

DEDICATED TO:

Thomas G Healey, RN, CRNA, MA

St Mary's University

Died January 5, 2014



FINANCIAL DISCLOSURE

There is no financial conflicts with this presentation.

Lecturing about a topic does not constitute endorsement of any product.
Please take the time to research each topic for more information.

Mentioning a product or company does NOT represent endorsement.

Why Hospitals Should **FLY**

The Ultimate Flight Plan to Patient Safety and Quality Care



Reviewed by David A. Wynn, MD, MBA
Reviewed by Robert C. Johnson, MD

John J. Nance, JD

IF DISNEY RAN YOUR HOSPITAL

9½ Things You Would
Do Differently

By
FRED LEE

Cultural Insights From a
Hospital Executive Who Became
A Disney Cast Member



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Rx MEDICAL CENTER

HEALTH CARE REFORM NOW!

A Prescription for Change

George Halvorson

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TERMS

Metrics --- Measurement

Dashboard – Rolling gauge of where we are in the metrics

Key Performance Indicators

Low Hanging Fruit



EFFICIENCY VERSE COURTESY?



Paradox: Customer First is More Efficient





**BIG BROTHER IS
WATCHING YOU**

1984

George Orwell

PENGUIN READERS

BIG BROTHER



**IS WATCHING
YOU**



What can you do?



WHY BOTHER WITH THE FUTURE?

“The future belongs to the unreasonable ones, the ones who look forward not backward, who are certain only of uncertainty, and who have the ability and the confidence to think completely differently.”

Charles Handy quoting Bernard Shaw

WHAT DOES YOUR DASHBOARD LOOK LIKE?

Word Online

Print Find Download Help

Last	Avg 1st Start for Qtr	% Debrief	PONV%	SCIP%	CH TO IP TO	OP TO
Scube	2.3	100.0%	9.5%	95.8%	40.8	25.2

Dashboard Metrics:

- Average First Case Start
- APCH Turnover Time
- % of Patients with PONV
- IP Turnover Time
- % of Patients with Documented Debriefing
- OSC Turnover Time
- SCIP Compliance

PAGE 1 OF 1

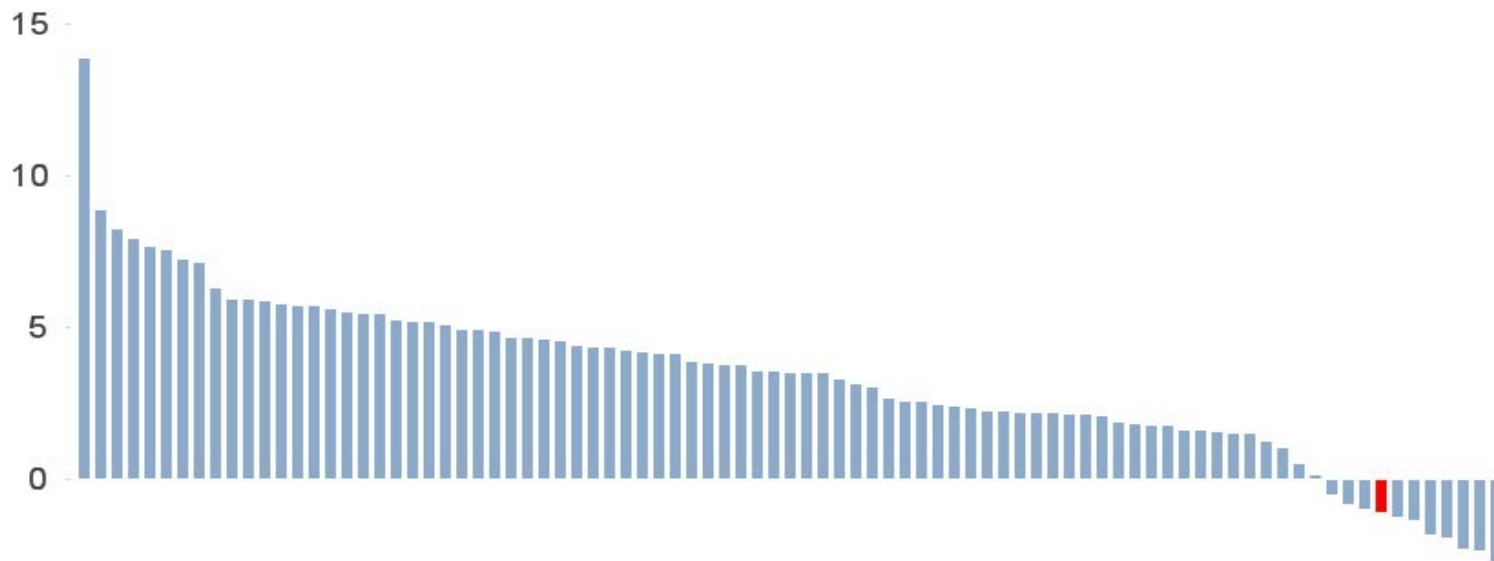
HELP IMPROVE OFFICE 100%

Reply all | Delete | Junk | ...

The quality of the graphs in Qlikview is not what we could want it to be.....

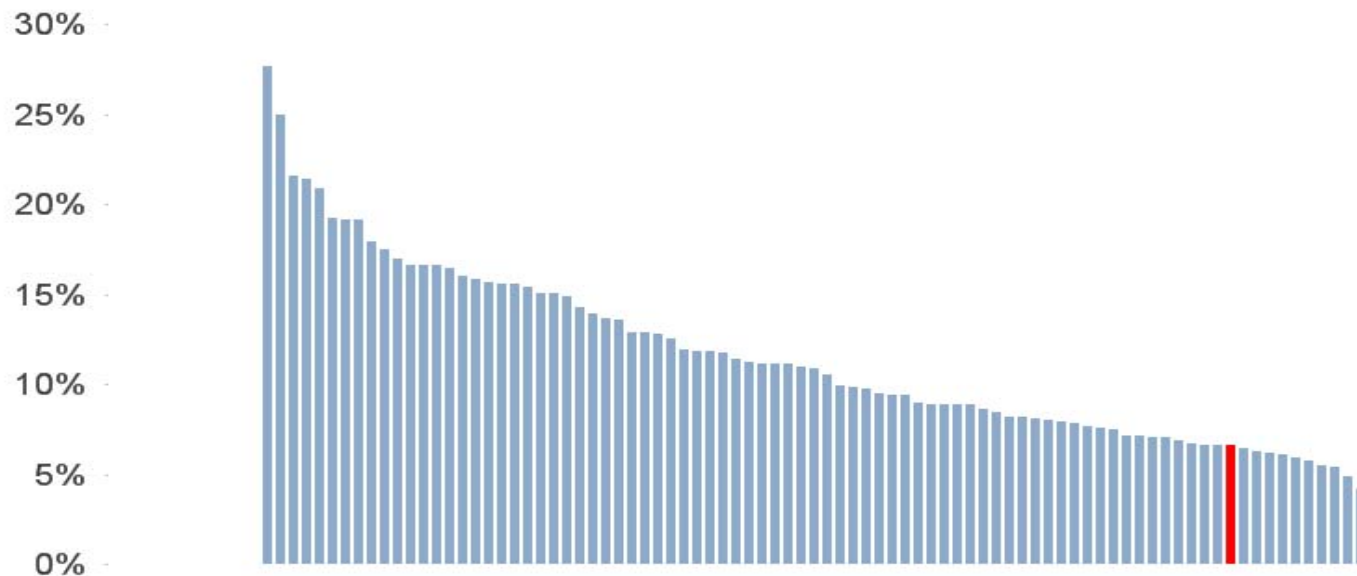
Last	Avg 1st Start for Qtr	PONV%	% Debrief	CH TO	IP TO	OP TO	SCIP%
Strube	-1.05	6.6%	100.0%		38.3	33.5	96.1%

Q2 Avg 1st Case Start vs Sched (Res, CRNA, and AA)



Reply all | Delete | Junk | ...

Q2 PONV % (Res, CRNA, AA)

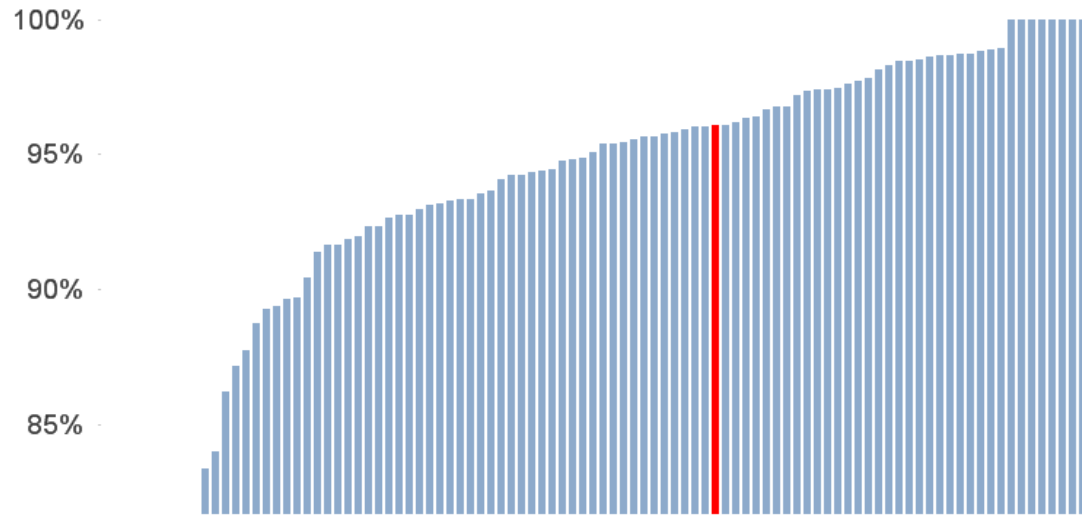


Q2 % Debrief (Res, CRNA, AA)

Reply all | Delete | Junk | ...



Q2 % SCIP Compliance (Res, CRNA, AA)



Q2 Inpatient Turnover (Res, CRNA, AA)

60

Reply all | Delete | Junk | ...

Report Spam

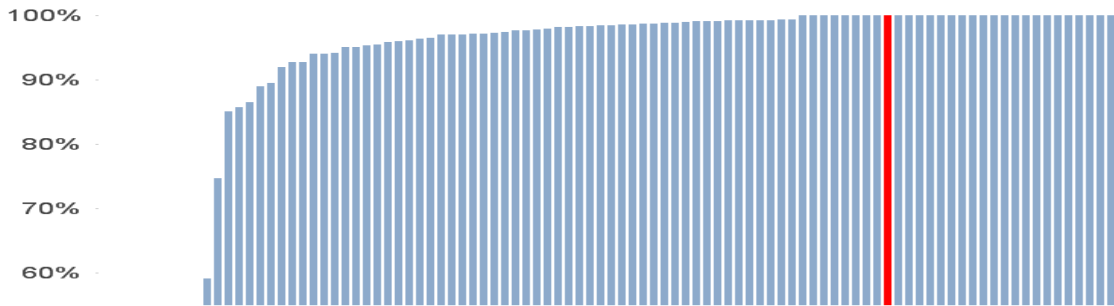
Year	Month	NameIRSCIP	Exempt	Exempt%	Missed	Missed%	No Incision Time	NoIncTm%	On Time	OnTime%	total cases	SCIP Compliance
2016	1	Strube, Peter D	9	28.125	1	3.125	0	0	22	68.75	32	
2016	2	Strube, Peter D	6	24	1	4	0	0	18	72	25	
2016	3	Strube, Peter D	4	21.05263	1	5.263158	0	0	14	73.68421	19	
					3		0				76	

Definitions:

- A. 'Exempt' status: surgeries with 'Surgeon: No antibx' anesthesia event documented - recommended action: quick glance to make sure exemption status is valid
- B. 'On Time' status: surgeries with an antibiotics administration within 60 minutes prior to incision time (120 minutes for vancomycin or fluoroquinolones) - no follow-up needed
- C. 'Missed' Status: surgeries with no exemption and no timely prophylactic antibiotics administration prior to incision time - recommended action: identify trends & review with clinical stakeholders for remedial action
- D. 'No Incision Time' Status: surgeries with no exemption and no 'Incision (Abx Linked)' anesthesia event time documented - recommended action: workflow reminder and/or impact education

Reply all | Delete | Junk | ...

