Creating Value for Patients
In an Era of Accountability

Thomas Graf, MD
CMO Population Health and Longitudinal Care Service Lines
Geisinger Health System
“Let us bear in mind that the most important individual after all is the patient. Our paramount thought must be to provide him means by which he can have skilled diagnostic and therapeutic service in as complete form as may be indicated in a given case, in the shortest possible time consistent with thoroughness, and at the least cost to him.”

HL Foss, MD
11/4/1950
Geisinger Now and Future

• Last Decade: Creating Systems to support medical professionals success and changing their behavior

• Next decade: Building on this by Creating systems to support patients success and changing patient behavior
The Triple Aim Plus...

• Higher Quality

• Better Patient Experience

• Lower Total Cost of Care

• Better Professional Experience
Leveraging the Sweet Spot to Drive Innovation

Aligned objectives between the health plan & clinical enterprise, with each organization contributing what it does best.

Health Plan
- Population analysis
- Align reimbursement
- Finance care
- Engage member and employer
- Report population outcomes
- Take to market

Clinical Enterprise
- Care delivery
- Identify best practice
- Design systems of care
- Interpret clinical reports
- Continually improve
- Activate patient & family

Joint:
- Population Health
- Population Served
- EHR / Infrastructure
What is an Accountable Care Organization?

Sg2 Definition:
A set of providers associated with a defined population of patients, accountable for the cost and quality of care delivered to that population.

Statutory Definition:
A physician organization or practice, hospital that employs physicians, or physician/hospital organization that:

- has defined processes to promote evidence-based medicine, report on quality and cost measures, and coordinate care
- contracts with Medicare
- has a primary care physician panel large enough to be accountable for at least 5,000 Medicare fee-for-service beneficiaries
- meets minimum quality and cost metrics
- meets defined criteria for “patient-centeredness”
- is eligible to receive and can distribute Medicare’s shared savings payments to the ACO’s
Goals of the ACO

- Moving further upstream with prevention and early intervention services to prevent health conditions from becoming chronic

- Dramatically improving the management of chronic health conditions for the 45% of Americans with one or more such conditions whose treatment draws down 75% of total medical costs

- Reducing errors and waste in the system
Strategic Elements

- Culture / Alignment
- Balancing fee for service mindset with accountable care goals
  - LOS
  - Readmissions
  - Use of post acute
  - Reduced use of ancillaries
Developing a Viable Structure

ACO Governing Board

ACO Services Co
ACO General Management
- ACO Executive
- Coordination of board activities
- CMS/Insurer Interface
- Liaison with participating hospitals/hospitals/other partners
- Legal interface
  - Compliance
  - Anti-trust
  - Stark etc

Finance/Accounting
- ACO budgets, LRFM, ROI analysis
- 3rd Party Contracting/Negotiations with insurers
  - Drive process
  - Execute distributions/collections
- Gain/Loss sharing
- Financial Statements
  - Preparation
  - Presentation
  - Required edits
- Financial compliance

Reporting and Analysis
- Prepares data submissions for CMS, other payers (Quality, data use, agreements, other)
- Receives data from payers
  - Analysis
  - Opportunity reports
  - Annual contract performance analysis
- Assists partners with analysis of internal data

Technical Support
- EHR support
- Care management software
- HIE
eTools

Clinical Re-engineering Services
(Effectors Arms)
- Medical Home infrastructure & support
- SNF/infrastructure & support
- Transition Management services
- Targeted efforts specific to hospitals/physician groups

Quality/Continuum Management
- Assessment
- Reporting
- Improvement
- Connectivity and care trajectory optimization
- Tie to financial incentive
How a Shared Savings Program Works

- A spending benchmark is established
- If quality targets are met within that spending target, shared savings from payers are then distributed to participating providers

The ACO does not take insurance risk: if costs go up instead of down, there is no penalty other than the amount invested to improve performance (e.g., case managers, IT investments)

1 Sg2 Special Report ACO, October 2
How is success measured?

The Medicare Shared Savings Program will reward ACOs that lower their growth in health care costs while meeting performance standards on quality of care and putting patients FIRST.

