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REDEFINING BOUNDARIES

Health Care Transformation Post Reform: Geisinger's Model

November 2, 2010
NYSHealth Foundation – 2010 Fall Conference
New York, NY

Glenn Steele Jr., MD, PhD
President and CEO
Geisinger Health System

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Where We Are Now
(Nationally)

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The Quality of Health Care Delivered To Adults In the United States

McGlynn, Elizabeth A.: Asch, Steven M.: Adams, John: Jeesey, Joan: Hicks, Jennifer: DeCristofaro, Alison: Kerr, Eve A.

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…
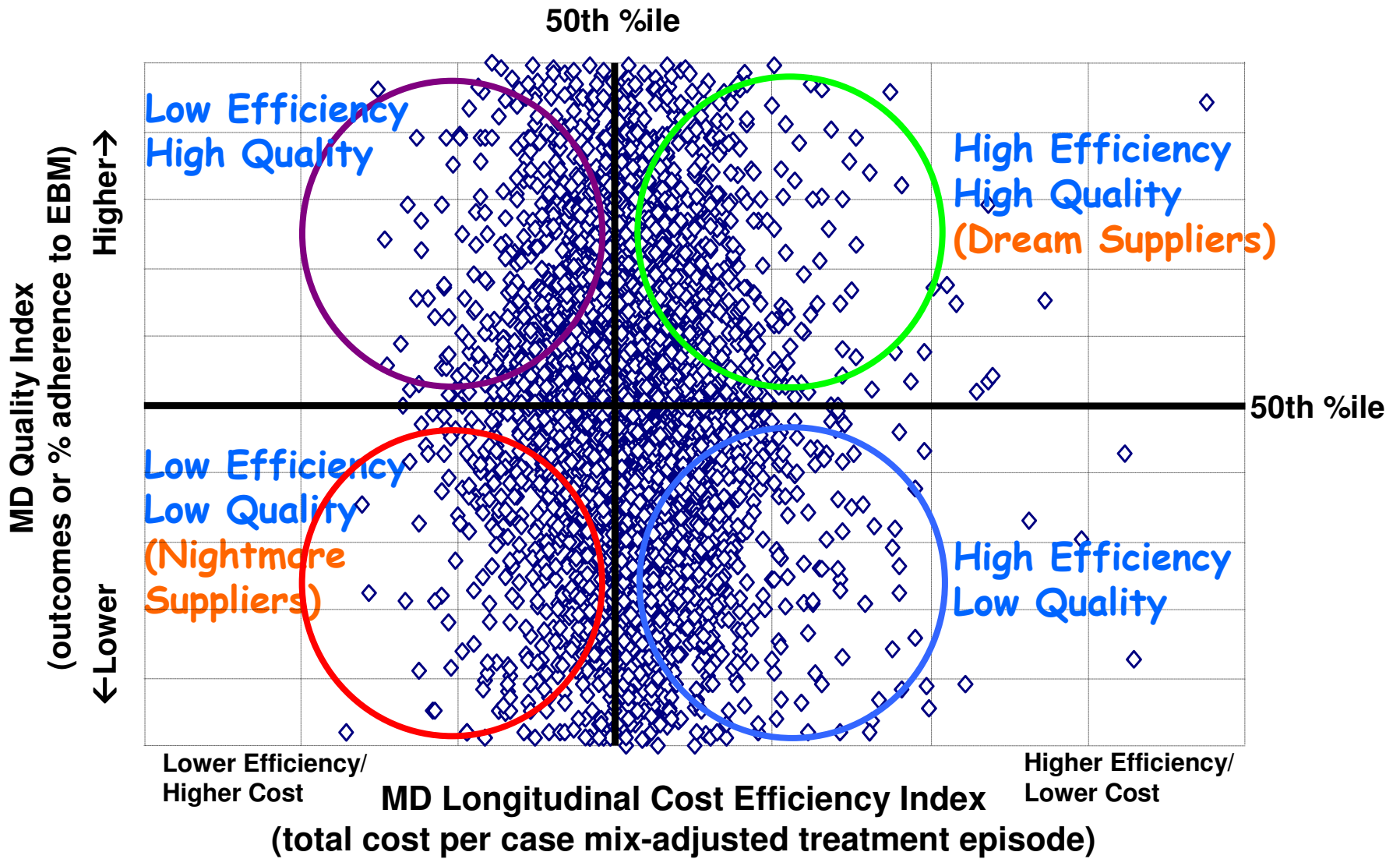
RESULTS

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.

