


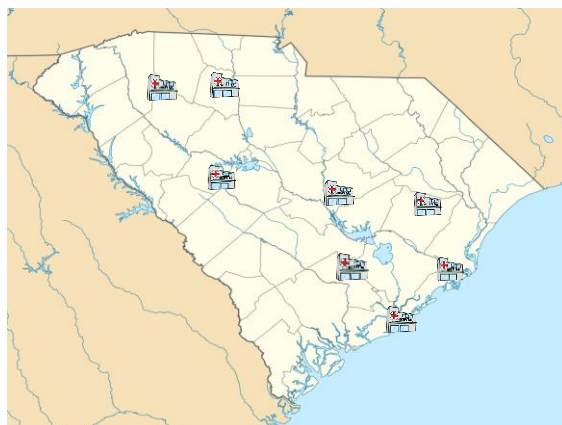
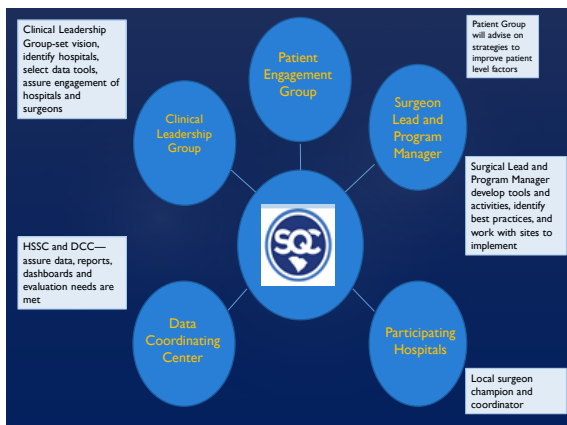
  
**South Carolina Surgical Quality Collaborative**  
 What is it?  
 What are the results?  
 Mark Lockett MD FACS, Surgeon Lead SCSQC

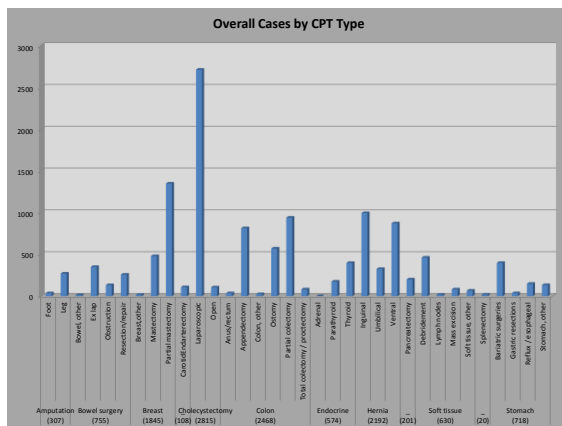




- ### SCSQC - What is it?
- Joint effort to improve the quality and value of surgical care in South Carolina
  - Blue Cross Blue Shield Foundation three year grant to fund the project
    - Web-based platform
    - Central administration
    - 8 sites
      - Data abstractor, surgeon lead
    - Monthly calls
    - Quarterly meetings
  - Patient and trainee engagement



### SCSQC Hospitals

Hospital	Beds	Operating Rooms	Annual Cases
Easley	109	5	4,054
Spartanburg	381	24	16,689
Self - Greenwood	358	13	6,500
KershawHealth - Camden	121	7	3,400
McLeod Health - Florence	461	30	19,594
Regional Med - Orangeburg	286	9	5,528
MUSC	709	40	28,466
Tidelands - Georgetown	267	14	7,200



Complications

Hospital: [Redacted]

Report Criteria

Report Name: [ ]

Time Frame: All

Gender: All

30 Day Follow Up: All

Case Selection: All

Condition: All

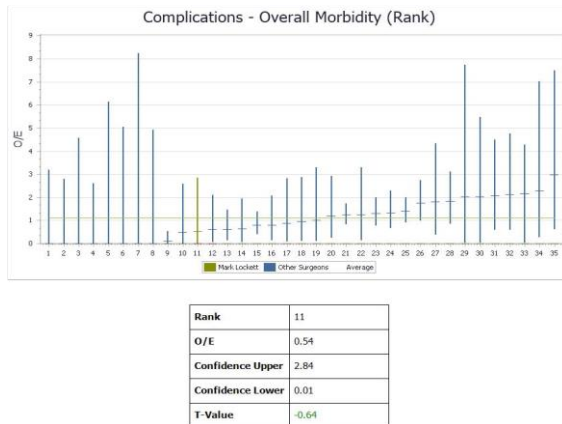
CPT Code(s): [ ]

