2010 Annual Meeting
Year in Review
Year in Review

- Quick refresher
- Trend data
- Checklist campaign
- New module development
- Data integration activities
- Public perspective
- Operational issues
- Economics and Demonstrating Value
- Research and development
- Discussion about the future
• WA State’s clinician-led collaborative for higher quality, safer, and cost-effective surgical and interventional care

• Define, track and deliver excellence
  – Surveillance and benchmarking
  – Interventions to change clinical practice

• Grassroots and voluntary
  – 55 hospitals
  – ~90% of general, bariatric, pediatric and vascular surgical care
The Scope of SCOAP
• **Strategic growth in targets**
  – Appendectomy, Colectomy/Proctectomy, Gastric bypass
  – Vascular and pediatric surgery
  – “Higher-risk” surgery pilot (esophagus, pancreas and liver) in development
  – “Lower-risk” surgery pilot (cholecystectomy, hernia, breast) in development
  – Specialty SCOAP in planning (SPINE and Uro-SCOAP)

• **Strategic growth in function**
  – Universal enrollment
  – Surveillance/benchmarking
  – Active intervention to change behavior
  – Anchors
SCOAP Growth

Number of Procedures by Year

SCOAP Procedures

Year

2005  2006  2007  2008  2009

0  1000  2000  3000  9000  10000  12000
Re-operative Complications
Elective Colon/Rectal Resections
Risk-adjusted Operative Re-intervention
Elective Colon & Rectal Procedures

[Graph showing the trend of re-intervention rates for different cohorts over four years.]
Peri-op DVT Prophylaxis
Gastric Bypass Procedures

SCOAP

Year 1 | Year 2 | Year 3 | Year 4
---|---|---|---
2006 Cohort | 2007 Cohort | 2008 Cohort | 2009 Cohort

50% | 60% | 70% | 80% | 90% | 100%
Peri-op Blood Glucose Checked among Diabetics
Gastric Bypass Procedures
Peri-op DVT Prophylaxis
Elective Colon & Rectal Procedures
Normothermia
Elective Colon & Rectal Procedures
Beta-blockers Continued Post-op
Elective Colon & Rectal Procedures

Year 1 | Year 2 | Year 3 | Year 4
--- | --- | --- | ---
2006 Cohort | 2007 Cohort | 2008 Cohort | 2009 Cohort
Peri-op Insulin Used when PBG High

Elective Colon & Rectal Procedures
Pre-op Imaging among Younger Women

Appendectomy Procedures

SCOAP
Risk-adjusted Length of Stay: Open Elective Colon & Rectal Procedures
RISK-ADJUSTED LENGTH OF STAY: LAP ELECTIVE COLON & RECTAL PROCEDURES

Chart showing the risk-adjusted length of stay for Lap Elective Colon & Rectal Procedures from Year 1 to Year 4 for different cohorts.
Year in Review

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• Checklist campaign and results
• Data integration activities
• New module development
• Public perspective
  – Web data
  – Video vignettes
• Operational issues
  – Data divers
  – IRR
  – Outsourcing
  – Report refinement
• Economic assessment
• Research and development
### Step 1: Briefing—Prior to Skin Incision (All Team Members)
- Team members introduce themselves by name and role
- Team members invited to express any safety concerns throughout procedure
- Confirm: Patient (at least 2 identifiers), Surgical Site, Procedure Name, Proper Position
- Personnel exchanges discussed (timing of and plan for announcing exchanges)
- Confirm skin prep product contains 70% alcohol, unless contraindicated

#### Anesthesia Team Reviews
- Concerns (airway, special meds [beta blockers], relevant allergies, conditions affecting recovery, etc)

#### Surgeon Reviews
- Brief description of procedure and anticipated difficulties
- Expected duration of procedure
- Expected blood loss
- Need for instruments/supplies/IV access beyond those normally used for the procedure

#### Nursing/Surgical Tech Team Reviews
- Equipment issues (e.g., instruments ready and trained on, requested implants available, gas tanks full)
- Sharps management plan reviewed

### Step 2: Process Control—Prior to Skin Incision (Surgeon Leads)
- Essential imaging displayed, right and left confirmed
- Antibiotic prophylaxis given in last 60 minutes
- Active warming in place