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Cost/Quality "Correlation"

50th %ile

MD Quality Index
(outcomes or % adherence to EBM)
Higher→ ←Lower

Low Efficiency
High Quality

High Efficiency
High Quality
(Dream Suppliers)

50th %ile

Low Efficiency
Low Quality
(Nightmare
Suppliers)

High Efficiency
Low Quality

Lower Efficiency/
Higher Cost

Higher Efficiency/
Lower Cost

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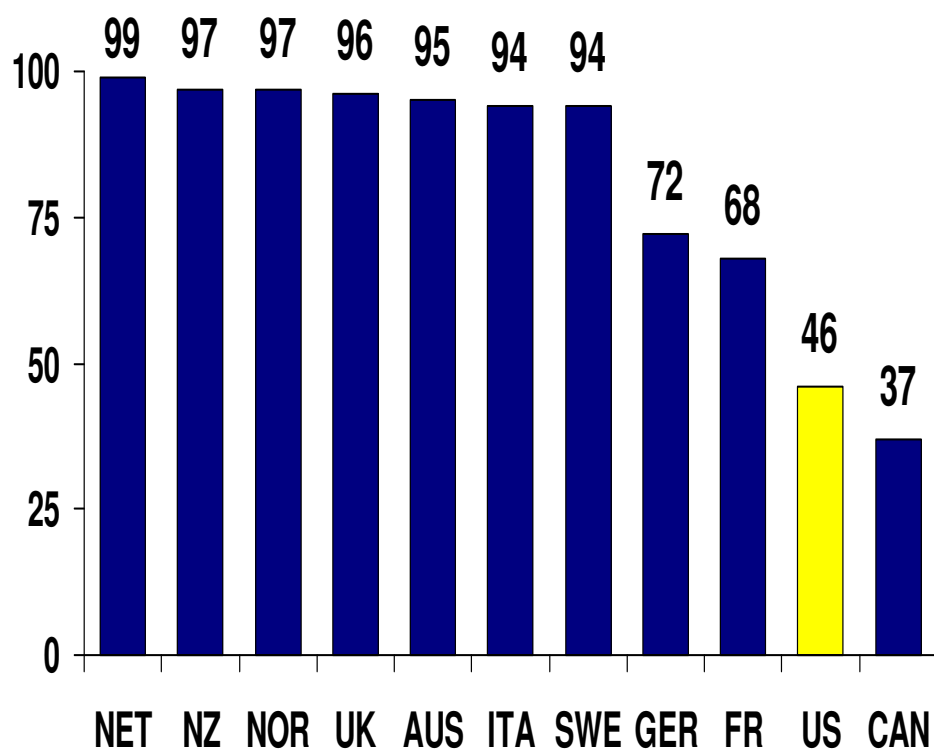(total cost per case mix-adjusted treatment episode)

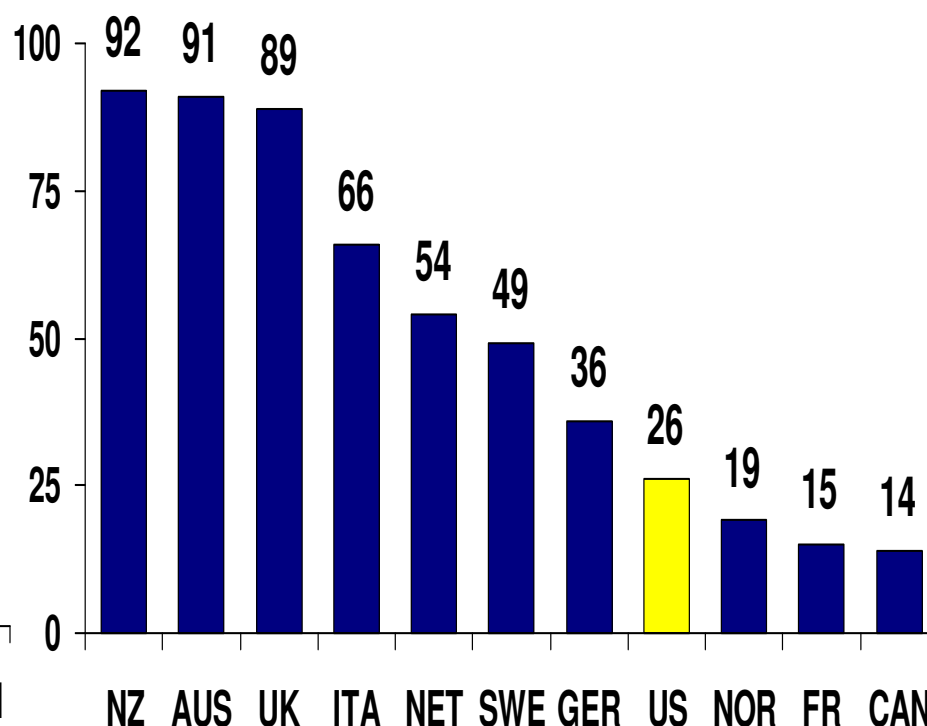Adapted from Regence Blue Shield; Arnie Milstein, MD - Mercer