ICD9 Code(s): [ ]

Chart Type: Line

Surgeon Specific:

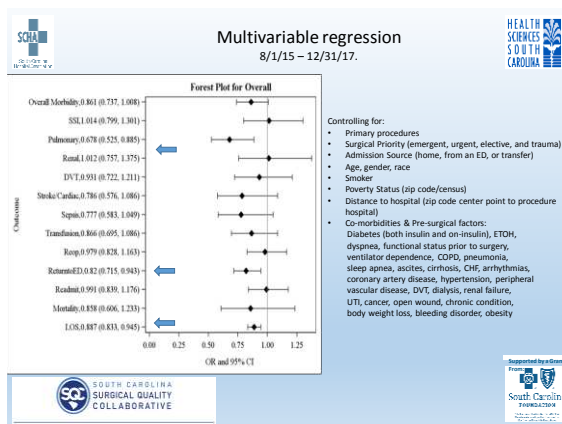
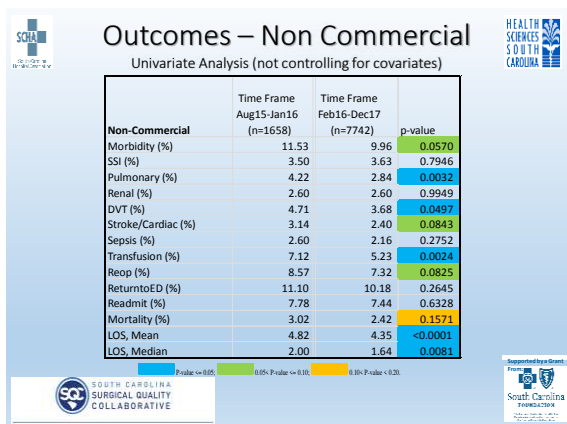
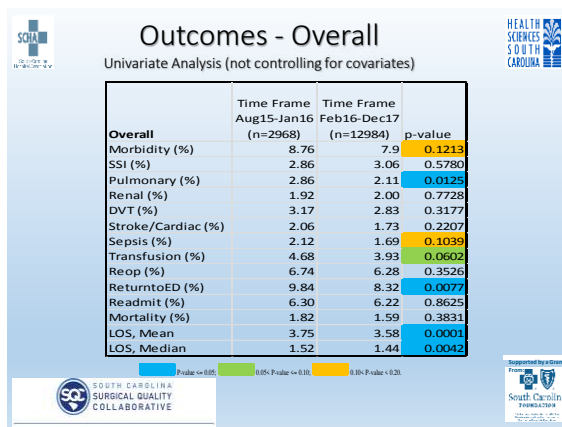
Other filters: Surgical Site Infection, Cardio-Pulmonary, Other, Length of Stay, OR Times, Discharge Events, RBC, ASA Class, Patient, Comorbidities, Colectomy.