**CASE EXPECTED TO BE ≥ 1 HOUR:**
- Glucose checked for diabetics
- Insulin protocol initiated if needed
- DVT/PE chemoprophylaxis plan in place
- If patient on beta blocker, post-op plan formulated
- Re-dosing plan for antibiotics
- Specialty-specific checklist

### Step 3: Completion and Debriefing—Start Prior to Closure (All Team Members)

After critical portion of operation complete:
- (Surgeon) Perform a visual and physical sweep of the wound
- (Surgeon and Nurse/Tech) Perform preliminary quiet needle/sponge/instrument count

After skin closure:
- (Surgeon and Nurse/Tech) Confirm final needle/sponge/instrument count correct
- (Surgeon and Nurse) If specimen, confirm label & instructions (e.g., orientation, 12-lymph nodes for colon CA)
- (All) Confirm name of procedure
- (All) Equipment issues to be addressed?   No   Yes, and response plan formulated (Who/When)
- (All) What could have been better?   Nothing   Something, with plan to address (Who/When)
- (All) Concerns for recovery (e.g., plan for pain management, plan to prevent nausea/vomiting)
A Message from the Governor
January 15, 2009

It has been estimated that preventable errors account for 30 percent of all health care costs. Given the current economic crisis, these are not dollars we can afford to waste. The health care system can do better, both in preventing needless suffering and in reducing costs. Washington State is leading the way in addressing this issue.

Over 40 hospitals across the state created the Surgical Care and Outcomes Assessment Program (SCOAP) to prevent errors in surgery, reduce unnecessary costs, and empower patients to get the best care. Many errors result from a lack of streamlined care and communication—checklists prevent these errors.

Starting January 15th, the SCOAP surgical checklist - preventing errors before they occur - will be rolling out across hospitals in Washington State. Sponsored by the Life Science Discovery Fund (LSDF) and coming from a broad coalition of health care stakeholders, the SCOAP checklist is a real example of the health care community working together to save lives and prevent unnecessary health care costs.

The Governor’s office is proud to support the SCOAP surgical checklist initiative and encourages every hospital to participate. Through programs like the LSDF and SCOAP, we are helping to translate the best science into improved health for our community.

To find out more information about SCOAP, how to talk with your doctor about the SCOAP surgical checklist, and how to find a participating hospital near you, visit www.scoap.org.

Sincerely,

Christine O. Gregoire
Governor
Hospital Performance: Process

before and after checklist implementation

% of elective colon/rectal cases

BB cont’d  PBG checked  Normothermia  DVT proph  Abx on time

Q1 2008  Q4 2009
Hospital Performance: Process
before and after checklist implementation

- BB cont'd
- PBG checked
- Normothermia
- DVT proph
- Abx on time

% of elective colon/rectal cases

Q1 2008 vs Q4 2009
Hospital Performance: Outcomes before and after checklist implementation

% of elective colon/rectal cases

- Wound opened
- Reoperation
- CAE

Q1 2008 & Q4 2009
Hospital Performance: Outcomes
before and after checklist implementation

% of elective colon/rectal cases

- Wound opened
- Reoperation
- CAE

Q1 2008 vs Q4 2009
• Trend data
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• Research and development
Data Integration

- 4 hospital pilot
- Spreading best practices
- Evidence based reviews
- Interview best performers
- Distill practice patterns into a “to do” list
- Couple the intervention with contemporaneous data gathering
- Use SCOAP to track success
PROBLEM: My hospital is underperforming in issues related to malnourished patients.

How do I get started to improve this metric at my hospital?

1. **Collect additional data to assess where problem is occurring:**
   - Review the testing process, is testing done in a pre-admission clinic, by the physician’s office?
   - When is testing done? SCOAP recommends testing occur up to six weeks prior to the scheduled date of surgery so that low albumin can be addressed if possible
   - Review how and if outside testing results are included in the hospital medical record to ensure that when testing is done the testing results are available for abstraction.