Q2 % Debrief (Res, CRNA, AA)



Q2 % SCIP Compliance (Res, CRNA, AA)



UW Health Surgical Site Infection (SSI) Prevention Steering Team Case Review



This case has met the National Healthcare Safety Network (NHSN) definition of a Surgical Site Infection. Please review and complete reverse side and return to



Patient Name:	Patient MR#:
Name of Procedure(s):	Date of Procedure:
Surgery Classification:	Date of Infection:
Surgeon(s):	Days to SSI:
Anesthesiologist(s):	Type of Infection:
Infection Present at Time of Surgery:	ASA:
SSI detected during:	Wound Classification:
Causative Organism Identified:	BMI:
Patient Discharge Disposition:	Account #:

Definition of Surgical Site Infection:

Superficial Incisional SSI – Involves only skin and subcutaneous tissue of the incision AND patient has at least one of the following:

- Purulent drainage from the superficial incision
- Organism isolated from aseptically-obtained culture
- Incision is deliberately opened by a surgeon/physician AND culture positive or not cultured AND patient has at least one of the following signs and symptoms:

Definition of Surgical Site Infection:

Superficial Incisional SSI – Involves only skin and subcutaneous tissue of the incision AND patient has at least one of the following:

Purulent drainage from the superficial incision

Organism isolated from aseptically-obtained culture

Incision is deliberately opened by a surgeon/physician AND culture positive or not cultured AND patient has at least one of the following signs and symptoms:

Pain or tenderness

Localized erythema

Heat

Diagnosed by physician

Deep Incisional SSI – Involves deep soft tissues of the incision (e.g. fascial and muscle layers) AND patient has at least one of the following:

Purulent drainage from the deep incision

Incision that spontaneously dehisces OR is deliberately opened or aspirated by a surgeon/physician AND is culture positive or not cultured AND patient has at least one of the following signs and symptoms:

Pain or tenderness

Fever

Abscess or evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test

Organ/Space SSI – Infection involves any part of the body deeper than the fascial/muscle layers, that is opened or manipulated during the operative procedure AND patient has at least one of the following:

Purulent drainage from the drain that is placed into the organ/space

Organisms isolated from an aseptically-obtained culture of fluid or tissue in the organ/space

Abscess or evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test

Surgical Site Infection Prevention Strategies:

QUALITY INDICATORS IN ANESTHESIA

Haller identified -- 108

Myles developed -- 9

Quality of Recovery scale – 40

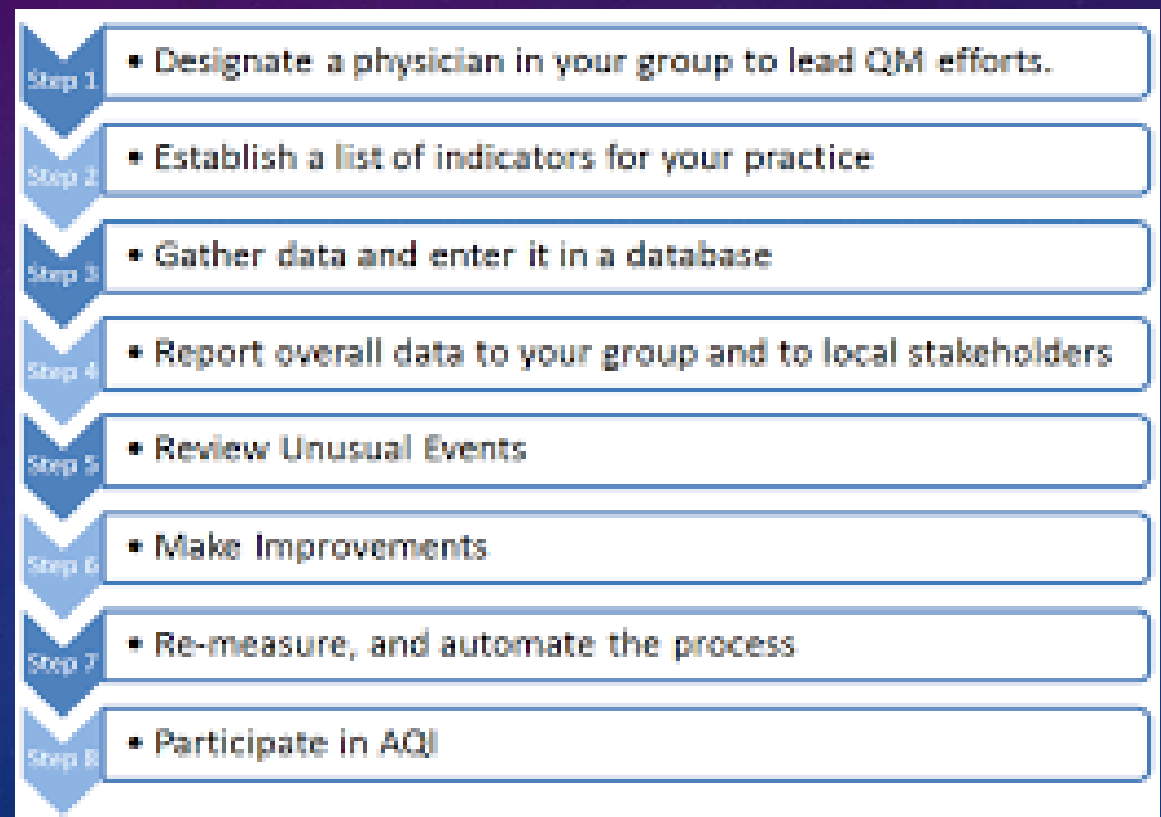
Van Der Veer

De Vos

Hysong

Veloski

Mugford

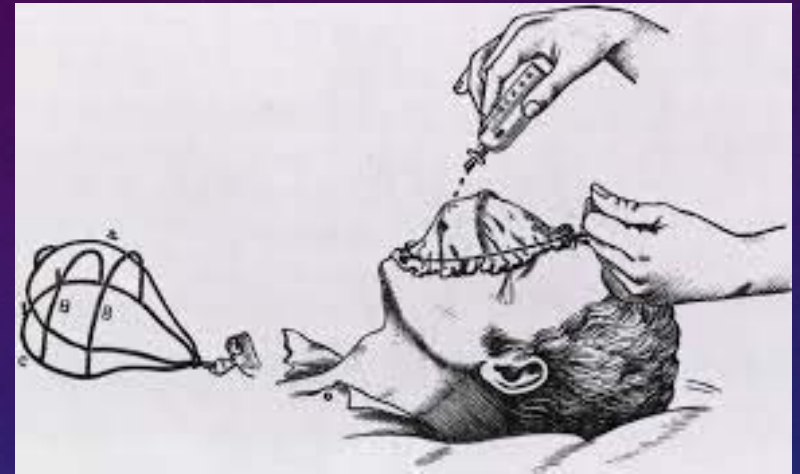


OUTCOMES

1% looked at structure of care

57% measured outcomes

42% measured the process of care



KEEP IN MIND, EVERYTHING IS CHANGING.....

- Must report at least 3 measures, or file for hardship
- + 0.5% incentive for cases in 2014
- - 1.5% 'withhold' in 2015
- - 2% penalty in 2016, 2017



Are we thinking about the benefit of our time?

Are we being productive?

What is your time worth?

Do you know what stuff costs?

Need to Get the PREP Nurse Involved!
Your time is worth \$2-\$4 per minute

But; you need to be productive!

What is the average utilization?

Get a anesthesia tech...

Increase your utilization

5 MOST UNDESIRABLE SURGICAL OUTCOMES

The Perspective of Patients vs Anesthesia Providers

Patient Beliefs	Provider Beliefs
1. Vomiting	1. Pain from incision
2. Gagging on endotracheal tube	2. Nausea
3. Pain	3. Vomiting
4. Nausea	4. Pre-operative anxiety
5. Recall without pain	5. Discomfort from insertion of IV catheters

¹Macario A et al. *Anesth Analg.* 1999;89:652–658.

²Macario A et al. *Anesth Analg.* 1999;88:1085–1091.

BENN (2012) ASKED WHAT ARE THE BIGGEST IMPACT ON ANESTHESIA OUTCOMES?

Biggest impact and improvement:

On time starts

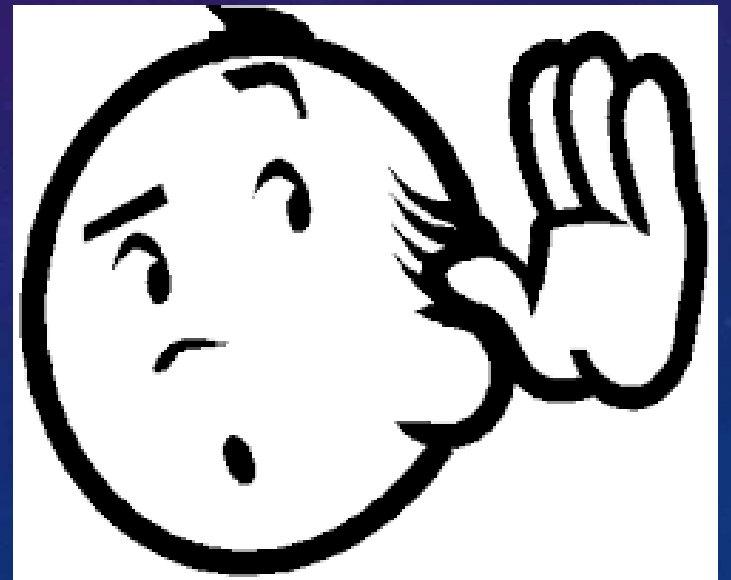
PONV (we have come to accept %25 PONV as normal)

Pain (11% experience severe and debilitating pain)

Communication

Bowel Function

Hospital stay



NQS

The National Quality Strategy was first published in March 2011 as the National Strategy for Quality Improvement in Health Care, and is led by the Agency for Healthcare Research and Quality on behalf of the U.S. Department of Health and Human Services (HHS).

Mandated by the Patient Protection and Affordable Care Act, the National Quality Strategy was developed through a transparent and collaborative process with input from a range of stakeholders.

The National Quality Strategy pursues three broad aims. These aims will be used to guide and assess local, State, and national efforts to improve health and the quality of health care.

Better Care: Improve the overall quality, by making health care more patient-centered, reliable, accessible, and safe.

Healthy People/Healthy Communities: Improve the health of the U.S. population by supporting proven interventions to address behavioral, social and, environmental determinants of health in addition to delivering higher-quality care.

Affordable Care: Reduce the cost of quality health care for individuals, families, employers, and government.

MISTAKES!

- How Many Die From Medical Mistakes in U.S. Hospitals?

- <http://www.propublica.org/article/how-many-die-from-medical-mistakes-in-us-hospitals>



DEATHS PER YEAR!

- 1999, the Institute of Medicine published the famous “To Err Is Human” report, which dropped a bombshell on the medical community by reporting that up to 98,000 people a year die because of mistakes in hospitals
- (2014) A study in the current issue of the Journal of Patient Safety that says the numbers may be much higher — between 210,000 and 440,000 patients

National Initiatives for Healthcare Improvement

- IOM - STEEEP
- IHI - IMPACT, 100K Lives Campaign, 5 Million Lives Campaign
- CMS - SCIP, State QIO's, 8th Scope of Work
- AHRQ - CAHPS Survey
- JCAHO - National Patient Safety Goals
- Leapfrog/HealthGrades - Public Reporting and Transparency

ASAQCDR

What are the additional registry measures available in NACOR?

