Health Care Transformation Post Reform: Geisinger’s Model

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New York, NY

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President and CEO
Geisinger Health System
Where We Are Now (Nationally)
The Quality of Health Care Delivered To Adults In the United States


BACKGROUND
We have little systematic information about the extent to which standard processes involved in healthcare—a key element of quality—are delivered in the United States.

METHODS
We telephoned a random sample of adults living in 12 metropolitan areas in the United States and...received written consent to copy their medical records...to evaluate performance on 439 indicators of quality of care for 30 acute and chronic conditions as well as preventative care...

RESULTS
Participants received 54.9 percent of recommended care.

CONCLUSIONS
The deficits we have identified in adherence to recommended processes for basic care pose serious threats to the health of the American public. Strategies to reduce these deficits are warranted.
Cost/Quality “Correlation”

MD Longitudinal Cost Efficiency Index
(total cost per case mix-adjusted treatment episode)

50th %ile

Lower Efficiency/ Higher Cost

Low Efficiency
Low Quality
(Nightmare Suppliers)

Higher Efficiency/ Lower Cost

High Efficiency
Low Quality

High Efficiency/ High Quality
(Dream Suppliers)

Adapted from Regence Blue Shield; Arnie Milstein, MD - Mercer
Where Is the U.S. on Health IT?

Only 46% of U.S. primary care physicians have electronic medical records (EMRs), and only 26% have advanced IT capacity.

* Count of 14 functions includes: electronic medical record; electronic prescribing and ordering of tests; electronic access test results, Rx alerts, clinical notes; computerized system for tracking lab tests, guidelines, alerts to provide patients with test results, preventive/follow-up care reminders; and computerized list of patients by diagnosis, medications, due for tests or preventive care.

Source: Commonwealth Fund 2009 International Health Policy Survey of Primary Care Physicians.
The "Cross Subsidy"
Total National Health Expenditures, 2008–2017

Dollars in trillions

Projected under current system

Source: Based on projected expenditures absent policy change and Lewin estimates.
International Comparison of Spending on Health, 1980–2006

Average spending on health per capita ($US PPP*)

* PPP = Purchasing Power Parity.

The Path to a High Performance US Health System “A 2020 Vision and the Policies to Pave the Way”, pg. 16-21, The Commonwealth Fund
Where We Want to Be

1. Affordable coverage for all
2. Payment for value
3. Coordinated care
4. Continuous improvement/innovation
5. National health goals, leadership, accountability

The Path to a High Performance US Health System “A 2020 Vision and the Policies to Pave the Way”, pg. 16-21, The Commonwealth Fund
The Legacy

“Make my hospital right, make it the best.”

Abigail Geisinger
1827-1921

“Geisinger Quality – Striving for Perfection”…2006 - 2011
Geisinger Health System
An Integrated Health Service Organization

Provider Facilities

- Geisinger Medical Center
  - Hospital for Advanced Medicine & the Janet Weis Women’s & Children’s Hospital, Level I & II Trauma Center
- Geisinger Northeast (2 campuses)
  - Geisinger Wyoming Valley Medical Center with Heart Hospital, Henry Cancer Center, Level II Trauma Center
  - South Wilkes-Barre Ambulatory Surgery, Adult & Pediatric Urgent Care, Pain Medicine, Sleep Medicine
- Marworth Alcohol & Chemical Dependency Treatment Center
- 3 Ambulatory surgery centers
- >48K admissions/OBS & SORU
- ~820 licensed in-patient beds

Managed Care Companies

- ~250,000 members (incl. ~49,000 Medicare Adv.)
- Diversified products
- >25,000 contracted physicians/facilities (including 110 non-Geisinger hospitals)
- 42 PA counties

Physician Practice Group

- Multispecialty group
- ~860 physicians
- ~460 advanced practitioners
- ~62 primary and specialty clinic sites (37 community practice sites)
- >2.0 million outpatient visits
- ~350 residents and fellows
Electronic Health Record (EHR)

