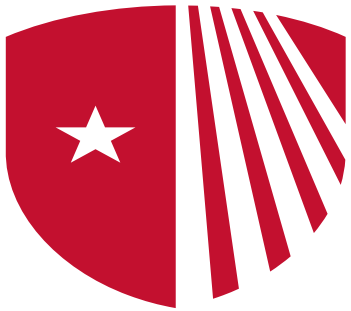


Stony Brook Medicine

A Pediatrician's Perspective on Hospital Management

Joseph H. Laver, MD, MHA
Chief Medical Officer
Professor of Pediatrics
May 17, 2015


Welcome to New York City

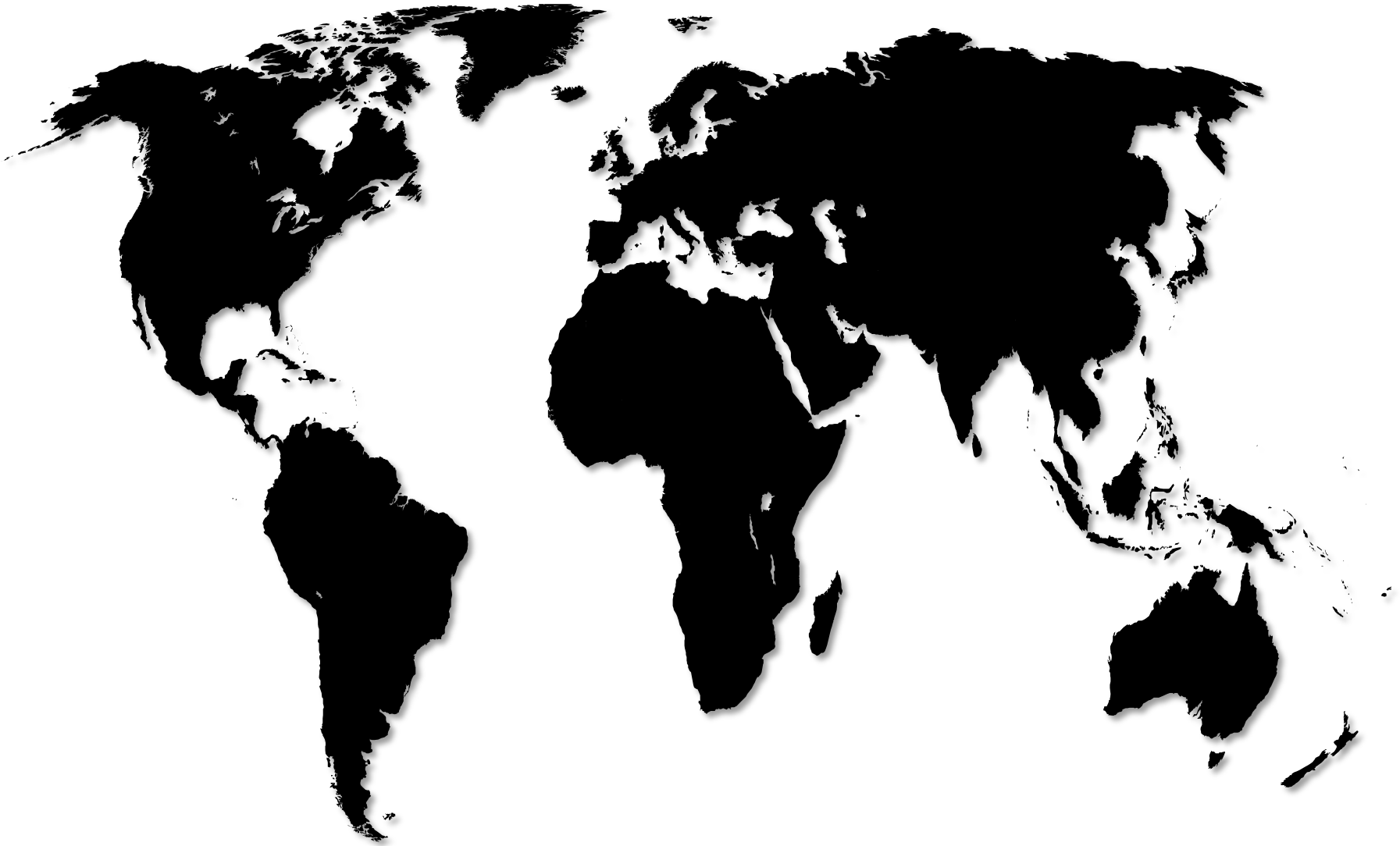
Stony Brook Medicine

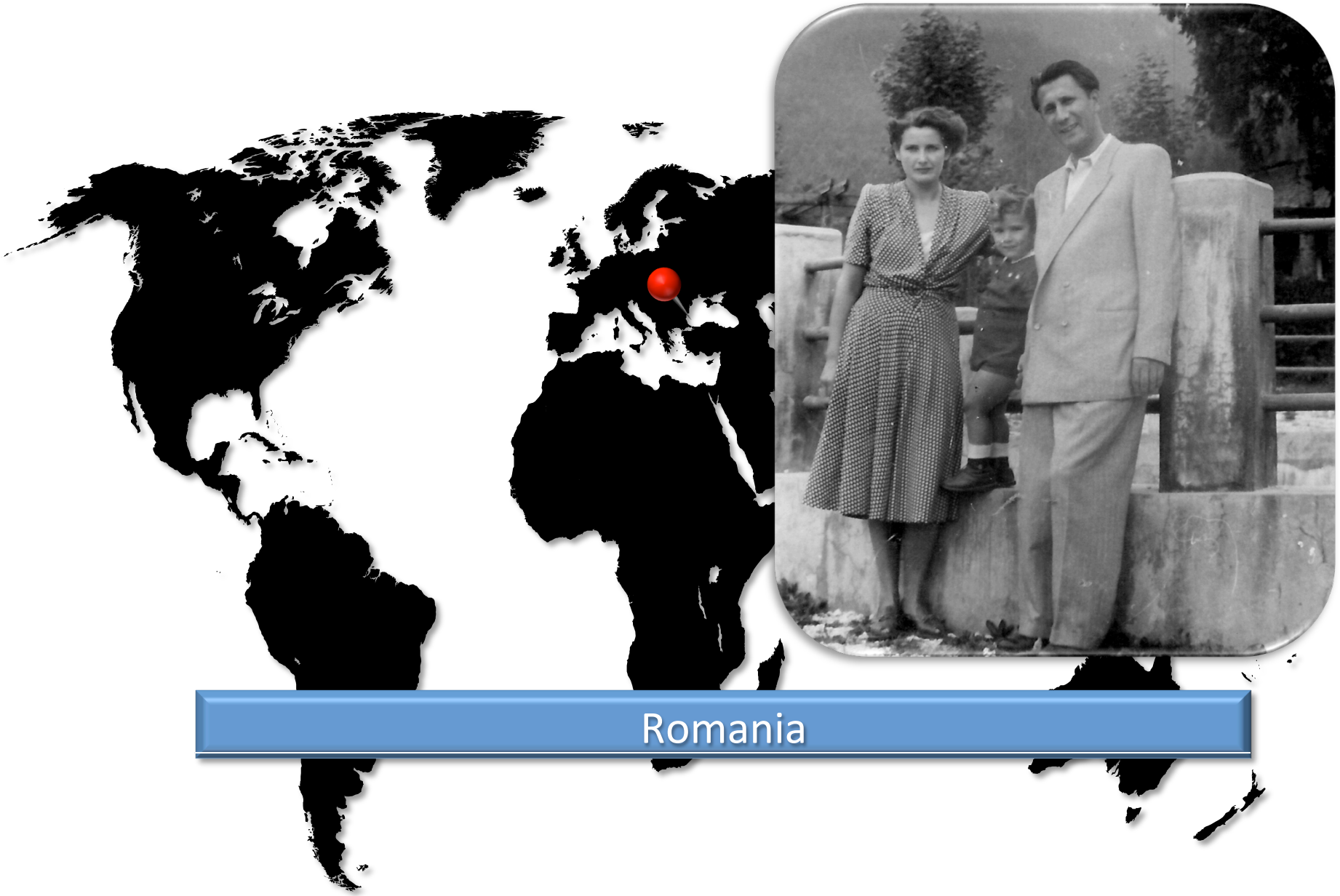
MART AND HOSPITAL PAVILION


Stony Brook
Children's

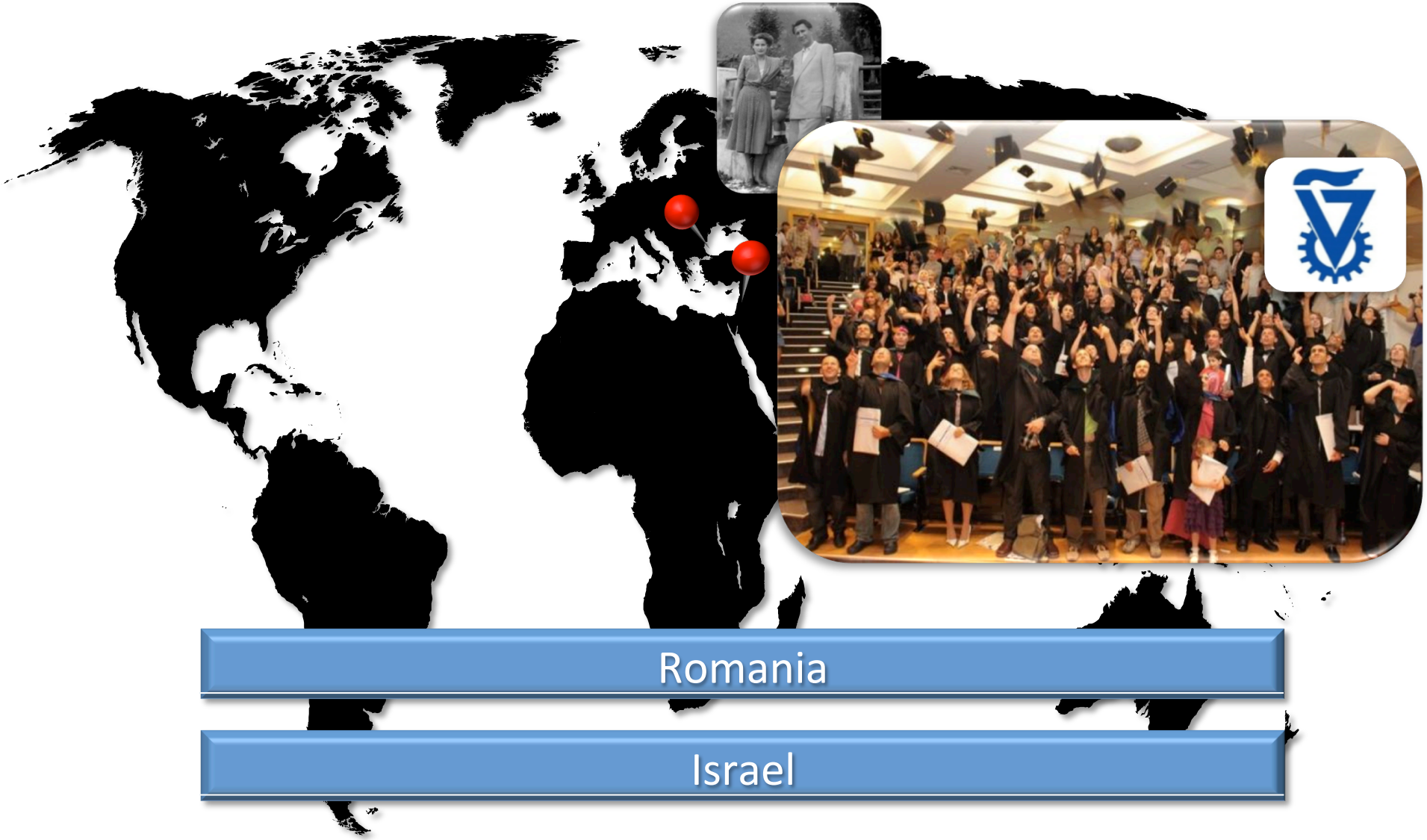
- Who am I?
- How to control cost?
- Why is it important to improve quality & safety?
- How do physicians fit in all this?
- Can we be optimistic about the future?