ACOs will be measured by meeting 33 measures within 5 quality domains:

- Patient/Caregiver experience of care
- Care Coordination
- Patient Safety
- Preventative Health
- At-risk population/frail elderly health
Geisinger Value Based Care

- ProvenCare ® Acute
- ProvenCare ® Chronic
- ProvenHealth Navigator®

- ProvenHealth Transitions
- ProvenWellness Neighborhood
- Ask/Inform-a-Doc

- Specialty Cohort Management
I argued that with the rapid advances being made by medical science it had become impossible for any one physician to master more than a relatively small segment of his art. Consequently a number of individuals had to share the responsibility once faced by the family doctor. Just as co-operative endeavor had become a requirement in arts and arms, business and science, finance and commerce, I reasoned that so had it become necessary in medicine, particularly in medicine practiced in a modern medical center such as we envisioned.

HL Foss, MD
The Functional Components of Population Health

- Value Driven Population Care
  - ProvenHealth® Navigator, Clinical Redesign

Value Driven Acute Care:
- Proven Care Acute

Value Driven Post-Acute Care:
- TOC, SNFist

Value Driven Specialty Care:
- PHN Integration

Value Driven Actuarial and Operational Informatics

Cultural Transformation
Data Driven Care and Leadership Evolutions
## Error Reduction Strategy

<table>
<thead>
<tr>
<th>High Leverage</th>
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<tbody>
<tr>
<td>Forcing functions and constraints</td>
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<tr>
<td>Automation and computerization</td>
</tr>
<tr>
<td>Standardization and protocols</td>
</tr>
<tr>
<td>Checklists and double check systems</td>
</tr>
<tr>
<td>Rules and policies</td>
</tr>
<tr>
<td>Education / Information</td>
</tr>
</tbody>
</table>

| Low Leverage |

### Table 1. Rank Order of Error Reduction Strategies

Source: ISMP. Reprinted with permission.

Five rights: not the gold standard, *Pennsylvania Patient Safety Advisory*
June 2005
Lessons Learned

• It is not the tool created in the electronic medical record, but its implementation into a system of care that makes it successful

• Spreading the work out over a team, each with clearly defined roles improves reliability

• Measures are never perfect, but improve with time and are vital to the change process

• Compensation helps focus attention, but is not sufficient to drive change
ProvenHealth Navigator® Quality

Diabetes Bundle

Phase 1 Trend 5.0%  
Phase 2 Trend 9.8%  
Phase 3 Trend 4.8%  
Phase 4 Trend 3.0%  
Phase 5 Trend 21.0%  
Phase 6 Trend 161.5%

A1C Less than 7%

Phase 1 Trend  
Phase 2 Trend 3.5%  
Phase 3 Trend 0.5%  
Phase 4 Trend 2.2%  
Phase 5 Trend -3.2%  
Phase 6 Trend -17.1%

CAD

Phase 1 Trend 6.5%  
Phase 2 Trend 5.5%  
Phase 3 Trend 12.2%  
Phase 4 Trend 5.1%  
Phase 5 Trend 16.1%  
Phase 6 Trend 119.8%

LDL Less than 100 or Less than 70 if High Risk

Phase 1 Trend  
Phase 2 Trend 7.3%  
Phase 3 Trend 9.6%  
Phase 4 Trend 9.8%  
Phase 5 Trend 14.2%  
Phase 6 Trend 25.8%

Preventive Care

Phase 1 Trend 13.3%  
Phase 2 Trend 9.9%  
Phase 3 Trend -3.4%  
Phase 4 Trend -16.0%  
Phase 5 Trend -23.2%  
Phase 6 Trend -13.5%

Mammogram

Phase 1 Trend  
Phase 2 Trend 5.4%  
Phase 3 Trend 2.8%  
Phase 4 Trend -0.5%  
Phase 5 Trend 2.1%  
Phase 6 Trend 18.6%

Phase 1 and 2 represent 2007 through 2013 – Blue = 2007 / Red = 2013
Phase 4 represents 2009 through 2013 – Blue = 2009 & Red = 2013

Phase 3 represent 2008 through 2013 – Blue = 2008 / Red = 2013
Phase 5 represents 2010 through 2012 trends – Blue = 2010 & Red = 2013
Medicare Risk Adjusted Acute Admissions/1000

- Bars representing Medicare Risk Adjusted Acute Admissions/1000 for each year from 2006 to 2012.
- PHN category in blue bars.
- Non-PHN category in yellow bars.
- 67 Current PHN Sites indicated by a black dot on the 2006 bar.


