Nurses Taking the Lead in Improving Surgical Outcomes in Older Patients

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The Coalition for Quality in Geriatric Surgery
(CQGS)
The Coalition for Quality in Geriatric Surgery Project

• What is it?
• Why is it important?
• How are we building it?
• Why your input is so important!!

The Coalition for Quality in Geriatric Surgery Project

Vision

• A comprehensive, systematic program to improve the surgical care of older adults by establishing a verifiable quality improvement program with standards based on best evidence and focused on what matters most to the individual patient
• Applicable to all hospitals regardless of size, location or teaching status
Why is CQGS important?

- Roughly 10,000 adults turned 65 today
- The same tomorrow... x19 years*
- By 2050, 20 million Americans will be 85 year or older

- ~ 19.2 million procedures**, nearly 40% of all procedures
- Overall, older adults have worse outcomes after surgery

* Pew Research Center population projections
** CDC National Hospital Discharge Survey 2010

Background to CQGS

ACS Geriatric Surgery Task Force
Coalition for Quality in Geriatric Surgery (CQGS)

Teaching Tool Kits
Quality Indicators

https://www.facs.org/~/media/files/quality%20programs/nsqip/acsnsqipagsgeriatric2012guidelines.ashx
How Are We Building CQGS?

Building the Team

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Four Guiding Principles of Continuous Quality Improvement

1. Set the Standards
   - Highest clinical standards
   - Based on evidence
   - Individualized to the patient

2. Build the Right Infrastructure
   - Appropriate, adequate staffing levels, specialists, equipment and IT systems

3. Collect Robust Data
   - From medical charts
   - Post-discharge tracking
   - Continuously updated
   - Risk adjusted

4. Verify through a Third Party
   - External peer review
   - Establish public assurance

ACS Quality Programs: How do they work?

Standards & Infrastructure

Data Registry

Verification Process*

Education

* A peer review of the center occurs tri-annually to verify the center adheres to standards, accurately collects data and has tools and infrastructure to continuously improve quality.

Stakeholder Organizations

- AARP
- ACS Advisory Council for Rural Surgery
- ACS Committee on Surgical Palliative Care
- Aetna
- American Academy of Ophthalmology
- American Academy of Orthopaedic Surgeons/American Association of Orthopaedic Surgeons
- American Academy of Otolaryngology
- American Academy of Physical Medicine and Rehabilitation
- American College of Physicians
- American Geriatrics Society
- American Hospital Association, Health Research & Educational Trust
- American Society of Anesthesiologists
- American Society of Consultant Pharmacists
- American Society of PeriAnesthesia Nurses
- American Urological Association
- Association of periOperative Registered Nurses
- Association of VA Surgeons
- Carealign
- Case Management Society of America
- Center to Advance Palliative Care
- Centers for Medicare and Medicaid Services
- Eastern Association for the Surgery of Trauma
- Family Caregiver Alliance
- Florida Hospital Association
- Geriatrics for Specialists Initiative
- Gerontological Advanced Practice Nurses Association
- Hartford Institute for Geriatric Nursing
- Hospital Elder Life Program
- Kaiser Permanente
- Memorial Sloan Kettering Cancer Center
- National Association of Social Workers
- National Committee for Quality Assurance
- National Gerontological Nursing Association
- Nurses Improving Care for Healthsystem Elders
- Patient and Family Centered Care Partners
- Penn Medicine Department of Anesthesiology & Critical Care
- Pharmacy Quality Alliance
- Society for Academic Emergency Medicine
- Society for Critical Care Medicine
- Society of General Internal Medicine
- Society for Hospital Medicine
- The American Association for the Surgery of Trauma
- The American Board of Surgery
- The American Congress of Obstetricians and Gynecologists
- The Beryl Institute
- The John A. Hartford Foundation
- The Society of Thoracic Surgeons
- University of Colorado/Care Transitions
- US Department of VA – Geriatrics and Extended Care
- Yale New Haven Patient Experience Council
- UAB Division of Gerontology, Geriatrics and Palliative Care
- University of Chicago – Maclean Center for Medical Ethics
Stakeholder Input:
Kickoff Meeting – September, 2015

Get Perspective, Ideas and Buy-In
Current State of Older Adult Surgical Care:
  Mapped Problems
Future State of Older Adult Surgical Care:
  Top Priorities & How to Achieve

Literature Reviews

- Goals & Decision-Making
  - Pre-op Optimization
  - Clinical Care
  - Transitions of Care

- 1228 → 226
- 127 → 71
- 210
- 701 → 184

Field Visits across the U.S.A.