A Life Spanning over Three Continents



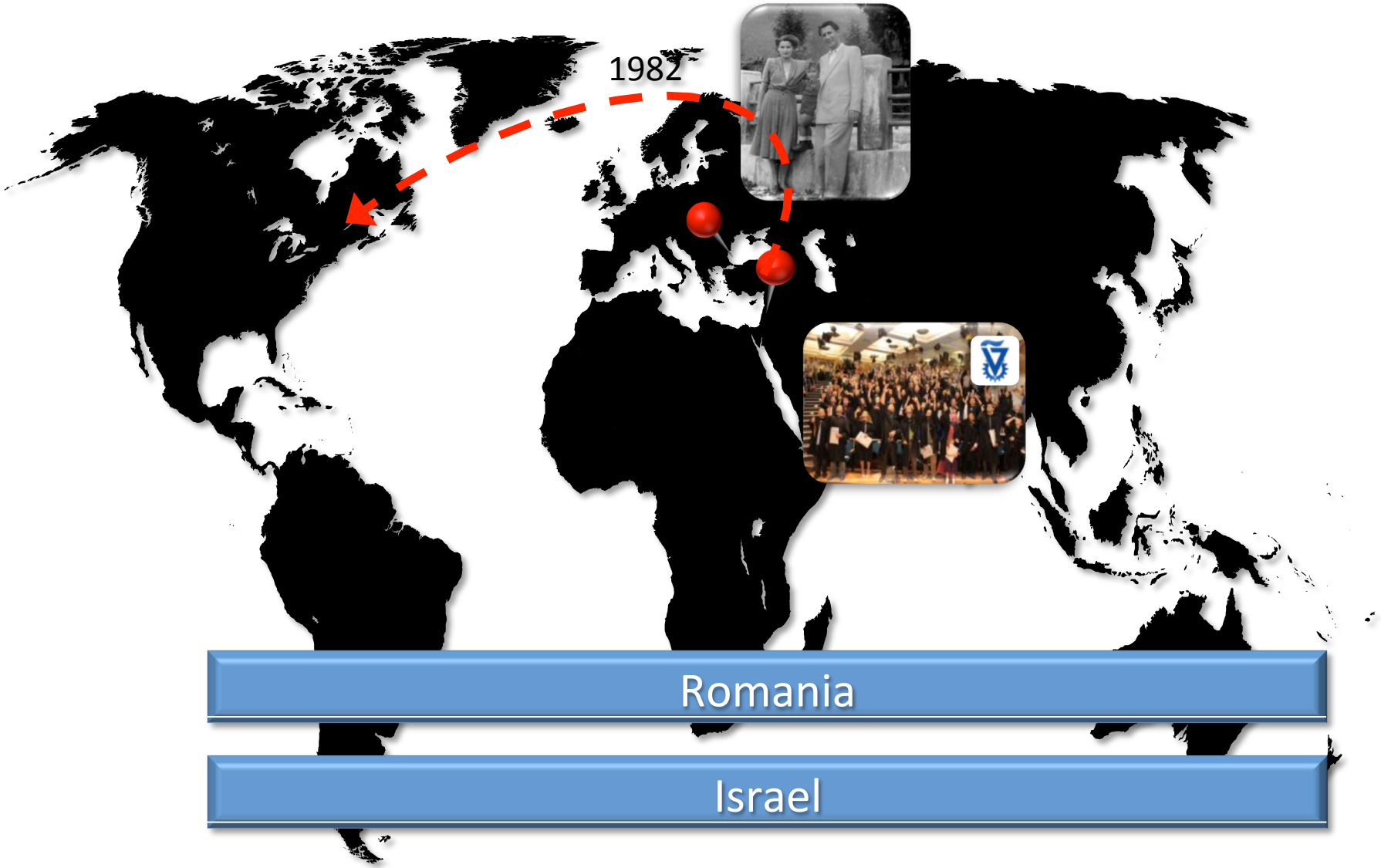


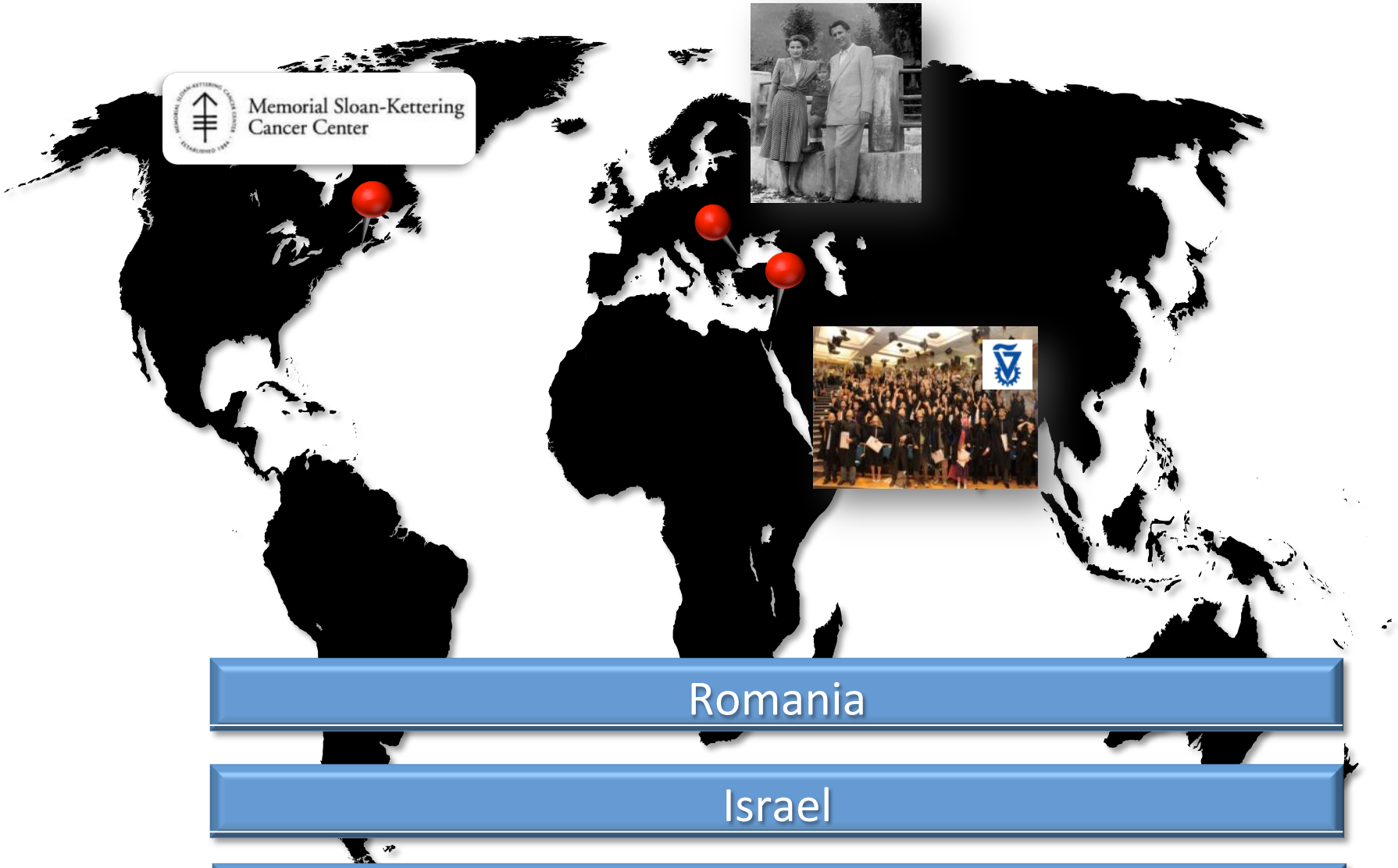
Romania

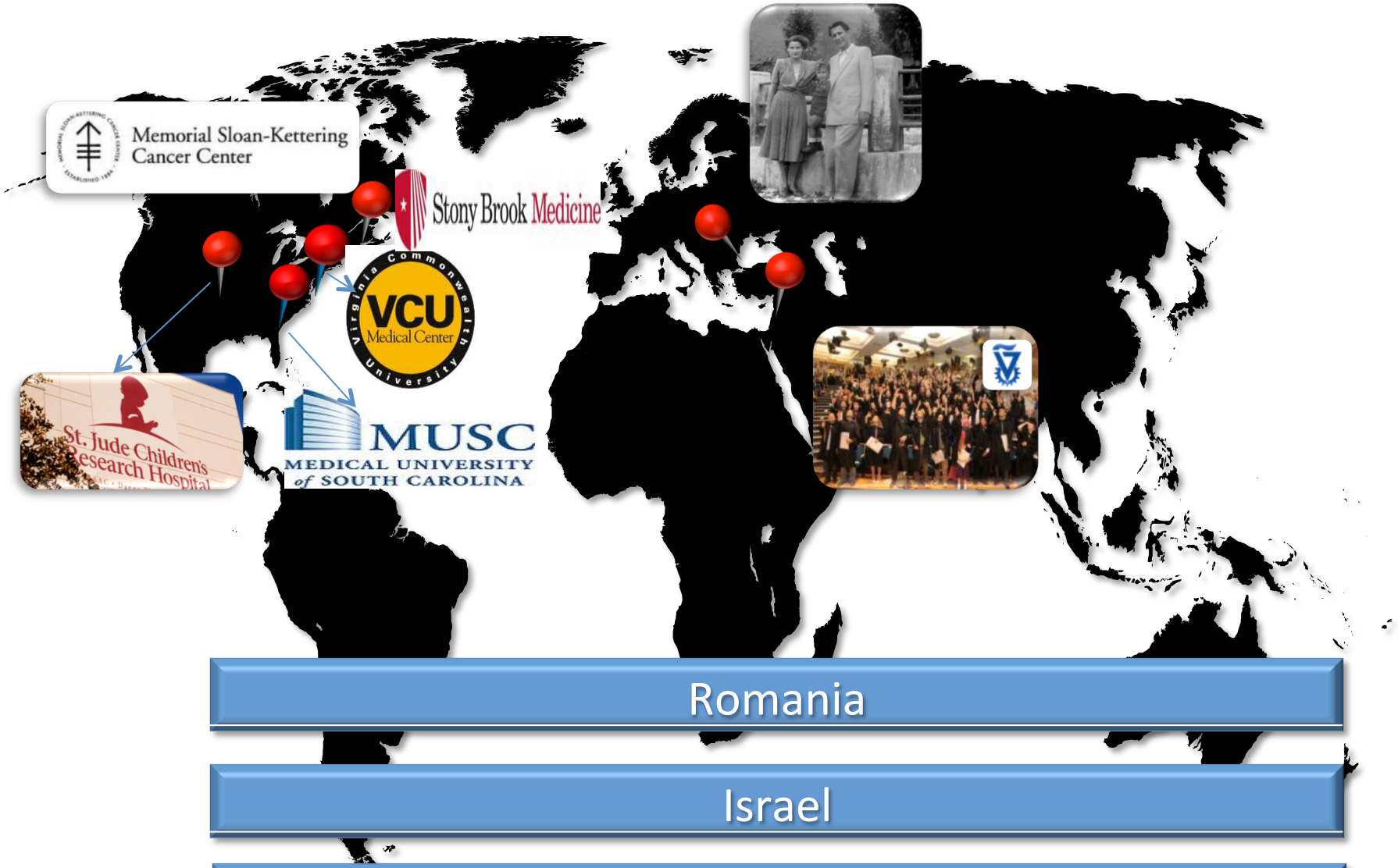


Romania

Israel


1982
Romania
Israel


Memorial Sloan-Kettering Cancer Center
Romania
Israel
United States


Memorial Sloan-Kettering Cancer Center
Stony Brook Medicine
VCU Medical Center
Virginia Commonwealth University
St. Jude Children's Research Hospital
MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA
Romania
Israel
United States

Faculty Positions

Memorial Sloan-Kettering Cancer Center

Attending Physician/Assistant Member, 1985-1989

Cornell University

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Director, Pediatric Hematology/Oncology and Professor of Pediatrics, 1989-2000

VCU Medical Center

Jesse Ball DuPont Professor and Chairman Department of Pediatrics, 2000-2008

St. Jude Children's Research Hospital
ALSAC • Danny Thomas, Founder
Finding cures. Saving children.

Clinical Director & Executive Vice President; Member & Endowed Chair, 2008-2013

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Chief Medical Officer 2013-present

- Who am I?
- Why & how to control costs?
- Why is it important to improve quality?
- How do physicians fit in all this?
- Can we be optimistic about the future?

High U.S. Spending Is Not Due Primarily to Over Use of Services

U.S. hospital costs are 70% higher but utilization is 30% lower than other developed countries

	Percent of GDP	Real Annual Avg Growth Rates (%) 1970-2005	Inpatient Spending per Capita (U.S. $ PPP)	Inpatient Acute Care Days per Capita
U.S.	15.3	4.4	$1526	0.7
OECD Median	9.1	4.1 (2.3-6.8)	$904	1.0 (0.4-2.1)

Source: Anderson, GF. Frogner , BK. Health Affairs, November 2008

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Price of U.S. Services are Considerably Higher

Price of Services (in US Dollars)	US	France	Switzerland
Routine Office Visit	89	23	64
Cost per hospital stay	15,734	3,396	4,566
Hip replacement surgery (hospital and physician)	38,017	11,353	17,521
Coronary Artery Bypass graft (hospital and physician)	67,583	16,140	25,486

Average US generalist, income = 5x average US worker.

Average US specialist, income = 10x average US worker.

Average OECD generalist, income = 2x average OECD worker.

Average OECD specialist, income = 2.7x average OECD worker.

