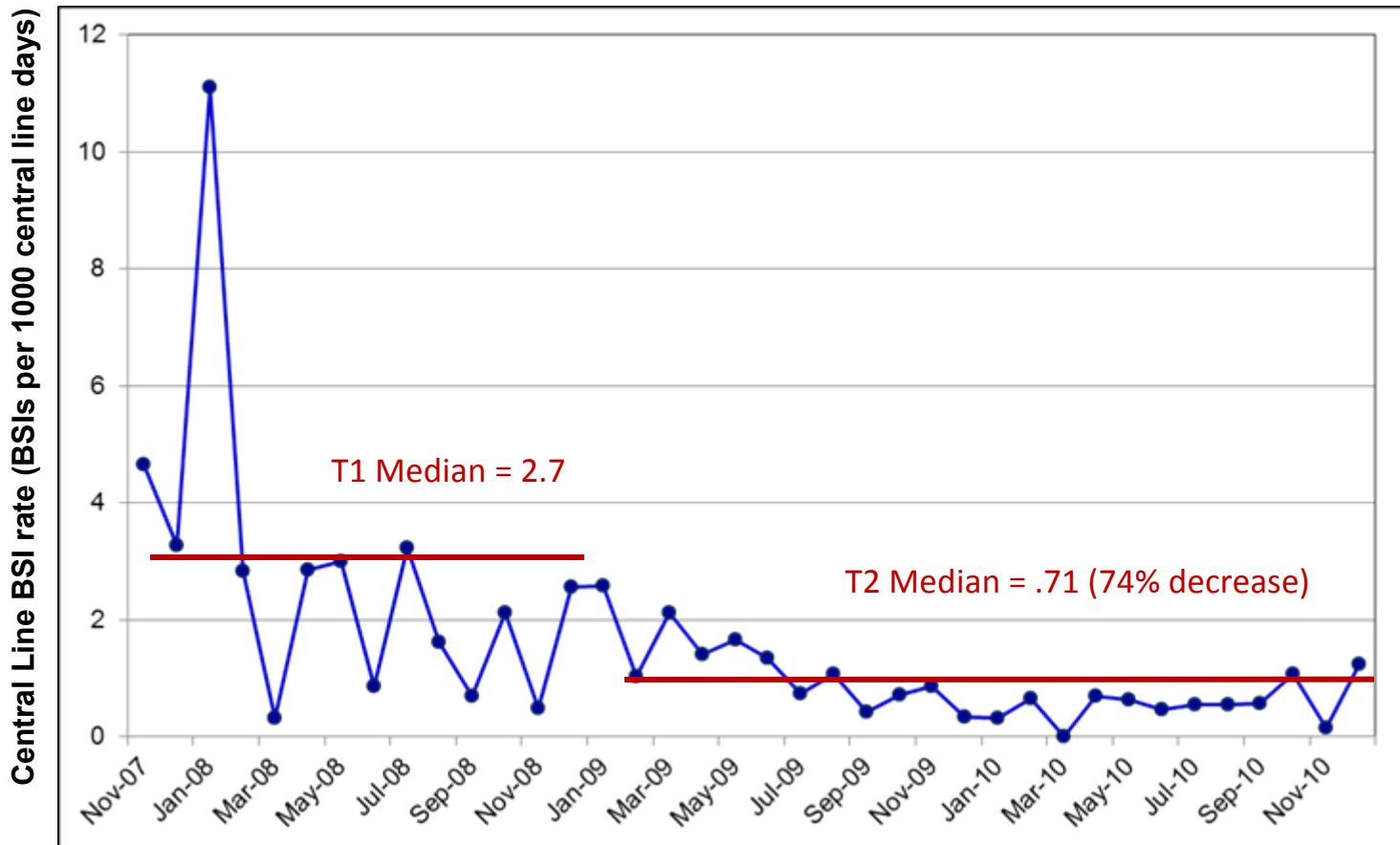
-Align aims and measures with national programmes