- 11 Hospitals in 7 Cities
  - 4 Community-based
  - 3 Academic centers
  - 1 ACO System
  - 1 VA
  - 1 Safety Net
  - 1 Rural
Standards Development Process

- Stakeholder Input (58)
- Pre- and Peri-Op Guidelines & Literature Review (100s)
- Hospital Field Visits (11)
- Targeted Stakeholder Calls (20)

Preliminary Standards (308)

Standards Development Process

- Preliminary Standards (308)
  - Started with stakeholder assessment
  - Based on the best Practice Guidelines
  - Expanded with extensive literature search
  - Stakeholders rated validity and feasibility

- Alpha Standards (92)
  - Paper survey at 15 centers
  - Which standards were already in place.
  - How difficult or easy would they be to implement?

We needed to lower the burden!

Standards Development Process

- Preliminary Standards (308)
- Alpha Pilot Standards (92)
- Beta Pilot Standards (33)
Focus is on **four** target areas that foster quality improvement in the older adult surgical population.

1. Goals of Care and Decision Making
2. Cognition Screening and Delirium
3. Maintenance of Function and Mobility
4. Nutrition and Hydration Optimization

### Standards Development Process

- **Preliminary Standards** (308)
  - Written in 2016 by the CDT
  - Extensive literature search
  - Stakeholders rated validity and feasibility

- **Alpha Standards** (92)
  - Alpha Pilot – 15 centers
  - Implementing the standards
  - Difficulty?

- **Beta Standards** (30)
  - Beta Pilot 6–8 centers
  - Full implementation of 30 beta standards
Rationale for Beta Pilot

1. Determine the feasibility of implementation for each standard
2. Collect best practices for standards implementation
3. Learn barriers to implementation in a wide variety of hospitals (large and small, urban and rural)
4. Record deficiencies in the writing of any standard that can cause misinterpretation
5. Record rationale for or against the standards in the overall effort to improve older adult surgical care.
6. Work out the “kinks” in the verification process

Beta Pilot

• Hospitals will put the standards in place, testing their feasibility and utility on real patients in real hospitals
• Is it possible to put the standards in place at any hospital (diverse in size, academic affiliation, resources, region, etc.)
• What are best practices for implementation?
• What are the pitfalls for implementation?

Beta Pilot Sites

• NYU Winthrop Hospital
• Johns Hopkins Hospital Bayview
• Kaiser Permanente Fresno
• Denver VA Hospital
• University of Alabama at Birmingham
• Rochester General Hospital
• University of Connecticut Health
• University Hospital, Newark (Rutgers)
Beta Pilot Roster

<table>
<thead>
<tr>
<th>Institution</th>
<th>Type of Center</th>
<th># of beds</th>
<th>Region</th>
<th>Other Quality Programs</th>
<th>Alpha Pilot Site (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winthrop Community</td>
<td>Community</td>
<td>575</td>
<td>Northeast</td>
<td>Trauma, Varitars, Cancer, and Breast</td>
<td>Y</td>
</tr>
<tr>
<td>Johns Hopkins University Hospital</td>
<td>Academic</td>
<td>442</td>
<td>Northeast</td>
<td>Bariatrics and Cancer</td>
<td>Y</td>
</tr>
<tr>
<td>Kaiser Permanente - Fresno</td>
<td>Hospital System</td>
<td>388</td>
<td>West</td>
<td>Trauma, Bariatrics, Cancer</td>
<td>Y</td>
</tr>
<tr>
<td>Denver VA</td>
<td>VA</td>
<td>128</td>
<td>West</td>
<td>N/A</td>
<td>N</td>
</tr>
<tr>
<td>Eastern Maine Medical Center</td>
<td>Academic</td>
<td>845</td>
<td>Eastern</td>
<td>Trauma</td>
<td>N</td>
</tr>
<tr>
<td>UAB</td>
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<td>1,335</td>
<td>Southeast</td>
<td>Trauma, Varitars, Cancer, and Breast</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Goals of Care & Decision Making**