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
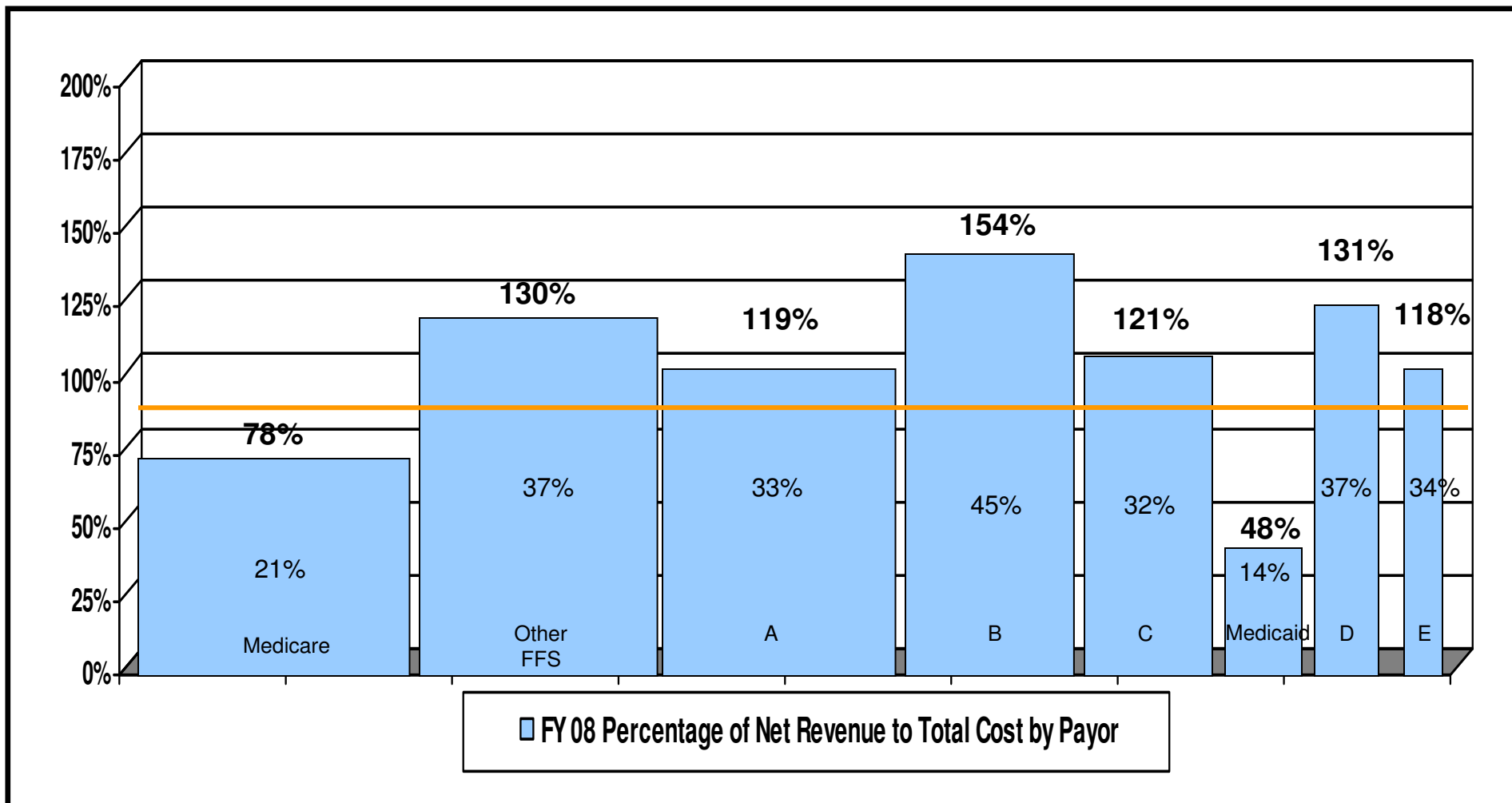
Percent reporting EMR

