

Developing Your Research Program: SOQIC & ISQIC

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Disclaimer

 
Better lucky than good.



National Institutes of Health

Turning Discovery Into Health

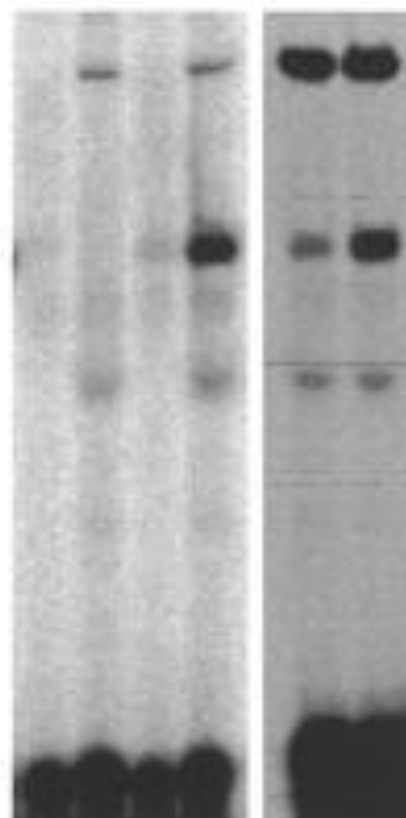