- Elicit overall health goals, treatment goals, and discuss the impact of surgical and nonsurgical treatments on symptoms, function, setting, and survival
- Ensure advance directives and healthcare proxy are well documented prior to surgery
- Ensure advance directives and desires for limitations of life-sustaining treatments are well documented and easily accessible in medical record
- Revisit goals of care if an older adult experiences an escalation of care or requires intensive care for > 72 hours
- Reevaluate goals of care with an unanticipated change in discharge disposition
- Patient reported alignment of goals of care after the surgical episode

**Cognition Screening & Preservation**

- Conduct baseline cognition assessment, provide education on perioperative cognition and delirium, perform medication reconciliation
- Store sensory aids in a safe place
- Avoid Beers Criteria medications
- Carefully reconcile home medications. Implement multi-component delirium prevention protocols, restore sensory aids
- Perform cognition screen at discharge. Ensure that the patient demonstrates understanding discharge instructions
- Baseline cognitive status compared with cognitive status at discharge
- Postoperative delirium

**Function & Mobility Preservation**

- Function and mobility screening to identify baseline; prehabilitation to improve function and/or mobility if indicated
- Identify and document patient fall risk
- Patient positioning to avoid pressure ulcers and safe transfers to prevent skin tears
- Early mobilization on POD1, physical and/or occupational therapy consult if indicated
- Ensure appropriate post-discharge rehabilitation is arranged. Ensure comprehension of discharge instructions
- Function at baseline compared to function at discharge
- 30-day patient reported function

**Nutrition & Hydration Optimization**

- Malnutrition screening, nutritional supplementation provided if indicated
- Liberal NPO policy; allow liquid intake as long as possible in collaboration with anesthesia colleagues
- Judicious use of intravenous fluids
- Bring dentures to the hospital. Judicious use of IV fluids, resume PO intake as soon as safely possible
- Provide postop nutritional treatment plan to patient if indicated
- Patients post-discharge nutrition plan is documented

**SURGICAL JOURNEY OF THE OLDER ADULT**

**Data/Outcomes**

- Discharge Transitions
- Post Op
- Intra Op
- Immediate Pre Op
- Pre Op Clinic

**Target Areas**

- Patient safety
- Communication
- Cognition
- Function
- Activity
- Nutrition
- Pain

**Standards Development Process**

- Preliminary Standards (308)
  - Written in 2016 by the CDT
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  - Stakeholders rated validity and feasibility
- Alpha Standards (92)
  - Alpha Pilot – 15 centers
  - Implementing the standards
  - Difficulty?
- Beta Standards (30)
  - Beta Pilot – 8 centers
  - Full implementation of 30 beta standards
- Final Standards
CQGS Beta Pilot Update

Process/Timeline:
- Provide Sites Application, Program Compliance Assessment, and Beta Standards List (November)
- Conduct "Kickoff" Calls (December - January)
- Sites Begin Implementation (March 1)
- 6 - Monthly Coaching Calls (March - June)
- Site Visits occur (June & July)

Implementation & Feedback (March – June):
- Sites must implement all 30 standards to the best of their ability for all surgical patients aged 75+
- The Resource Manual describes in detail the rationale behind each standard, strategies for implementation, and how exactly sites meet each standard
- Sites will submit questions to Kat before each bi-monthly call which will give sites the opportunity to learn from one another

Site Visit (June and July):
- Site must commit to scheduling site visit before the April 30, 2018 deadline.
- CDT will review Surveyor Training PPT (April)
- Group Webinar for Surveyors to review and discuss all materials (May)
- Conduct Site Visit (June & July)

Site Visit – Verification

What the day looks like:
- 9 hour day
- Chart Review
- One-on-one Interviews
- Working Lunch
- Process and Protocol Review
- Hospital Tour
- Exit Interview
1. Determine the feasibility of implementation for each standard for all surgical patients 75 years of age and older.