-Develop a portfolio and execution model

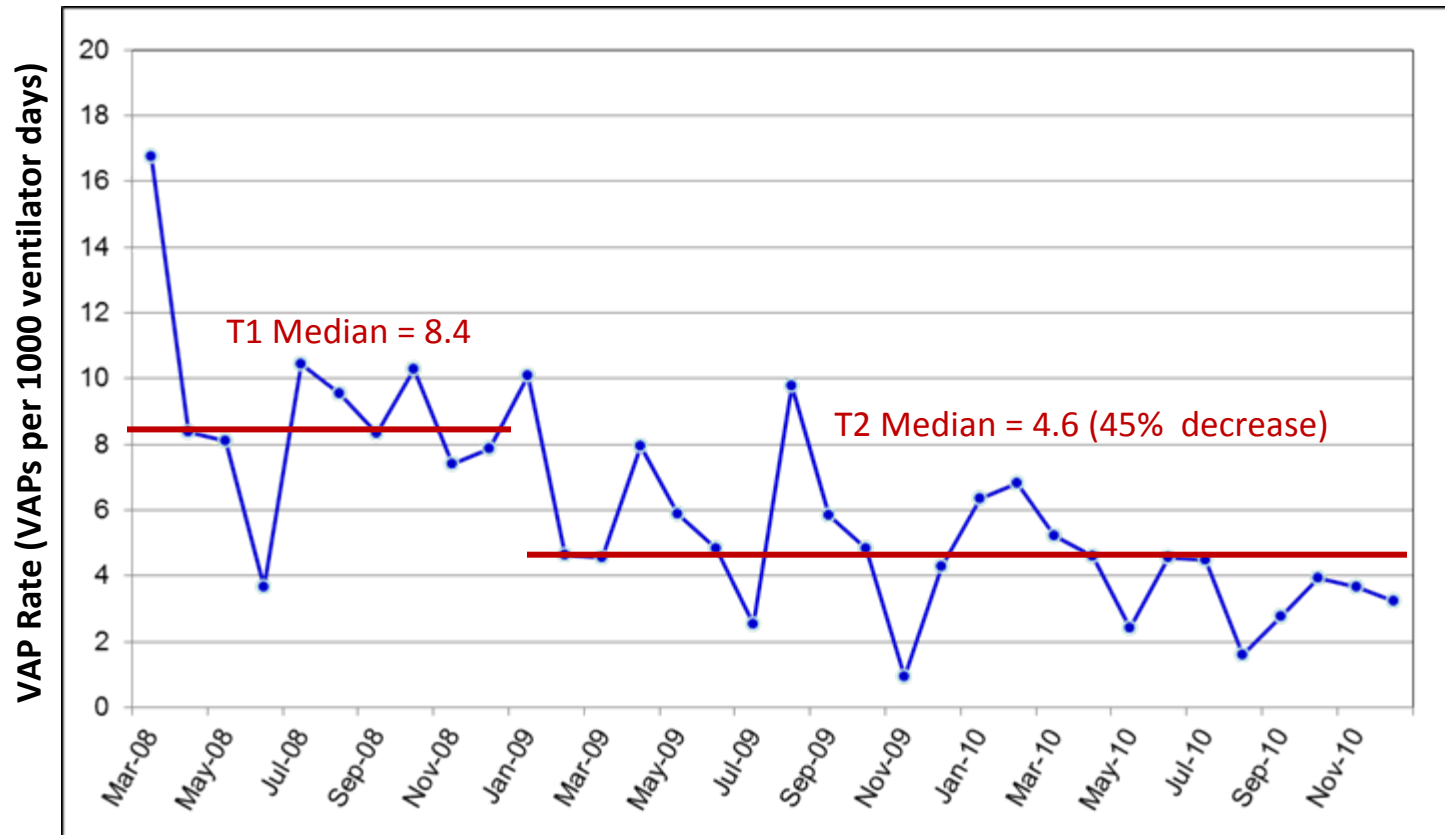
-Build connection to safety in national work