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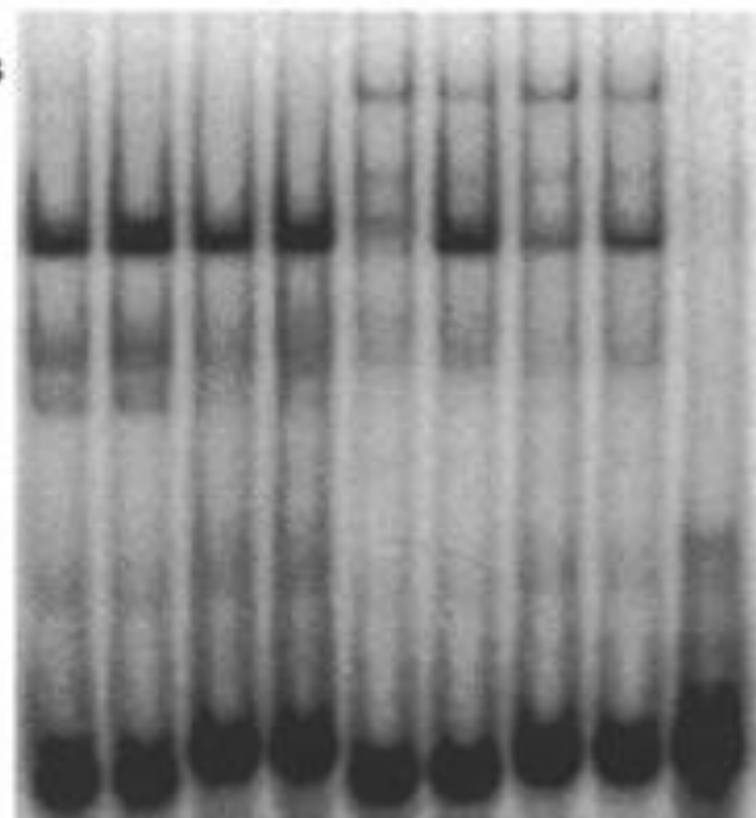
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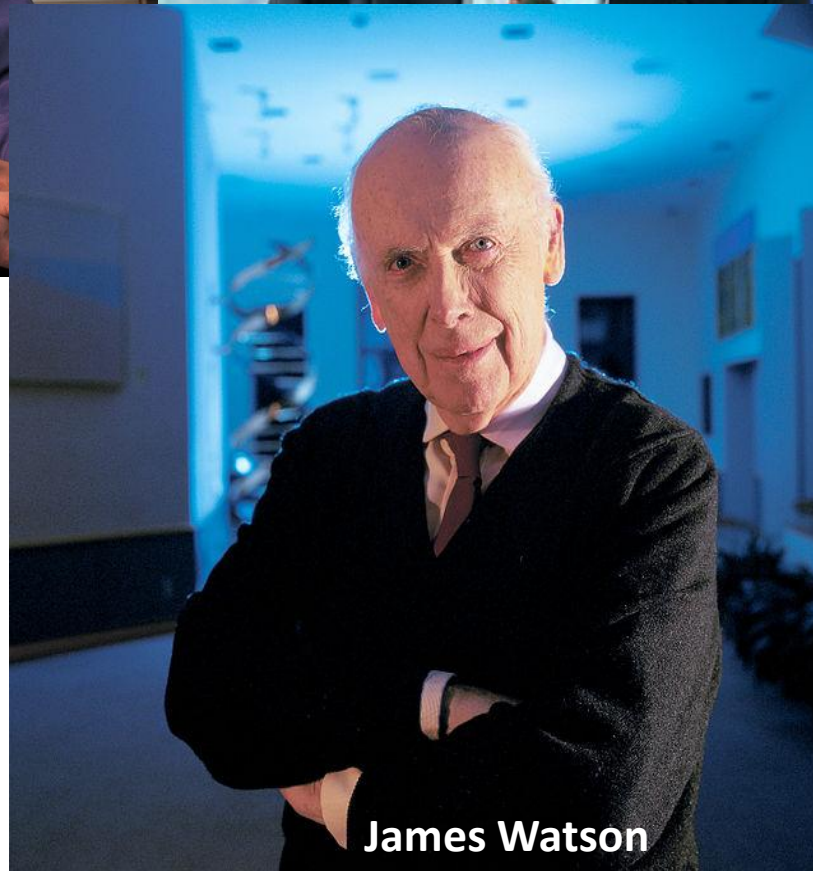
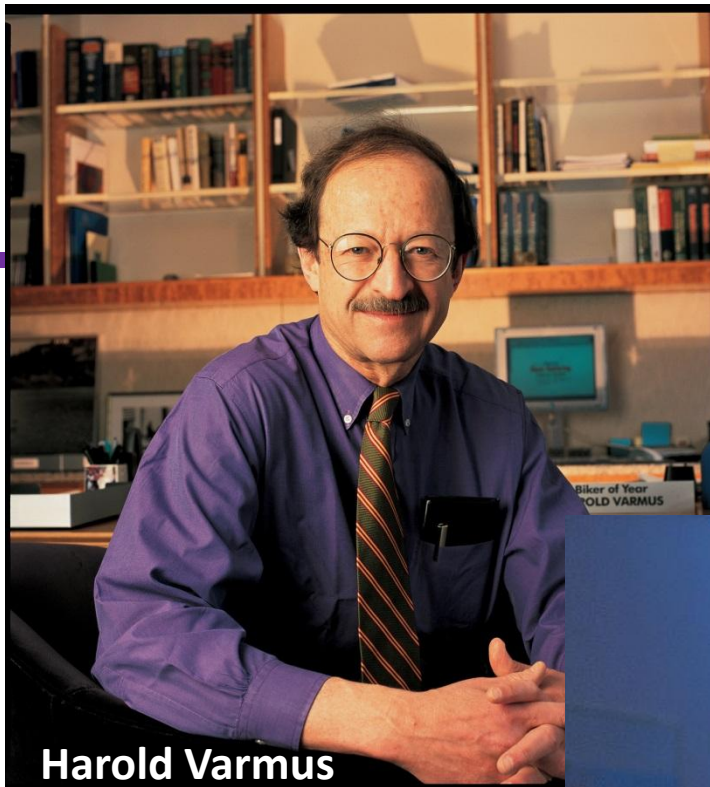
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©HALLIBROUT