Source: Topher, S. Annals of Internal Medicine October 2012

Role of Technology:

Technology Will Lower Costs and Increase Benefits of Care:

1. Sustaining **long-term reductions** in the cost of care will **rely more on productivity** rather than efficiency
2. **Productivity strategies** will require **innovative** technology
3. Communication and information **technologies can play a major role in improving productivity**
4. The same **technologies** can be used to **raise the benefits** of care through **personalization**, **transparency**, **self service** and other mechanisms

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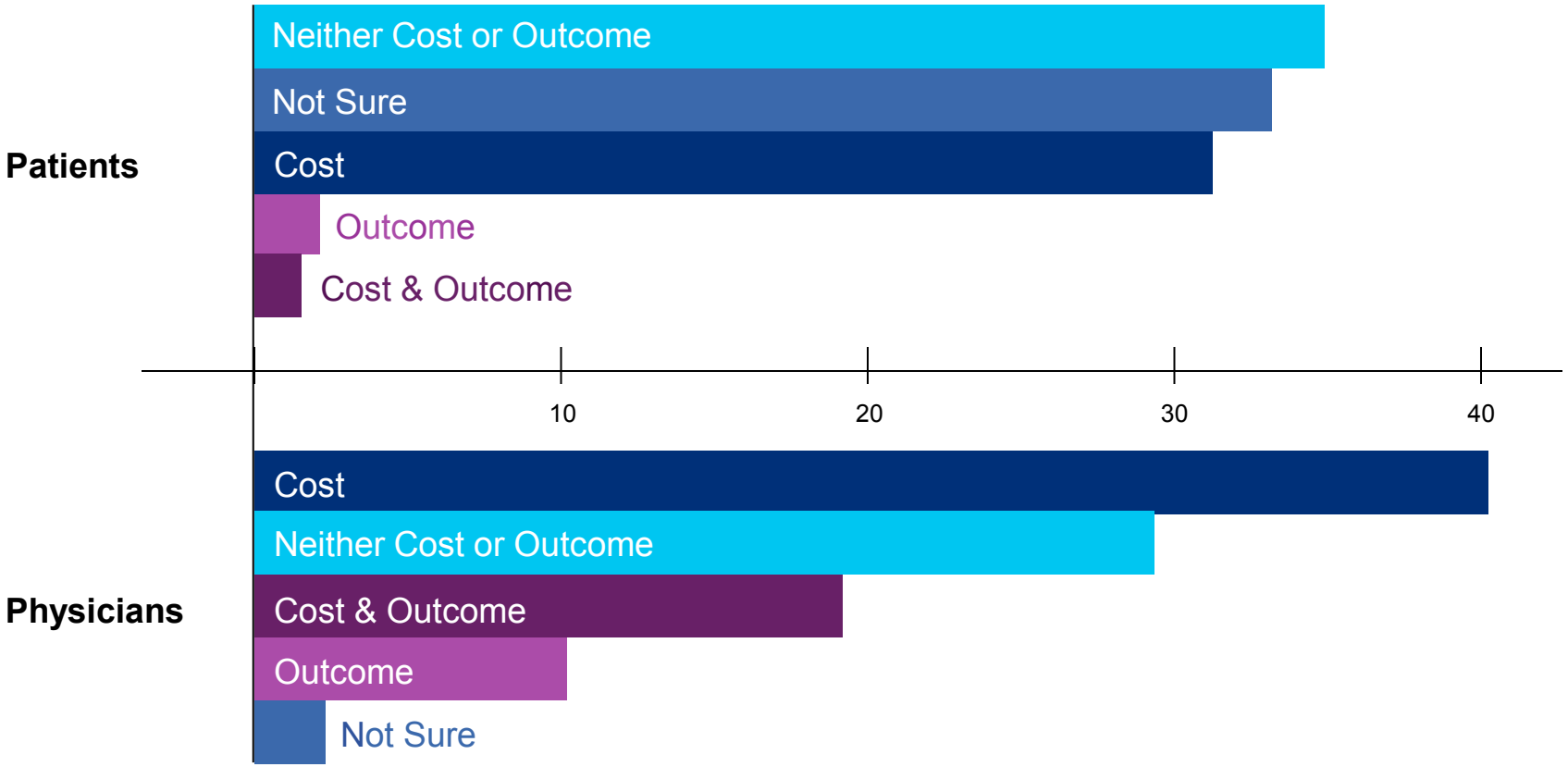
For Most Patients, "Value" is Neither Outcomes nor Cost

"In your own words, how would you define "value" in healthcare? Please be specific." **(unaided response)**



Source: Quintiles, The New Health Report 2011

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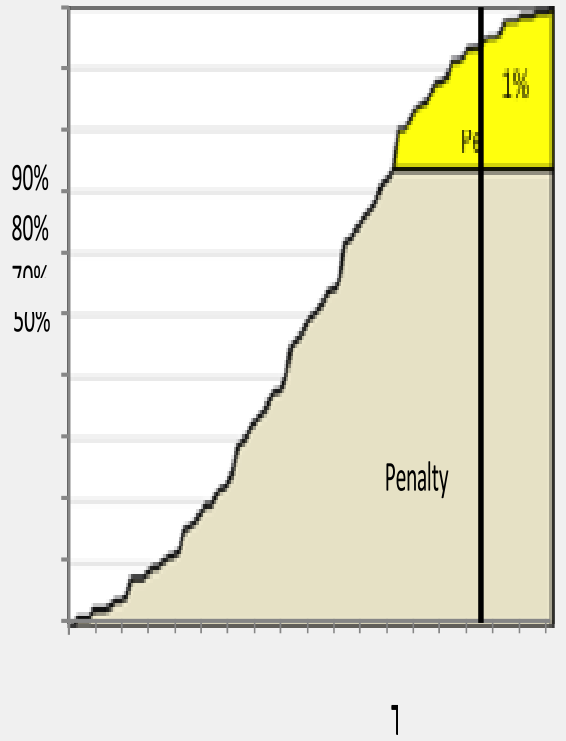
COST- WHY SHOULD PHYSICIANS CARE

	FFY 2013			FFY 2014			FFY 2015		
	Domain Weight	Domain Score	Percentile	Domain Weight	Domain Score	Percentile	Domain Weight	Domain Score	Percentile
Domain 1 Score (PSI-90*)	Does Not Apply						35%	10.0	90th
Domain 2 Score (CLABSI/CAUTI*)							65%	8.0	80th

Total HAC Score	Does Not Apply	8.7	95th
75th Percentile Total HAC Score		7.00	
Receives 1.0% Reduction?		Yes	
Estimated Annual Impact		($1,733,251)	



- Under HACRP, hospital payments are reduced by 1.0% if hospital-specific performance on specified HAC measures grouped into domains fall within the 75th percentile (bottom 25%) of national performance.

- The table displays hospital-specific domain scores, percentile performance (100th=worst), the Total HAC Score, whether the hospital falls above the 75th percentile, and the estimated annual dollar impact for the program year. The graph displays the hospital's Total HAC Score in relation to the penalty quartile.

Size and Scale of Available Technology will be Far Beyond Anything Comprehended or Utilized to Date

BIG DATA

PERSONAL

SOCIAL

- Quantity and Velocity
- Data Supply Chain vs. Data Lake
- Hyperscale Hardware
- Internet of Things

In 2017, the equivalent of all movies ever made will cross the global internet every 3 minutes

Source: Accenture Technology Trends 2014 ;
Cisco VNI Global Mobile Data Traffic Forecast 2013 – 2018 (January 2014)

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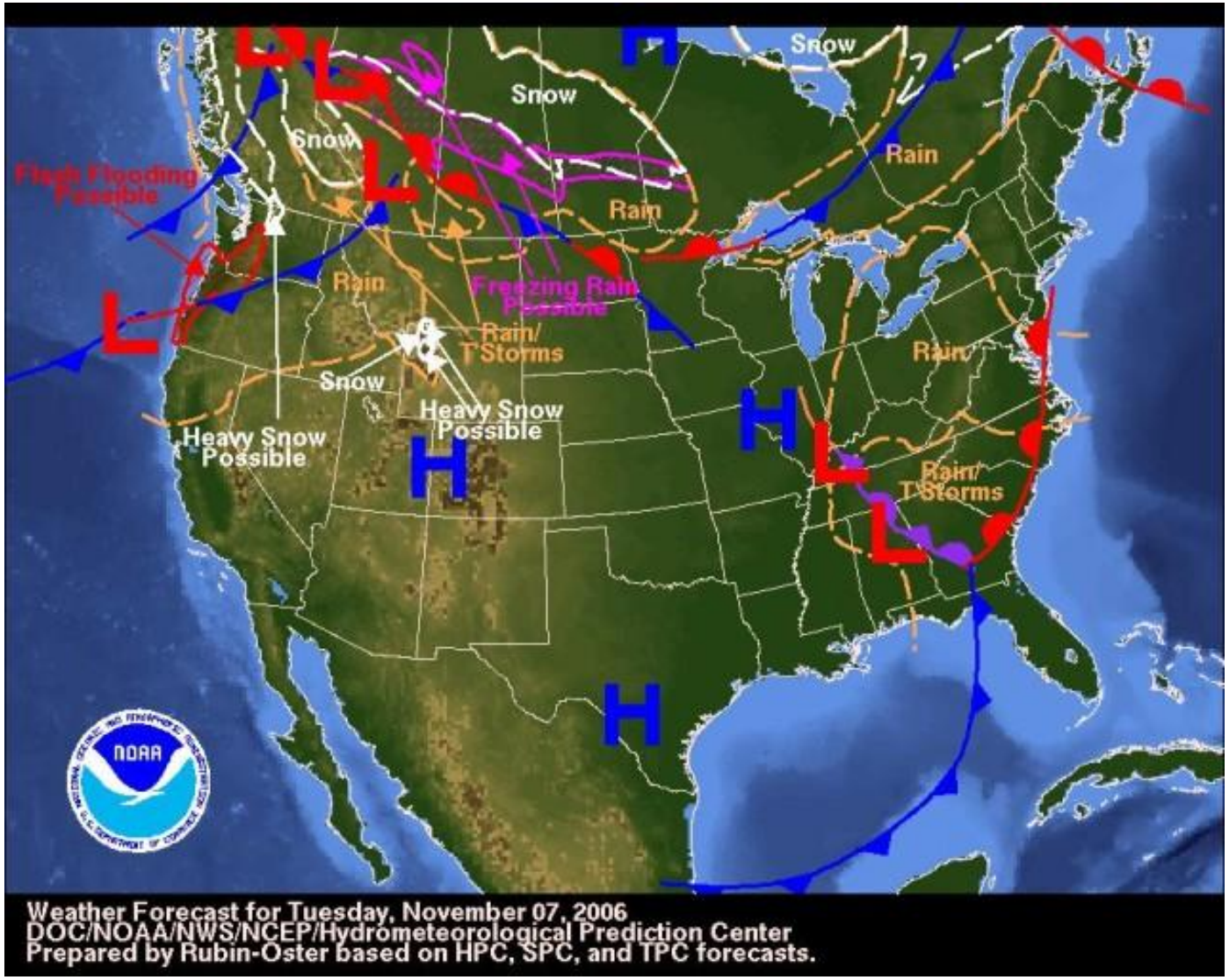
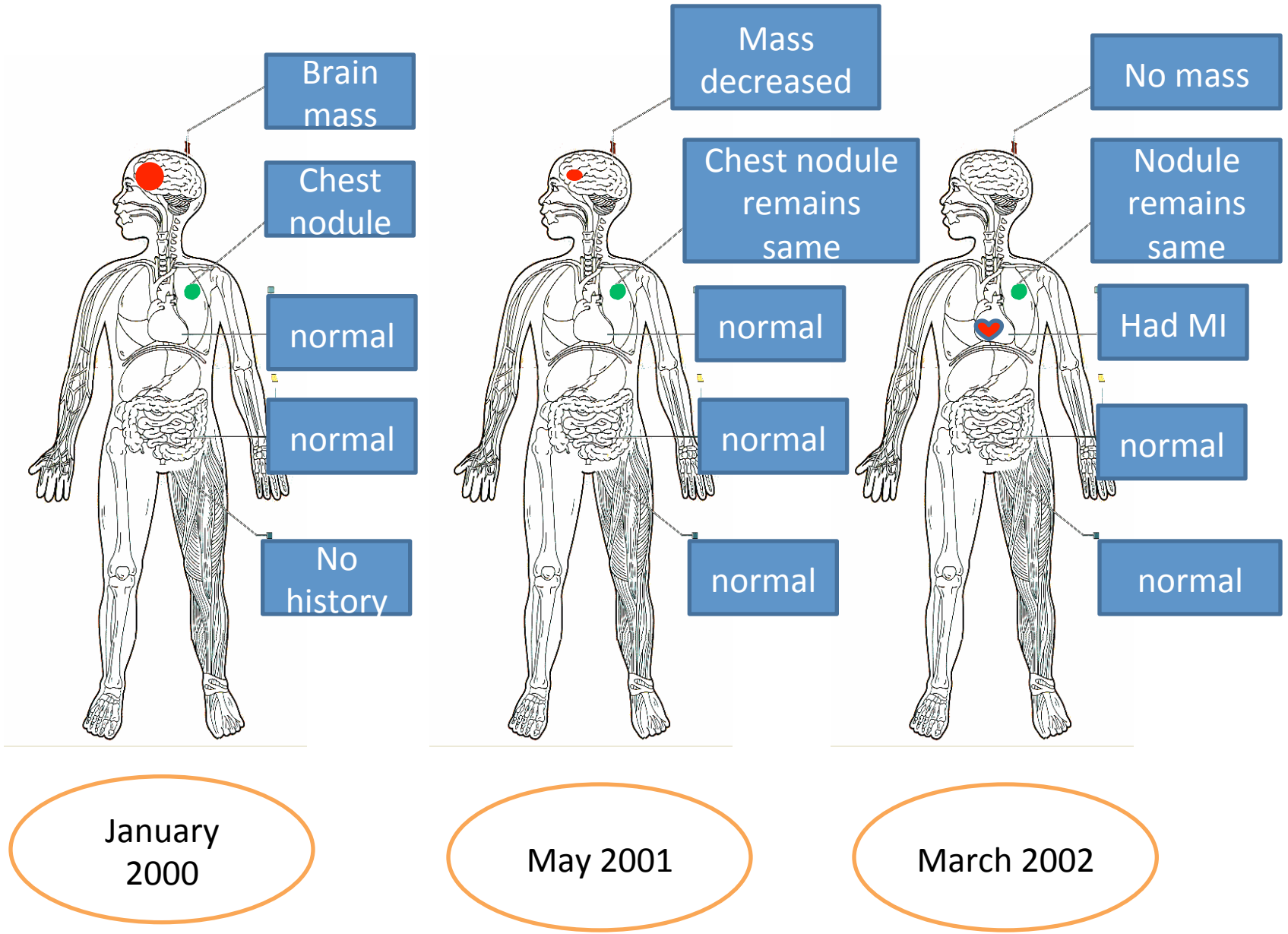
Challenge: Turn EMR into a simple Visual



Simple self-explanatory visual

Visualization of EMR



Population Health & Hospital

- Sharing data across all points of care is only way to provide coordinated care
- Data access becomes critical for patients, families, doctors, staff
- Mobile applications become more important and essential