-Define within clinical governance framework

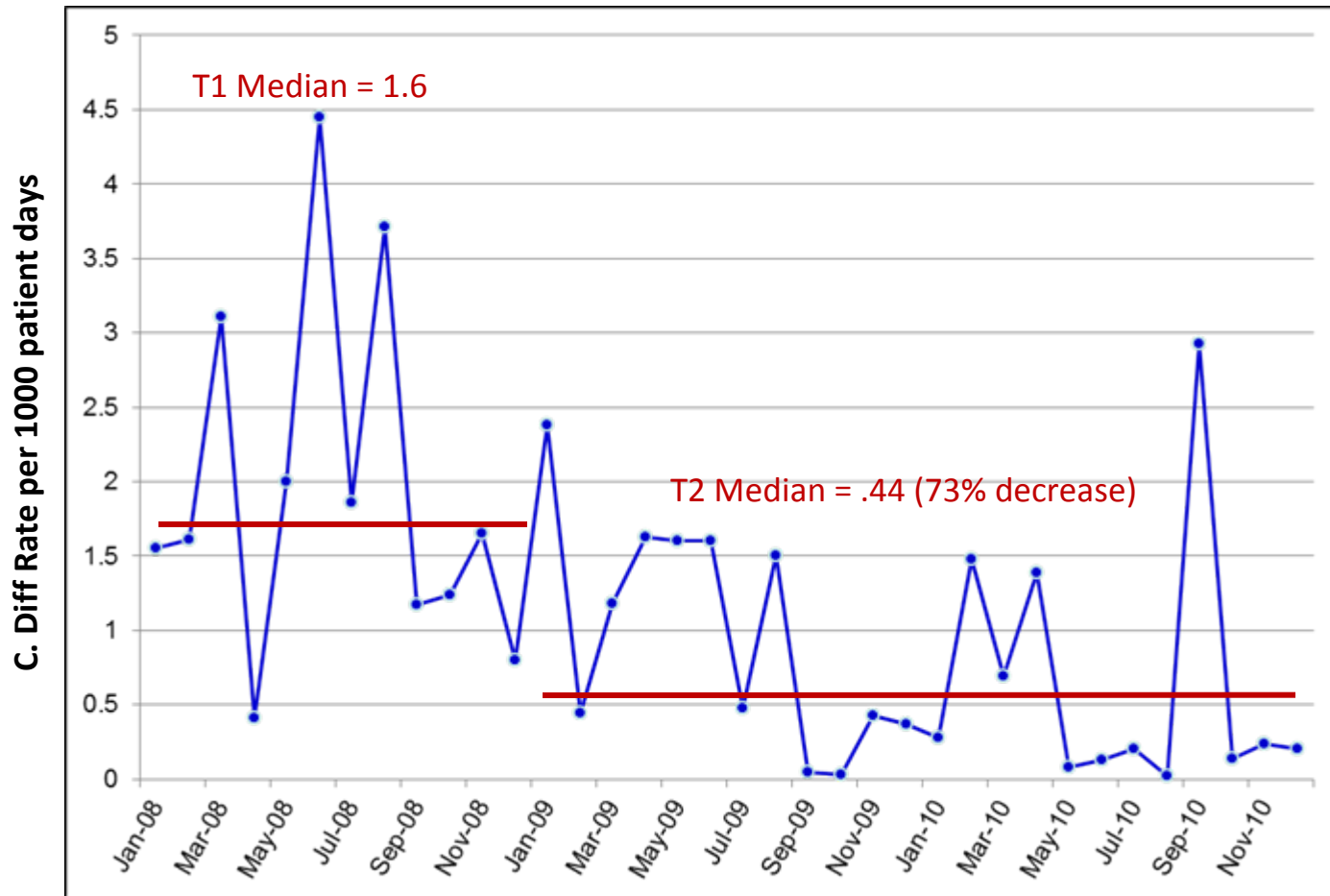
**Scottish Patient Safety Program (SPSP)
Critical Care Central Line BSI Rate
November 2007 through December 2010
(Goal: 0 CL BSIs)**



Scottish Patient Safety Program (SPSP) VAP Rate March 2008 through December 2010 (Goal: 0 VAPs)