- 1 Antibiotic timing**
- 2 Central line sterile placement**
- 3 PACU normothermia**
- 4 Beta blockade for CABG patients***
- 5 Medication reconciliation (#130)**
- 6 Smoking cessation screening (#226)**
- 7 Acute pain management (#342)**
- 8 Perioperative risk assessment (#358)**
- 9 Post-op transfer of care protocol OR > PACU**
- 10 Post-op transfer of care protocol OR > ICU**
- 11 Prevention of PONV, adults**
- 12 Prevention of PONV, pediatrics**
- 13 OR/PACU cardiac arrest rate**



- 14 OR/PACU all-cause mortality**
- 15 Successful completion of planned procedure (composite anesthesia safety)**
- 16 PACU re-intubation rate**
- 17 PACE acute pain management success**
- 18 Composite procedural safety for central line placement**
- 19 Composite anesthesia patient satisfaction**

* This measure is only reported by a select number of eligible professionals

“ANESTHESIA GIVEN” “SURGERY PERFORMED”

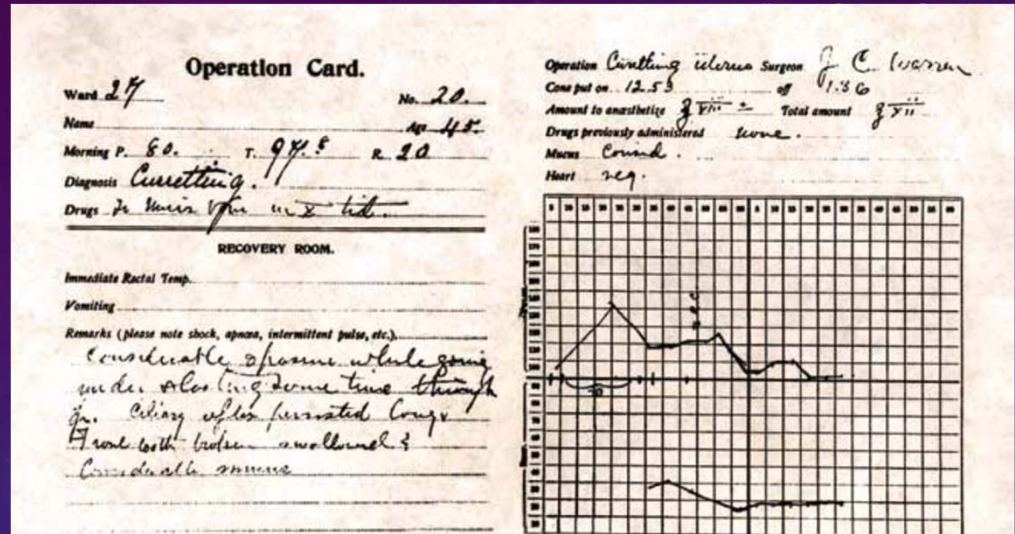
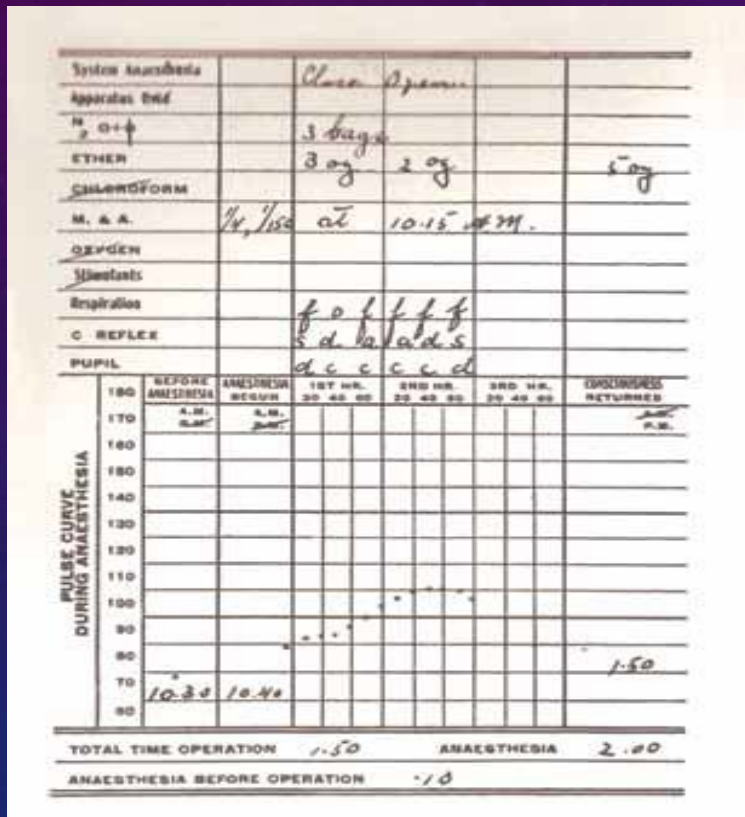


Fig. 1. The two sides of an early anesthesia chart, especially designed for this purpose and used at an operation November 30, 1894, by Dr. F. A. Codman.

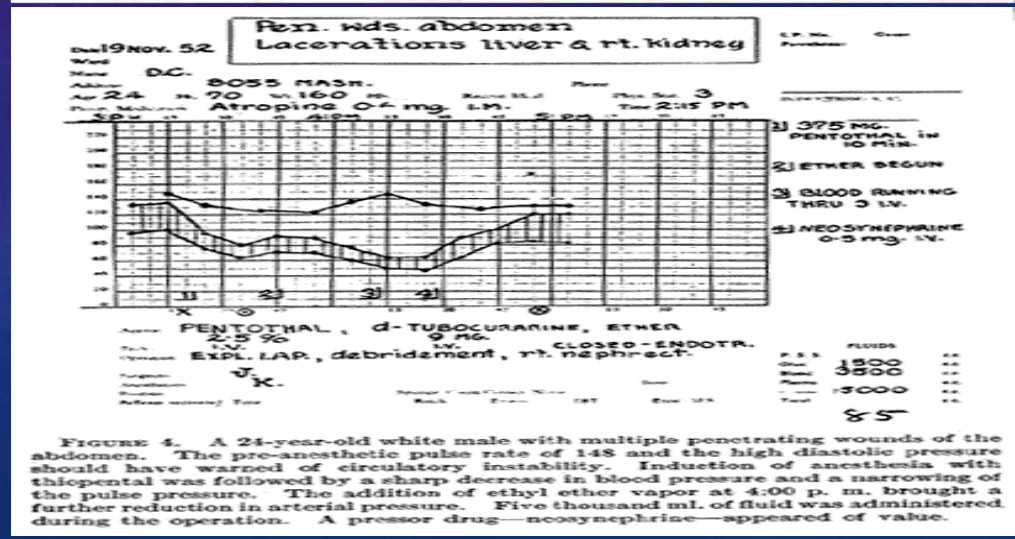
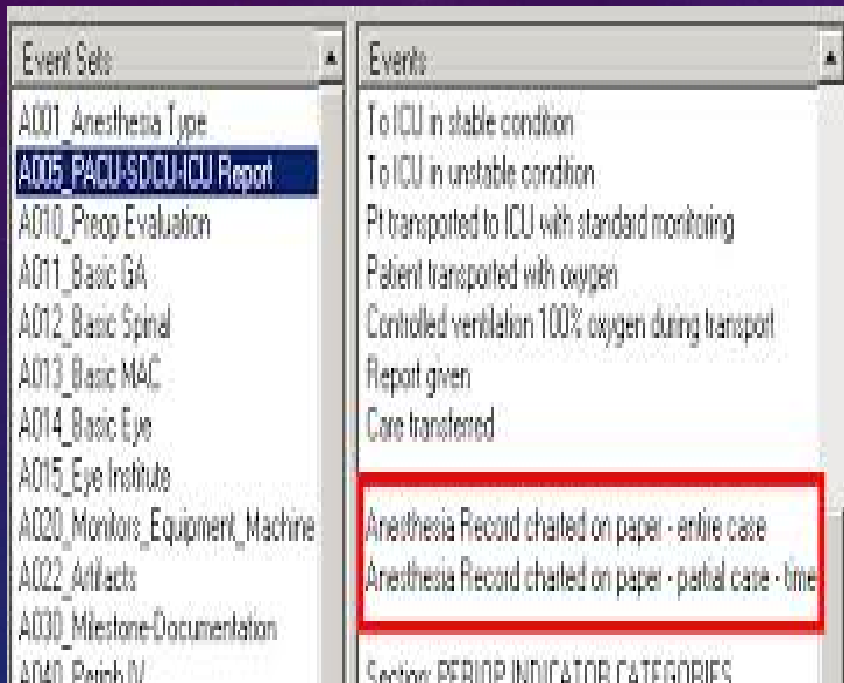


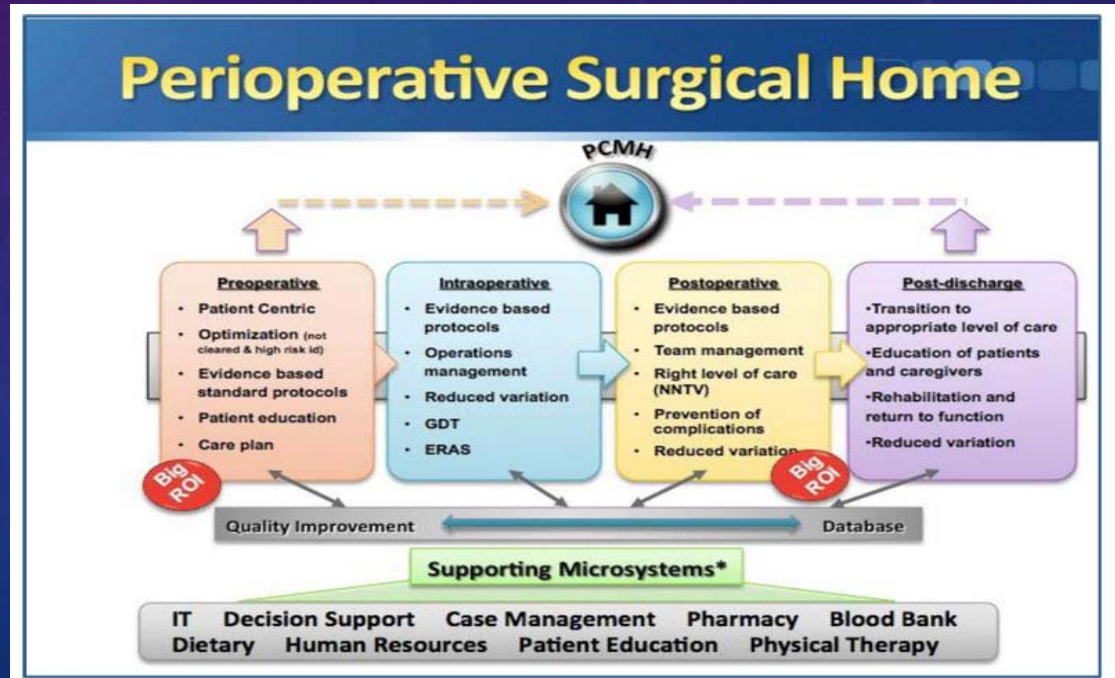
FIGURE 4. A 24-year-old white male with multiple penetrating wounds of the abdomen. The pre-anesthetic pulse rate of 148 and the high diastolic pressure should have warned of circulatory instability. Induction of anaesthesia with thiopental was followed by a sharp decrease in blood pressure and a narrowing of the pulse pressure. The addition of ethyl ether vapor at 4:00 p. m. brought a further reduction in arterial pressure. Five thousand ml. of fluid was administered during the operation. A pressor drug—neocynephine—appeared of value.

COMPUTER CHARTING.. IT IS HERE! WHY NOT? BIGGEST REASON WHY NOT?



DOMAINS

- Patient safety
- Patient and caregiver experience
- Care coordination
- Clinical care
- Population health
- Efficiency and cost reduction



National Quality Strategy: How It Works

STAKEHOLDER TYPES

States

Federal and HHS

Private Sector

Multi Stakeholder Groups

PRIORITIES

Six quality concerns that affect most Americans.



Patient Safety



Person- and Family-Centered Care



Effective Communication and Care Coordination



Prevention and Treatment of Leading Causes of Mortality



Health and Well-Being



Affordable Care

LEVERS

Core business functions, resources, and/or actions that may serve as a means for achieving improved health and health care quality.



Measurement and Feedback



Public Reporting



Learning and Technical Assistance



Certification, Accreditation, and Regulation



Consumer Incentives and Benefit Designs



Payment



Health Information Technology



Innovation and Diffusion



Workforce Development

THE THREE AIMS



The National Quality Strategy unites efforts to improve health and health care for all Americans. The above graphic provides a high-level view of how the National Quality Strategy works to provide better, more affordable care for the person and the community.