- $130M invested (hardware, software, manpower, training)
- Running costs: ~4.4% of annual revenue of > $2.3B
- Fully-integrated EHR: 37 community practice sites; 2 hospitals; 2 EDs; 6 Careworks Retail-based and worksite clinics
  - Acute and chronic care management
  - Optimized transitions of care
- Networked PHR - ~155,000 active users (33% of ongoing patients)
  - Patient self-service (self-scheduling, kiosks)
  - Home monitoring integrated with Medical Home
- “Outreach EHR” - 2,600 non-Geisinger physician users
  - Regional image distribution
- Active Regional Health-Information Exchange (KeyHIE)
  - 11 hospitals, 90+ practices, 400,000 patients consented
- Keystone Beacon Community
  - HIT-enabled, Community-wide care coordination in 5 rural counties
The Vision

- Geisinger Quality
- Innovation
- Market Expansion
- Securing the Legacy
Targets for Geisinger Innovation

- Unjustified variation
- Fragmentation of care-giving
- Perverse payment incentives
  - ↑ Units of work
  - Outcome irrelevant
- Patient as passive recipient of care
Key Partnerships

- Patients
- Physicians
- Hospitals
- Buyers
- Payers
- All members of the care team
Innovation Initiatives

- ProvenCare® for Acute Episodic Care (the “Warranty”)
- ProvenCare® Chronic Disease
- ProvenHealth Navigator℠ (Advanced Medical Home)
- Transitions of Care
ProvenCare® for Acute Episodic Care (the “Warranty”)
ProvenCare® for Acute Episodic Care

ProvenCare®
- Identify high-volume DRGs
- Determine best practice techniques
- Deliver evidence-based care
- GHP pays global fee
- No additional payment for complications
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Before ProvenCare® (n=132)</th>
<th>ProvenCare® (n=321)</th>
<th>% Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-hospital mortality</td>
<td>1.5 %</td>
<td>0.3 %</td>
<td>80 %</td>
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<tr>
<td>Patients with any complication (STS)</td>
<td>38 %</td>
<td>33 %</td>
<td>13 %</td>
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<tr>
<td>Patients with &gt;1 complication</td>
<td>8.4 %</td>
<td>5.9 %</td>
<td>30 %</td>
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<tr>
<td>Atrial fibrillation</td>
<td>24 %</td>
<td>21 %</td>
<td>13 %</td>
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<tr>
<td>Neurologic complication</td>
<td>1.5 %</td>
<td>0.9 %</td>
<td>40 %</td>
</tr>
<tr>
<td>Any pulmonary complication</td>
<td>7 %</td>
<td>5 %</td>
<td>29 %</td>
</tr>
<tr>
<td>Re-intubation</td>
<td>2.3 %</td>
<td>0.9 %</td>
<td>61 %</td>
</tr>
<tr>
<td>Blood products used</td>
<td>24 %</td>
<td>22 %</td>
<td>8 %</td>
</tr>
<tr>
<td>Re-operation for bleeding</td>
<td>3.8 %</td>
<td>2.8 %</td>
<td>26 %</td>
</tr>
<tr>
<td>Deep sternal wound infection</td>
<td>0.8 %</td>
<td>0.3 %</td>
<td>63 %</td>
</tr>
<tr>
<td>Readmission within 30 days</td>
<td>6.9 %</td>
<td>5.6 %</td>
<td>20 %</td>
</tr>
</tbody>
</table>
ProvenCare® CABG: Financial Outcomes

Hospital:
• Contribution margin increased 17.6%
• Total inpatient profit per case improved $1946

Health Plan:
• Paid out 4.8% less per case for CABG with ProvenCare® than it would have without
• Paid out 28 to 36% less for CABG with GHS than with other providers
ProvenCare® Portfolio

ProvenCare®:
- CABG
- PCI (Percutaneous Coronary Interventions Angioplasty/Angioplasty + AMI)
- Hip replacement
- Cataract
- EPO
- Perinatal
- Bariatric surgery
- Low back
- Lung cancer
Chronic Disease Portfolio

- Diabetes
- Congestive Heart Failure
- Coronary Artery Disease
- Hypertension
- Prevention Bundle
Physician Group Practice Demonstration Performance Year 4 Quality Measures Results