Scottish Patient Safety Program (SPSP) Critical Care C. Diff Rate January 2008 through December 2010 (Goal: 50% reduction)



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Patient-Centered Flow

- Patient demand is growing
- Our ability to **safely** and **efficiently** serve all patients depends on:
 - Right Patient
 - Right Place
 - Right Time
 - Right Care Team
 - No Delays
- Most activity in the hospital is scheduled; urgent/emergent work is “predictable”



PATIENT-CENTERED FLOW

We all play a part

Flow and Safety

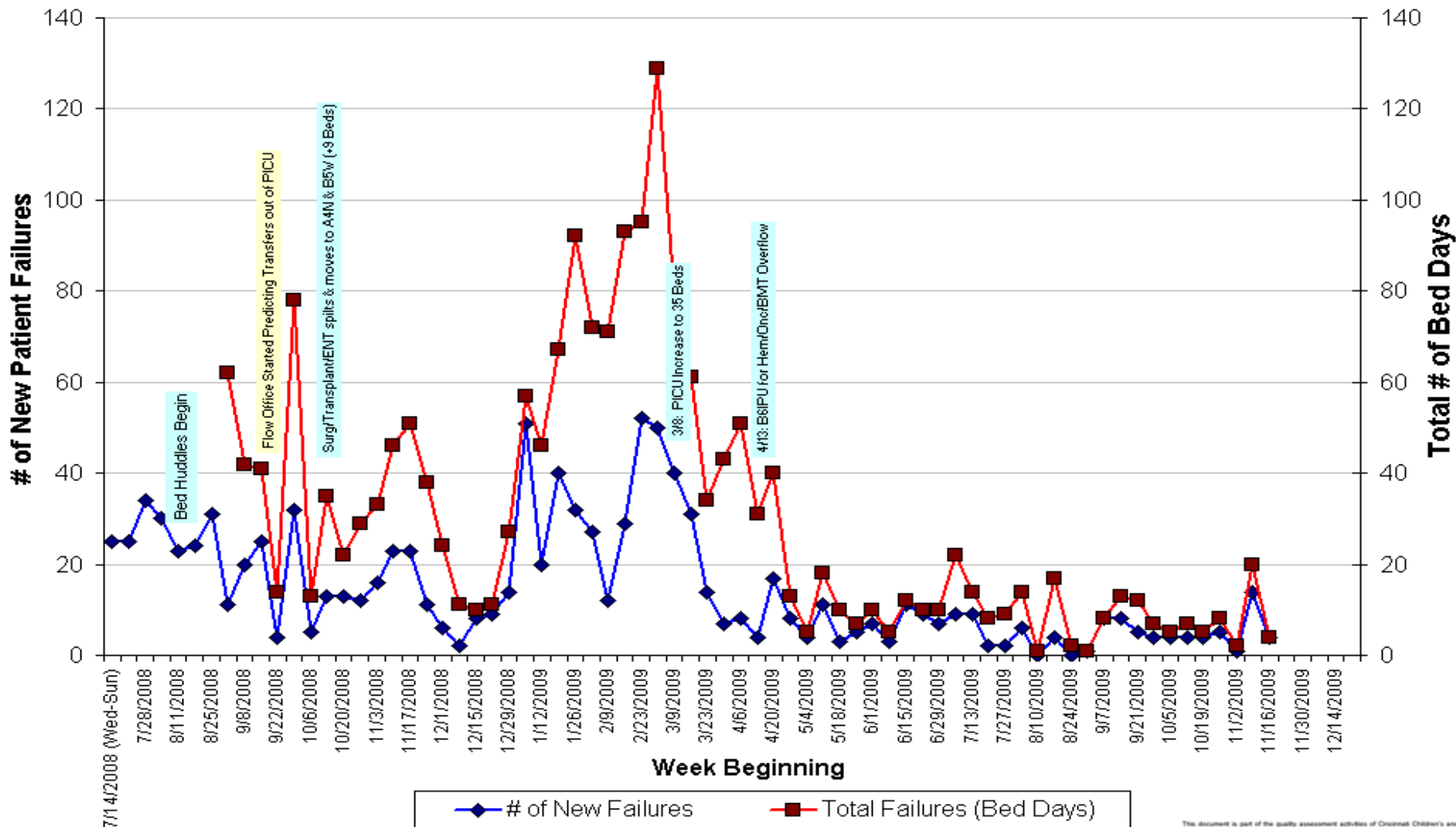
- Inseparable initiatives in a hospital
- Getting the “Rights” right
 - Right Bed, Nursing Care, Time, Plan, Treatment
- No longer a passive system – best care requires active management of these critical aspects of the patients experience.
- Best route to optimize the best care model is to control the variables in care delivery.