THE STRATEGY IS TO CONCURRENTLY PURSUE THREE AIMS

Better Care

Improve overall quality by making health care more patient-centered, reliable, accessible, and safe

Healthy People / Healthy Communities

Improve population health by supporting proven interventions to address behavioral, social, and environmental determinants of health in addition to delivering higher-quality care

Affordable Care

Reduce the cost of quality health care for individuals, families, employers, and government

PQRS— PHYSICIAN QUALITY REPORTING SYSTEM

The Physician Quality Reporting System (PQRS) is a quality reporting program that encourages individual eligible professionals (EPs) and group practices to report information on the quality of care to Medicare. PQRS gives participating EPs and group practices the opportunity to assess the quality of care they provide to their patients, helping to ensure that patients get the right care at the right time.

By reporting on PQRS quality measures, individual EPs and group practices can also quantify how often they are meeting a particular quality metric. Beginning in 2015, the program will apply a negative payment adjustment to individual EPs and PQRS group practices who did not satisfactorily report data on quality measures for Medicare Part B Physician Fee Schedule (MPFS) covered professional services in 2013. Those who report satisfactorily for the 2015 program year will avoid the 2017 PQRS negative payment adjustment.

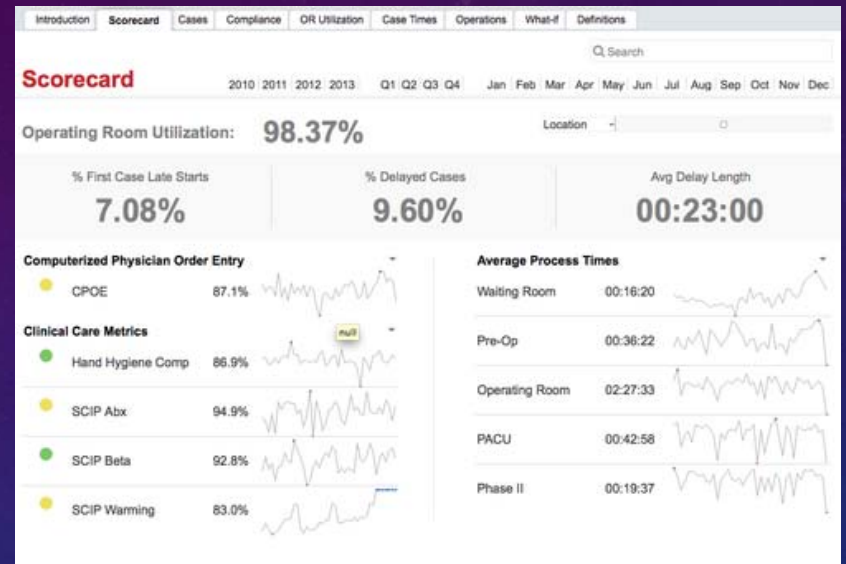
PQRS PROGRAM OVERVIEW

The 2006 Tax Relief and Health Care Act (TRHCA) authorized a physician quality reporting system, including an incentive payment, for EPs who satisfactorily reported data on quality measures for Medicare Part B Physician Fee Schedule (PFS) covered professional services furnished to Medicare Fee-for-Service (FFS) beneficiaries during the second half of 2007. CMS named this program the Physician Quality Reporting Initiative (PQRI), which was renamed Physician Quality Reporting System or PQRS in 2011.

PQRS was further modified as a result of The Medicare, Medicaid, and SCHIP Extension Act (MMSEA) and the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA). MMSEA authorized CMS to establish two alternative reporting periods; the reporting of measures groups, and submission of data on PQRS quality measures through clinical data registries. The Affordable Care Act authorized payment adjustments beginning in 2015. For each program year, CMS implements PQRS through an annual rulemaking process published in the *Federal Register*. The program has expanded the number of measures and reporting options over time to facilitate quality reporting by a broad array of eligible professionals.

DASHBOARD OVERVIEW

The Affordable Care Act of 2010 called for “timely feedback to eligible professionals on the performance of the eligible professional with respect to satisfactorily submitting data on quality measures.” As timely feedback is already provided, CMS indicated in the 2012-2014 PFS final rule the introduction of the Dashboard as an additional tool for EPs to review their interim performance in PQRS. The Dashboard allows organizations and EPs to log-in and access their interim 2015 PQRS reported data on a quarterly basis in order to monitor the status of claims-based individual measures reporting. The Dashboard should *not* be used to determine final data analysis for full-year program reporting.



NEGATIVE PAYMENT

Payment (Negative) Adjustment 2.0%
adjustment applied in 2016 based on 2014 reporting
year data. Adjustment per \$10,000 = \$200

Individual eligible professionals (EPs) and group practices participating in the Physician Quality Reporting System (PQRS) group practice reporting option (GPRO) can avoid the 2017 PQRS negative payment adjustment by satisfactorily reporting 2015 quality measures data to a participating registry. Each EP or group participating in GPRO via registry must satisfactorily report on at least 50% of eligible instances for at least 9 measures covering 3 National Quality Strategy (NQS) domains to avoid the negative payment adjustment. If fewer than 9 measures or 3 NQS domains are reported via a qualified registry, CMS will apply a measure-applicability validation (MAV) process

2015 PQRS PAYMENT ADJUSTMENT OVERVIEW

Section 1848(a)(8) of the Social Security Act, as added by section 3002(b) of the Affordable Care Act, requires CMS to subject EPs who do not satisfactorily report data on quality measures for covered professional services to a payment adjustment beginning in 2015. The PQRS payment adjustment is applied two years after the 12-month reporting period; therefore, EPs who did not meet the payment adjustment criteria during the 2013 program year will receive a PQRS payment adjustment throughout the 2015 calendar year. The PQRS payment adjustment applies to all of the eligible professional's Part B covered professional services under the Medicare Physician Fee Schedule (PFS). Accordingly, EPs or group practices receiving a payment adjustment in 2015 will be paid 1.5% less than the MPFS amount for that service. For 2016 and subsequent years, the payment adjustment is 2.0%. A list of those considered eligible and able to participate in PQRS is available on the CMS program website at;

[http://cms.gov/Medicare/Quality-Initiatives-PatientAssessment-Instruments/PQRS.](http://cms.gov/Medicare/Quality-Initiatives-PatientAssessment-Instruments/PQRS)

PHYSICIAN QUALITY REPORTING SYSTEM (PQRS)

Defining PQRS

- “Paid under or based on the Physician Fee Schedule”
- Eligible Professionals (EPs)
- Payment Incentives (ending in 2014) v. Payment Adjustments
- Common Measures Reported by the CRNA
- #30 (NQF #0269): Timing of Prophylactic Antibiotic
- #44 (NQF #0236): Preoperative Beta-Blocker in Patients with Isolated CABG Surgery
- #76 (NQF #0464): Prevention of Catheter-Related Bloodstream Infections (CRBSI): Central Venous Catheter (CVC) Insertion Protocol
- #193 (NQF #0454): Perioperative Temperature Management

ADDITIONAL SCIP

- Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered
 - Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery
 - Hospitals will be scored based on their performance on each measure relative to other hospitals and on how their performance on each measure has improved over time. The higher of these scores on each measure will be used in determining incentive payments
- Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision
- Prophylactic Antibiotic Selection for Surgical Patients
- Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose
- Surgery Patients on a Beta Blocker Prior to Arrival That Received a Beta Blocker During the Perioperative Period

WHAT WILL STAY AND WHAT WILL GO?

[HTTP://WWW.JOINTCOMMISSION.ORG/SURGICAL_CARE_IMPROVEMENT_PROJECT/](http://www.jointcommission.org/surgical_care_improvement_project/)

- **Surgical Care Improvement Project**

- October 16, 2014

- The Surgical Infection Prevention (SIP) measures were added as a core measure set in the fall of 2003. Hospitals began collecting core measure data for SIP with patient discharges beginning July 1, 2004. The SIP set subsequently transitioned to the [Surgical Care Improvement Project \(SCIP\) measures effective July 1, 2006](#).

- The Surgical Care Improvement Project (SCIP) is a national quality partnership of organizations interested in improving surgical care by significantly reducing surgical complications. SCIP Partners include the Steering Committee of 10 national organizations who have pledged their commitment and full support for SCIP.

- In addition, the SCIP target areas are advised by a technical expert panel (TEP). This group meets on a quarterly basis and provides technical expertise and resources to ensure the SCIP measures are fully supported by evidence-based research.

- Finally, The Joint Commission continues to align with Centers for Medicare and Medicaid Services (CMS) with respect to the performance measures for patients undergoing surgery.

- The SCIP measures can be found in the [Specification Manual for National Hospital Inpatient Quality Measures](#). Submit your questions about SCIP measure specifications to the [Performance Measurement Network Q&A Forum](#).

- **Effective January 1, 2015**

- The Joint Commission will retire the following measures: SCIP INF-2, SCIP INF-3, SCIP INF-6, SCIP CARD-2, SCIP VTE-2. The Joint Commission will be providing accredited hospitals greater flexibility in meeting ORYX® performance measure reporting requirements beginning with measure set selections for calendar year 2015. To learn more see [Facts about ORYX® for Hospitals](#).

Topic Details

Monday 7:48 CST, April 18, 2016

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Topic Library Item

Surgical Care Improvement Project

October 16, 2014

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Topic Library Item

Facts about ORYX® for Hospitals (National Hospital Quality Measures)

September 18, 2015

The Joint Commission's ORYX® initiative integrates outcomes and other performance measurement data into the accreditation process. ORYX measurement requirements are intended to support Joint Commission-accredited organizations in their quality improvement efforts. Performance measures are essential to the credibility of any modern evaluation activity for health care organizations. ORYX data are publicly reported on The Joint Commission website at Quality Check®, www.qualitycheck.org. The public availability of performance measure data permits user comparisons of hospital performance at the state and national levels.

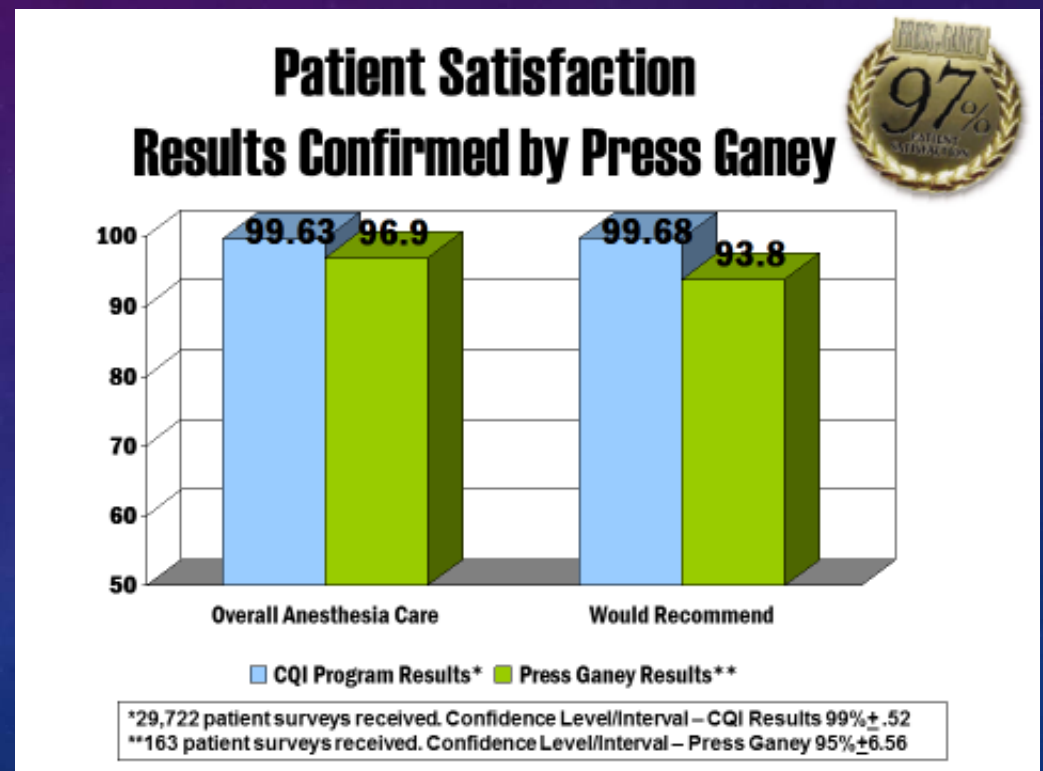
2016 ORYX performance measure reporting requirements

Joint Commission-accredited hospitals continue to have flexibility in meeting the ORYX performance measure requirements for reporting on a minimum of six measure sets. Only one measure set – perinatal care – is mandatory as one of the six measure sets for hospitals. For 2016, the threshold for mandatory reporting on the perinatal care measure set has been reduced to 300 or more live births per year (previously, it was 1,100 live births per year). Accredited hospitals have the flexibility of meeting ORYX reporting requirements through one of three options:

- Option 1: Vendor submission of quarterly data on six of nine sets of chart-abstracted measures.