August 20, 2010

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RTI International

Sherry Grund, R.N.
Joan Roberson
Francis Landiza
IFMC

RTI International is a trade name of Research Triangle Institute.
ProvenHealth Navigator<sup>SM</sup> (Advanced Medical Home)
ProvenHealth Navigator<sup>SM</sup> (Advanced Medical Home)

- Partnership between primary care physicians and GHP that provides 360-degree, 24/7 continuum of care
- “Embedded” nurses
- Assured easy phone access
- Follow-up calls post-discharge and post-ED visit
- Telephonic monitoring/case management
- Group visits/educational services
- Personalized tools (e.g., chronic disease report cards)
Paying to Cut Health Costs
Extra Nurses Help Doctors Keep Patients Out of the Hospital

A Health Insurer Pays More to Save
By Reed Abelson
ProvenHealth Navigator\textsuperscript{SM}  
(Advanced Medical Home)

- Currently serves 40,000 Medicare recipients and 25,000 commercial patients
- Results from best primary care sites:
  - ↓ 25\% patients’ admissions
  - ↓ 23\% days/1000
  - ↓ 53\% readmissions following discharge
  - Significant benefit to patients and families, avoiding multiple hospital admissions
ProvenHealth Navigator\textsuperscript{SM} significantly expanded since 2007

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date</th>
<th>Sites</th>
<th>Gold members</th>
<th>Commercial members</th>
<th>PGP members</th>
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<tr>
<td>1</td>
<td>October 2006</td>
<td>2 GHS</td>
<td>3,000</td>
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<td></td>
<td>May 2007</td>
<td>1 non-GHS</td>
<td>100</td>
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<td>800</td>
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<td>2</td>
<td>November 2007</td>
<td>10 GHS</td>
<td>7,300</td>
<td>6,000</td>
<td>10,200</td>
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<tr>
<td></td>
<td>May 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>August 2008</td>
<td>9 GHS</td>
<td>4,200</td>
<td>4,500</td>
<td>6,200</td>
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<td>January 2009</td>
<td>3 non-GHS</td>
<td>400</td>
<td>1,400</td>
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<td>4</td>
<td>July 2009</td>
<td>11 GHS and</td>
<td>4,300</td>
<td>12,300</td>
<td>4,700</td>
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<td></td>
<td>November 2009</td>
<td>1 non-GHS</td>
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<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>32 GHS and 5</td>
<td>19,300</td>
<td>25,000</td>
<td>21,100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>non-GHS</td>
<td></td>
<td></td>
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</table>
Cumulative Total Difference in Spending Attributable to PHN (%) vs. Predicted PMPM

- Clinic 1 begins
- Clinic 2 begins
- Clinics 3-8 begin
- Clinics 9-11 begin

% Difference

Ongoing Issues

- Scalability?
- Generalizability?
- Specialist ≠ PCP
Fundamental Innovation at Geisinger
How and Why?

Anatomy
• Continuum of Care (provider “all-in”)
• Hub and spoke provider design
• Aligned incentives
• Insurance/provider joint goals

Market
• Demography
• Brand
• Market share (insurance and provider)
• Electronic enabler across 42 counties
Fundamental Innovation at Geisinger
How and Why?

**Financial Health**
- Balance sheet
- Operating margin
- “Hedging” strategy
- Planned risk taking

**Sociology**
- IHS culture
- Clinical leadership (insurance and provider)
- Patient centric design
- The “common good” goal
All of the above
“permissive” but not enough

Clinical leadership
Pride of purpose
Professionalism

Overarching
“POST REFORM”

Question: And Now What?
Answer: Reengineering Care!
Prognosis (National)

↑ Access
↑ Demand
Perverse incentives
  “Piece rate” Medicare/Medicaid payment
  ↑ units of work
  ∴ ↑ cost
  ↓ value
Prognosis (National)

Consolidation of insurance companies
Consolidation of hospitals

↑ IDS
↑ ACOs
Winners will provide

More value for patients!
Or

"Price controls!!"