Percent reporting nine or more of 14 IT functions*

	EMR %
NET	99
NZ	97
NOR	97
UK	96
AUS	95
ITA	94
SWE	94
GER	72
FR	68
US	46
CAN	37

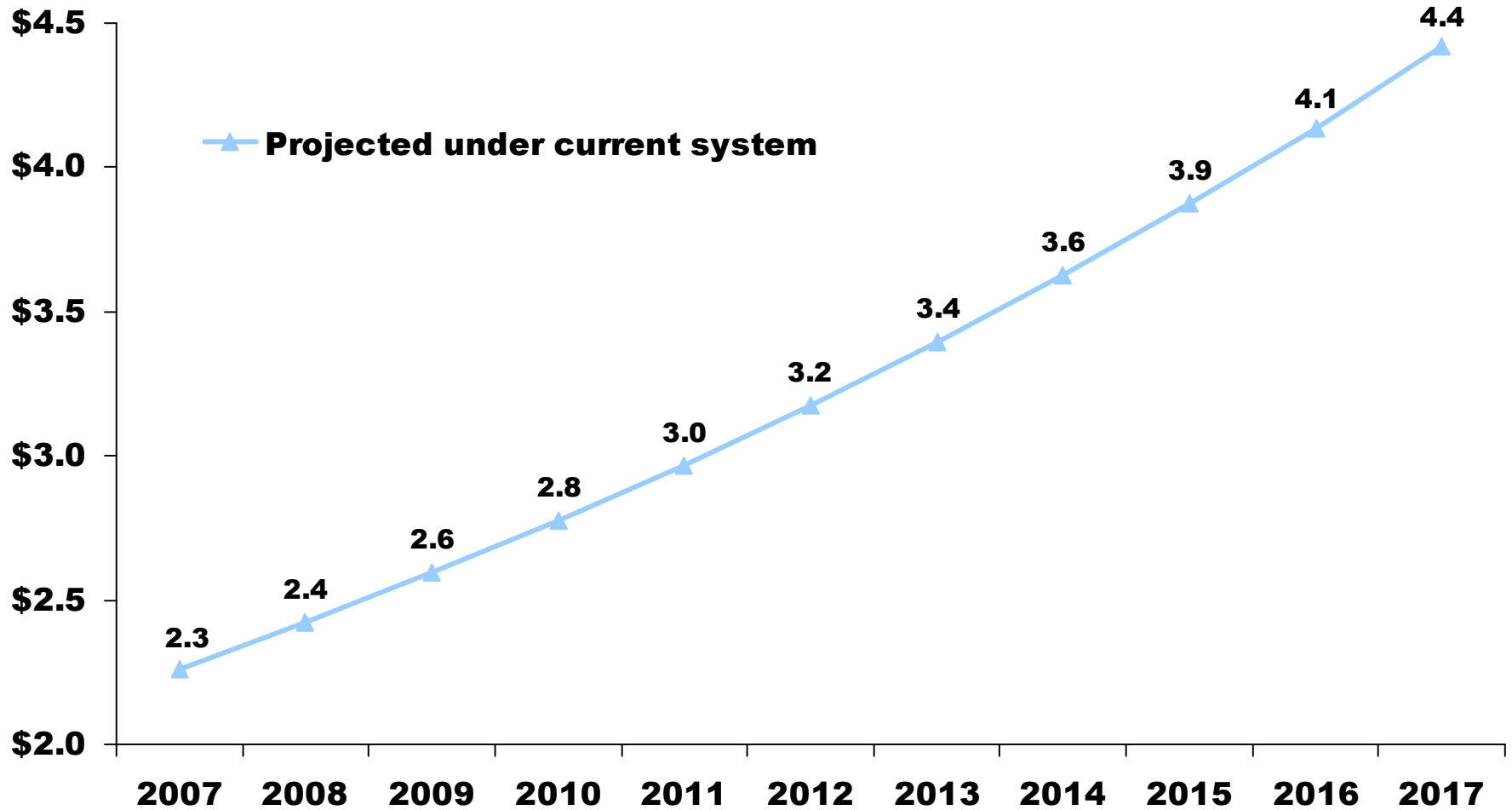|	Nine or more %
NZ	92
AUS	91
UK	89
ITA	66
NET	54
SWE	49
GER	36
US	26
NOR	19
FR	15
CAN	14

* 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

Legend: ▲ Projected under current system

| Year	Value
2007	2.3
2008	2.4
2009	2.6
2010	2.8
2011	3.0
2012	3.2
2013	3.4
2014	3.6
2015	3.9
2016	4.1
2017	4.4

Y-axis: $2.0, $2.5, $3.0, $3.5, $4.0, $4.5

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*)