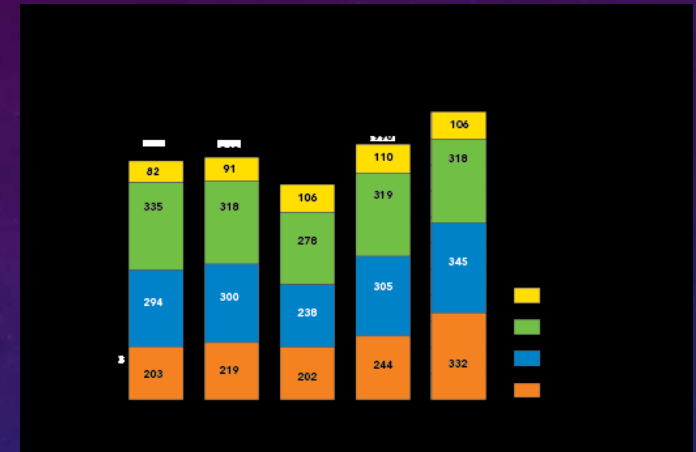
OR DASHBOARD METRICS

- Operational Stats
- Patient Satisfaction
 - Turnover Time
 - On Time Starts
 - Cancellations
 - Overtime Minutes



CASE VOLUME

- Reflects total number of cases over time
- Compares inpatient to outpatient volumes
- Allows you to follow growth as well as seasonal variation
 - The following sample hospital has a decrease in volume in August which reflects a time when many surgeons take vacation
- Average number of cases per OR per year in best practice ORs
 - Inpatient 900 cases per OR/year
 - Outpatient 1400 cases per OR/year



OR UTILIZATION BY DAY OF THE WEEK

- Reflects total OR utilization on each day of the week
- The goal is to even out the utilization so there is little variation between the days of the week
- Goal in best practice ORs is 75%-80% total OR utilization. This allows adequate “flex” in the system
- The following sample hospital revised its block schedule to allow better utilization of Thursdays and Fridays

OR START TIMES

- Defined as time patient enters the operating room
- Usually monitored at exact time and within 10 minutes
 - Example: 0720 exact time while also monitoring the 10 minutes later at 0730
- Goal is 90% within 10 minutes
- Sample hospital reflects a PI project that improved start time from 65% to 85%. Issues addressed were
 - Communication between team members
 - Monitoring of start times
 - Communication to surgeons the importance of on time starts by the OR committee
 - Change in Preoperative Patient preparation

Goal of increasing utilization by 23%
Cost per/minute \$30
Save 110 minutes per day

Revenues increased by \$3312

This doesn't even account for Cost Savings.

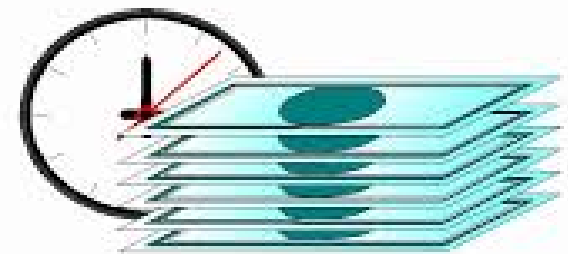
Single OR savings: \$1987
Savings for same OR for year\$
516,672



AVERAGE TURNOVER TIME

- Turnover time is calculated as patient out of the room to next patient in the room
- We usually follow same surgeon turnovers since there is quite a bit of variability when turning over between 2 different surgeons or services
- Goals
 - Outpatient 10-20 minutes
 - Inpatient 30-40 minutes
- Sample hospital slide shows a PI project that begin in April.
Issues addressed included
 - Staffing Levels
 - Communication between team members
 - Preoperative patient workup

Improved Turnaround Time - Impact



between current time and benchmark potential can yield significant opportunities for increased business as well as physician satisfaction.

COMFORT ZONE



- Most of us practice our art in the comfort zone
- New and different ideas tend to pull people from the comfort zone to the scare zone
- Try new things
- Enhance your patient outcomes

PATIENT SATISFACTION SCORES: AMERICAN HEALTH CARE AFFORDABILITY ACT.

A random sample of patients discharged from hospitals across the country are surveyed and asked questions about their feelings and perceptions about their hospital stay. This measure combines hospital performance on questions that asked patients their levels of satisfaction with some of the following elements of their stay:

- **How well nurses communicated with patients**
- **How well doctors communicated with patients**
- **How well caregivers managed patients' pain**
- **How well caregivers explained patients' medications to them**

The survey also asks patients to give an overall satisfaction rating to their hospital stay.



PATIENT satisfaction is an important measure of the quality of health care. Satisfaction with anesthesia is used as an outcome measure in clinical trials, and patient satisfaction is considered to be an integral part of service quality. Its measurement is also required to fulfill performance improvement and revalidation agendas for healthcare professionals. However, clinical experience tells us that appropriately developed or validated instruments are not widely used in any of these settings

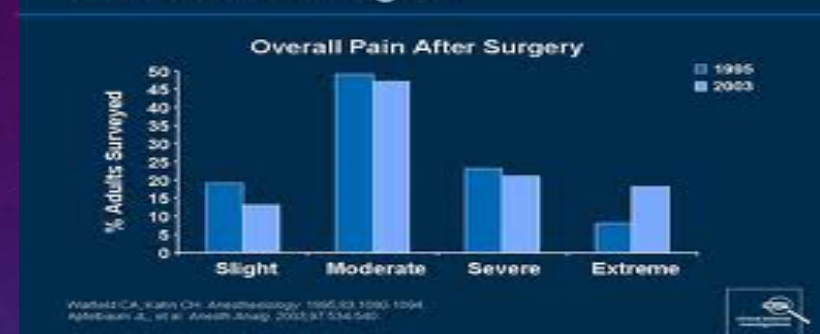
FOCUS OF HCAHPS ON PAIN AND PATIENT SATISFACTION

- **Pain**
 - Establishing and maintaining an institutional pain performance improvement plan is a Joint Commission requirement¹
- **Patient satisfaction**
 - Local, regional, or national patient satisfaction data are now being reported via Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS, also known as CAHPS[®] hospital survey)²
 - As part of the Affordable Care Act 2010, the Centers for Medicare and Medicaid (CMS) have established hospital reimbursement based on HCAHPS scores³
 - Effective beginning October 1, 2012

1. Wells N, et al. In: Hughes RG, ed. *Patient Safety and Quality: an Evidence-Based Handbook for Nurses*. AHRQ Publication No. 08-0043. 2. US Department of Health and Human Services, Centers for Medicare and Medicaid. HCAHPS: Patients' Perspectives of Care Survey. <http://www.cms.gov>. Accessed November 21, 2011. 3. American Hospital Association (AHA) Hospital-based purchasing program: the final rule. May 24, 2011. <http://www.americangovernance.com>. Accessed October 11, 2011.

ACUTE PERIOPERATIVE PAIN

Fig. 13 Postoperative Pain Is Still Undermanaged

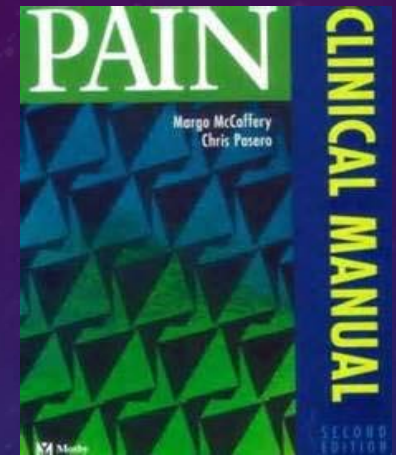


- **Perioperative pain**
 - Approximately 46 million inpatient procedures and 35 million outpatient surgeries were performed in the US in 2006
 - Despite new treatment standards, guidelines, and educational efforts, acute postoperative pain continues to be undertreated, with up to 75% of patients in the US still failing to receive adequate postoperative pain relief
 - With the advent of Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) surveys, patients are now able to make decisions on hospitals based on quality of care, including quality of pain management

GODMOTHER OF PAIN

MARGO MCCAFFERY RN 1968

Pain is a unpleasant sensory and emotional experience associated with actual or potential tissue damage.

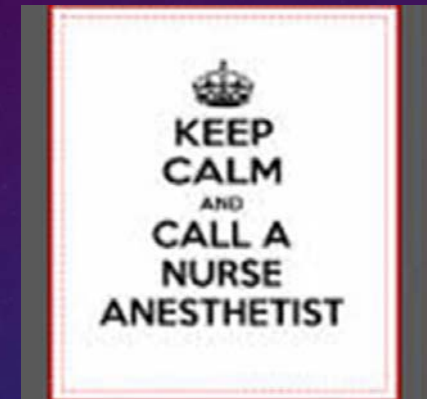


Pain is whatever the experiencing person says it is

May not be directly proportional to amount of tissue injury

Highly subjective, leading to under treatment

WE MUST START TO THINK DIFFERENTLY!



THINK OUTSIDE THE BOX.....

DIFFERENT DRUGS, DIFFERENT AND NEW USES!

MULTI-MODAL
SYNERGY
PRE-EMPTIVE

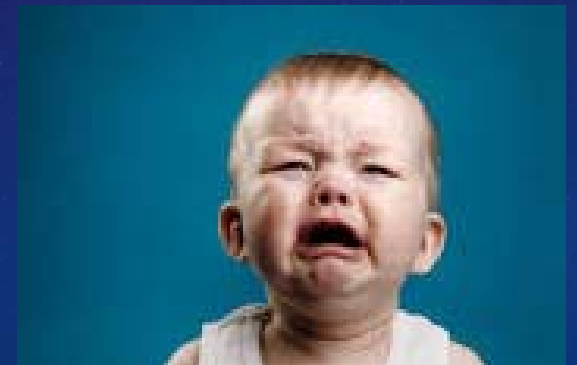
WOW.....

“You shouldn’t have that much pain?”

“Pain doesn’t raise your blood pressure”

“You should feel this way”

“This won’t be that painful”



HOW TO TALK TO PATIENTS

JUST RELAX

WE ARE ALMOST DONE

YOU ARE DOING FINE

ALLOW YOUR EYES TO GENTLY CLOSE

YOU ARE PROBABLY ALREADY FEELING BETTER

TAKE THIS AND IT WILL HELP YOU FEEL BETTER

I'M GIVING YOU SOMETHING TO MAKE YOU FEEL BETTER



HOW TO TALK TO PATIENTS

Suggestibility and Semantics

NEGATIVE WORDS

HURT OR PAIN
DOCTOR IS CUTTING
PUTTING YOU TO SLEEP
LABOR PAINS
IT WON'T BE LONG
ARE YOU HAVING PAIN?
ARE YOU GOING TO
THROW UP?
LITTLE BEE STING

POSITIVE WORDS

COMFORT
GETTING STARTED
DRIFTING OFF TO SLEEP
PRESSURE WAVES
IN A SHORT TIME
ARE YOU COMFORTABLE?
ARE YOU HUNGRY?
HERE'S A STICK



Oxytocin is also thought to modulate inflammation by decreasing certain cytokines. Thus, the increased release in oxytocin following positive social interactions has the potential to improve wound healing.



Marazziti D, Dell'Osso B, Baroni S, Mungai F, Catena M, Rucci P, Albanese F, Giannaccini G, Betti L, Fabbrini L, Italiani P, Del Debbio A, Lucacchini A, Dell'Osso L (2006). "A relationship between oxytocin and anxiety of romantic attachment". *Clinical Practice and Epidemiology in Mental Health* 2 (1): 28. [doi:10.1186/1745-0179-2-28](https://doi.org/10.1186/1745-0179-2-28). [PMC 1621060](https://pubmed.ncbi.nlm.nih.gov/17034623/). [PMID 17034623](https://pubmed.ncbi.nlm.nih.gov/17034623/).