USELESS





THE UNIVERSITY OF TEXAS

MD Anderson ~~Cancer Center~~

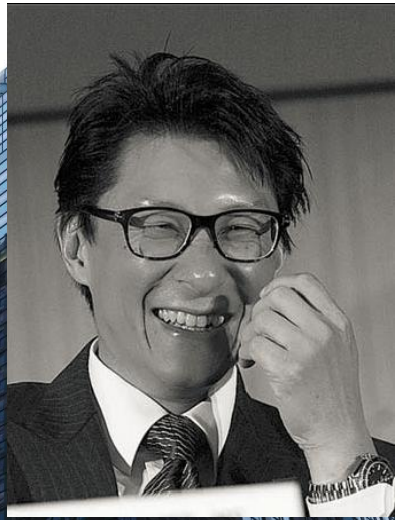




100+years

AMERICAN COLLEGE OF SURGEONS

Inspiring Quality: Highest Standards, Better Outcomes





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About Quality Programs

[ACS Leadership in Quality](#)[Inspiring Quality Initiative](#)[Resources](#)[Continuous Quality Improvement](#)[ACS Clinical Scholars in Residence](#)

ACS Clinical Scholars in Residence Overview

[🕒 Clinical Scholars Program](#)[🕒 ACS Clinical Scholar in Residence Mentors](#)[🕒 Past and Current Clinical Scholars](#)[ACS NSQIP](#)

ACS Clinical Scholars in Residence

The American College of Surgeons (ACS) is offering a two-year onsite fellowship in surgical outcomes research, health services research, and health care policy. The primary goal of the program is to involve the Clinical Scholar in the ongoing quality improvement initiatives of the ACS, including the [National Surgical Quality Improvement Program \(ACS NSQIP®\)](#), the [National Cancer Data Base \(NCDB\)](#), the [Trauma Quality Improvement Program \(TQIP\)](#), the [Surgeon Specific Registry \(SSR\)](#), the [Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program \(MBSAQIP\)](#), guideline development, and accreditation programs. The Clinical Scholar will also be able to conduct research in a variety of areas relevant to ongoing projects within the ACS. In parallel, the scholar will have the opportunity to complete a Master of Science degree in clinical investigation, health services and outcomes research, or health care quality and patient safety through Northwestern University.

The ACS Clinical Scholars in Residence program is a unique opportunity that allows the surgical resident to gain firsthand experience in outcomes and health services research at a national health care organization. The program also prepares the Clinical Scholar for a career in academic surgery with a focus on national surgical health care issues. The program is open to applicants who have completed 2–3 years of surgical residency and have obtained two years of program funding from their home institution or other granting agency.

Program Information

- [Full Program Details](#)
- [Past and Current Clinical Scholars in Residence](#)
- [ACS Clinical Scholars in Residence Program Mentors](#)

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**Surgical Outcomes &
Quality Improvement Center**

SOQIC

Northwestern University



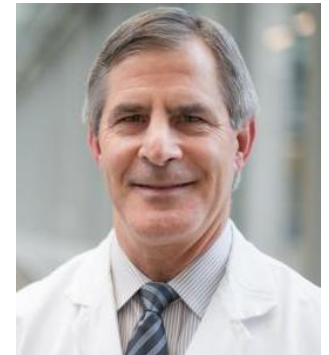
Northwestern 2010

- Silos of HSR
 - Center for Healthcare Studies (40)
 - General Internal Medicine (40)
 - Preventative Medicine (40)
 - Medical Social Sciences (70)
 - Others (150)
- 4 Masters programs
- Strong undergrad, business, law, engineering schools
- Chicago: ACS, JC, AMA, AHA, UHC, etc.