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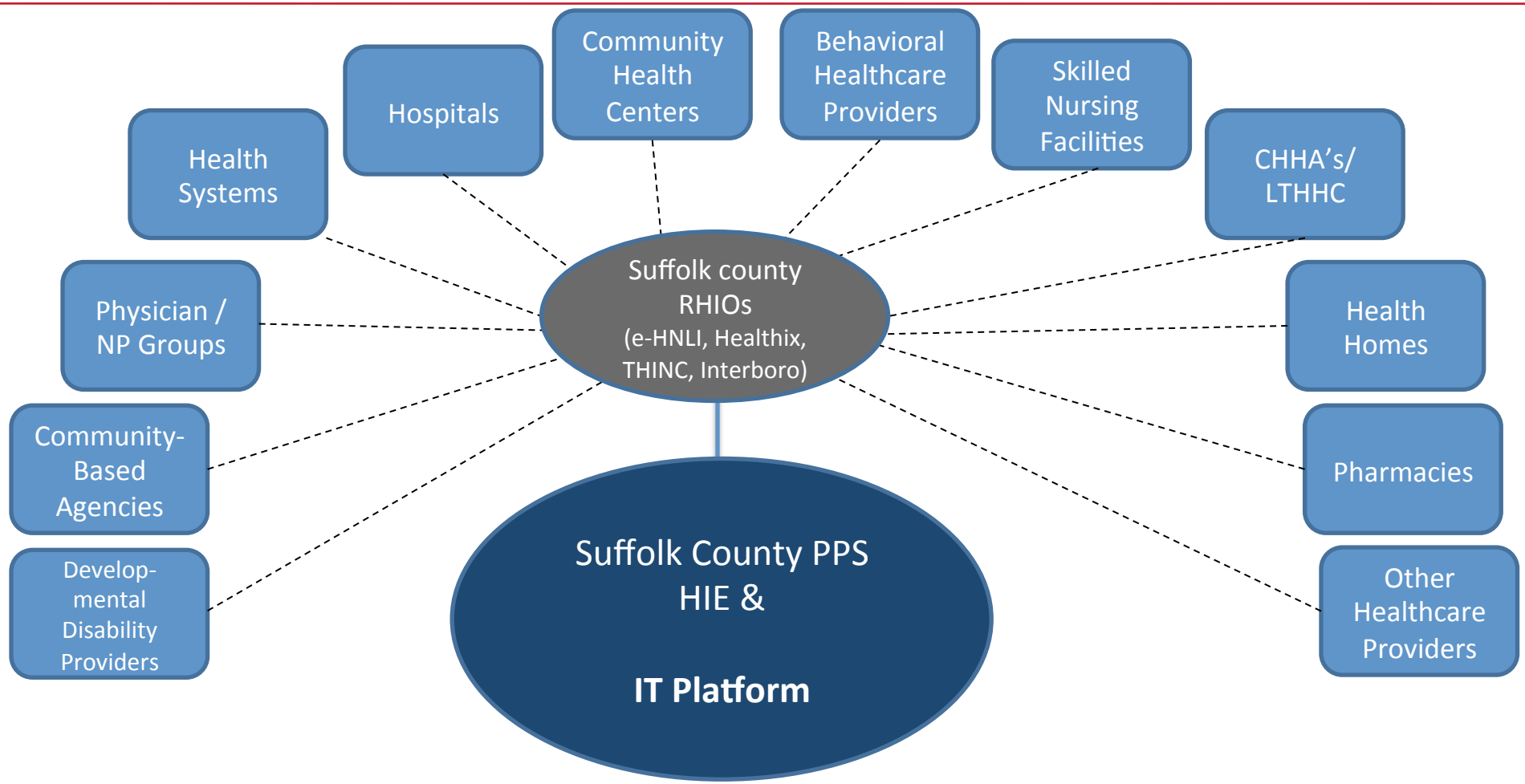
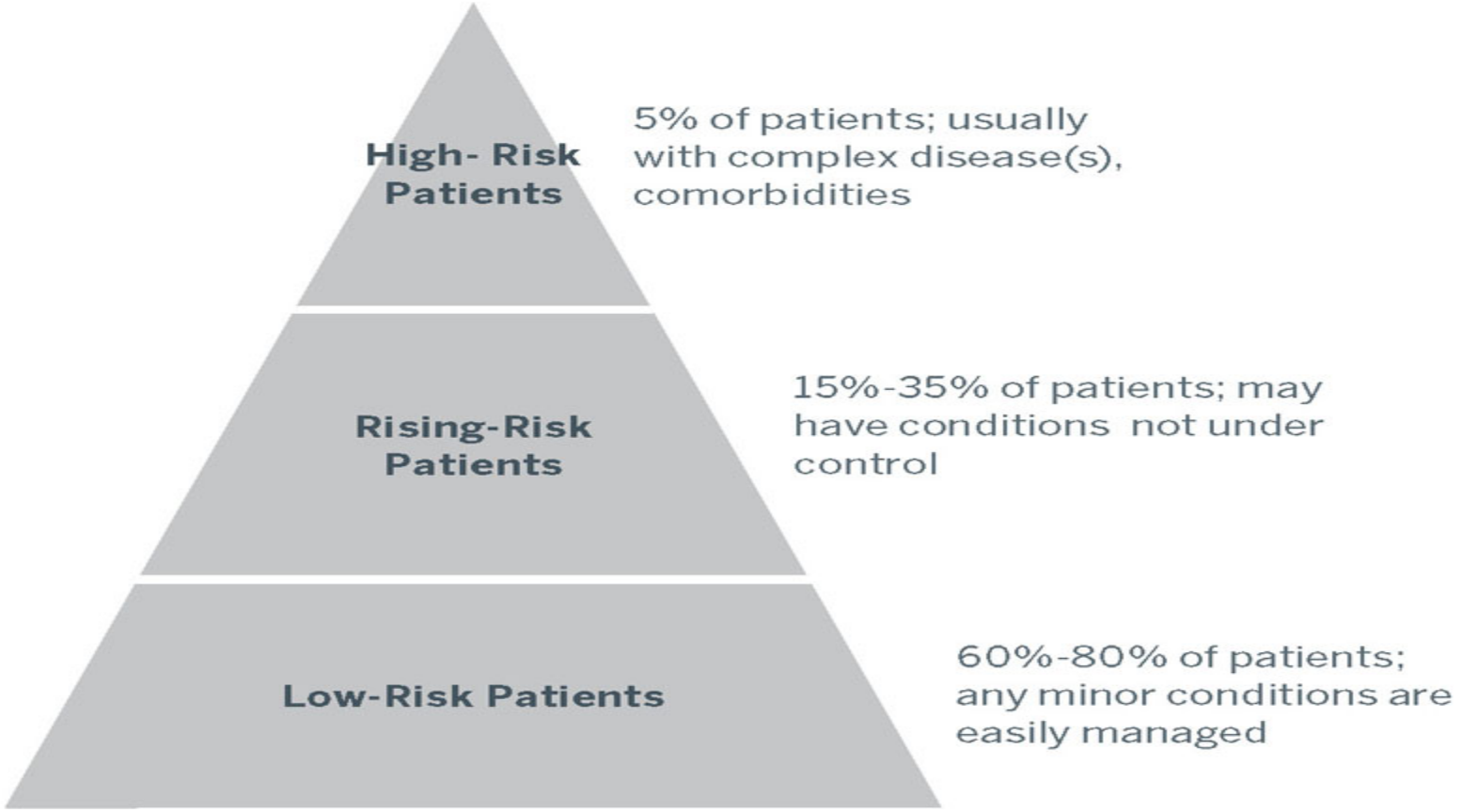
Big data: Connecting the Partners



Target Three Types of Patients

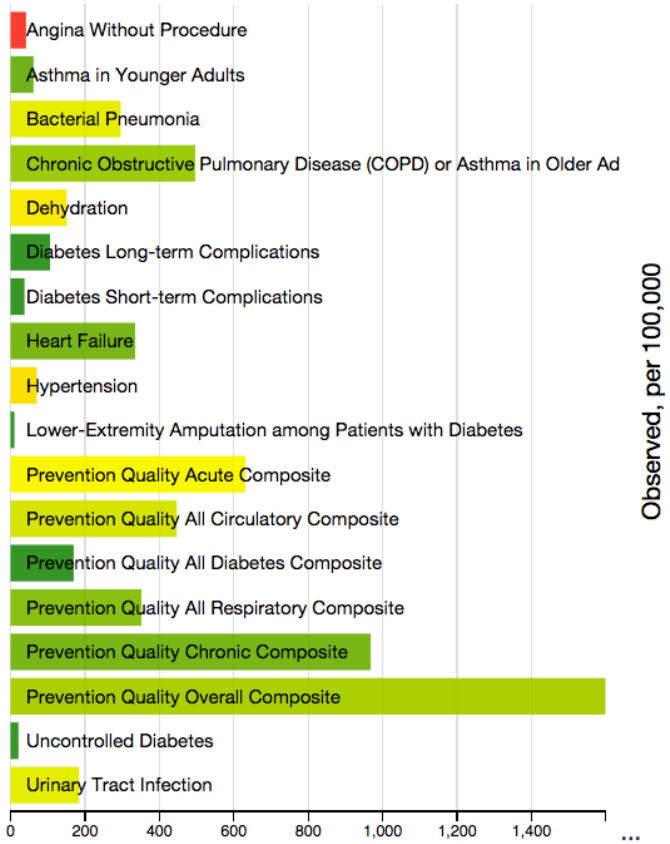
Segment Care Management Models Based on Patient Care Needs

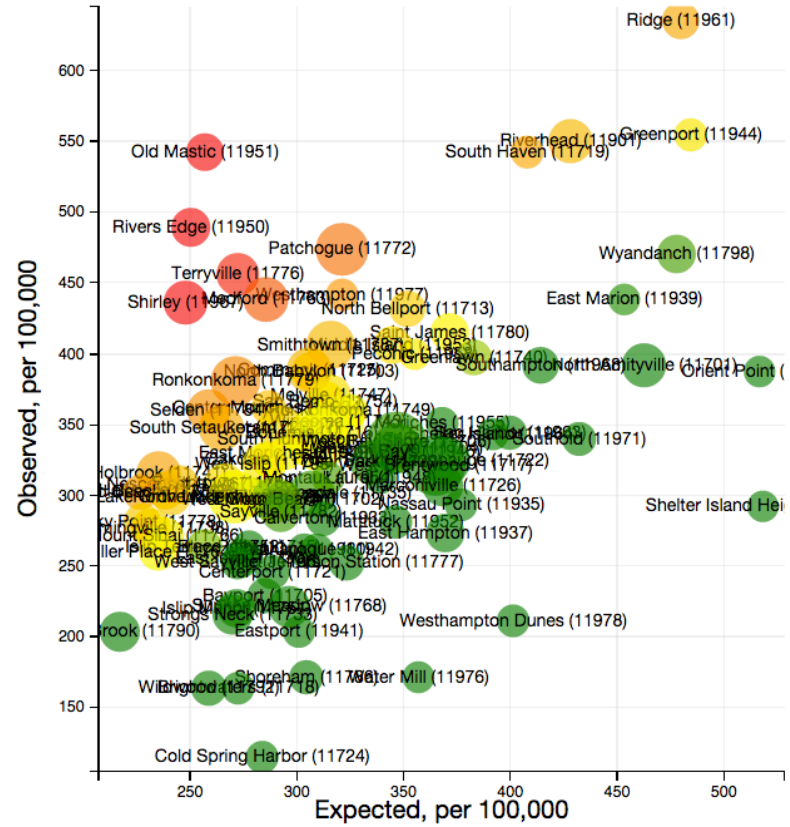


Population Health Statistics

- The county of residence in USA means a 14-year difference in life expectancy
- On the Blue Washington DC subway route, there is a 9-year difference in life expectancy between downtown and Fairfax, Virginia
- Rheumatoid arthritis & DM associated with living close to highly traveled roads

mathbiol.github.io/openHealth/?jobs/pqiSuffolk.js



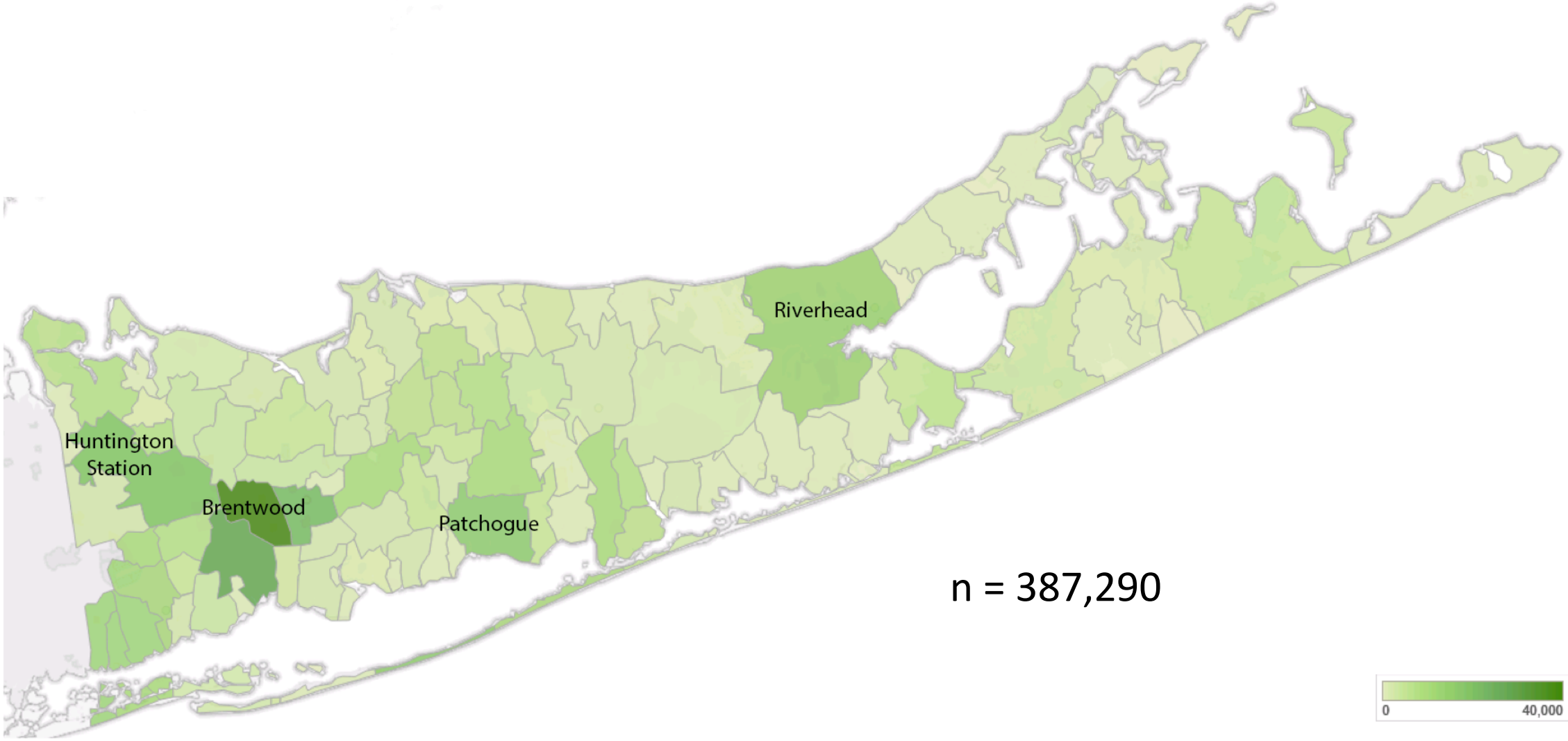


Observed / expected tabulate

keep updated

	Angina Without	Asthma in Younger	Bacterial Pneumonia	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in	Dehydration	Diabetes Long-term	Diabetes Short-term	Heart Failure	Hypertension	Lower-Extremity Amputation among	Prevention Quality Acute	Prevention Quality All Circulatory	Prevention Quality All Diabetes	Prevention Quality All Respiratory	Prevention Quality Chronic	Prevention Quality Overall	Uncontrolled Diabetes	Urinary Tract