TRUST

Oxytocin is sometimes known as the *trust hormone*

Where are you from?

Do you have kids, grandkids?

What do you do for a living?

What do you like to do?

Talk with the patient, not to the patient.



NEW FIELD OF STUDY

Terms to know:

Multi-Modal, Pre-emptive, and Synergy

Sound familiar?

Incidence of Pain, as Compared to Major Conditions

Pain affects more Americans than diabetes, heart disease and cancer combined. The chart below depicts the number of chronic pain sufferers compared to other major health conditions.

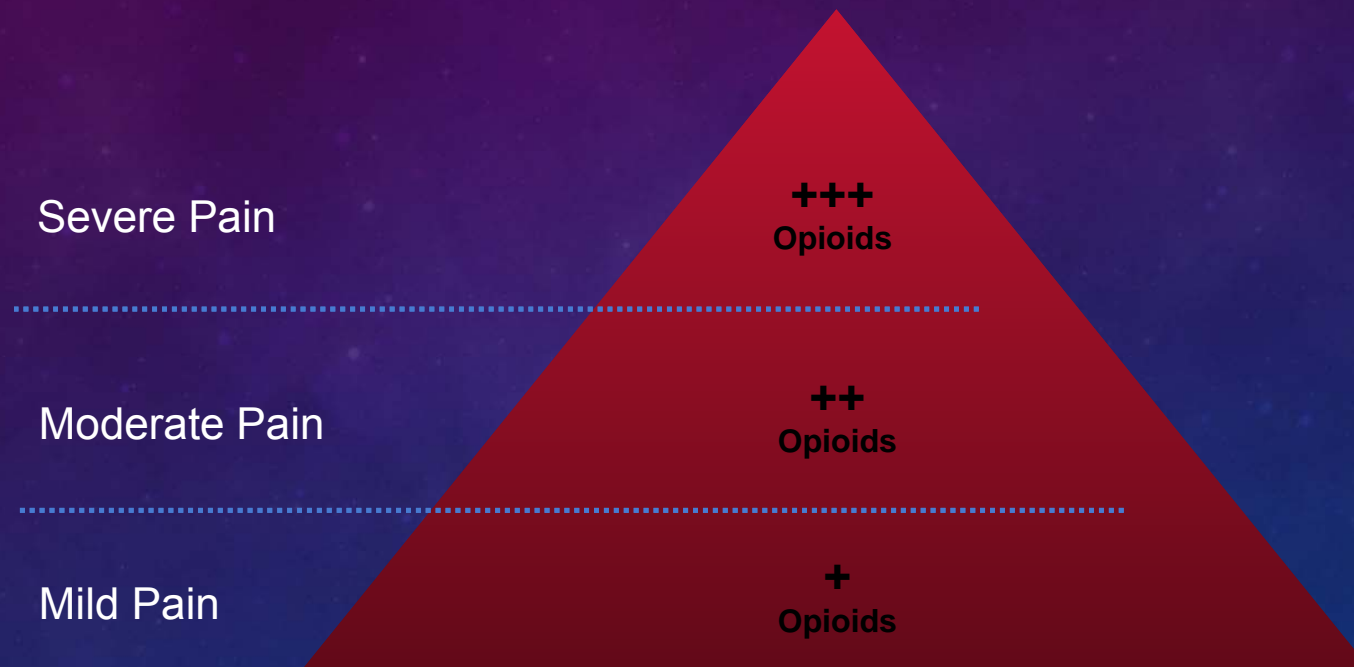
Condition	Number of Sufferers	Source
Chronic Pain	100 million Americans	Institute of Medicine of The National Academies (2)
Diabetes	25.8 million Americans (diagnosed and estimated undiagnosed)	American Diabetes Association (3)
Coronary Heart Disease (heart attack and chest pain)	16.3 million Americans	American Heart Association (4)
Stroke	7.0 million Americans	
Cancer	11.9 million Americans	American Cancer Society (5)

[Back to Top](#)

The Burden of Pain on Every Day Life

...\$500 billion to \$595 billion (in 2010 dollars) in the

THE HISTORICAL ACUTE PAIN PARADIGM



Aubrun et al., 2003¹

- Opioid analgesics rank among the drugs most frequently associated with adverse drug events²

1. Aubrun F, et al. *Anesthesiology*. 2003;98(6):1415-1421. 2. The Joint Commission Sentinel Event Alert. Safe use of opioids in hospitals. Issue 49; August 8, 2012. Available at: <http://www.jointcommission.org>

MULTIMODAL APPROACH TO ACUTE PAIN MANAGEMENT



Severe Pain

STEP 3
STEP 2
and
Higher doses of opioids

Moderate Pain

STEP 2
STEP 1
and
Low doses of opioids

Mild Pain

STEP 1
Acetaminophen, NSAIDs, or COXIBs
and
Local/regional anesthesia

Modified from Crews et al., 2002¹

1. Crews JC. *JAMA*. 2002;288:629-632. 2. World Health Organization. Pain relief ladder. <http://www.who.int>. Accessed November 21, 2011. 3. Ventafridda V, et al. *Cancer*. 1987;59:850-856. 4. ASA Task Force. *Anesthesiology*. 2004;100:1573-1581.

PAIN... WE ARE LATE WHEN TREATED IN THE OR.....

- ▶ When we treat the pain the OR.... The receptors and the transmitters are already being fired..... Why not treat prior to that?
 - ▶ The study of Pain is a new issue... we have only really cared for the last few years... why should YOU care?
- ▶ Cost.. Money and patient satisfaction...
- ▶ “Patients who are pretreated with pain meds, anxiolytic or NSAIDS prior to surgery” --“have a greater decrease in postoperative pain” --- “decrease in postoperative anxiety”

ACUTE

- ▶ Immediate
- ▶ Serves as a warning
- ▶ Typically easier to treat
- ▶ Typically has a end
- ▶ Less 3-6 months and subsides once the healing process is accomplished.

Acute pain serves the evolutionary function of warning for tissue damage, but chronic pain does little except to annoy and sometimes immobilize our ailing population.



CHRONIC PAIN

- ▶ Involves complex processes and pathology. Usually involves altered anatomy and neural pathways. It is constant and prolonged, lasting longer than 6 months and sometimes for life.
- ▶ Serves NO purpose
- ▶ Typically can not identify a cause
- ▶ Leads to pain behaviors: Negative emotions, anxiety, depression, sleep deprivation, May lead to the patient seeking active end of life.
- ▶ Very difficult to treat



THE POWER OF WORDS

New Drugs and new ways of approaching patients.....

Do you have any pain?

verse how do you feel?

“You should only have (this) much pain?”

Most misused word in our culture: Standard?

WHO CONTROLS THE ROOM TEMP?

- You DO!!
- SCIP: http://www.sjhlex.org/documents/Physicians/SCIP_Poster_Full_Size.pdf
- Temperature must be equal to or greater than 96.8° F within 30 minutes prior to anesthesia end time or immediately 15 minutes after anesthesia end time.
- It costs on average between \$2500-\$7000 per pt for complications related to hypothermia. Infection being the most common.
- YOU CONTROL THE TEMP.
- WE need to change the mind set of the operating room.

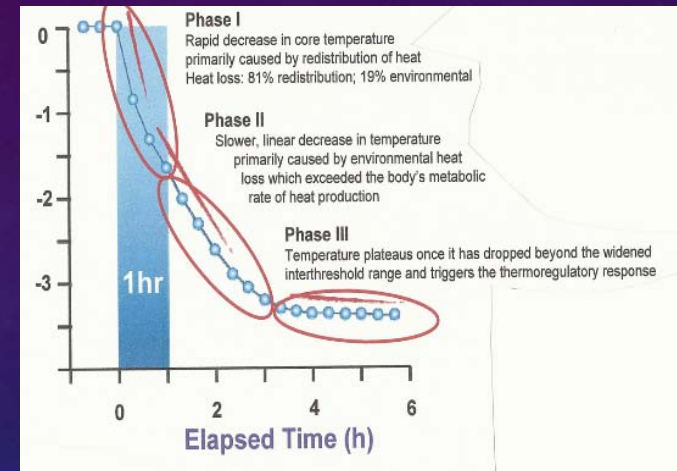
HYPOTHERMIA

50% to 90% of surgical patients

(approximately 14 million) experience
inadvertent perioperative hypothermia each year

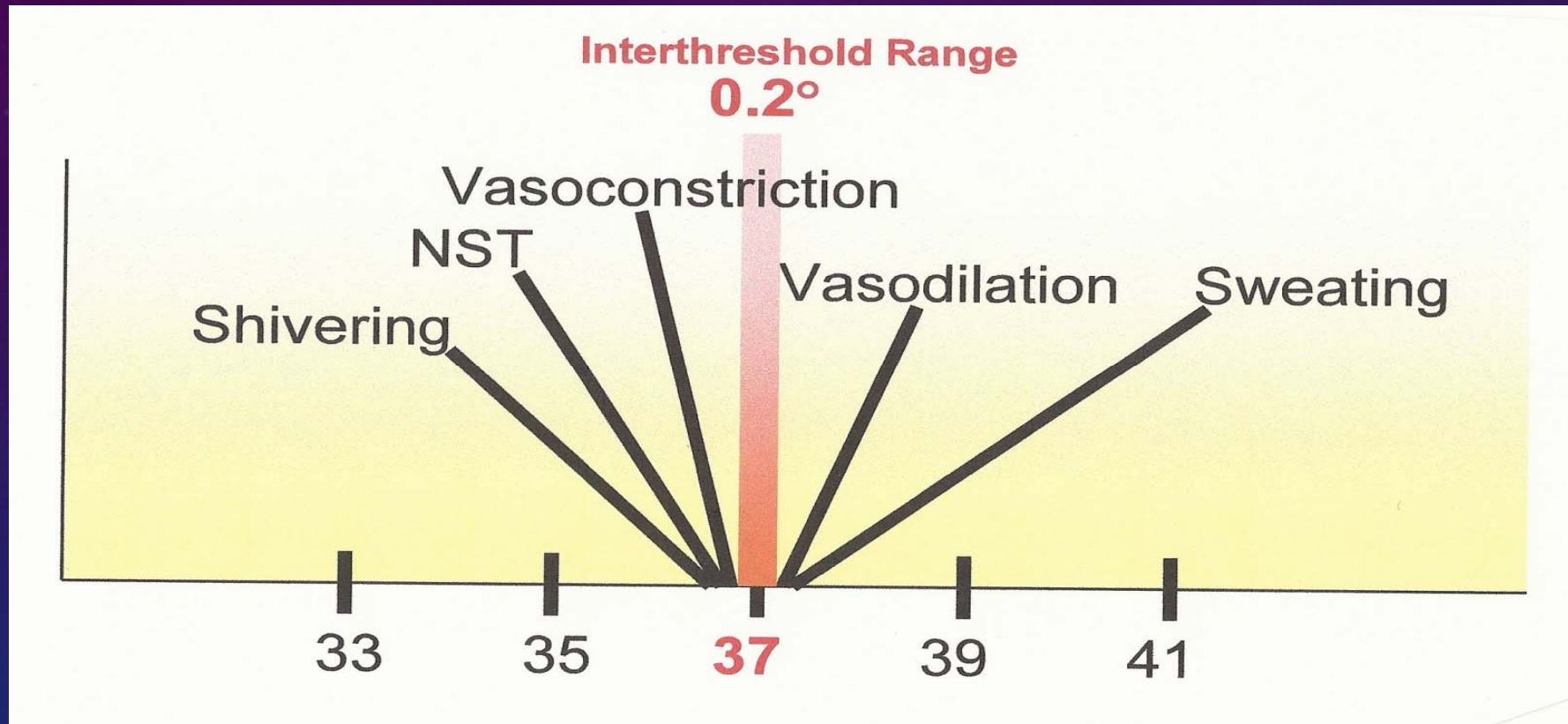
Between 30-40% of all surgical patients
are hypothermic upon admission to PACU