Legend:
- United States
- Germany
- Canada
- Netherlands
- France
- Australia
- United Kingdom
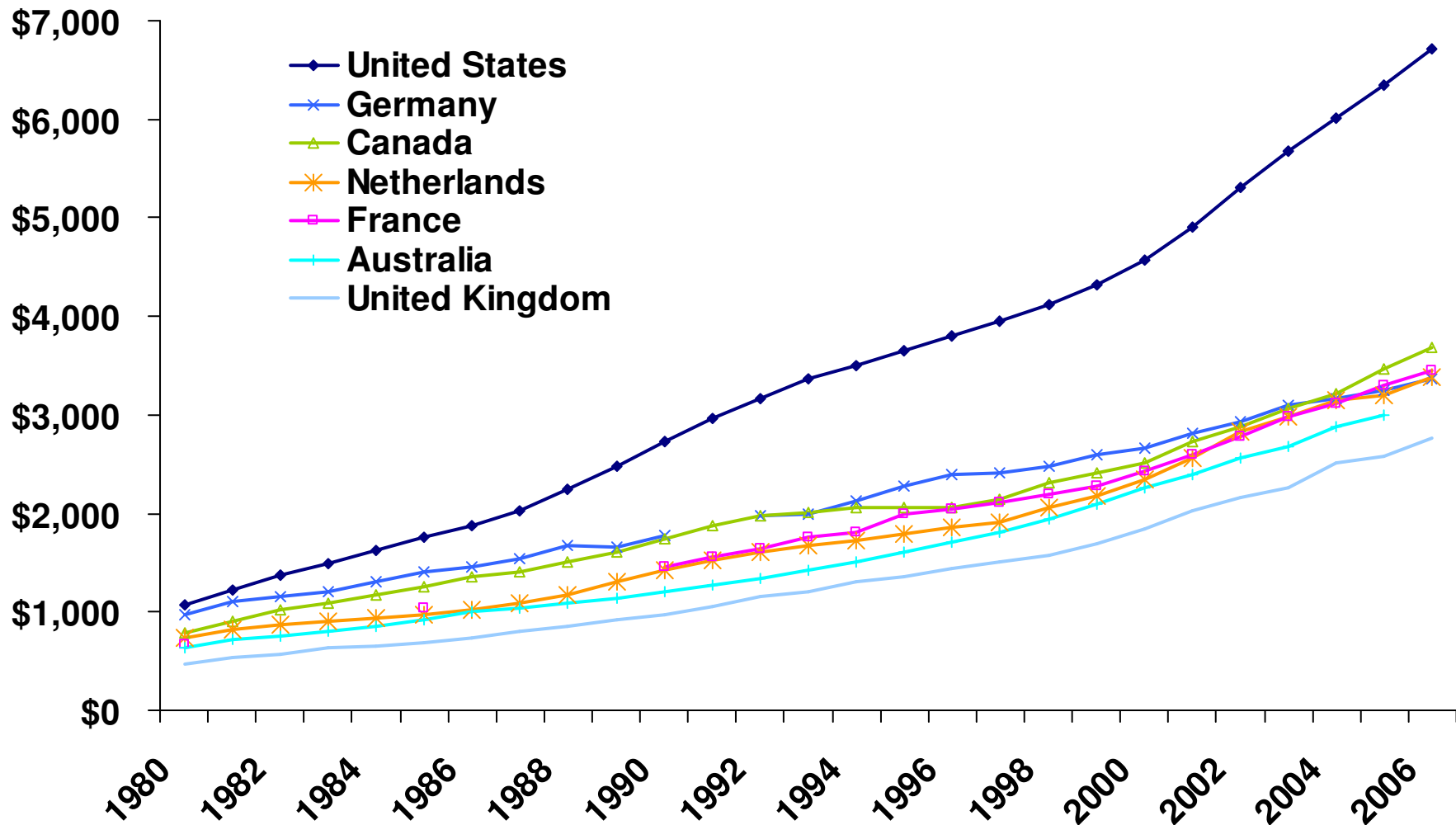
* PPP = Purchasing Power Parity.
Data: OECD Health Data 2008, June 2008 version.