Initial Results of Re-Design

- Weekday Waiting Times – **28% reduction** in spite of a 24% increase in case volume
- Weekend Waiting Times – **34% reduction** in spite of a 37% increase in case volume
- **Throughput increase of 4.8% = 1 OR room** in a setting of 20 rooms
- Overtime hours decreased by an estimated **57%** between September 18, 2006 and the first week of January 2007. If OR operating costs are estimated at \$250/room hour, then these savings are equivalent to \$10,750/week, or **\$559,000 annually.**
- **Overall growth** sustained at **~7%** / year for past two years, no additional operating rooms added



Weekly Critical Flow Failures



Last Update: 11/23/2009 by A. Anneken, Division of Health Policy & Clinical Effectiveness Data Source: MPS

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Greater Production Capacity Through Flow and Patient Placement – What Has it Meant?

- Has allowed for an additional **78 patients per day** to be treated within our current bed capacity that would not have been possible under “pre-flow improvement processes
- Improved flow and patient placement have allowed us to **avoid the construction of 102 additional beds** (\$100+ million) that would have been required to meet today’s volume in our FY2002 workflow system

Institute of Medicine's Six Aims

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How do we make care more patient centered?

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Patient Voices


A diagnosis of a chronic disease, mental illness or condition can change one's life in many ways. In Patient Voices, we feature first person accounts of the changes, challenges and rewards patients face as they cope with various health issues.



A.D.H.D.

Taming an overactive brain, succeeding with and without medication, and more from people living with A.D.H.D.


- [Join the discussion.](#)
- [Health Guide: A.D.H.D.](#)



AIDS and H.I.V.

What is it like to live with H.I.V.? Eight men and women living with H.I.V. speak about their experiences.


- [Join the discussion.](#)
- [Health Guide: AIDS](#)
- [Health Guide: H.I.V. Infection](#)



Alopecia


Mysterious bald spots, unproven treatments, a new reflection in the mirror - what is it like to suddenly lose your hair? Six people with alopecia speak.

- [Join the discussion.](#)
- [Health Guide: Alopecia](#)




A.L.S. (Lou Gehrig's Disease)

A.L.S. causes difficulty walking, speaking, breathing and, ultimately, death. Here, six men and women speak about how



Alzheimer's Disease

A slow decline in memory, an inability to complete simple tasks, the concern about long-term care, eight men and




Autism

From social awkwardness to a complete inability to communicate verbally, six men and women speak about life with

CONTRIBUTOR: WILLIAM W. J. DE SHON/REUTERS

Italian Design Street Walking **Milano**
November 29th 2010 – January 8th, 2011



Poltrona Frau

The Burden of the Illness

The New York Times

Healthguide

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Concert Seats in an Intimate Setting:
RESERVED



Published: October 18, 2009

Patient Voices: A.L.S.

Amyotrophic lateral sclerosis, also known as Lou Gehrig's disease, affects parts of the nervous system that control voluntary muscle movement. The average life span of someone with A.L.S. is five years after diagnosis. Here, six men and women speak about how their lives have changed as a result of this devastating illness. ([Join the discussion here.](#))



A Better Roadmap

Eric Lowen, 57
Valencia, Calif.



Two Boys and a Diagnosis of A.L.S.

Wes Rose, 37
Glenside, Pa.