Inadvertent hypothermia has been called as the most frequent, preventable complication of surgery and anesthesia

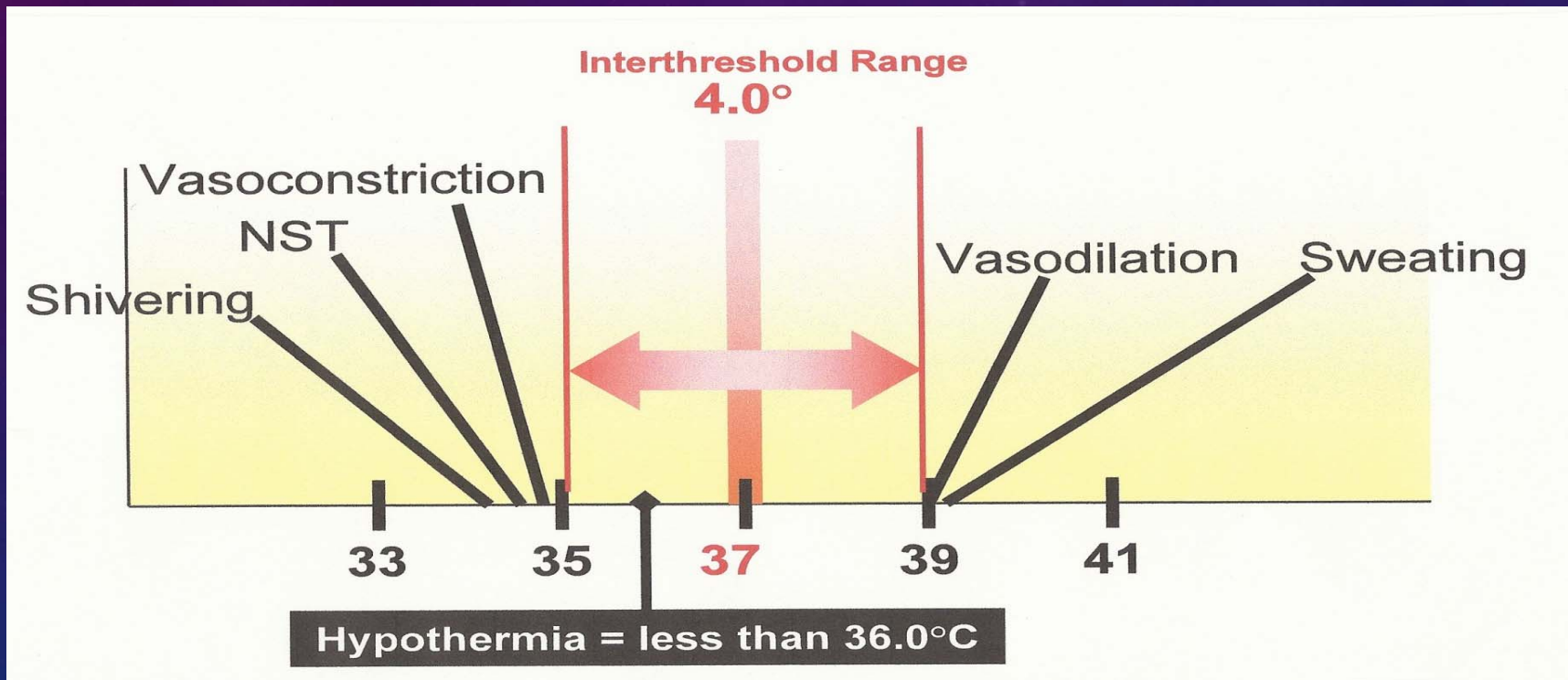


	Decreased:
Time spent in ICU	43%
Need for mechanical ventilation	34%
Need for blood transfusion	40%
PRBC	85%
FFP	79%
Platelets	78%
Surgical site infections	64%
Postop MI	44%
Mortality rates	55%

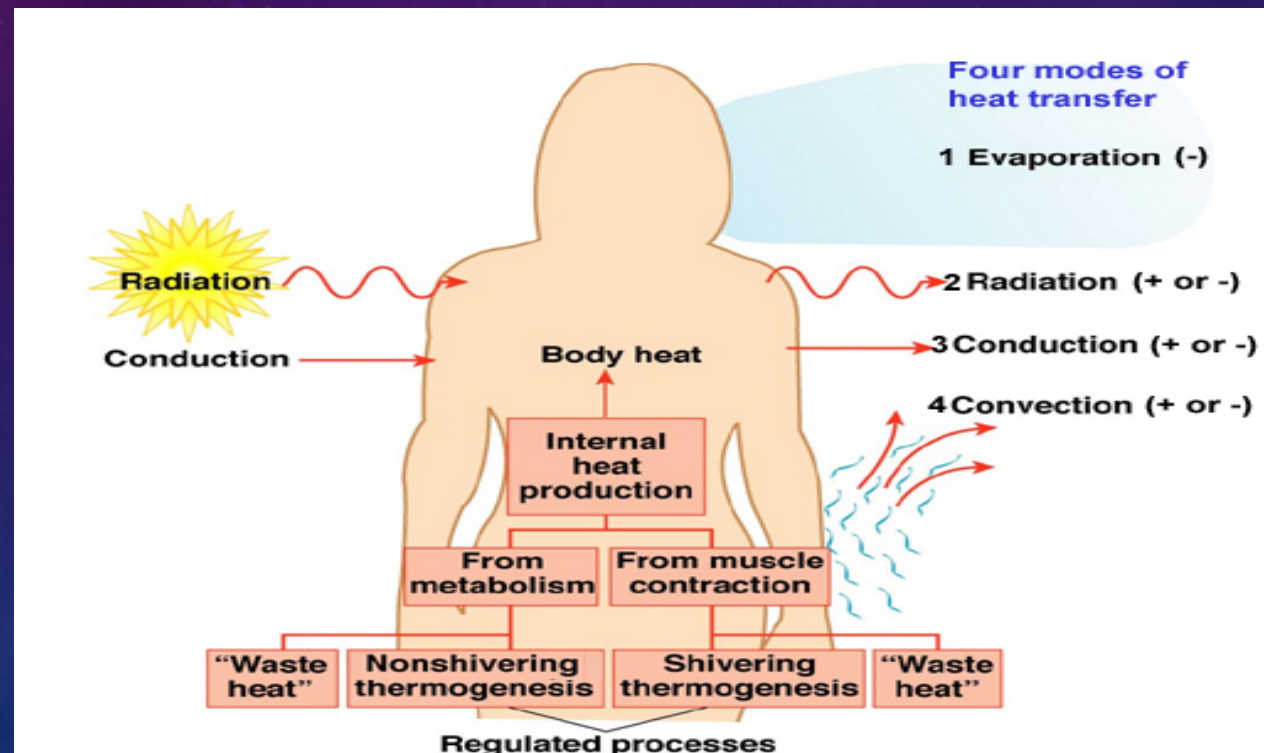
PHYSIOLOGIC THERMOREGULATION



THERMOREGULATION UNDER ANESTHESIA



HEAT LOSS

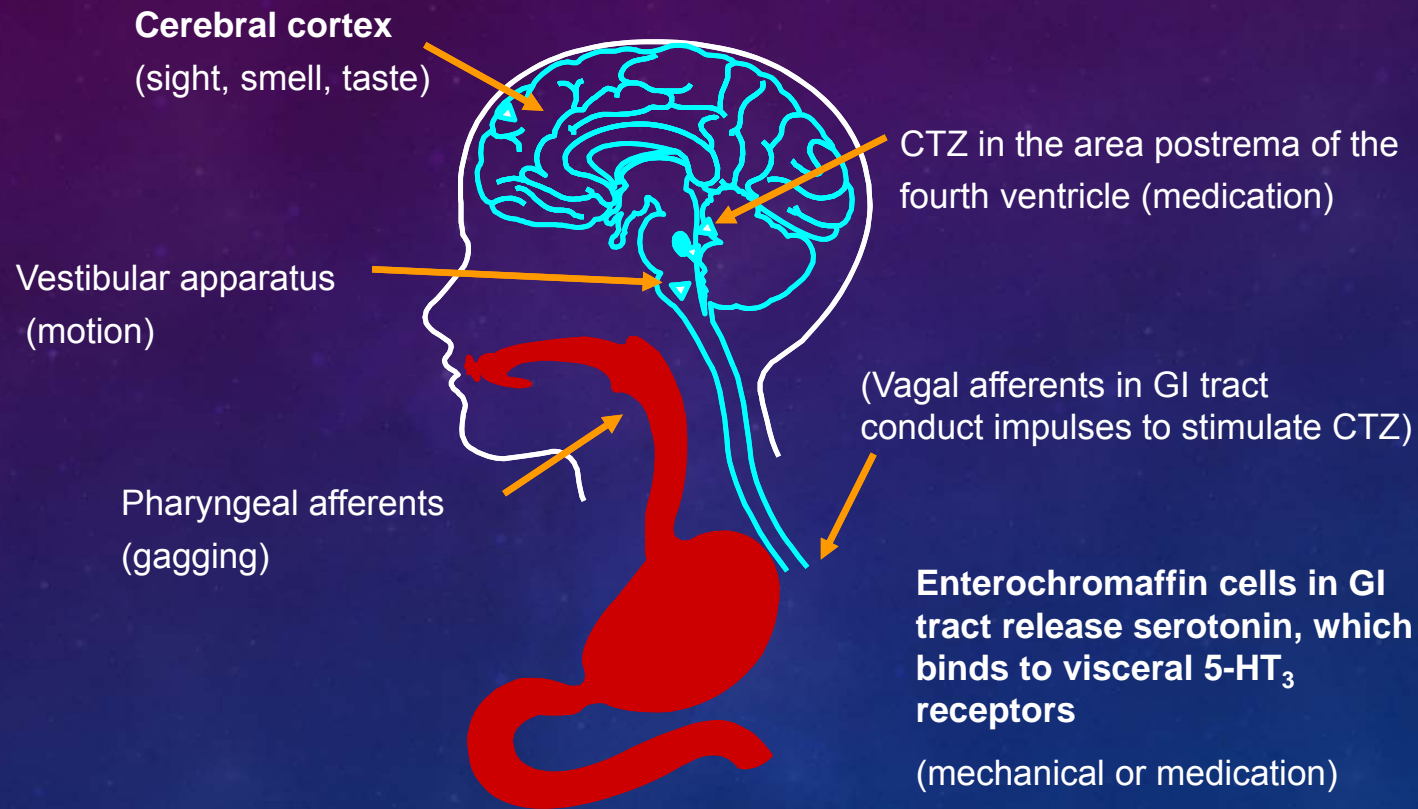


ECONOMIC IMPACT – FOR EACH INCIDENT OF NAUSEA/VOMITING THAT IS AVOIDED:

- **Avoid resource utilization costs:** Patients who vomit spend an average of 43 minutes longer in the PACU at a cost of \$85 for nausea and \$138 for vomiting.
- **Save the cost of rescue treatment:** \$283 (minimum) to treat patients who experience PONV
- **For surgical centers:** PONV delays may result in an ambulance transfer to a hospital costing \$300 - \$900 and result in an admission costing \$1,200 to more than \$2,400 per day.
- In spite of receiving anti-nausea drugs during surgery, 26% of patients still require additional treatment in the Post-Anesthesia Care Unit (PACU), and 40% of patients require additional treatment for PONV following discharge.
- PONV is also associated with poor surgical outcomes, prolonged healing and wound disruption. Commonly used anti-nausea drugs have a sedating effect, which may prolong time to discharge and increase the risk of obstruction for OSA patients.
-



PATHOPHYSIOLOGY OF PONV



CTZ = chemoreceptor trigger zone.



MULTI MODAL EXAMPLE

- Anticholinergic drugs (both scopolamine and robinul?? Atropine is better..) (anti muscarinic receptor antagonists) and H-1 antagonists such as Dramamine and meclizine are very useful in motion sickness but are ineffective against substances that act directly on the chemoreceptor trigger zone
- A lot of drugs we use, then trigger nausea and vomiting in the chemoreceptor trigger zone --- thus making the above listed drugs useless in this regard.
- Antiemetic drugs should be combined to increase antiemetic activity while decreasing toxicity effects; for example, dexamethasone when given with 5HT-3 increases activity of both. Diphenhydramine when given with metoclopramide increases the action of both while reducing the risk of EPS.
- Hence; we need a multi modal attack against nausea and vomiting
- Remember these of older drugs either forgotten or just not used anymore.
You still have the mainstay drugs to use....

