Sustainable Population Health:
One Health System’s Journey

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Conflict of Interest

Terri Steinberg, MD, MBA

Has no real or apparent conflicts of interest to report.
Agenda

• Introduction
• Learning Objectives
• Christiana Care’s Path to a New Delivery Model – CareLink CareNow
• Limiting Healthcare Cost Growth
• Outcomes and Results
• Challenges, Considerations, and Lessons Learned
• Q&A
Learning Objectives

• Identify the IT components and data sources to create and sustain a modern, technology-driven care management model

• Define the staff skill sets required to administer a care management model that allows health systems to successfully assume commercial and government risk-based contracts

• Adapt traditional, retrospective care management workflows to optimize proactive patient interventions

• Design workflows that leverage both risk scores and health event data to help care managers effectively identify “rising risk” patients most in need of proactive interventions

• Assess how technology-driven care management can help health systems sustainably lower costs, raise care quality and improve the patient experience
Health Care Processes Will Follow the Money
Christiana Care and CareLink Care Now

• 1,000-bed 2-campus not-for-profit teaching hospital in Delaware
  – 22nd nationally in hospital admission volume
  – 11,600 employees
  – $1.6 B revenue
Christiana Care’s Path to a New Delivery Model

- CMMI Grant 2012 to implement 2 innovations:
  - Comprehensive care management
  - Analytics-based technology platform
- Evolution to a shared risk model with payers and employers
  - Christiana Care Health System has a full-risk goal
- CareLink Care Now
  - Wholly-owned subsidiary of Christiana Care
  - Care Management company
  - Contracts include ACO, direct to employer, payer partnerships
  - 102,000 (180,000) lives
Christian Care’s Path to a New Delivery Model

**Strategies**
- Expose performance to providers in real time
- Use analytics to identify high and low risk members, deliver care when needed
- Deliver the level of care based on need
- Understand the population’s overall characteristics
- Standardize evidence-based care
- Measure what you do, don’t do things you can’t measure

**Outcomes**
- Improved utilization measures (readmissions, etc.)
- Cost savings, but less pronounced than utilization
- Provider and patient satisfaction
Transition to CareLink CareNow

- Stand-alone care management company
- Various contracts – 180,000 members
  - Medicare Shared Savings Program
  - Bundle payments for Christiana Care Health System and other hospitals
  - Direct to employer contracts
  - Christiana Care Health System and other health system patients
- IT platform – various components
  - Custom-developed “back end” operational data store and business logic to move data and actions among systems
  - Population Health EHR: Medecision Aerial™
  - Analytics: Custom-developed and Medecision
  - Risk Prediction Engine
Framework to Limit Healthcare Cost Growth

**PA 15-146, An Act Concerning Hospitals, Insurers and Health Care Consumer**

Improve Population Health

What is population health?

• Management of the cost and outcomes for any defined group:
  – Patients
  – Insurance plan members
  – Those who have chronic diseases or specific conditions

• Requires health care organizations to think about people differently
  – Not every person of interest is a patient
  – Some people of interest are someone else’s patients

• Segment the population for success
  – Customized interventions, right-sized care
Components for Effective Population Management

- Risk Assessment Financial Performance
- Data Integration Encounters Real-time data triggers
- From visit-based to continuum-based care “Glue between visits”
Methods to Segment a Population

1. Predictive Analytics
   – Risk-stratifying the entire population to identify patients who need more or less care
   – Identifying the highest risk, highest need patients

2. Automated Outreach
   – Text messages linking to a survey to find out how the patient is doing
   – Automated telephone calls to ask the patient how things are going
Cap Cost Growth

• Value = Quality/Cost

• Measure costs and quality

• If you don’t measure it, don’t do it

• Healthcare is expensive, healthcare technologies are very expensive
  – Understand evidence-based utilization, based on outcomes, for pharmaceuticals and new procedures
  – Especially important for million-$ therapies

• Health care is a tremendous economic driver
  – Embrace the economic impact of cost containment, especially for those geographies that rely on “meds”
Support Providers to Transform

• Embrace new care delivery methods
  – Implement evidence-based pathways
  – Reallocate roles and responsibilities
  – Top of license
• Inter-visit management
  – On-demand access
  – Telehealth, video visits
• Patients assume personal responsibility for outcomes
Support Market Competition

• Develop new strategic relationships
  – Provider/Payer relationships
  – Healthcare organization collaborative competition

• Establish risk-based payment models
  – Ensure essential services, that have no reimbursement in fee-for-service are provided
  – Social services, food programs, literacy, employment
Use Data Analytics to Drive Care

• Drive population management, based on resources:
  – percentile risk for aggressive monitoring and intervention
  – Prediction models to segment populations

• Ensure that everyone is enrolled in a “wellness” DM program, with triggers for gaps in care

• Identify those lost to care, not likely to see providers, or needing specific disease management

• Recognize that the riskiest enrollee, often the expensive one, is the person who may not present to the physician’s office
Analytic Value Escalator

- **What happened?** Descriptive Analytics
- **Why did it happen?** Diagnostic Analytics
- **What will happen?** Predictive Analytics
- **How can we make it happen?** Prescriptive Analytics