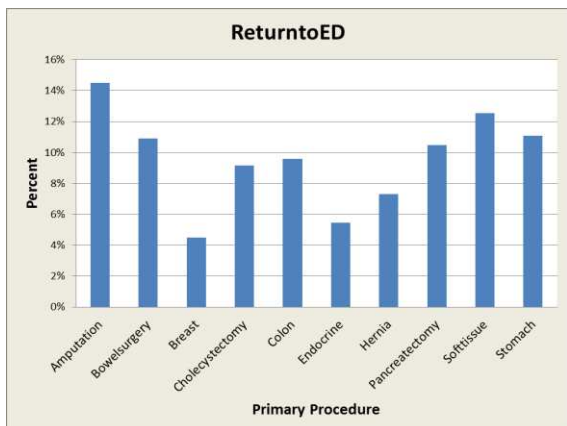
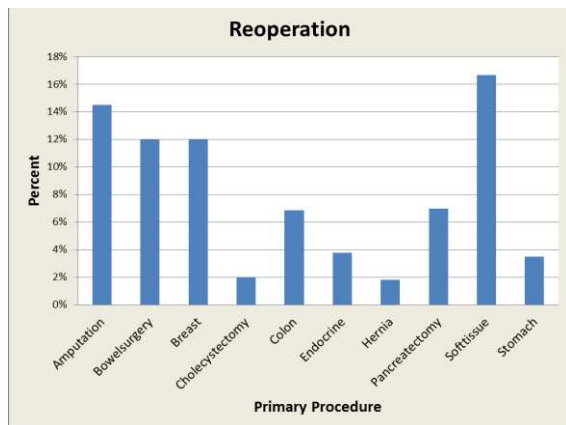
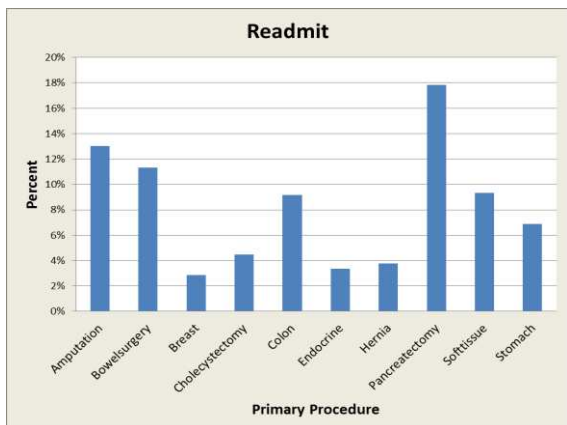
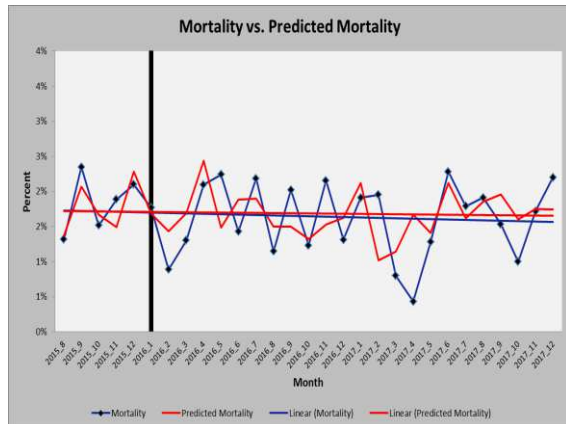
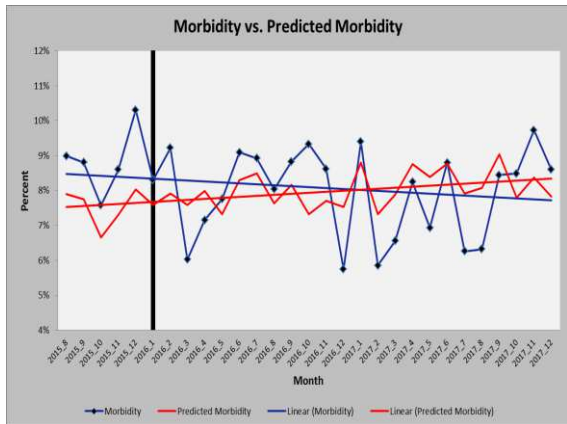


### COLLABORATE

Click a Discussion Topic below to add comments, images, documents, videos and literature to the discussion.

- Collaborate Feedback
- MMMC - Year 2 Project
- IMMC - Year 2 Project
- Tidelands - Year 2 Project
- MUSC - Year 2 Project
- Kershaw - Year 2 Project
- SHS - Year 2 Project
- Self - Year 2 Project





	Medicare [n=5843]	Medicaid/Both [n=2339]	Commercial [n=5887]	Selfpay [n=1218]
Readmit (%)	454 (7.8%)	190 (8.1%)	261 (4.4%)	61 (5.0%)
LOS (mean, SD)	4.7 ± 6.8	4.0 ± 6.4	2.4 ± 4.0	4.1 ± 6.0
LOS (Mode)	0	0	0	0
SSI (%)	218 (3.7%)	80 (3.4%)	121 (2.1%)	41 (3.4%)
Return to ED (%)	471 (8.1%)	353 (15.1%)	346 (5.9%)	148 (12.2%)
Reop (%)	447 (7.7%)	189 (8.1%)	281 (4.8%)	73 (6.0%)