Department of Surgery 2010

- One Surgeon
 - Dave Bentrem, MD MS
- Strong chair support
 - Nat Soper, MD
- Strong institutional commitment
 - Dean Eric Nielsen, MD



Surgical Outcomes and Quality Improvement Center



- Better **measures**
 - Hospital quality comparisons
 - Quality measurement development/testing
- Better **levers**
 - Public reporting
 - Pay for performance
 - Health policy evaluations
- Better **evidence**
 - Effectiveness of quality improvement initiatives

Major SOQIC Initiatives



- P4P measure and program evaluations
- Influencing policy



- 57 Hospitals
- Novel approaches to spur quality improvement
- Platform for QI trials / improvement science



- 151 Hospitals
- National trial of policy intervention



- NMH quality initiatives
- System Surgical Collaborative

The Team

- Surgeons
 - 8 surgeons



- Health Services Researchers
 - 4 PhDs



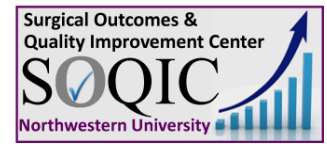
- 15+ staff
 - Statisticians, analysts, programmers, project coordinators, grants, PI leaders
- 8 Research fellows



How Did We Get Here?

- Start-up funding
 - Department, hospital, medical school, cancer center
- Leveraged existing expertise, connections, & needs
 - Quality measure evaluations
 - FIRST Trial
 - BCBS-IL
 - Qualitative research
- Early grant support
- Key staff and faculty hires/development

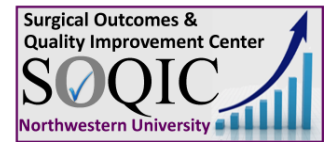
SOQIC Grant Progression



Source	Project	
ACS Illinois	Cancer quality measurement	\$70,000
ACS	Risk calculators	\$30,000
RHLCC Team Award	PROs	\$25,000

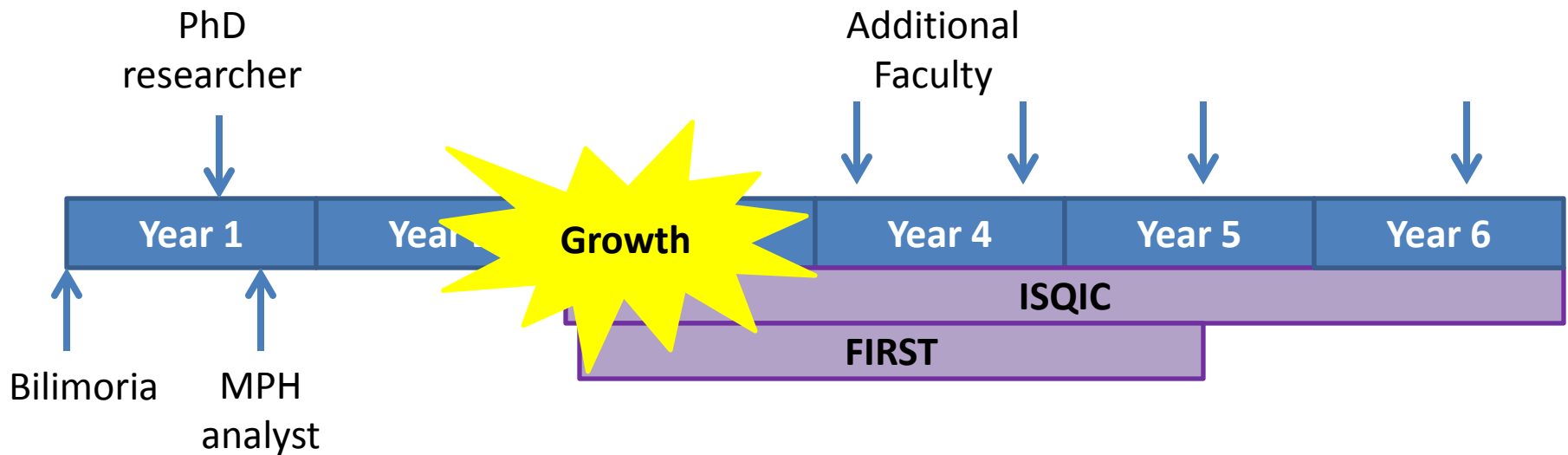
Junior Faculty Grants

Leverage SOQIC Infrastructure



Source	Grant	PI
ACS	VTE in ISQIC	Yang
STS	Lung cancer quality – NM	Odell
ACS	Lung Cancer quality – ISQIC	Odell
NIH / NCI K08	Lung cancer quality – ISQIC	Odell
NIH / NIDA R34	Opioid reduction – ISQIC/NM	Stulberg/Johnson
Pacira	Opioid reduction – ISQIC/NM	Stulberg/Bilimoria