Hot Spot Map: Medicaid and Uninsured in Suffolk County



Medicaid Members Data from DSRIP 2012; Uninsured data from ACS 2012 5 Year Estimate

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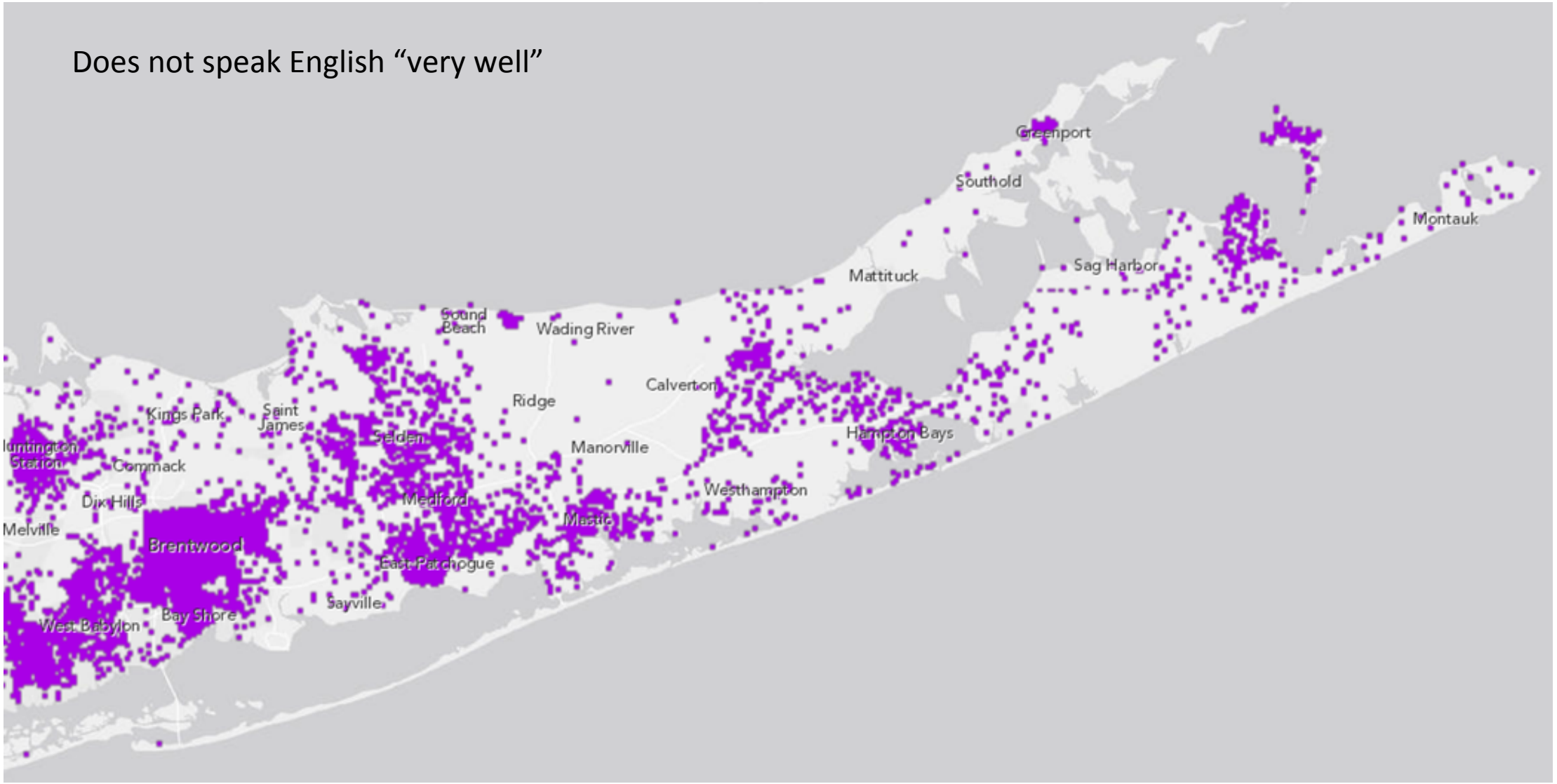
Hot Spot Map: Spanish Speakers Suffolk County



Census 2011 Language Mapper

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ESSAY
Hooking-Up at an Affirmative-Consent Campus? It's Complicated

IT'S THE ECONOMY
Can You Uber a Burger?


When Women Become Men at Wellesley


Cristela Alonzo Wants to Make America Laugh


How Billionaire Oligarchs Are Becoming Their Own Political Parties


The Beggar

MAGAZINE

29 COMMENTS

Can Big Data Tell Us What Clinical Trials Don't?

OCT. 3, 2014

Eureka

By VERONIQUE GREENWOOD

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Pin
Save
More

BIRDMAN
NOW PLAYING
GET TICKETS

When a helicopter rushed a 13-year-old girl showing symptoms suggestive of kidney failure to Stanford's Packard Children's Hospital, Jennifer Frankovich was the rheumatologist on call. She and a team of other doctors quickly diagnosed lupus, an autoimmune disease. But as they hurried to treat the girl, Frankovich thought that something about the patient's particular combination of lupus symptoms — kidney problems, inflamed pancreas and blood vessels — rang a bell. In the past, she'd seen lupus patients with these symptoms develop life-threatening blood clots. Her colleagues in other specialties didn't think there was cause to give the girl anti-clotting drugs, so Frankovich deferred to them. But she retained her suspicions. "I could not forget these cases," she says.

Back in her office, she found that the scientific literature had no studies on patients like this to guide her. So she did something unusual: She searched a database of all the lupus patients the

http://www.nytimes.com/2014/10/05/magazine/can-big-data-tell-us-what-clinical-trials-dont.html?_r=0

Consumers Demand Technology Becomes Highly Personalized and Available on Their Terms

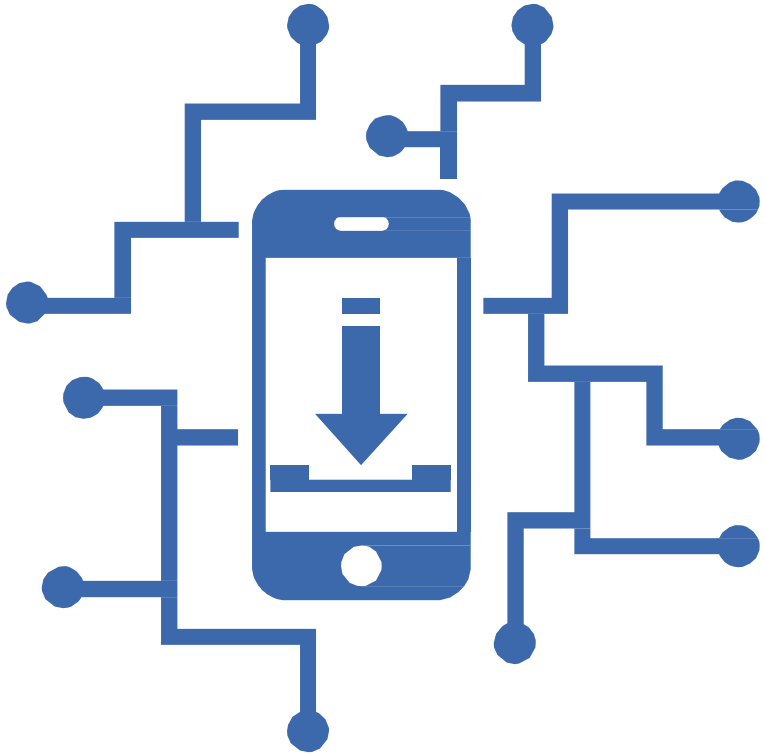
BIG

PERSONAL

SOCIAL

- **Context Aware**
- **Augmented**
- **Digital**

By 2018, there will be 5 billion global mobile users and 10 billion mobile-ready devices and connections



Source: Accenture Technology Trends 2014 ;
Cisco VNI Global Mobile Data Traffic Forecast 2013 – 2018 (January 2014)

Social Tech Extending Beyond Status Updates to Content Creation, Self Service and Behavioral Change

BIG

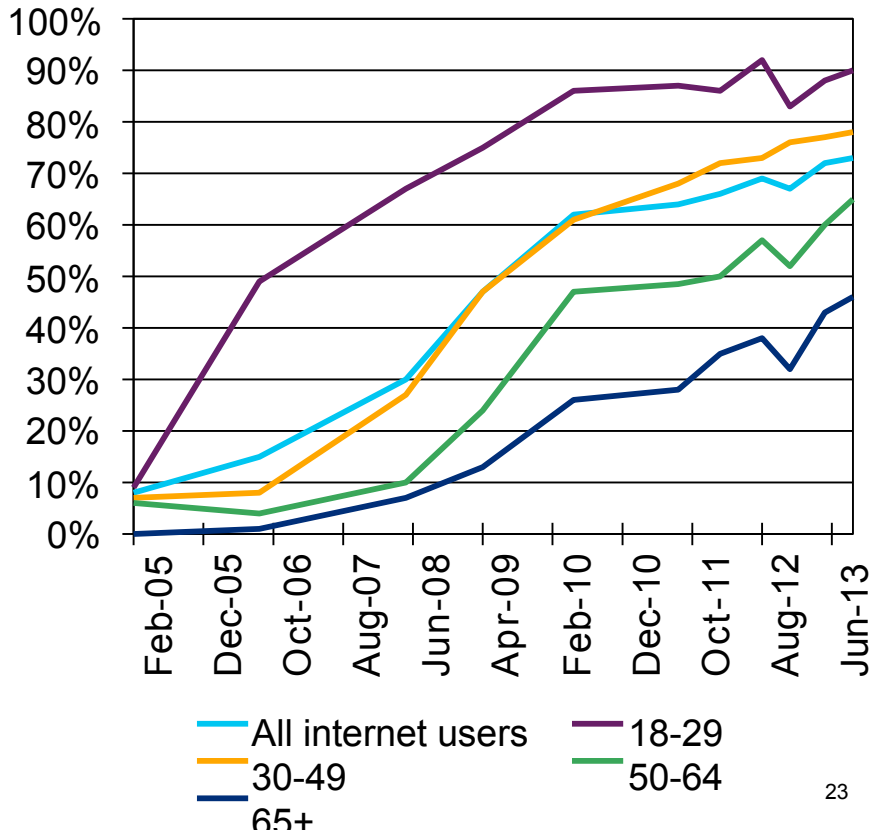
PERSONAL

SOCIAL

- **Community**
- **Self–Organization**
- **Crowd Source Content**
- **Workforce**

Source: Accenture Technology Trends 2014;
Pew Research Internet Project 2013

Social networking site use by age group, 2005-2013
(% of Internet users in each age group who use social networking sites, over time)



LAVER'S INSIGHTS

- Who am I?
- What's next to control costs?
- Why is it important to improve quality and safety?
- How do physicians fit in all this?
- Can we be optimistic about the future?

- Because it is the right thing to do:
  1. For patients
  2. Providers
  3. Payers


Perfection is not attainable,
but if we chase perfection
we can catch excellence.
Vince Lombardi
BrainyQuote

Stony Brook Medicine

FOR PATIENTS: A PROMISE OF A IDEAL PATIENT EXPERIENCE

- The people responsible and accountable for maintaining Quality on the front end will interact with the quality data reports (*e.g.*: **NHIQM)** program on a continuing basis
- **Data** will inform the processes, so changes can be made in real time
- **NMs**, **Physician Leads** and **Quality staff** will interact with each other to make changes and achieve compliance

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QUALITY: VISION

- Big Q= Best medical care delivery with best possible health outcomes.

- Become top 10 on the UHC list in Safety and Accountability in 5 years (10-20 points/year).