**Value**
- INFORMATION Hindsight
- Insight
- OPTIMIZATION Foresight

**Difficulty**

Source: Gartner Research, 2012
Use Data Analytics to Assess Performance

• Provide dashboards and easy-to-understand performance measures
• Develop care delivery processes that are based on evidence-based measures
• Ensure that performance discussions are a team activity
• Challenge provider-led teams to embrace quality and outcomes in everyday practice
  – Involves developing high performing teams
  – Team members work to the top of license
  – Improved provider satisfaction
Performance Dashboards
Coordinate and Align Strategies

• Align payment and performance incentives
  – e.g., RVU (physicians) vs. P4P (organizations)

• Recognize the strategic importance of ambulatory care

• Develop new methods to engage patients between visits, reduce dependence on visits to achieve goals

• Encourage payer/provider collaboration
Patient/Member Engagement

• “Last hundred feet” problem
  – Member engagement is the game changer
  – Care Management that represents providers is key

• Develop personal responsibility for outcomes

• Create useful outreach
  – Video conference on demand for face-to-face interactions
  – Active IVR and text-based disease management
  – Secure text messaging and email replaces the telephone
Patient/Member Engagement

- Identify successful methods to manage chronic diseases
  - Game-ification of disease management
  - Develop useful methods to incorporate symptom feedback to segment chronic disease population
  - Revise “old methods” to include patients as partners
Outcomes and Results

29.9% increase in patients with total hip or total knee replacement discharged to home with self-care or home health care after initiation of care coordination by CareLink
Outcomes and Results

30.4% reduction in the 90-day readmission rates for patients with total hip or total knee replacement

Desired Direction

Total Joint Replacement: 90-Day Readmission Rate

Percent of patients with one or more unplanned hospitalizations within 90-days of discharge, all cause
Outcomes and Results

11.8% increase in congestive heart failure patients being discharged to home with self-care or home health care after initiation of care coordination by CareLink

**Desired Direction**

*Congestive Heart Failure: Community Discharge Rate*

*Percent of patients discharged to home with self care or home health care*
Outcomes and Results

13.9% reduction in the 90-day readmission rates for congestive heart failure patients

Desired Direction

Congestive Heart Failure: 90-Day Readmission Rate

Percent of patients with one or more unplanned hospitalizations within 90-days of discharge, all cause
Outcomes and Results

7.6% reduction in 30-day readmission and 17% reduction in total return rates for patients transferred to skilled nursing facilities

30-Day Readmission Rate
Unplanned Inpatient Admission

<table>
<thead>
<tr>
<th>% Readmission/Total Returns</th>
<th>July-Dec 2015</th>
<th>July-Dec 2016</th>
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<tbody>
<tr>
<td></td>
<td>10.7%</td>
<td>9.9%</td>
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Total Hospital Returns
Unplanned Inpatient, ED, Obs, Visits

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<tr>
<th></th>
<th>July-Dec 2015</th>
<th>July-Dec 2016</th>
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<tbody>
<tr>
<td>Desired Direction</td>
<td>20%</td>
<td>16.6%</td>
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Adoption of an embedded Care Management Model

• Change management was not as difficult as one would predict
• Why?
  – Clinicians are data driven
  – Clinicians are competitive
  – Financial incentives to reduce utilization are aligned
  – Providers are grateful for the help
  – Even SNFs supported the utilization changes – good citizenship
Challenges to Execute the New Delivery Model

• Healthcare must transition to “on demand” model
• Integrated data platforms don’t exist
  – New workflows include EMRs, and between-visit software
  – A strong vendor partnership is essential
• Patient/member empowerment is undeveloped
  – Home monitoring platforms
  – Biometric device integration into the technology platform
  – Sophisticated education and management platforms, embedded in the workflow
Challenges to Execute the New Delivery Model

• New technologies and intensive care management is expensive
• Health care organizations must transition from hospital and visit-based care to home-based care
Technology Considerations

- Develop methods for EMR integration across the continuum
- Define a data integration strategy
- Include care management platforms in the integration strategy
- Identify new data-driven workflows for each actor:
  - Care Managers, physicians, social workers, etc
- Utilize real-time analytics to focus resources on those who need it
  - Right intervention, right time, right person
- Develop analytics platforms to measure cost and quality
  - Make these available to providers to influence change
Christiana Care’s Path to a New Delivery Model

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Lessons Learned

• Don’t grow 2800% in one year
• It takes time to build and execute a care management program and recognize cost savings
• Care management business processes are important
• Technology can’t fix everything
• Self-service analytics for providers is a dream
• Care management/provider partnerships are best
The Future of Health Care is Clear

- Fee-for-service care will transition to a value-based model
- Improved value = higher quality + lower cost
- A visit-centric model will transition to a continuum-of-care model
- Analytics will drive care delivery through population segmentation and performance measures
- Technology will drive right-sized care
  - Evidence
  - Analytics
  - New care delivery methods
The Future of Health Care is Clear

• Data integration will establish excellent workflows
• Successful health care organizations will share data to develop optimal workflows
• Care delivery will be provided by the right person, at the right time, in the right location
• What’s next for CareLink Care Now?
  – Integrate socioeconomic and financial data, more EMRs
  – Expand member populations
Questions?

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