Timeline for Growth



Core vs. Shared Resources



Developing Faculty Researchers

- Targeted recruitment: 4 surgeon HSR recruits
- KL2, K12, and institutional support



Tony Yang, MD MS



David Odell, MD MS



J. Stulberg, MD PhD



Ryan Merkow, MD MS

Data Warehouse

- NCDB
- SEER
- SEER-Medicare
- Medicare
- NIS
- ACS NSQIP
- AHA
- Hospital Compare
- NPDB
- HCRIS
- Numerous others

SOQIC DATA WAREHOUSE[Logout](#)

BDW HomeCMSNCDBNIS

CMS

Report Filters

(1) Select first, last year, and if desired gender, race, and minimum and maximum age
(2) Select the range of dx and pr to be used for filtering, and choose 'AND' or 'OR' logic
(3) Filter for diagnoses and procedures with a number or text string - any length will work
(4) If desired, indicate whether or not there should be a POA filter for the selected diagnosis code
(5) Select any required diagnoses and/or procedures and click 'Add' after each selection
(6) Click the appropriate checkboxes in the 'Files to Export' row
(7) Click the 'Generate CSV Files' button

First Year

Last Year

Gender

Race

Dx/Pr Range to filter

Min Age

Max Age

Diagnosis

Procedure

☐ Records with Dx AND Pr ☐ Records with Dx OR Pr

☒ All Dx ☐ POA ☐ Not POA

Records Per File: 0 0 0

Files to Export: ☐ Medpar ☐ Beneficiary ☐ Outpatient Base ☐ Outpatient Revenue ☐ Carrier Claims ☐ Carrier Line

Links to Files:

Training Residents to Be Health Services Researchers

- Surgical resident research fellows
 - 12 prior
 - 7 current
- Funding
 - T32, F32, other grants
- 7 *JAMA* publications



Collaboration / Education



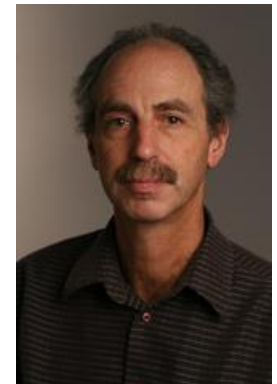
- Weekly research fellows meeting
- Weekly project meetings
- Monthly project advisory committee meetings
- Joint seminar series (IPHAM/ACS)
- Mentoring dinners
- Quarterly get-togethers