2. **Collect additional data to assess where problem is occurring**
   - Form Workgroup together to work on problem. Workgroup should include:
     - Team leader (physician hospitalist, surgeon or other physician leader)
     - Content expert (nutrition)
     - Team facilitator (QI professional)
     - Process owners (frontline personnel such as nurses, pre-admission staff, etc.)
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New Modules

- **VI-SKOAP**
  - Vascular surgery, cardiology, interventional radiology
- **Higher risk SCOAP**
  - Esophagus, Pancreas, Liver
- **Cancer SCOAP**
  - Breast, Prostate, Lung
- **Ambulatory SCOAP**
- **Spine-SKOAP**
- **Urology-SKOAP**
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• Media campaign around SCOAP checklist initiative

• Website
  – Tell the SCOAP story
  – Show the improvement
  – Demonstrate that we’re more than just report cards
    • Checklist
  – Real reports
  – New website in development

• Public release data
## SCOAP Hospital Participation & Performance:

Publicly released data, by hospital
Quarter 2, 2008 through Quarter 1, 2009

### Metrics Key:
- See SCOAP website for detailed explanations

1. Use of advanced testing (ultrasound or CT scan) among women, ages 18-50, undergoing appendectomy - prevents misdiagnosis
2. Accuracy of advanced testing (ultrasound or CT scan) for patients undergoing appendectomy - prevents misdiagnosis
3. Tests, while in the OR, for leaks in the new stomach connections among gastric bypass patients - allows for repair before adverse impact on patients
4. Blood sugar testing among gastric bypass patients with diabetes - allows for appropriate management of diabetes and infection prevention
5. Insulin treatment in the OR for gastric bypass patients with high blood sugar - indicates timely management of elevated blood sugar
6. Heart protective medications (beta blockers) are appropriately continued after gastric bypass surgery - prevents heart attacks after surgery
7. Blood sugar testing among colon or rectal surgery patients with diabetes - allows for appropriate management of diabetes and infection prevention
8. Insulin treatment in the OR for colon or rectal surgery patients with high blood sugar - indicates timely management of elevated blood sugar
9. Heart protective medications (beta blockers) are appropriately continued after colon or rectal surgery - prevents heart attacks after surgery
10. Body temperature is maintained appropriately during surgery - prevents infection
11. Use of advanced pain control methods among eligible cases - improves patient comfort
12. Red blood cell transfusion avoided during colon or rectal procedures

### Symbols Key:
- (%) of cases

- [ ] No data available
- [ ] Not releasing data
- [ ] Too few cases to accurately evaluate (1-4)

### Using SCOAP Surgical Checklist

<table>
<thead>
<tr>
<th>Metric</th>
<th>APPENDECTOMY</th>
<th>BARIATRIC</th>
<th>COLON/RECTAL²</th>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
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<td>Central Washington Hospital</td>
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<td>Evergreen Hospital Medical Center</td>
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<td>Good Samaritan Hospital</td>
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<tr>
<td>Grays Harbor Community Hospital</td>
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<td>[x]</td>
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<tr>
<td>Group Health Cooperative/Eastside Hospital</td>
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<td>[x]</td>
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<tr>
<td>Harborview Medical Center</td>
<td>[ ]</td>
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<td>[x]</td>
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<tr>
<td>Highline Medical Center</td>
<td>[ ]</td>
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<tr>
<td>Island Hospital</td>
<td>[ ]</td>
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</tbody>
</table>

### Hospitals Currently Participating in SCOAP

- Central Washington Hospital
- Evergreen Hospital Medical Center
- Good Samaritan Hospital
- Grays Harbor Community Hospital
- Group Health Cooperative/Eastside Hospital
- Harborview Medical Center
- Highline Medical Center
- Island Hospital

**Updated July 30, 2009**
Year in Review

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  - Web data
- **Operational issues**
  - Data divers
  - IRR
  - Outsourcing
  - Report refinement
- **Economic assessment**
- **Research and development**
Operational issues

- Data divers/Metrics committee
- Communication within SCOAP network
- IRR group
- Outsourcing
- Report refinement
SCOAP Metrics/Data Divers Committee
Data Divers

• Quarterly meetings
• Goals
  – Increase accuracy in data abstraction
  – Advise on revisions of data tool
  – Provide a reality check on the data dictionary
• Help create value at the hospital level
  – Understand rationale
  – Recognize value-added of each variable
  – Video vignettes
Operational issues