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

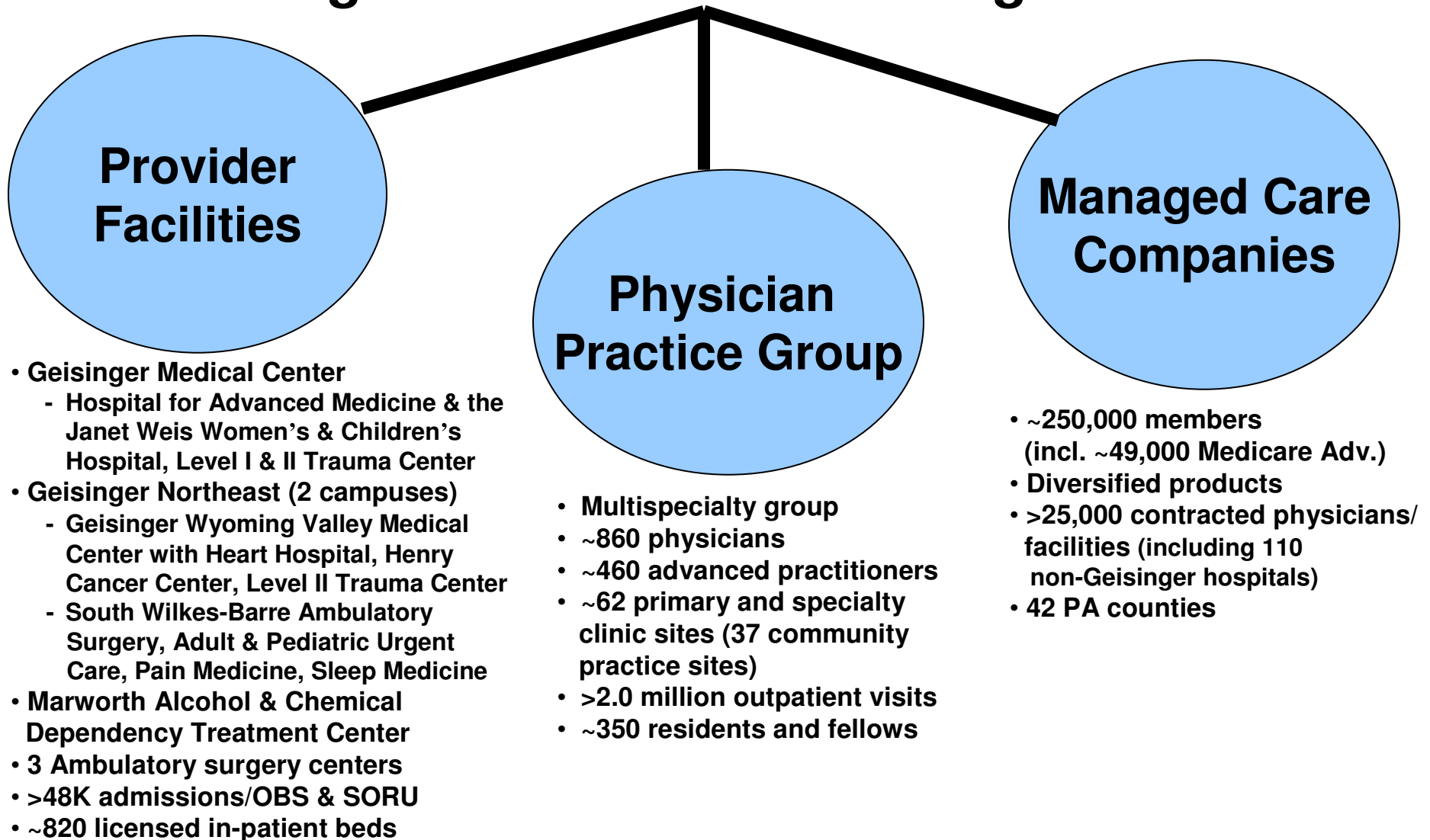Heal • Teach • Discover • Serve

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The Legacy

"**Make my hospital right, make it the best.**"

Abigail Geisinger
1827-1921

"***Geisinger Quality – Striving for Perfection***"…*2006 - 2011*

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Geisinger Health System

Intermountain Medical Group
Dallas

Bloomsburg
General Surg

Millville

Reichart
Road

Tunkhannock

Berwick

Nicholson

Dallas

Kingston

Wyoming

Pittston

Moosic

Lake Scranton

Geisinger Specialty Clinic-WB

Lewisburg

Milton

Knapper

Lycoming

WESTERN HUB

CENTRAL HUB

NORTHEASTERN HUB

Lock Haven

Bellefonte

Philipsburg

Gray's Woods

University Drive

Scenery Park

Lewistown

Family Practice Center
Mifflinburg

Family Practice Center
Selinsgrove

Marworth

Geisinger South
Wilkes-Barre

Woodbine

Geisinger
Wyoming Valley

Geisinger
Medical Center

Gray's
Woods

Intermountain
Medical Group
Mundy

Mountainhome

Mt Pocono

Kistler

Mountaintop

Hazleton

Mahanoy City

Selinsgrove

Juniata

Selinsgrove
Specialty Clinic

Sunbury

Shamokin
Specialty Care

Kulpmont

Catawissa

Pottsville

Frackville

Orwigsburg

Last updated 11/12/09

Legend

- ☐ (yellow) Geisinger ProvenHealth Navigator Sites
- ☐ (red) Contracted ProvenHealth Navigator Sites
- ☆ (yellow) Geisinger Medical Groups
- ☆ (brown) Geisinger Specialty Clinics
- ✚ Geisinger Inpatient Facilities
- ⬡ Ambulatory Care Facility
- ☐ (gray) Geisinger Health System Hub and Spoke Market Area
- ☐ (blue) Geisinger Health Plan Service Area
- ▲ Careworks Convenient Healthcare
- ● Non-Geisinger Physicians With EHR

Geisinger Health System
An Integrated Health Service Organization

Provider Facilities

Physician Practice Group

Managed Care Companies

- **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**

- **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**

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

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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

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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

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Key Partnerships

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

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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