Providing Resources for Non-Research Faculty

- Faculty Surgical Outcomes Research Course



- Call for Faculty Research Proposals



Co-location

- 250 health services researchers and staff on 3 floors

Northwestern University Feinberg School of Medicine

Center for Healthcare Studies



Northwestern University Feinberg School of Medicine

Institute for
Public Health and Medicine

PROMIS[®]
Dynamic Tools to Measure Health Outcomes from the Patient Perspective

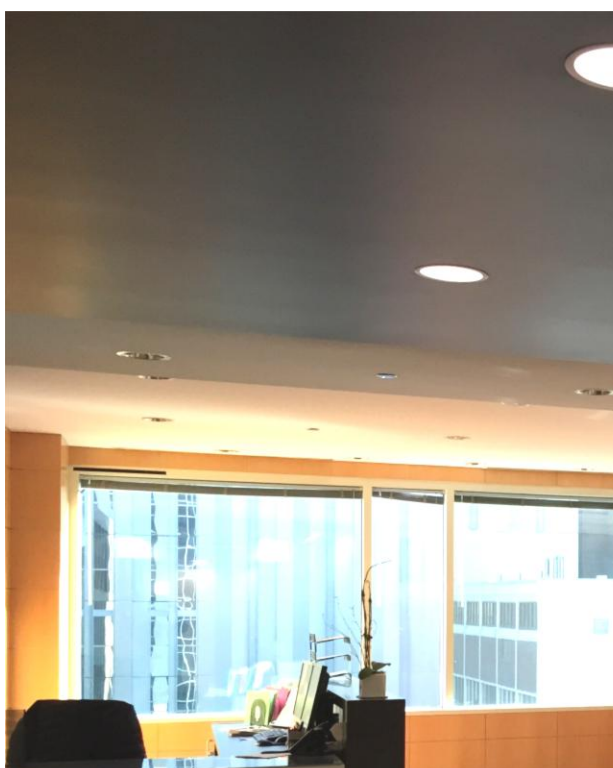


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ACS Collaboration



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- Statewide quality collaborative
- FIRST Trial
- Special projects
 - Risk calculator
 - Measure development: PQRS, CoC, NQF
- Clinical Scholars Program (research fellows)
- 6 grants together

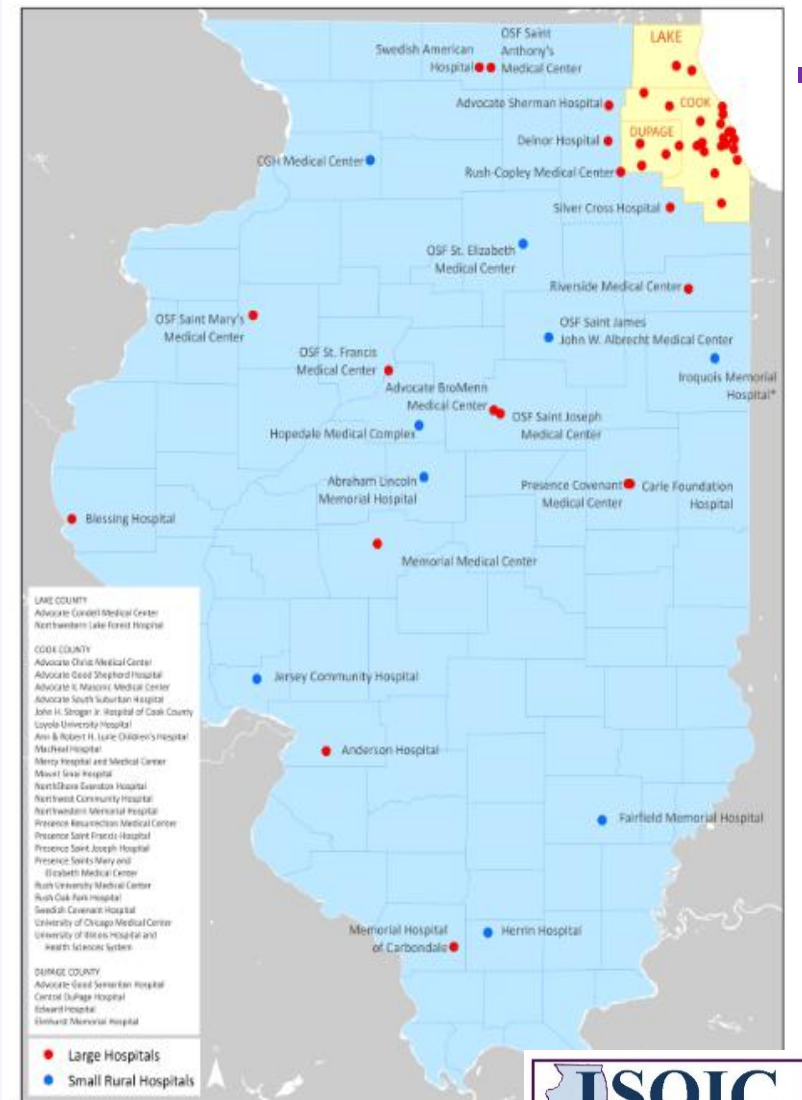
Hospital Quality Improvement Efforts

- Lead innovative QI/PI initiatives
- Analytics for key projects
- Quality measure innovation/evaluation
- Coordinate system projects
- Resident QI Projects
- Led to new System VP Quality