CLICK TO LISTEN



A 'Concentrated' Retirement

Beth Chilcoat, 61
Worthington, Ohio

CLICK TO LISTEN



Taking Charge of Fate



Michal Czerwonka for The New York Times

Eric Lowen, a member of the songwriting team Lowen and

1 of 6

Collaborative Care at ThedaCare



- Collaborative rounding on your admission
- Evidence-based care
- The nurse as manager of care
- Electronic Records
- Design of physical space

Results:

- Reduced inpatient costs by 25%
- Reduced lengths of stay by over a day
- Reduced errors
- Increased patient satisfaction.



Encircle Health

A Partnership with **THE DA CARE**



HEALTHCARE TEAM

THE DA CARE
PHYSICIANS
FAMILY MEDICINE
APPLETON NORTH
Suite 1300
920.738.4600

FOX VALLEY
PULMONARY
MEDICINE, L.L.C.
*Pulmonary Medicine,
Critical Care, & Sleep Disorders*
Suite 1700
920.734.9600

VALLEY UROLOGIC
ASSOCIATES
Suite 2600
920.739.3537

FOX VALLEY
SURGICAL
ASSOCIATES
Suite 1600
920.731.8131

Women's
Health Specialists, S.C.
THE FOX VALLEY OB/GYN PHYSICIANS™
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of Appleton
Diagnostic Imaging and Radiation Oncology Specialists

MORTON
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Suite 2500
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THE DA CARE
PHYSICIANS
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Suite 1200
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THE DA CARE
PHYSICIANS
INFECTIOUS DISEASES
APPLETON
Suite 3350
920.831.1841

THE DA CARE
AT HOME
920.969.0919

THE DA CARE
PHYSICIANS
Imaging
Suite 1800
920.738.6521

APPLETON MEDICAL
CENTER
Outpatient Treatment
Suite 3300
920.738.6504

APPLETON MEDICAL
CENTER
Sleep Lab
Suite 3200
920.225.7890

THE DA CARE
PHYSICIANS
Lab

THE DA CARE
BEHAVIORAL HEALTH
920.720.2300

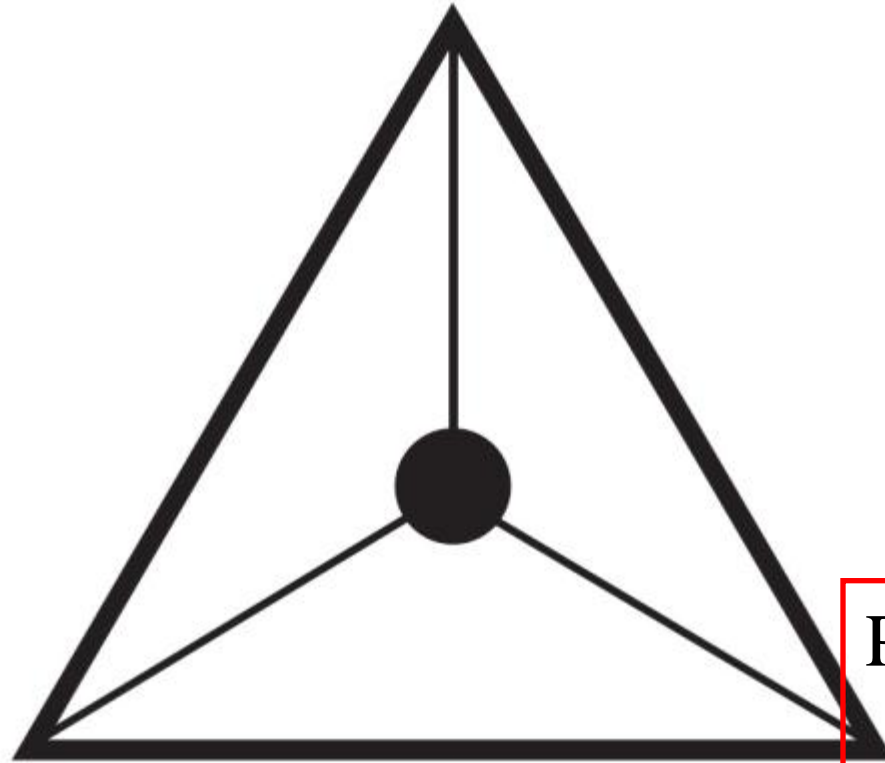
APPLETON MEDICAL
CENTER
Endoscopy
Suite 2800



Health of a
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Experience of
Care

Per Capita Cost



The IHI *Triple Aim*

Removing Waste

- Dr. Patty Gabow at Denver Health, a safety-net system, introduced a waste reduction focus several years ago.
- Her team has reduced expenses there by \$71M, \$30M in the last year – she said, “We’re getting good at getting better.”