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ProvenCare® CABG

% patients receiving all ProvenCare components

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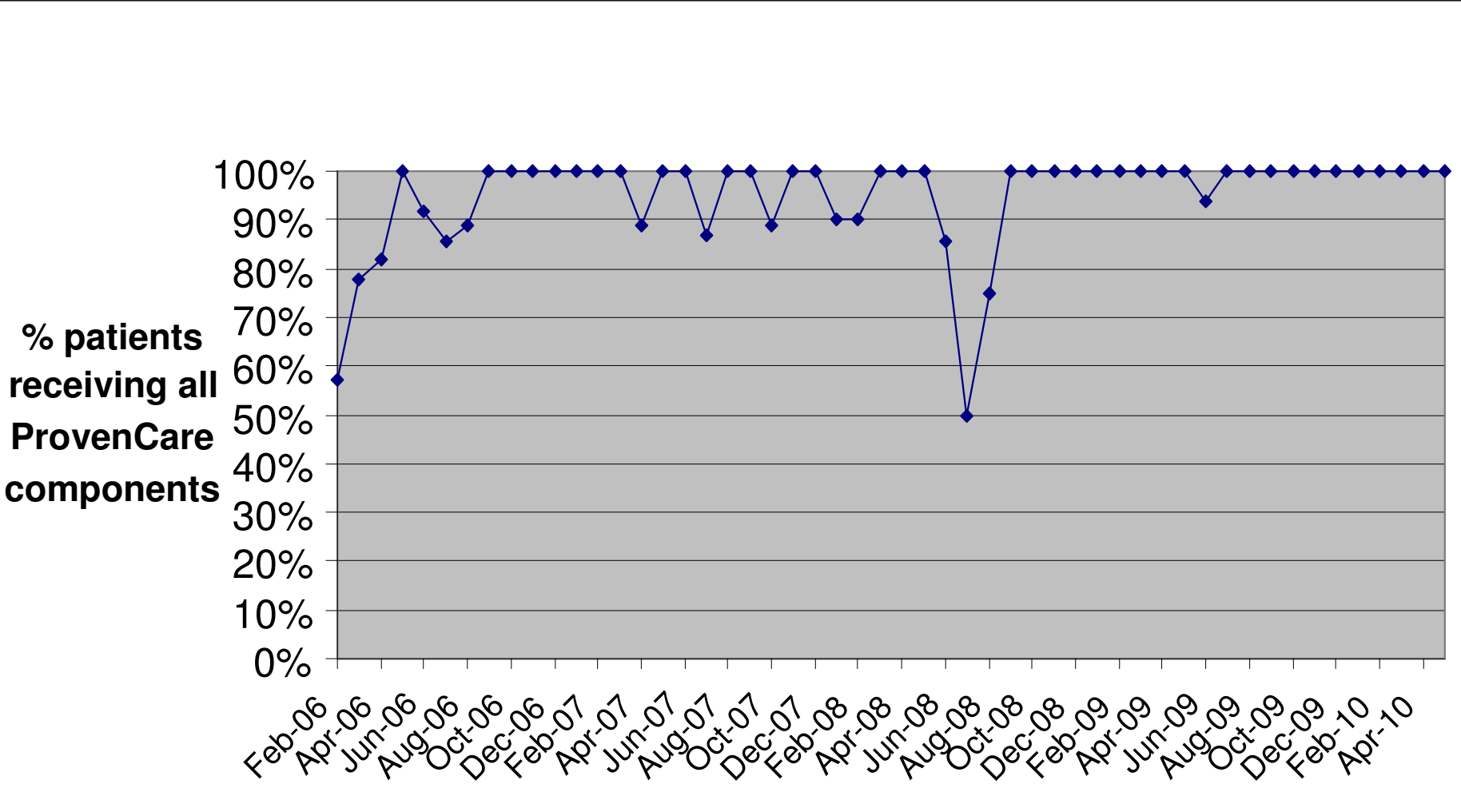
Quality/Value - Clinical Outcomes

	Before ProvenCare® (n=132)	ProvenCare® (n=321)	% Improvement
In-hospital mortality	1.5 %	0.3 %	**80 %**
Patients with <u>any</u> complication (STS)	38 %	33 %	**13 %**
Patients with >1 complication	8.4 %	5.9 %	**30 %**
Atrial fibrillation	24 %	21 %	**13 %**
Neurologic complication	1.5 %	0.9 %	**40 %**
Any pulmonary complication	7 %	5 %	**29 %**
Re-intubation	2.3 %	0.9 %	**61 %**
Blood products used	24 %	22 %	**8 %**
Re-operation for bleeding	3.8 %	2.8 %	**26 %**
Deep sternal wound infection	0.8 %	0.3 %	**63 %**
Readmission within 30 days	6.9 %	5.6 %	**20 %**

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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

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ProvenCare® Portfolio

ProvenCare®:

  – CABG

  – PCI (Percutaneous Coronary Interventions
      Angioplasty/Angioplasty + AMI)

  – Hip replacement

  – Cataract

  – EPO

  – Perinatal

  – Bariatric surgery

  – Low back

  – Lung cancer

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ProvenCare® - Chronic Disease

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Chronic Disease Portfolio

- Diabetes

- Congestive Heart Failure

- Coronary Artery Disease

- Hypertension

- Prevention Bundle

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Physician Group Practice Demonstration Performance Year 4 Quality Measures Results

August 20, 2010

Musetta Leung, Ph.D.
Diana Trebino
Michael Trisolini, Ph.D., M.B.A.
Gregory Pope, M.S.
RTI International

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

www.rti.org

ProvenHealth Navigator^{SM} (Advanced Medical Home)

ProvenHealth Navigator^SM (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)

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The New York Times

Business Day

TUESDAY, JUNE 22, 2010

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

THE AMERICAN JOURNAL OF MANAGED CARE.

ajmc.com

DOCUMENTING THE FUTURE OF AMERICAN HEALTHCARE

Value and the Medical Home: Effects of Transformed Primary Care

Richard J. Gilfillan, MD; Janet Tomcavage, RN, MSN; Meredith B. Rosenthal, PhD;
Duane E. Davis, MD; Jove Graham, PhD; Jason A. Roy, PhD; Steven B. Pierdon, MD;
Frederick J. Bloom Jr, MD, MMM; Thomas R. Graf, MD; Roy Goldman, PhD, FSA; Karena M. Weikel, BA;
Bruce H. Hamory, MD; Ronald A. Paulus, MD, MBA; and Glenn D. Steele Jr, MD, PhD