ISQIC: 57 Hospitals

- All academic centers
- 11 rural hospitals
- 60% of surgery in IL
- 80% of complex surgery
- Impacts >600,000 / year



Collaborative Effort



55 Illinois Hospitals

Performance Relative to Other Hospitals

Observed Rate:

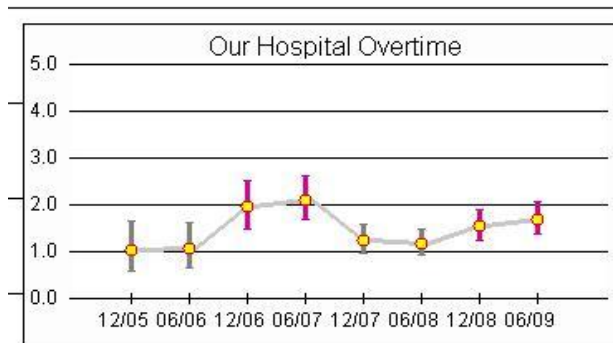
6.41%

Expected Rate:

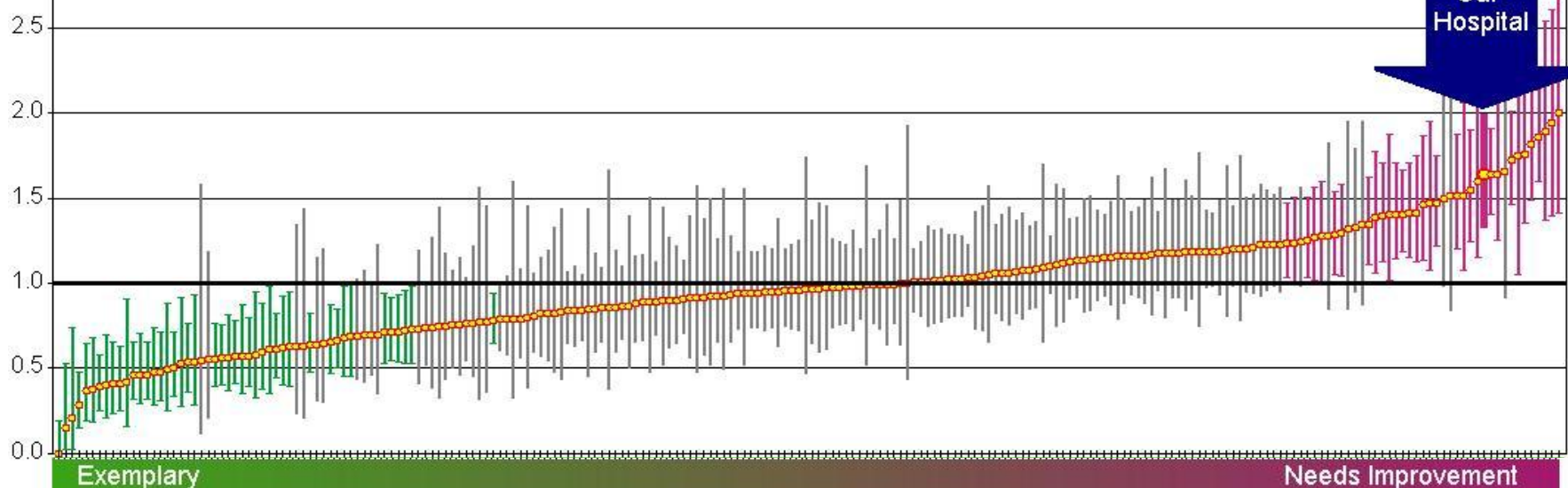
3.91%

O/E Ratio: 1.64

Status: Needs
Improvement



Odds Ratio



ISQIC's 21 Strategies

To Accelerate and Enhance Quality Improvement

- **Guided Implementation**
 - Surgeon Mentor
 - Process improvement coach
 - Coordinating Center
 - Site Visits
- **Education**
 - Formal QI/PI Training
 - Leadership engagement plan
 - Semiannual collaborative meetings
- **Comparative reports**
- **Collaborative projects**
 - Structured local and statewide QI initiatives
- **Networking**
 - Opportunities to get advice and share experiences
- **Funding**
 - Support local program
 - Pilot grants
 - Bonus for improvement