- Data divers/Metrics committee
- Better communication within network
January 2010

In This Issue

SCOAP Community Speaks Up: Albumin Testing
SCOAP Making a Difference: A Look at the Data
SCOAP Reports Available Online
Upcoming SCOAP Events

SCOAP Community Speaks Up

SCOAP Making A Difference: A Look at the Data

Albumin Testing

SCOAP data show widespread variation in how often our member hospitals perform elective colorectal resections (for non-cancer diagnoses) among patients with malnutrition. SCOAP data show substantial variation in this practice.
The SCOAP Community Speaks Up: Abdominoperineal Resection (APR)

Published January 8, 2010 Community Speaks Up, newsletter

We were recently asked by colleagues at Northwest Hospital, “What is SCOAP implying when it measures rates of abdominopelvic resection (APR) by hospital for patients with rectal cancer?”

SCOAP has been tracking on the use of APR since the beginning, with refinements in the dataset over the last two years to better capture information about cancer type and location. An APR is an operation that involves the removal of the entire rectum and the use of a permanent colostomy. When feasible, an alternative procedure for rectal cancer is a sphincter-sparing resection and a primary reconnection of the colon and distal remnant of the rectum (or anus). While increasing the use of appropriate sphincter-sparing operations is a goal, there is considerable variation between
Operational issues

- Data divers/Metrics committee
- Better communication within network
- IRR
  - FHCQ and Associate Medical Directors
  - Educational activity
    - >95% concordance
- Outsourcing
  - 4 SCOAP centers now using out of institution abstractors
    - adevlin@UW.edu
- Report refinement
Web Based Reports

- http://cqi.armus.com/reports/SCOAP/
- SCOAP/reports09
<table>
<thead>
<tr>
<th>Variable Description</th>
<th>SCOAP Hospital</th>
<th>2008</th>
<th>Q1 2009</th>
<th>SCOAP Hospital</th>
<th>Q1 2009</th>
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<tr>
<td></td>
<td>Benchmark %</td>
<td>N %</td>
<td>Benchmark %</td>
<td>N %</td>
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<tr>
<td><strong>Operative Processes</strong></td>
<td></td>
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<tr>
<td>16.1 All Laparoscopic Procedures</td>
<td>39.9%</td>
<td>93</td>
<td>32.3%</td>
<td>33</td>
<td>33.3%</td>
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<tr>
<td>16.2 Laparoscopic Converted to Open</td>
<td>5.7%</td>
<td>93</td>
<td>5.4%</td>
<td>33</td>
<td>3.0%</td>
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<tr>
<td>16.3 Nasogastric Tube in place leaving OR</td>
<td>0.8%</td>
<td>92</td>
<td>17.4%</td>
<td>10.2%</td>
<td>33</td>
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<tr>
<td>16.5 Left/Low Colon Anastomosis Tested</td>
<td>98.5%</td>
<td>38</td>
<td>94.7%</td>
<td>100.0%</td>
<td>18</td>
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<tr>
<td><strong>Processes for Colon Cancer</strong></td>
<td></td>
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<td>17.1 Negative Lymph Nodes Removed: &gt;= 12</td>
<td>100.0%</td>
<td>5</td>
<td>60.0%</td>
<td>100.0%</td>
<td>2</td>
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<tr>
<td>17.2 Cancer-free Margins</td>
<td>100.0%</td>
<td>19</td>
<td>100.0%</td>
<td>100.0%</td>
<td>9</td>
</tr>
<tr>
<td><strong>Postoperative Interventions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>19.1 Any intervention</td>
<td>12.6%</td>
<td>93</td>
<td>21.5%</td>
<td>13.1%</td>
<td>33</td>
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<tr>
<td>19.2 Operative Re-intervention</td>
<td>4.6%</td>
<td>93</td>
<td>6.5%</td>
<td>4.0%</td>
<td>33</td>
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<tr>
<td>19.3 Risk-adjusted Operative Re-intervention</td>
<td>0.5%</td>
<td>4.6%</td>
<td>4.9%</td>
<td>0.0%</td>
<td>3.4%</td>
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<tr>
<td>19.4 Colostomy</td>
<td>0.0%</td>
<td>1.8%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>1.4%</td>
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<tr>
<td>19.5 Non-operative Re-intervention</td>
<td>2.1%</td>
<td>9.6%</td>
<td>18.3%</td>
<td>0.0%</td>
<td>11.2%</td>
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<tr>
<td>19.6 Tracheal Reintubation</td>
<td>0.0%</td>
<td>0.7%</td>
<td>2.2%</td>
<td>0.0%</td>
<td>1.0%</td>
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<tr>
<td>19.7 VTE Treated</td>
<td>0.0%</td>
<td>0.3%</td>
<td>2.2%</td>
<td>0.0%</td>
<td>0.5%</td>
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<tr>
<td>19.8 Wound Opened &amp;/or Antibiotic for Infection</td>
<td>0.9%</td>
<td>5.5%</td>
<td>12.9%</td>
<td>0.0%</td>
<td>6.9%</td>
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<tr>
<td><strong>Hospital Stay and Discharge Status</strong></td>
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<tr>
<td>20.1 Mean Length of Hospital Stay (days)</td>
<td>7.9</td>
<td>93</td>
<td>12.0</td>
<td>8.1</td>
<td>33</td>
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<tr>
<td>20.2 Prolonged Length of Stay</td>
<td>0.0%</td>
<td>2.5%</td>
<td>7.5%</td>
<td>0.0%</td>
<td>3.6%</td>
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<tr>
<td>20.3 Mean Risk-adjusted LOS (days)</td>
<td>5.5</td>
<td>7.0</td>
<td>7.4</td>
<td>5.1</td>
<td>6.8</td>
</tr>
</tbody>
</table>
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Cost of Colectomy, CHARS Data