2. Learn the barriers to implementation.

3. Record deficiencies in the writing of any standard that can cause misinterpretation and record justification for or against the standards in the overall effort to improve older adult surgical care.

The CQGS Project – Major Deliverables by Year

**Year 1 (July 2015 – June 2016)**
- Engage stakeholders
- Brainstorm standards using value stream mapping (map current state & design future state)
- Research evidence/literature searches
- Conduct field visits
- Write preliminary standards
- Vet/Rate/Meet with stakeholders to form next draft of standards
- Create awareness about CQGS and cultivate relationships with key/VIP stakeholders

**Year 2 (July 2016 – June 2017)**
- Continue NSQIP Geri Pilot
- Conduct alpha pilot
- Complete Stakeholder comment
- Complete Beta Manual
- Standards & Verification
- Admin Pieces
- Process Pieces
- Editing
- Branding/Publishing
- Prepare for Beta
- Draft composite measures
- Begin education series modules and stakeholder analysis
- Begin communications strategy

**Year 3 (July 2017 – June 2018)**
- Conduct beta pilot
- Develop verification process
- Develop site visit process
- Begin Verification portal build
- Continue measure development
- Continue building education
- Continue communication strategy
- Create Surveyor program (Recruit, onboard, and train)
- Develop Reviewer program (Recruit, onboard, and train)

**Year 4 (July 2018 – June 2019)**
- Publish final standards manual
- Launch geriatric surgery registry
- Launch Surveyor Program
- Launch Reviewer Program
- Launch education program
- Launch Geriatric Surgery Quality Campaign
- Host Geriatric Surgery Quality Summit
- Launch GSVQIP
- Begin enrolling centers
- Complete Patient Focus Groups

Purpose of Site Visits

- Verify all standards using value stream mapping (map current state & design future state)
- Research evidence/literature searches
- Conduct site visits
- Complete preliminary standards writing
- Establish state of the art standards
- Create awareness about CQGS and cultivate relationships with key/VIP stakeholders

Education Timeline

- Baseline
- Design
- Timeline
- Launch
- Manual/Lookbook

- Outlines
- Baseline surveys & interviews
- Backward design
- Frontloading baseline
- Design literature
- Test development
- User testing
- Feedback from users
- Knowledge translation
- Series 1
- Series 2
- Full course
- Geriatric surgery education for patients, family & caregivers
- Market analysis
- Marketing
- Branding
- Publishing
- Training program
- Evaluate program
- Launch program
Current
- Curriculum Development – 3 buckets:
  - Module-specific: 2 in each category
  - Caregiver Role in a Patient’s Surgical Journey (not recorded)
  - Optimizing perioperative communication
- Preparing to Talk with your Surgeon (Patient)
- Goals and Decision Making in the Older Adult
- Maintaining Your Independence During Hospitalization (Guided to Phase 1)
- Preparing the Caregiver for Providing Post-Op Care
- Survey to Alpha Pilot, Beta Pilot, Geriatric NSQIP Pilot
- Potential Collaboration with AGS
- Potential Collaboration with ANA
- Call Scheduled with FCA

Development
- Education Buckets
  - Patient
  - Provider
  - Experimentation: how to deliver education
    - Video/multimedia (prehab, goals)
    - Checklists
    - Toolkits
    - Brochures
    - Pocket cards
  - Other associated documentation
- Materials requested from Beta Pilot Sites
- Creating/Producing all Materials
  - We want to make sure everything is cohesive and the branding looks the same throughout – packaging

Timeline 2017-2019
- Oct 2017: Series 1 Modules launched
- February 2018: Series 2 Modules launched
- March 2018 – January 2019: Continuous Education Development
- March – July 2018: Stakeholder Input
- June 2018: Finalization Launch Fall CQGS Curriculum

