

The Heart of Care Redesign; Care Protocols

Paul N. Casale, MD, FACC
Chief, Division of Cardiology
Lancaster General Health

Lancaster General Health - *By the Numbers (Fiscal Year 2012)*

- **Beds:** 631 in service at both campuses
- **Physicians:** More than 900
 - Includes 245 health system-employed in medical group
- **Operating Rooms:** 39
- **Surgeries:** 41,503
- **Emergency visits:** 107,914
- **Inpatient discharges:** 37,166 (includes 4,315 births)
- **Outpatient registrations:** 903,145
- **LG Health physician office visits:** 572,783

CMMI Bundled Payment for Care Improvement

Payment of Bundle	Acute Care Hospital Stay Only	Acute Care Hospital Stay plus Post-acute Care	Post-acute Care Only	Chronic Care
“Retrospective” (Traditional FFS payment with reconciliation against a predetermined target price after the episode is complete)	Model #1	Model #2	Model #3	Model #7
“Prospective” (Single prospective payment for an episode in lieu of traditional FFS payment)	Model #4 (Joint replacement, Hip fracture, Cardiac surgery, Coronary stents, Pacemakers, ICDs, Spine surgery)	Model #5	Model #6	Model #8

 Current
 Future

CMMI Bundled Payment for Care Improvement

- Lancaster General Health – *potential opportunities*:
 - Supply costs (variation in supplies utilized)
 - Length of stay
 - ED utilization/Readmissions
 - Diagnostic testing
 - Number of providers per case
 - Services/testing performed – unrelated to reason for admission

Care Redesign - Lancaster General Health

- Clinical Effectiveness Committees
 - Care Management Teams
 - Service Lines
 - Surgical/Medical Workgroups
 - System-wide Approach

Care Management Team

Multidisciplinary Membership

- Medical Director/Physician Leader
- Executive Sponsor
- Physicians/Surgeons
- Nursing Director
- Nurse Manager(s)
- Staff Nurse(s)
- Performance Improvement Coordinator
- Data Analyst
- Care Management (case manager, social work)
- Specialty Department Manager/Staff
 - Nutrition
 - Pharmacy
 - Rehab
 - Research
 - Laboratories
 - Therapy

Care Redesign - Hip Fracture

- 350,000 annually & number of hip fracture repairs predicted to increase
- Fracture risk doubles every decade after age 50
- One year mortality rate 14-36%
- 50% fail to regain pre-fracture mobility
- 25% who previously lived independently, require long term nursing care
- 35-65% hip fracture patients are affected by delirium

Care Redesign - Hip Fracture

- Greatest share of adverse events among orthopedic procedures
- Account for more hospital days than any other musculoskeletal injury
- Early operative treatment is associated with improved ability to return to independent living, reduction in risk for pressure ulcers and shortened LOS

Care Redesign - Hip Fracture

- Co-Management (Friedman, et, al., Arch. Int Med, 2009)
- Early Surgical Intervention (Al-Ani, et, al., JBJS, 2008)
- Delirium Assessment (Inouye, NEJM, 2006)
- Pain Management (Ickowicz, JAGS, 2009)
- PM&R (Koval & Cooley, Disability & Rehab, 2005)
- Cardiac Pre op Assessment (Salerno, et al., Am. Journal of Med, 2007)
- Osteoporosis Assessment, Treatment and Prevention (North Am. Menopause Soc, 2010)

Care Redesign - Hip Fracture

- Clear Coordination: ED, Medicine, Surgery, Nursing
- Timeliness to surgical intervention
- Standard orders: ED, Pre and Post op
- INR reversal
- Reduction in the use of narcotics /blood transfusions
- Delirium prevention, assessment and treatment
- Rheumatology integration to assess and understand root cause
- Physical Rehabilitation and Medicine evaluation – early ambulation

Care Redesign - Hip Fracture

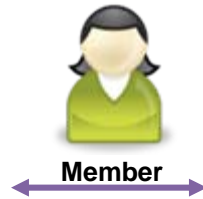
- Nursing Specialization
- Community and Family Education
- Daily Discharge rounds
- Outreach to Extended Care Facility

Where we are today

- Average length of stay
- Surgical intervention in 24 hours
- Pre-op cardiac evaluation
- Delirium management
- Early ambulation

LG Health Care Transformation Model

Patient Centered Medical Home



Member

Data/claims analytics
Enrollment

Home Visits

Enablement

Communication

Coordination

Acute Episodes

Support Services

Place of Residence

End-of-life care

Transition Plan Development

Graduation Assessment

Repatriate

The core care team is responsible for coordination (gets what is needed, when it is needed, where it is needed)



At home / institution



Virtual care



At the Care Center



Care Connections Team



- Extensivist, or clinical leader and "quarterback" for the member's care
- Advanced Practice Provider (NP)
- Navigators
 - Clinical or Lay Health Worker
 - Community Paramedics
- Social worker/Case manager
- Clinical pharmacist
- County Social Services Liaison

Benefits of CTM: Care Connections

- **Team care**, that crosses traditional boundaries and functions, to provide better access, better care and lower costs
- Dedicated **Care Center** to provide high-risk track for CTM participants; including
 - Coordination of critical resources
 - Boundary spanning: care at home, nursing facility, community centers and hospitals
- **Scalable and Replicable**: Pilot approach with staging to include 'second tier' of individuals
- **Incorporation of protocols and early identification of individuals at risk** of becoming Care Connections participant (multiple comorbidities, psycho-social, etc.)
 - Standardizing definitions of superutilizers
 - Standardizing care management process