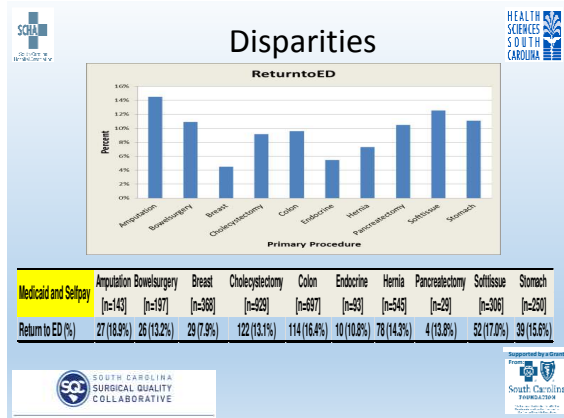
HEALTH SCIENCES SOUTH CAROLINA

SOUTH CAROLINA SURGICAL QUALITY COLLABORATIVE

Supported by Grant

South Carolina PROSTATECTOMY

	Amputation	Bowel surgery	Breast	Cholecystectomy	Colon	Endocrine	Hernia	Pancreatectomy	Softtissue	Stomach
	[n=407]	[n=306]	[n=2377]	[n=3516]	[n=3204]	[n=716]	[n=2908]	[n=258]	[n=846]	[n=884]
Readmit (%)	53 (13.0%)	106 (11.3%)	68 (2.9%)	158 (4.5%)	293 (9.1%)	24 (3.3%)	106 (3.6%)	46 (17.8%)	79 (9.3%)	61 (6.9%)
LOS (mean, SD)	9.5 ± 6.7	9.7 ± 9.8	0.8 ± 0.9	1.7 ± 2.9	6.4 ± 6.5	1.8 ± 2.4	1.2 ± 2.5	10.5 ± 8.8	5.4 ± 7.0	4.7 ± 6.3
LOS (Mode)	9	0	0	0	1	1	0	9	0	2
SSI (%)	17 (4.2%)	77 (8.3%)	31 (1.3%)	20 (0.6%)	199 (6.2%)	2 (0.3%)	38 1.3%	50 (19.4%)	17 (2.0%)	31 (3.5%)
Return to ED (%)	59 (14.5%)	102 (10.9%)	107 (4.5%)	322 (9.2%)	307 (9.6%)	39 (5.4%)	205 (7.3%)	27 (10.5%)	106 (12.5%)	98 (11.1%)
Reop (%)	59 (14.5%)	112 (12.0%)	286 (12.0%)	70 (2.0%)	220 (6.9%)	27 (3.8%)	51 (1.8%)	18 (7.0%)	141 (16.7%)	31 (3.5%)



	Amputation	Bowel surgery	Breast	Cholecystectomy	Colon	Endocrine	Hernia	Pancreatectomy	Softtissue	Stomach
	[n=143]	[n=197]	[n=360]	[n=429]	[n=697]	[n=93]	[n=545]	[n=29]	[n=306]	[n=250]
Return to ED (%)	27 (18.9%)	26 (13.2%)	29 (7.9%)	122 (13.1%)	114 (16.4%)	10 (10.8%)	78 (14.3%)	4 (13.8%)	52 (17.0%)	39 (15.6%)

## Rough SCSQC Payer Cost Savings Estimates:

**Assumptions:**

- Average LOS = 3.6 days (Average LOS for ALL SCSQC hospitalizations)
- Average payer costs (mean 3<sup>rd</sup> party reimbursement) for surgical hospitalization without a complication = \$17,373 (University of Michigan. JAMA Surg. 2016; 151(9):823-830)
- Average payer costs (mean 3<sup>rd</sup> party reimbursement) for surgical hospitalization with a complication = \$35,870 (University of Michigan. JAMA Surg. 2016; 151(9):823-830)
- Difference in average payer costs (mean 3<sup>rd</sup> party reimbursement) for surgical hospitalization with and without a complication = \$18,497 (University of Michigan. JAMA Surg. 2016; 151(9):823-830)

## Rough SCSQC Payer Cost Savings Estimates (cont.):

**CALCULATIONS** (Based on if the last 5 month metrics HAD BEEN TRUE throughout the entire SCSQC Initiative - 8/1/15 - 7/31/17):

- Estimated Avoided Complications: 263 estimated avoided complications x \$18,497 = **\$4,869,711**
  - (this may be an overestimate as multiple complications could occur within one hospitalization. This financial estimate assumes that each complication occurs within a unique hospitalization.)
- Estimated Avoided Hospital Days: \$17,373/3.6 = \$4,825/day. Thus 1,516 estimated avoided hospital days x \$4,825 = **\$7,349,700**
  - (this may be an underestimate as the \$17,373 is average payer cost WITHOUT complications, and of course, we had complications)
- Estimated Deaths Avoided: **63**
- Estimated Avoided Readmissions: 71 estimated readmissions x \$17,373 = **\$1,233,483**
  - (this may be an underestimate as the \$17,373 is average payer cost WITHOUT complications, and of course, we had complications)
- Remember, these estimates are not mutually exclusive.**
  - So we cannot just add them all up to produce a total savings. For example, some avoided hospital days included complications. In addition, the avoided hospital days included readmissions. A much more detailed analysis would need to be done to determine a cumulative savings.

- Sustainability
  - Commercial support
  - State resources
  - Federal resources
  - Foundations
  - Payment incentives
- Expand the number of hospitals
- Include other procedures / specialties
- Address the opioid crisis

## Thank You

Questions?