2018 ACS Quality and Safety Conference
Saturday, July 21 PreCon
Title: Management of the Complex Older Surgical Patient
Moderators: Marcia McGory Russell, MD, FACS and Emily Finlayson, MD, MS, FACS
Speakers and Titles (TENTATIVE)
8:00 – 8:15 AM – Introduction and Overview of CQGS
  (Emily Finlayson)
8:15 – 8:45 AM – Preoperative assessment
  (Tom Robinson)
8:45 – 9:15 AM – Care of the Hospitalized older patient
  (Marcia Russell)
9:15 – 9:45 AM – Transitions of Care
  (Benjamin Brooke)
9:45 – 10:45 Break
10:45 – 11:45 AM Breakouts – 3 toolboxes at 15 minutes each (group screens, postop pathways, strategies to improve transitions)
  (Will need leaders for each small group – TBD)
10:45 – 11:45 – Palliative Care/Goals of Care
  (Anna Mazzucchelli or Ana Barth or Gretchen Schwartz)
11:15 – 11:45 AM Breakouts – Some modification on role playing or exercise run by Zara at last course – will modify depending who the speaker is
11:45 – 12:00 PM Q&A and Takeaways
2018 ACS Quality and Safety Conference

Breakout
Title: How to Deliver Age-friendly Surgical Care to the Older Patient
Moderators: Ronnie Rosenthal, MD, MS, FACS and Mark Katlic, MD, MMM, FACS

Titles and Speakers:
4:30 – 4:40 PM Goals of Care and Decision Making (Victoria Tang, MD, MAS)
4:40 – 4:50 PM Cognition Screening and Delirium (JoAnn Coleman, DNP, ANP, ACNP, AOCN)
4:50 – 5:00 PM Maintenance of Function and Mobility (Sandhya Lagoo-Deenadayalan, MD, PhD, FACS)
5:00 – 5:10 PM Nutrition and Hydration Optimization (Mark Katlic, MD, MMM, FACS)
5:20 – 5:30 PM Q&A

2018 ACS Quality and Safety Conference

Breakout
Title: Don’t Be Confused: Understanding Delirium
Moderators: Thomas Robinson, MD, MS, FACS and Sandhya Lagoo-Deenadayalan, MD, PhD, FACS

Titles and Speakers:
20 min – Why Target Delirium for Surgical Quality Improvement (Thomas Robinson, MD, MS, FACS)
20 min – Strategies to Minimize Peri-Operative Delirium for Hip Fracture Patients (Steve Kates, MD)
20 min – Implementing System Wide Delirium Prevention and Management Pathways (Kellie Flood, MD)
15 min – Discussion (Q&A)

Stakeholder Meeting
Date: September, 2018
Time: 10:00 am – 4:00 pm ET
Place: TBD
Moderators: Clifford Ko, MD, Ronnie Rosenthal, MD, and Marcia McGory Russell, MD
Facilitator: Kataryna Christensen

Send “Save the Date” notification
Patient-Centered Outcomes Research Institute

Patient Family Advocacy Council (PFAC)

Education

• Patients
  – Preparing to Talk to Your Surgeon
  – Maintaining Independence Through the Surgical Process

• Caregivers
  – Caregiver as a Partner in the Patient’s Surgical Journey
  – Preparing the Caregiver for Providing Postoperative Care

• Providers
  – Optimizing Perioperative Communication
  – Surgical Decision Making with the Older Patient

Verification

• Verify standards
  – Build public trust
  – Ensure success of the program
Nurses Role in CQGS

Geriatric Resource Nurse

At least one geriatric nurse champion on each surgical unit
Geriatric Resource Nurse

- Age Related Changes in Health
- Depression
- Delirium
- Dementia
- Falls
- Caregiving
- Function
- Healthcare Decision Making
- Medications
- Nutrition and Hydration
- Oral Hygiene
- Pain
- Pressure Injuries/Skin Tears
- Restraints
- Sleep
- Urinary Incontinence
- Infection
- Discharge Planning

Nurses Taking the Lead in CQGS

- Geriatric Surgery Quality Program committee member
- Participate in geriatric-specific community outreach
- Maintain GRN
- At least one geriatric nurse champion on each surgical unit

Nurses Taking the Lead in CQGS

- Participate in multidisciplinary conference
- Review medications-Beers Criteria
- Communication across continuum of care
- Assess environment-rooms
- Assist with postoperative transitions of care