ISQIC Video Coaching

- Peer-to-peer coaching
 - Surgeons learning from their data and videos
 - Surgeons learning from each other



Reducing Opioid Prescribing

Preoperative

Screen & Prepare

- 1 – Abuse Risk Analysis
- 2 – Opioid Education
 - Risks/Benefits
 - Storage
 - Disposal
- 3 – Pain Expectation setting

Perioperative

While Inpatient (ERAS[¥])

Upon Discharge (MOPiS[£])

- 1 – Prescribing Opioid Alternatives
- 2 – PMP Look-up
- 3 – Safe Handling
- 4 – Prescribing Minimization

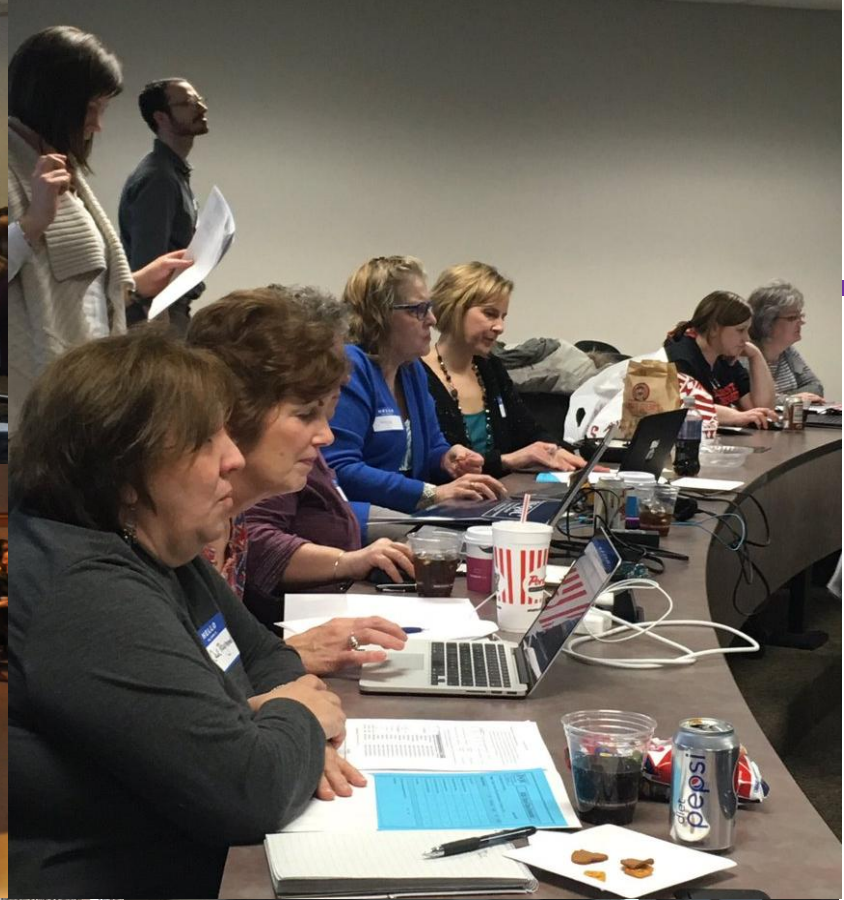
Postoperative

Provide Safe Retrieval Option

1. Retrieve
2. Educate

¥ - ERAS (Enhanced Recovery After Surgery)

£ - MOPiS (Minimizing Opioid Prescribing in Surgery)







(Retrospective) Keys to Success

- Make the right initial hires
- Be useful to many others
- Develop your own faculty
- Leverage available resources
- Lots and lots of luck

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