REASONS TO AVOID PONV “PATIENT SATISFACTION SCORES”

A survey found that people* are willing to accept a variety of trade-offs to avoid PONV:

- Dysphoria
- Increased cost
- Decreased mental acuity
- Increased postoperative pain

*Anesthesiologists, nurses, support staff at two teaching hospitals, and computer personnel who attended a national meeting.

Orkin . . *Anesth Anig* 1992;74:S225 Abstract.



IMPACT... ON COST

- PONV can increase total health care costs
 - May lead to increased PACU time
 - Has the potential to expand nursing care requirements
 - Is a limiting factor in early discharge of ambulatory surgery patients
 - Is a leading cause of unanticipated hospital admission

** PONV is estimated to cost several hundred million dollars annually **

DOGMA?

Dogma is a principle or set of principles laid down by an authority as incontrovertibly true. It serves as part of the primary basis of an ideology or belief system, and it cannot be changed or discarded



Traumatic injury is a common problem, with over five million worldwide deaths from trauma per year. An estimated 10 to 20% of these deaths are potentially preventable with better control of bleeding. Damage control resuscitation involves early delivery of plasma and platelets as a primary resuscitation approach to minimize trauma-induced coagulopathy. Plasma, red blood cell and platelet ratios of 1:1:1 appear to be the best substitution for fresh whole blood; however, the current literature consists only of survivor bias-prone observational studies.

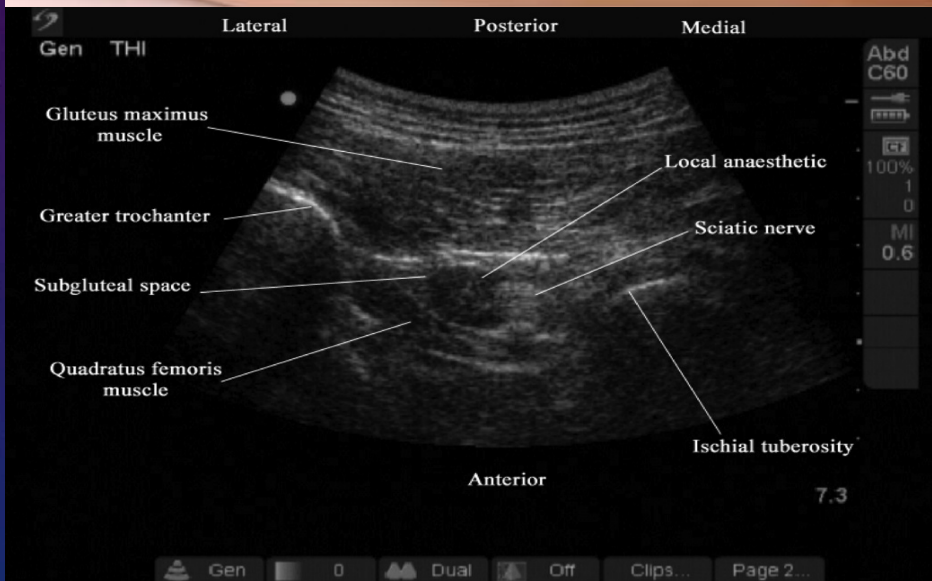
MUSIC



Music interventions have been suggested as a nonpharmacological intervention to alleviate pain and anxiety during surgical treatment.

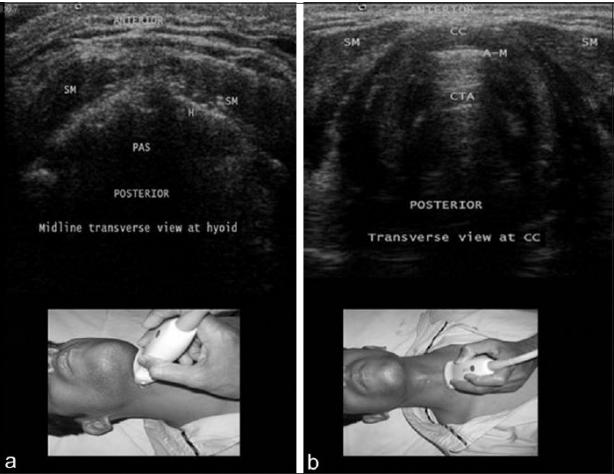
Most of the studies found in the literature involve passive music listening via headphones. The data suggest that researcher-selected music is most effective in reducing anxiety, primarily because it incorporates evidence-based parameters such as consistent tempo and dynamics, stable rhythms, and smooth melodic lines. Finally, the literature suggests that music therapists can serve as experts to help medical personnel identify effective implementation strategies.

ULTRASOUND...HERE AND MORE COMING....



NEW ULTRASOUND?---

"ANOTHER TOOL TO DISTINGUISH US FROM THE CRNA"

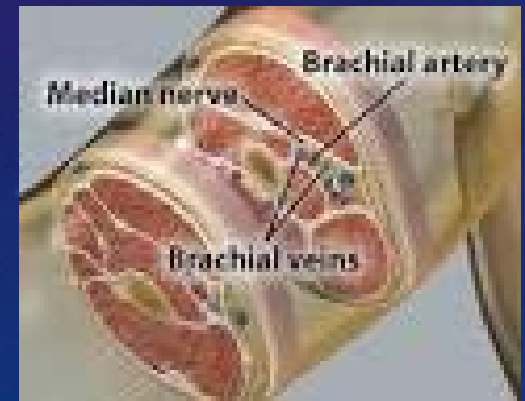
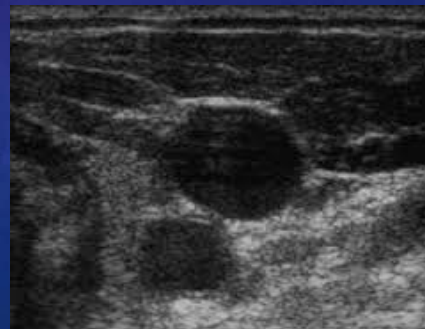


ULTRASOUND AND ANESTHESIA



Ultrasound speeds up safety and how well and effective your block is...

Increase Public Relations and Productivity..



SPINAL AND EPIDURAL PLACEMENT



Figure. The needle is inserted caudad to the probe, in plane with the ultrasound beam.

Reprinted with permission from Ki Jinn Chin, MMed.



INNOVATIONS THAT WILL TRANSFORM ANESTHESIA

Checklists

Behavioral Economics

Patient Portals

Payment Innovations

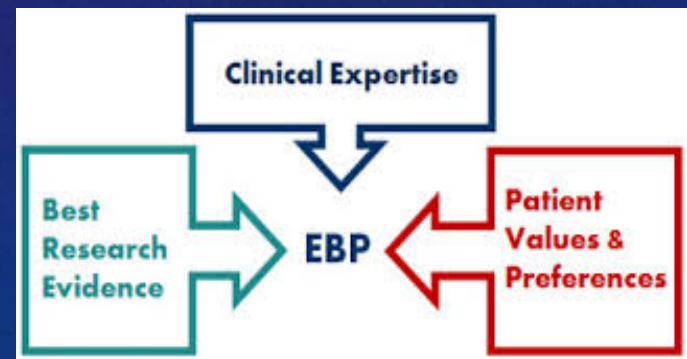
Evidence-Based Decision Making

Accountable Care Organizations

Regenerative Medicine

Virtual Visits

Genetics Enters Practice





AUGUSTINE
BIOMEDICAL + DESIGN

ENTER SITE

ASK THE QUESTION??

**AIR-FREE
CONDUCTIVE FABRIC
PATIENT WARMING
BLANKETS...**



Total Efficiency Warming
Pre-warm for as low as \$1/patient with a B104 Full Body Blanket. In the PACU, one WC5x controller can warm two patients.



ORIGINAL ARTICLE

Core temperatures during major abdominal surgery in patients warmed with new circulating-water garments, forced-air warming, or carbon-fiber resistive-heating system

Kenji Hasegawa · Chiharu Negishi · Fumitoshi Nakagawa · Makoto Ozaki

Received: 14 May 2010 / Accepted: 1 December 2011 / Published online: 22 December 2011
© The Author(s) 2011. This article is published with open access at Springerlink.com

Abstract It has been reported that recently developed circulating-water garments transfer more heat than forced-air warming systems. The authors evaluated the

Conclusions The combination of circulating-water wraps and a mattress better maintain intraoperative temperature than old forced-air and carbon-fiber resistive-heating systems.



COLLOID VERSUS CRYSTALLOID

Long-standing controversy regarding merits of crystalloid versus colloid for fluid resuscitation

Numerous studies

- None have unequivocally demonstrated distinct advantages in terms of pulmonary complications or survival with either therapy

Colloids more expensive & don't have same safety profile as crystalloids

- Hard to justify their use unless
- rapid volume expansion needed
- Less hemodilution
- w/colloids than crystalloids

JOACHIM BOLDT

Joachim Boldt: is a German anesthesia provider who used to be considered a leading researcher into colloids. He has been stripped of his professorship and is under criminal investigation for possible forgery of up to 98 research studies

FDA Safety Communication: Boxed Warning on increased mortality and severe renal injury, and additional warning on risk of bleeding, for use of hydroxyethyl starch solutions in some settings--November 25, 2013

FINAL THOUGHTS!

Avoid Cancellations

Increase utilization; examine your
block times and overtime staffing models.

Decrease turn-over times

Update Block times

Set Goals:

Start Procedures on time—95%

Finish in scheduled Day (8hrs)—95%

Anesthesia and surgical blocks on time

Preop clinic either use it or open one!

THE SCIENCE OF PATIENT SATISFACTION IS NEW!

This is a evolving field, this is only the tip of the iceberg. Keep learning.



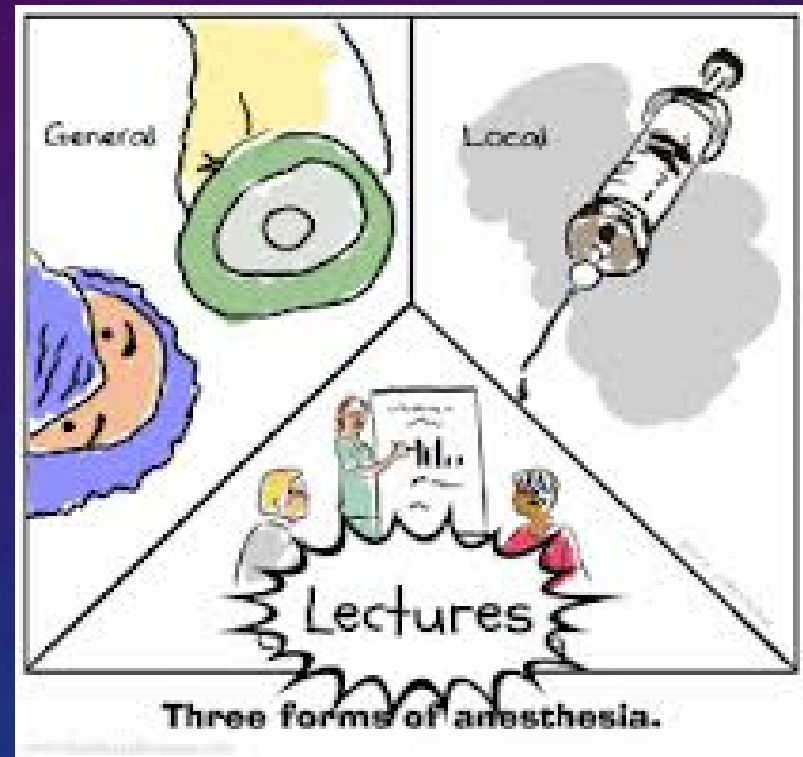


Can I be excused?
... my brain is full !

QUESTIONS

Thank you!

Email me for the articles:
pstrube3000@yahoo.com



DEDICATED TO:

Thomas G Healey, RN, CRNA, MA

St Mary's University

Died January 5, 2014

Navy Corpsman Vietnam