Values:
- 2006: PHN = 296, Non-PHN = 309
- 2007: PHN = 257, Non-PHN = 301
- 2008: PHN = 240, Non-PHN = 303
- 2009: PHN = 231, Non-PHN = 292
- 2010: PHN = 234, Non-PHN = 288
- 2011: PHN = 222, Non-PHN = 276
- 2012: PHN = 214, Non-PHN = 264
Medicare Risk Adjusted Readmissions/1000

<table>
<thead>
<tr>
<th>Year</th>
<th>PHN</th>
<th>Non-PHN</th>
<th>67 Current PHN Sites</th>
</tr>
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<tbody>
<tr>
<td>2006</td>
<td>44</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>2007</td>
<td>41</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>2008</td>
<td>30</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>2009</td>
<td>33</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>2010</td>
<td>34</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>2011</td>
<td>29</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>2012</td>
<td>29</td>
<td>42</td>
<td>42</td>
</tr>
</tbody>
</table>
### Table 4. Estimated ROI by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Without Rx Coverage Interaction</th>
<th>With Rx Coverage Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>0.7 (-0.2 to 1.6)</td>
<td>1.1 (-0.2 to 2.4)</td>
</tr>
<tr>
<td>2008</td>
<td>0.6 (-0.2 to 1.4)</td>
<td>1.0 (-0.1 to 2.1)</td>
</tr>
<tr>
<td>2009</td>
<td>1.1 (-0.1 to 2.2)</td>
<td>1.8 (0.3-3.3)</td>
</tr>
<tr>
<td>2010</td>
<td>1.2 (0.0-2.4)</td>
<td>2.1 (0.6-3.5)</td>
</tr>
<tr>
<td>All Years</td>
<td>1.0 (-0.1 to 2.0)</td>
<td>1.7 (0.3-3.0)</td>
</tr>
</tbody>
</table>

ROI indicates confidence interval; ROI, return on investment; Rx, prescription.

*a* Indicates that Rx coverage and PHN exposure variables were included as independent covariates only without the interaction effects.

*b* Refers to inclusion of interaction effects between these 2 variables in our regression model.
Cardiology and Value Based Care

- The way not to get there...

- And some ideas of what could work...
CAD Imaging Referral Process

1. Provider selects orders “CAD Imaging Referral”
2. Message sent to pool of CAD Imaging Referral nurses
3. Full chart review completed
4. Chart review applied to protocol with cardiologist input
5. Cardiologist selects and signs order for optimal test
6. Pre-cert managed by cardiology
7. Test scheduled (Cardiology scheduled if GHS test location)
8. Test completed
9. Results communicated to original provider
## Summary Impact

<table>
<thead>
<tr>
<th>Group</th>
<th>Second test in 90 days</th>
<th>Test savings in 694 consecutive patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHP</td>
<td>20.1%</td>
<td>Baseline</td>
</tr>
<tr>
<td>GHS-PCP</td>
<td>14.2%</td>
<td>-46 tests (5.9% in reduction overall)</td>
</tr>
<tr>
<td>GHS PCP with CAD Imaging</td>
<td>10.0%</td>
<td>-87 tests (11.1% reduction in overall)</td>
</tr>
</tbody>
</table>

*Estimated based on gross up to second tests from CPSL population to GHP population*
“Every few hundred years, throughout Western history, a sharp transformation has occurred. In a matter of decades, society altogether rearranges itself: its world view, its basic values, its social and political structures, its arts, its key institutions. Fifty years later, a new world exists, and the people born into that world cannot even imagine the world in which their grandparents lived and into which their own parents were born. Our age is such a period of transformation.”

Peter Drucker, “Managing in a Time of Great Change”