Waste Identification Tool

The screenshot displays the IHI.org website interface. At the top, the IHI.org logo is on the left, and navigation links for 'Log In/Register', 'Contact Us', and 'Site Map' are on the right. A search bar is also present. Below the header, a breadcrumb trail reads 'Home > Topics > Improvement > Improvement Methods > Tools'. A left sidebar menu lists various topics, with 'Tools' highlighted. The main content area features a 'Log In to Download File' button and the title 'Hospital Inpatient Waste Identification Tool'. The text describes the tool's purpose: 'The Hospital Inpatient Waste Identification Tool helps identify and categorize actual or potential waste in the hospital setting, from the perspective of front-line staff, in order to identify waste reduction strategies that can be connected to system-level improvement strategies.' A 'Background' section explains that as health care costs rise, hospitals must reduce expenses while maintaining quality. A 'Related Information' sidebar lists links to 'Increasing Efficiency and Enhancing Value in Health Care' and 'Quality Improvement Savings Tracker Worksheet'. At the bottom of the sidebar, there is an 'IHI Expedition' announcement for December 14, 2010, and a 'What others are saying' section with a 'Post your comments' link.

<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/Tools/HospitalInptWasteIDTool.htm>

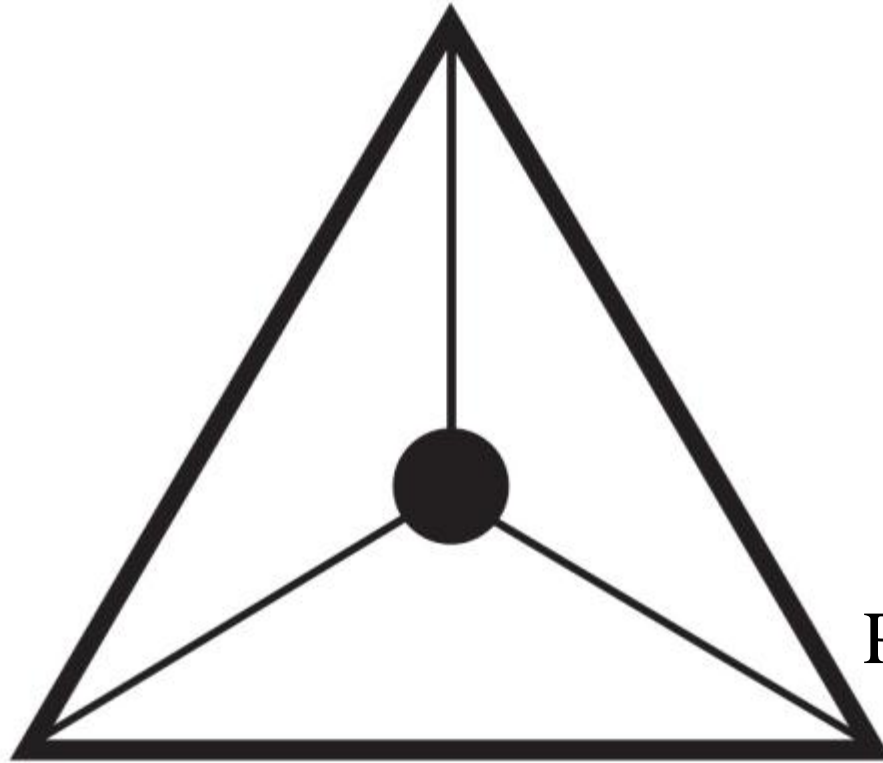
<http://www.ihl.org/IHI/Results/WhitePapers/HospitalInpatientWasteIDToolWhitePaper.htm>