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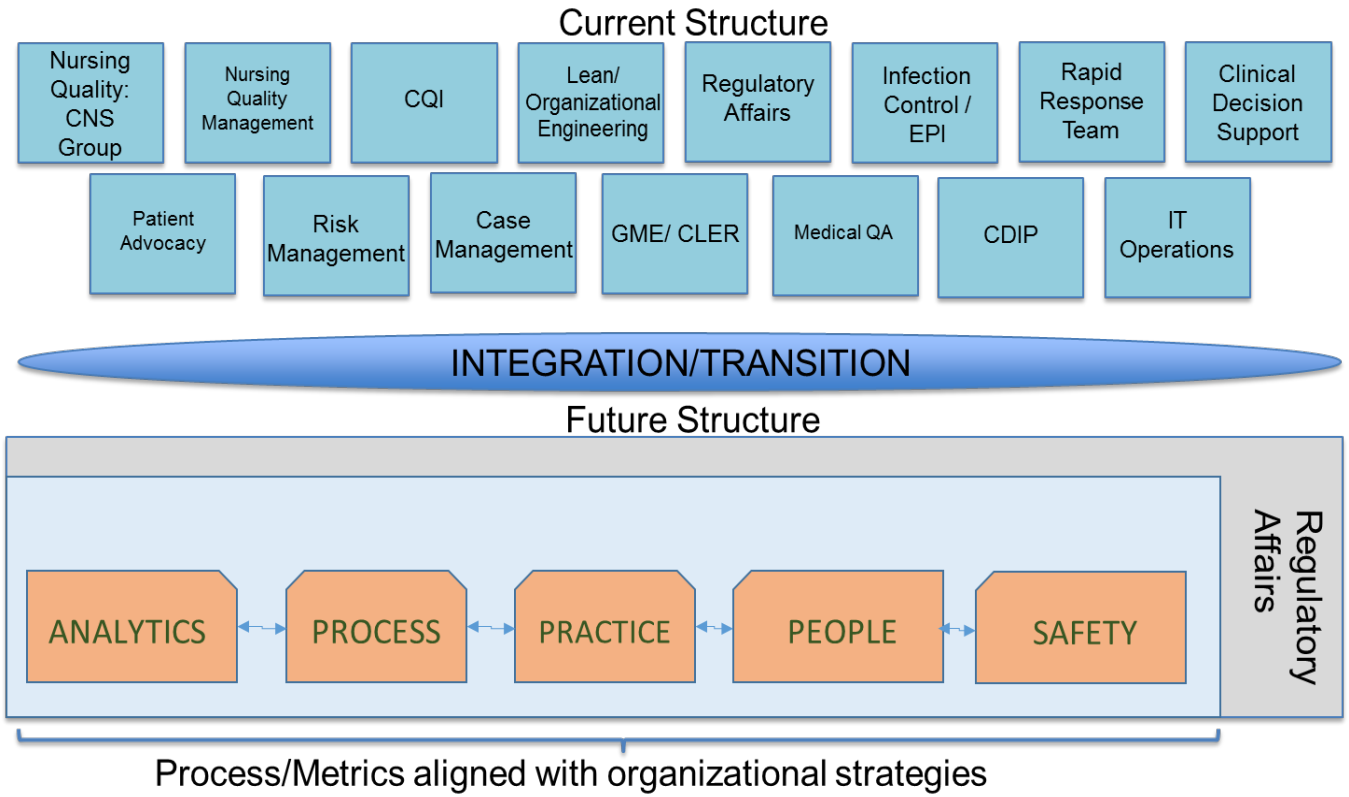
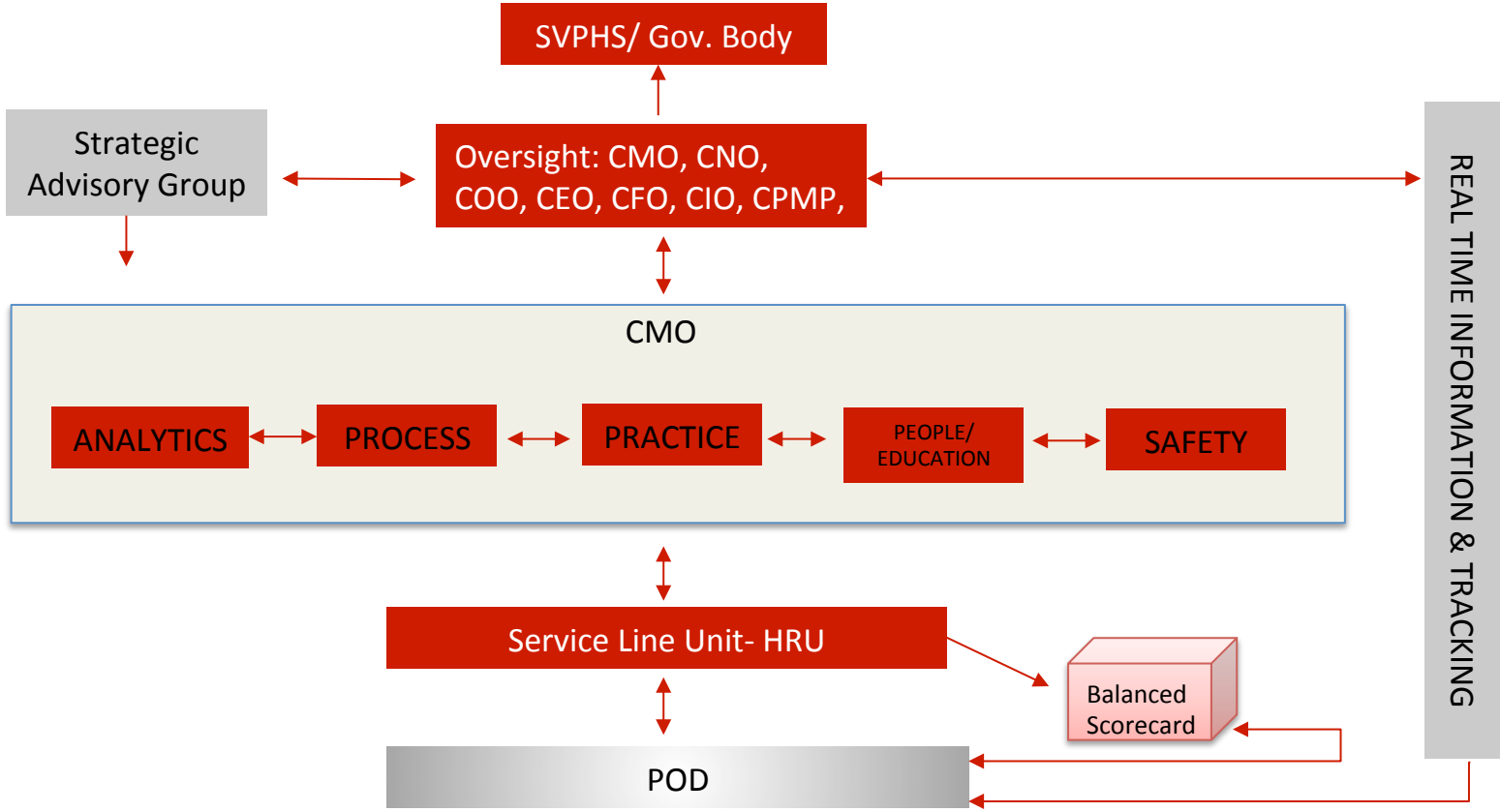
INTEGRATION OF CURRENT STRUCTURE INTO 5 FUNCTIONAL GROUPS




SVPHS/ Gov. Body
Strategic Advisory Group
Oversight: CMO, CNO, COO, CEO, CFO, CIO, CPMP,
REAL TIME INFORMATION & TRACKING
CMO
ANALYTICS
PROCESS
PRACTICE
PEOPLE/ EDUCATION
SAFETY
Service Line Unit- HRU
Balanced Scorecard
POD

BIG Q: ORGANIZATIONAL ALIGNMENT TO BEST PRACTICE MODELS

Malcolm Baldrige National Quality Award	ANCC Magnet Recognition Program	Big Q
Leadership and Strategic Planning	Transformational Leadership and Structural Empowerment	Strategic Advisory and 5 Functional Groups
Measurement, Analysis, Knowledge Management	New Knowledge, Innovations, and Improvements	Analytics, Process, Practice
Workforce Focus	Exemplary Professional Practice	Workforce Engagement and People
Process Management	Exemplary Professional Practice , Empirical Outcomes	Process
Results	Empirical Outcomes	Ideal Patient Experience

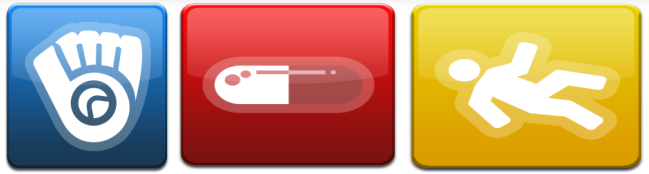
FOR PATIENTS: ALIGNMENT WITH PATIENT CENTEREDNESS

- Do not harm me (patient safety group)
- Cure me and alleviate my suffering (process and practice group)
- Treat me with respect (analytics and practice)
- Do not let me wait/get me to the right place (analytics, process)
- Keep me well (work force engagement, process)

CURRENT	FUTURE
Structure by roles	Designed for function
Perpetuates silo-type work	Inter-professional shared governance
Driven by outcomes and old data	Informed by real time data, focusing on both key processes and outcomes
Cross service ambiguity regarding authority, responsibility, and ownership	Framed by known models of success
Limited buy-in at the unit level	Streamlined to support service lines and units
Directed versus supported work	Supports unit-based focus on the Stony Brook brand promise of the ideal patient experience
Not linked to overall organizational changes	Hinged to other structural changes in the organization

FEEDBACK & RISK

Improving Patient Safety, Service Recovery and Risk Management



RL6 Risk = SB SAFE

- Endorsed by AHA,1500 clients include Presbyterian, MSK, Cleveland Clinic
- SBUH already utilizes Claims Management & Patient Feedback modules
- Product review by physicians, nurses, pharmacists, IT staff, Risk & Quality Management, CMO, Regulatory & Safety AD, DIO
- Quick entry mode< 5 minute entry on one page using UHMC sign on
- Report creation with drill down capability
- Customizable email alerts (VIP, fall risks, readmits)
- Links to patient, staff directories, hospital formulary
- Patient Safety Organization linkages to Best Practice data

RL6 Peer Review

- Stores peer review data in one place, offers secure, role-based user access, distributes sensitive files, sends review invites/notifications, documents results

Ease of Report Submission and Manager follow up

Feedback to Users subsequent to report submission

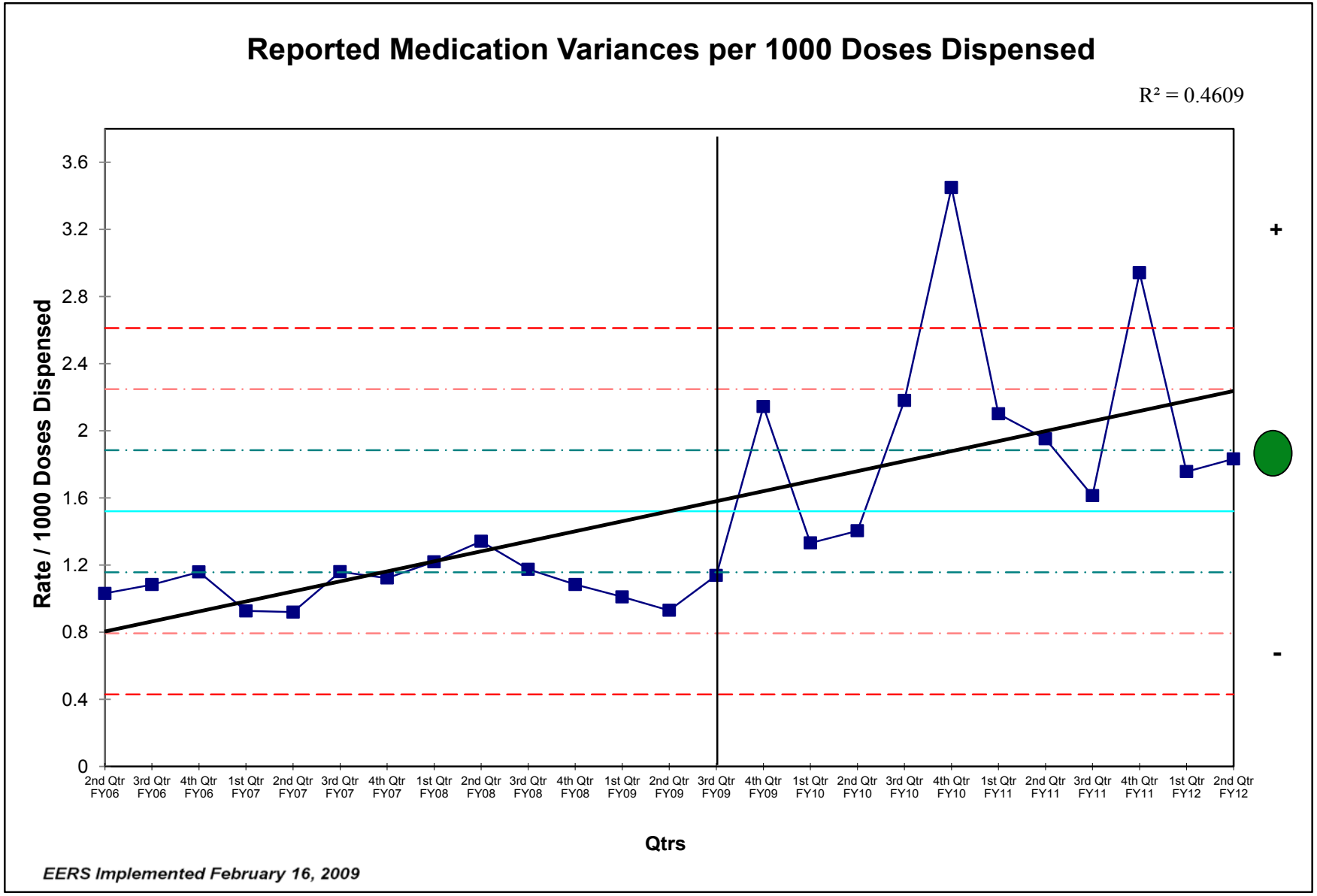
Ease of Report Creation with Drill Down capability