- Average Cost/case (2008 dollars)

- Non-SCOAP vs SCOAP

- $15.4 million
Gastric bypass

$20.8 million

SCOAP
SURGICAL CARE AND OUTCOMES ASSESSMENT PROGRAM

2006
2007
2008

$24,000
$22,000
$20,000
$18,000
$16,000
$14,000
$12,000
$10,000

Non-SCOAP
SCOAP
Appendectomy

The graph shows the cost of appendectomy over the years 2006 to 2008. The cost for Non-SCOAP and SCOAP is depicted with red and blue lines, respectively. The cost for Non-SCOAP remains relatively stable, while the cost for SCOAP shows a gradual increase, reaching $14.4 million by 2008.
Demonstrating Value-ROI

- Healthcare system sees fewer expenses
- Hospitals benefit the most
- Most hospitals paid as DRGs
- Lower expenses are direct profit
- ROI as strategic plan
- ROI as Quarter by Quarter calculation
Domains of Value

- Improvement in metrics that link to quality (and P4P metrics)
- Each major complication reduces profit margin
  - ROI within 12 months for <2% reduction in complications
- Cost returned through benchmarking on efficiency
  - GI recovery
- Cultural aspects;
  - Linked to mission
  - Creates less “dabbling” in non-specialty areas
  - Creates surgeons willing to standardize in other areas
  - Asserts role of your hospital in the community of hospitals
  - Cutting edge QI activity- VISCOAP
  - Insurers, Governor and public engaged in its progress
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• **Platform for Comparative Effectiveness**
  – $30 million in grant applications in last year

• **Investigational metrics**
  – Seam guards on staplers
  – Anastomotic technique
  – Statin withdrawal
  – Benefit of novel drug strategies

• **Real world outcomes**
  – VTE example
First Ever Data on VTE Chemoprophylaxis and Outcome
Elective Colon/Rectal Surgery
(n=897 no tx and 1748 tx)
• SCOAP platform as infrastructure
• Build out modules in any clinical arena where there is relevance and readiness
• Roving spotlight
• Interventions
  – Education
• Build sustainability
  – Public
  – Payers
  – Show value
Discussion
Things to Consider

• Greatest challenges ahead
• Greatest opportunities
• NSQIP and SCOAP
• SCOAP would be even better if it addressed....
• Is SCOAP financially sustainable
• Role of industry in SCOAP
• Role of insurers in SCOAP
• Role of public in SCOAP
• Biggest mistakes so far
• Smartest moves to date