Health of a
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Per Capita Cost

The IHI *Triple Aim*



Ideal Collaboration Between Patients and Providers

- The greatest, untapped resource for improving health care is the knowledge, wisdom, and energy of the individuals, families, and communities who face challenging health issues in their every day lives.
- People must be engaged as co-producers of health care for themselves and their communities, not merely as patients or consumers of services.
- Local communities must retrieve their own historical, cultural, and religious traditions of health and healing, and bring those into dialogue with contemporary medical systems.

*-Bill Doherty
University of Minnesota*



*Jönköping County
Obesity Initiative*



Cooking class



*Walking bus
School nurse*



Camp



Dentist



Healthiest cafeteria



Nutritionist



Southcentral Foundation, Anchorage, AK

The “Five Year Gestation”

Southcentral Foundation Nuka System of Care

Customer Owned and Driven Alaska
Native redesign built on changed
community and primary care platform

December 2010



Salutogenesis

Aaron Antonovsky

From the Latin “salus” which means health, and the Greek “genesis” which means origin.

A “*health-ease*” instead of a “*dis-ease*” continuum

The Path Forward

- New ways to lead
- Vibrant and important aims
- **More ways to learn**

IHI Open School



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 An interprofessional educational community giving you the skills to become a change agent in health care. [Learn more >>](#)

LEARN
Courses

CONNECT
Community

AND MORE
Resources

Don't Miss This





 **Advanced Case Study - NEW!**

Between Sept. 30th and Oct. 14th, 2010, students and residents all over the world gathered in interprofessional teams and analyzed a complex incident that resulted in patient harm. Selected teams presented their work to IHI faculty during a series of live webinars in October. [Watch the presentations.](#)


 **Profiles in Leadership Video Series - NEW!**

 **This Month's Leader: Jeffrey Sachs**
Director, The Earth Institute, Columbia University
Special Advisor to United Nations Secretary-General Ban Ki-moon













Profiles in Leadership is a series of interviews with effective leaders in fields as varied as health care, education, community organizing, international development, and homelessness prevention. Each month from Sept. 2010 to Feb. 2011, we'll feature a different leader in a multi-part video interview.

Read about the IHI Open School in [The New York Times!](#)
[Sign up](#) for our newsletter or [read the latest one.](#)



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 **Resources**

View by Format

-  **Video:** Watch interviews with the best minds in health care improvement
-  **Audio:** Listen to the IHI Open School's *On Call* audio conference series
-  **Case Studies:** Hone your skills with real-life health care cases
-  **Glossaries:** Definitions of quality improvement and patient safety terms
-  **Literature:** Articles, discussion questions, and bibliographies
-  **Writer's Corner:** Inside tips on writing for journals and the popular press
-  **Newsletters:** Stay current with the IHI Open School's monthly newsletters
-  **Storyboards:** Find out what Chapters and Faculty Advisors are working on
-  **Activities & Exercises:** Try these activities with your IHI Open School Chapter
-  **Faculty Resources:** Teaching tools and shared learning from campuses worldwide
-  **Related Links:** Blogs, organizations, and initiatives supporting health care improvement
-  **Contests and Opportunities:** Win awards and advance your career

View by Topic

-  **Patient Safety**
Patient safety is a critical topic in today's health care environment. As many as 98,000 Americans die annually due to medical errors.
-  **Quality Improvement**
Borrowing from the worlds of aviation and manufacturing, great thinkers have developed powerful methods to guide improvement in health care.

IHI Open School Chapter Community



326
Chapters

US Chapters in **45** states
International Chapters in **43** countries



IHI Open School Measures

- **60,000** students and residents registered on IHI.org
- **9,000** faculty and deans registered on IHI.org
- **22,000** students and residents have completed an online course
- **1,500** students and residents have earned their Certificate of Completion

* Since the IHI Open School was created in September 2008



OMG!
I JUST GOT
BORN!

mshivers



Thank You!

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