Comprehensive Software Module Integration

Trending, Analysis and Dissemination of Data and Report results

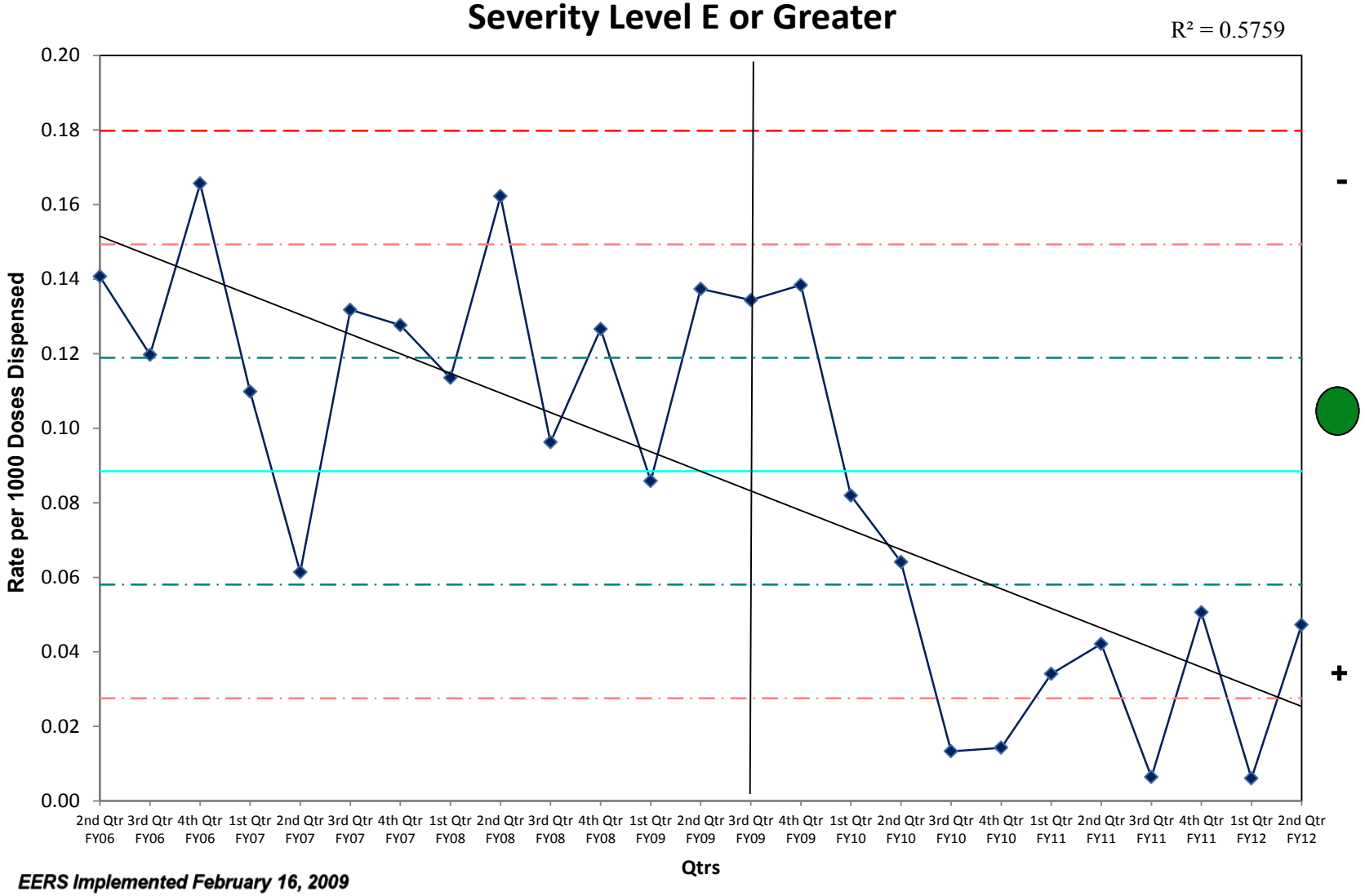
Programmatic acceptance, sustainability and resources are essential to identify opportunity, understand and improve Patient Safety

Reported Medication Variances per 1000 Doses Dispensed



EERS Implemented February 16, 2009

Reported Medication Variance that Effect the Patient Severity Level E or Greater



EERS Implemented February 16, 2009

- Who am I?
- What's next to control costs?
- Why is it important to improve quality?
- How do physicians fit in all this?
- Can we be optimistic about the future?

Leaders are often chosen primarily for characteristics that have little or no correlation with a successful tenure as leader:

- Examples of such include a long bibliography, scientific eminence, institutional longevity, ready availability, a willingness to not "rock the boat" or to accept inadequate resources.
- It is surprising how often management skills, interpersonal skills and experience are undervalued. One should ask what critical skills are absolutely essential for that role at that time in that particular settings.

Simone's Maxims, 1999

- The purely clinical chair ("do not blind me with science")
- The MD/Scientist chair- focused on cells
- The business oriented chair- building programs*
- The "clueless" dean- not a clinician nor a scientist
- The leader with no clinical experience making clinical decisions…

- Implementing evidence-based practices and reducing variability within similar services.
- Lack of physicians' involvement and leadership in quality projects and their lack of buying in.
- Developing a cadre of physicians interested in moving the needle (quality "champions").
- Exciting initiatives; for instance, the expansion of Palliative Care.

Quality of Life Service/Hospice Patient Involvement

- Patients needing service were seen in approximately 25% of instances in 2008
- In three years, nearly 95% of patients were seen by the service

T.C.A. § 68-11-272(2011) Quality Improvement Privileged

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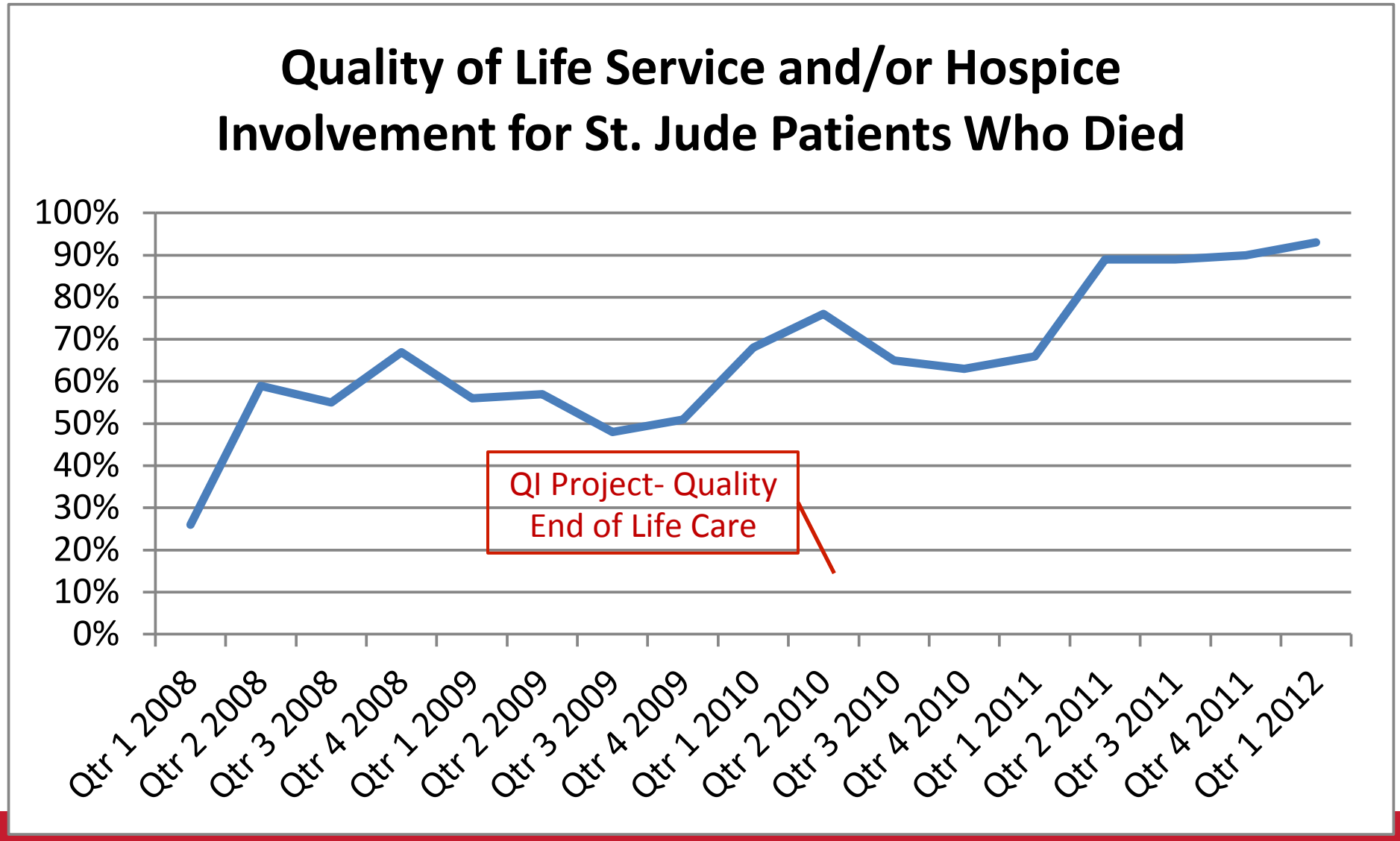
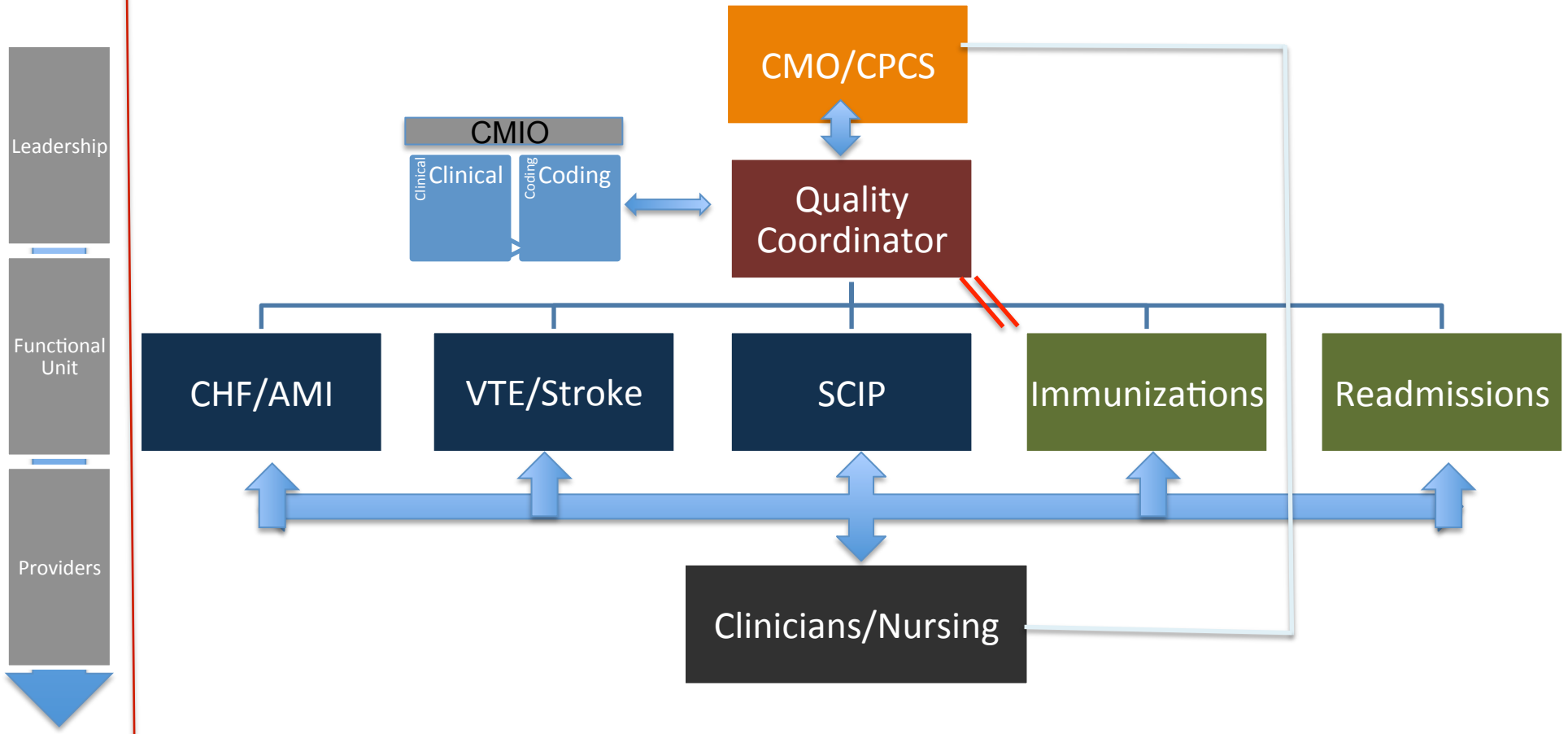


Stony Brook Medicine

TEAM WORK



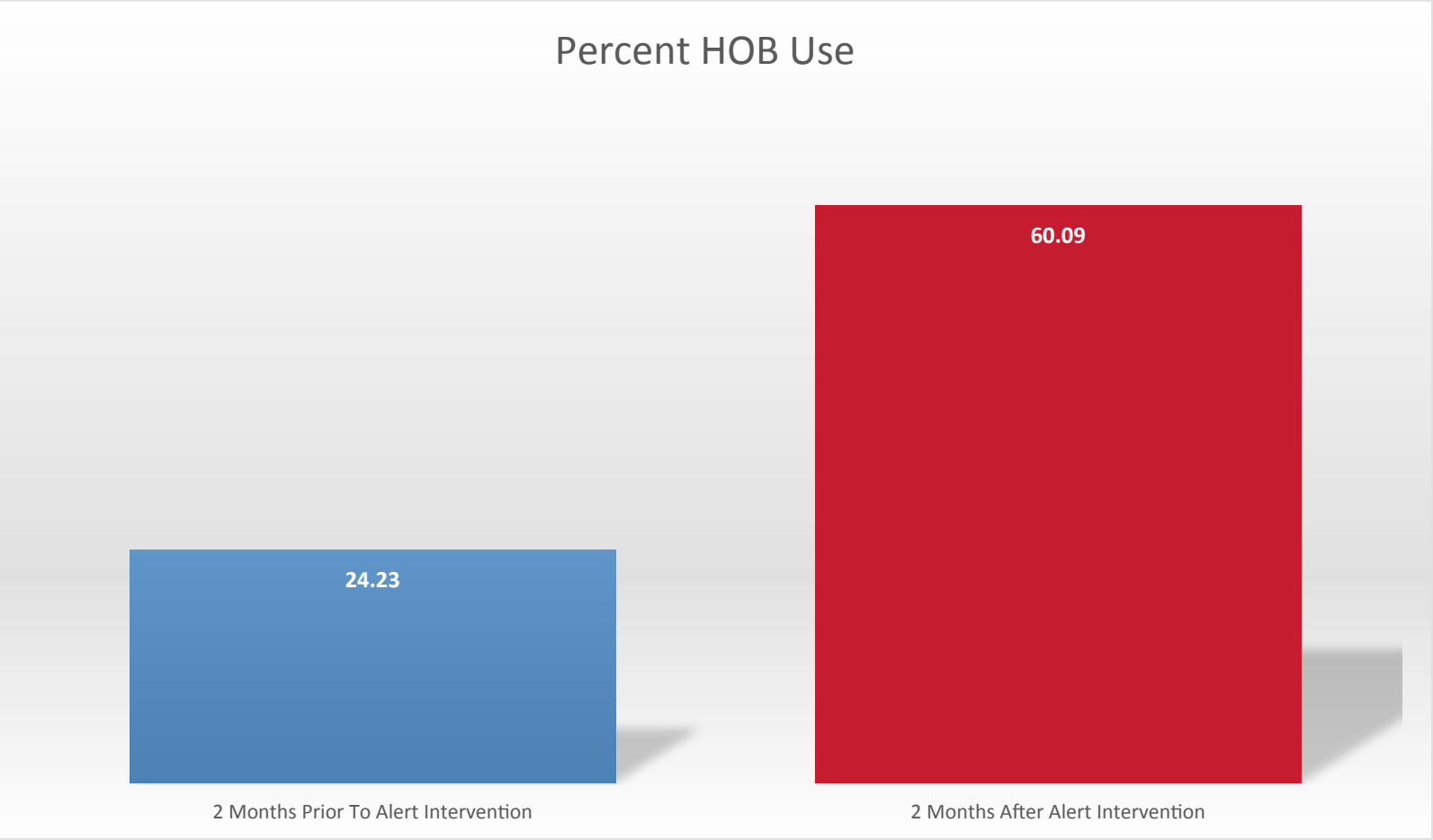
30 Day Readmission Rule was Implemented
November 25, 2014

Purpose: Improve utilization of Hospital Observation (HOB) on patients readmitted to the hospitalist service in less than 30 days of discharge.

Intervention: Creation of an alert which prompted ED physicians to contact the hospitalist service to evaluate and disposition patients who are potential 30 day readmissions.

Results:

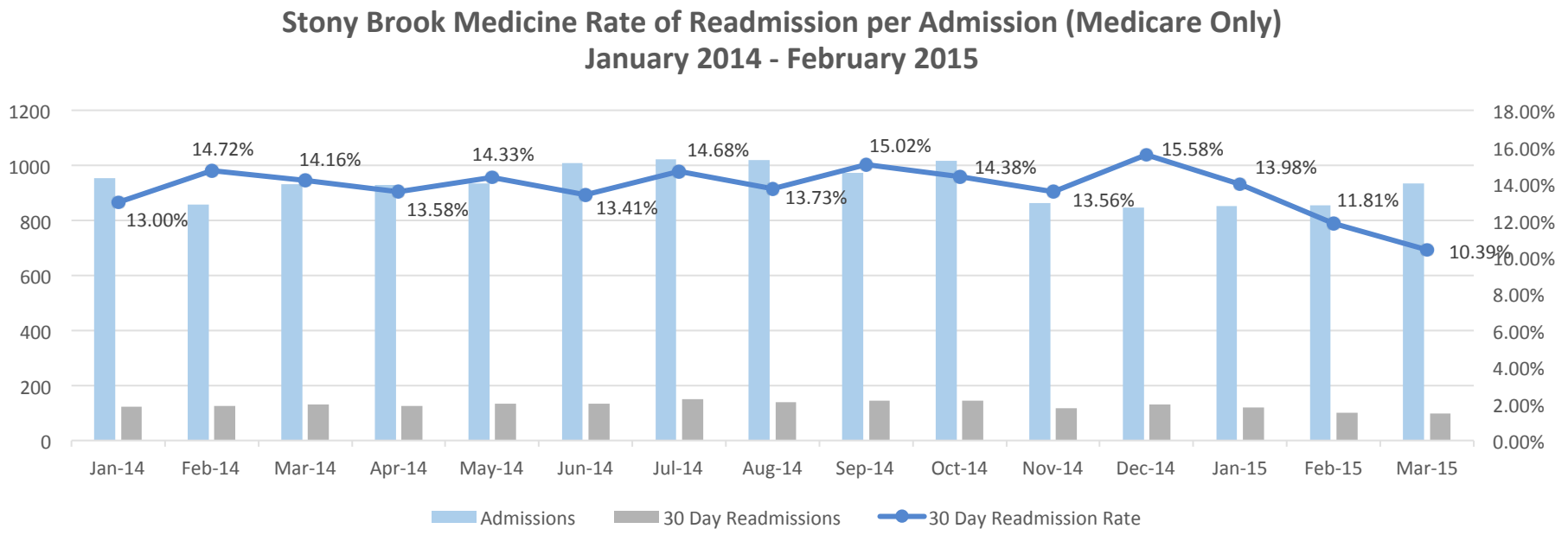
1. Reduction in the number of inpatient admissions on patients presenting to the ED within 30 day of discharge
2. Increase in the number of patients put in hospital observations on patients presenting to the ED within 30 day of discharge
3. Increase in the number of patients put on HOB and discharged **WITHOUT** admission



Every patient that is put on HOB represents an opportunity to prevent an admission

Stony Brook University

READMISSION RATE
MEDICARE ONLY



Please note that this information is subject to change. The information provided is current state and may change depending on status changes and final coding. Please contact the Department of Care Management for any additional information regarding this clause.

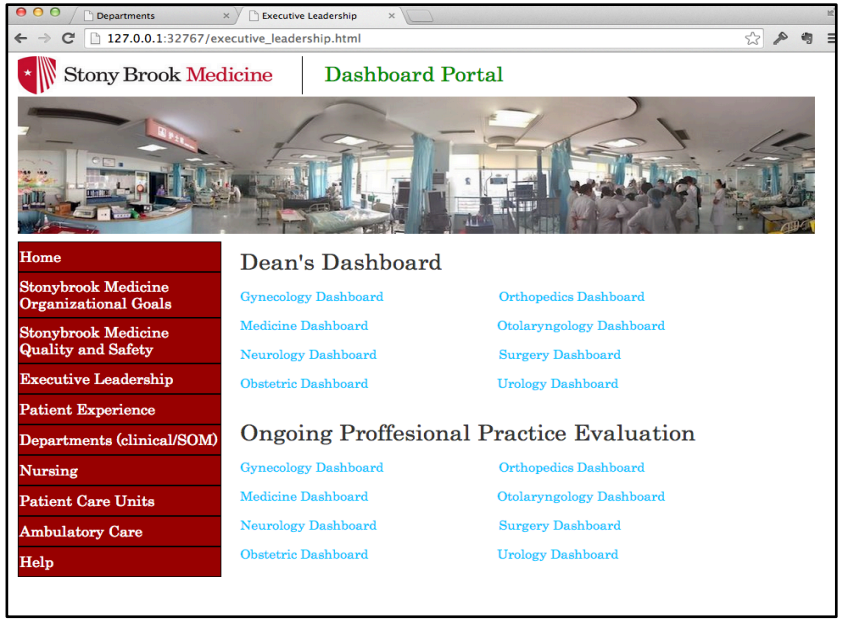
Prepared by Leanne Merill
Care Management Department

Van Halen's standard performance contract contained a provision calling for them to be provided backstage with a bowl of M&Ms from which all the brown candies have been removed.

Stony Brook Medicine

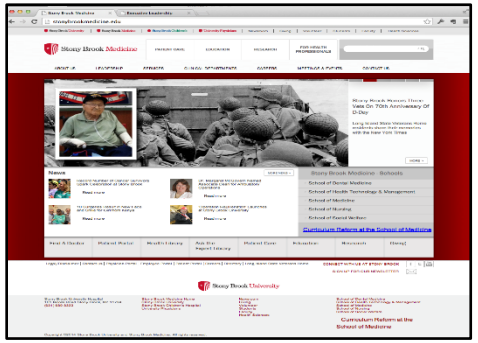
- Research
- Educational Activities
- HCAHPS
- Mortality Review
- UHC Data
- Registry Data
- Boards
- CPMP Survey
- Compliments/Complaints
- Peer Review

OPPE Data Mart



Finance (contract negotiations / at risk contracts)

Stony Brook Medicine public website to display HCAHPS and other publicly reported quality measures

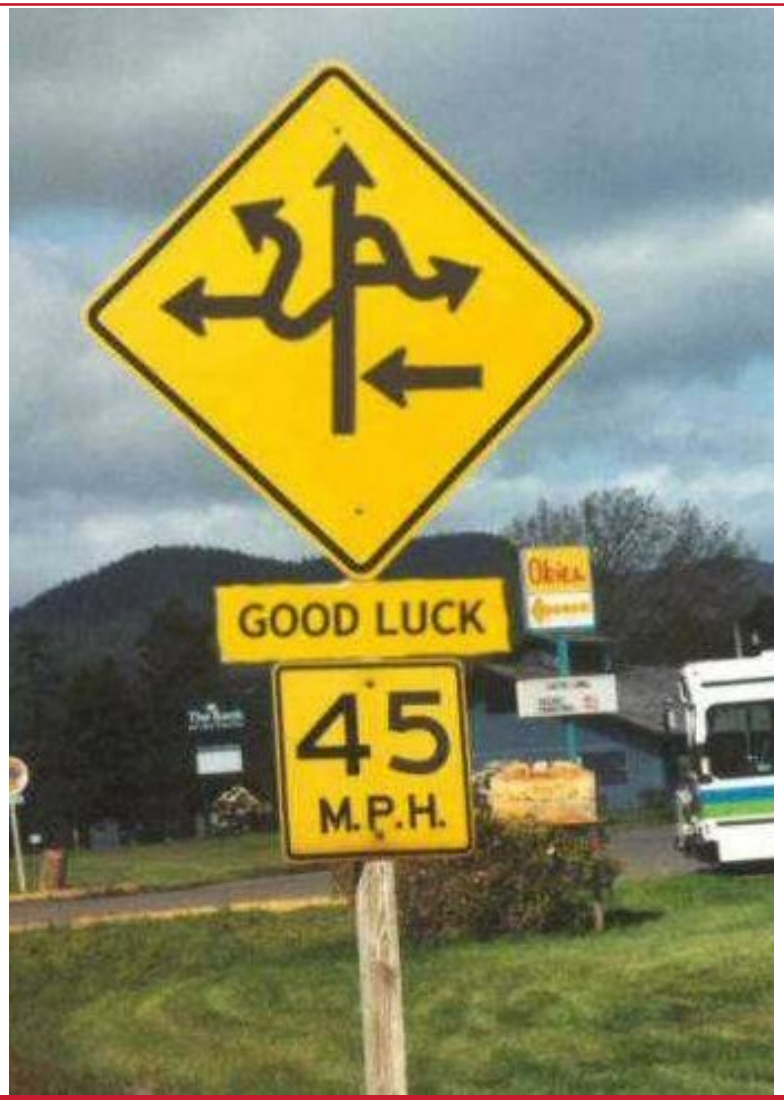


"The future ain't what it used to be."

- Yogi Berra

Expect the unexpected and be ready to take risks…

Watch Videos Online Hudson River Plane Landing (US Airways 1549) Animation with Audio Veoh.com.url


GOOD LUCK
45
M.P.H.

- Surviving is not good enough- Thriving is important
- Administrators can make decisions that affect different populations
- Cost is not everything-Quality matters
- Rapid change that we are not prepared for- Pediatricians are used to it
- Family Centered care-pediatrics was ahead of the curve
- The concept of Medical Home- pediatrics well adjusted
- Balancing the clinical vseducation and reseach missions

Like any good wine, it is all about being proud of what we do …

- Adjust to the new environment-can be fun (GME, new technologies, etc.)
- Health System Partnerships offer a tremendous opportunity- building networks
- Making decisions that can affect many lives (although for me it has been very rewarding to impact one life at a time)
- Integrating innovation into daily management
- A gentle approach to management goes a long way- educate our peers

When it gets tough, just remember to hang on!

Thank you!

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