August 2010

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ProvenHealth Navigator^{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[SM] significantly expanded since 2007

	Date	Sites	Gold members	Commercial members	PGP members
Phase 1	October 2006 May 2007	2 GHS 1 non-GHS	3,000 100	800	
Phase 2	November 2007 May 2008	10 GHS	7,300	6,000	10,200
Phase 3	August 2008 January 2009	9 GHS 3 non-GHS	4,200 400	4,500 1,400	6,200
Phase 4	July 2009 November 2009	11 GHS and 1 non-GHS	4,300	12,300	4,700
Total		**32 GHS and 5 non-GHS**	**19,300**	**25,000**	**21,100**

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Cumulative Total Difference in Spending Attributable to PHN (%) vs. Predicted PMPM
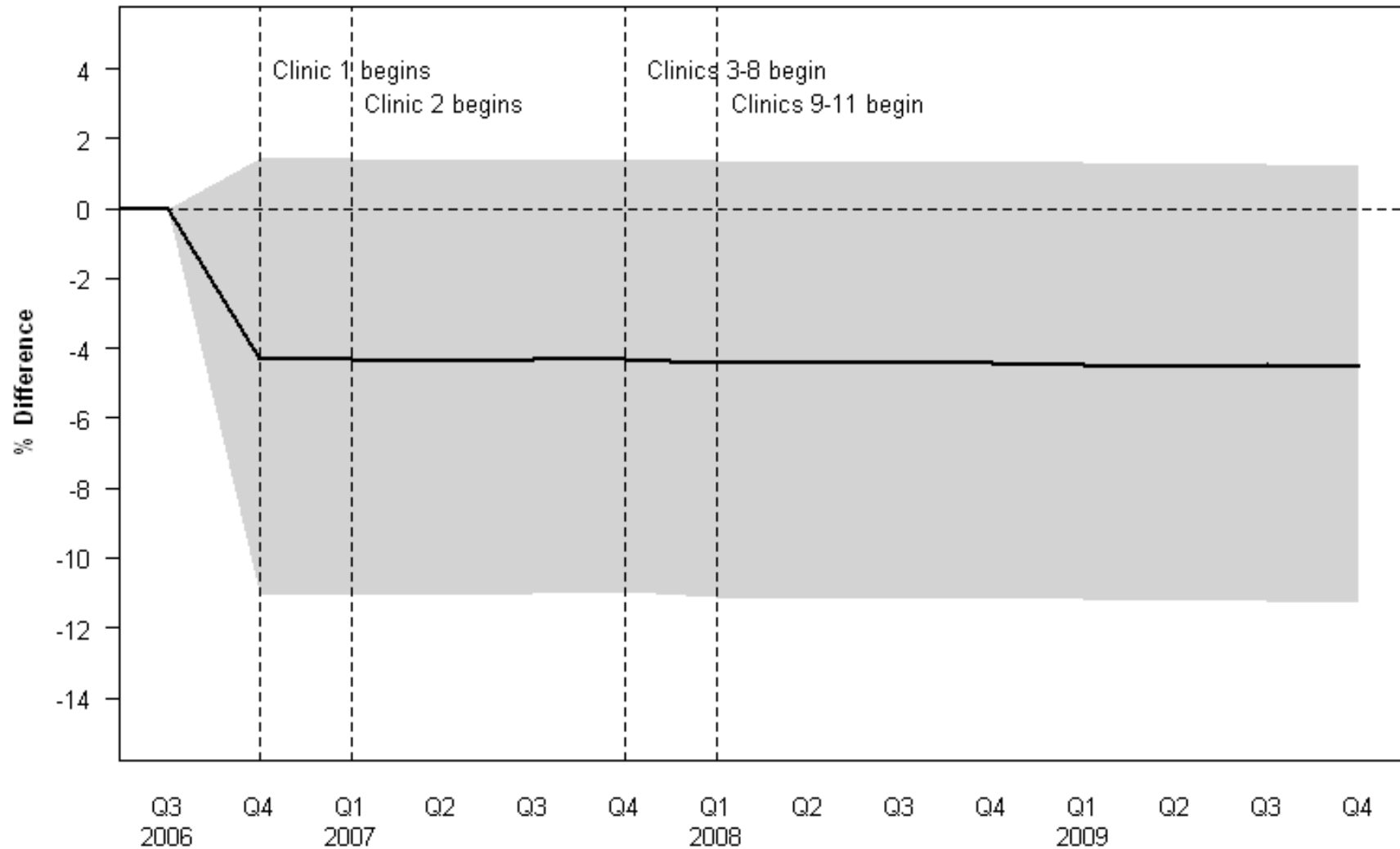
Ongoing Issues

- Scalability?
- Generalizability?
- Specialist $\neq$ 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

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∴ All of the above

"permissive" but not enough

Clinical leadership
Pride of purpose ⟩ Overarching
Professionalism
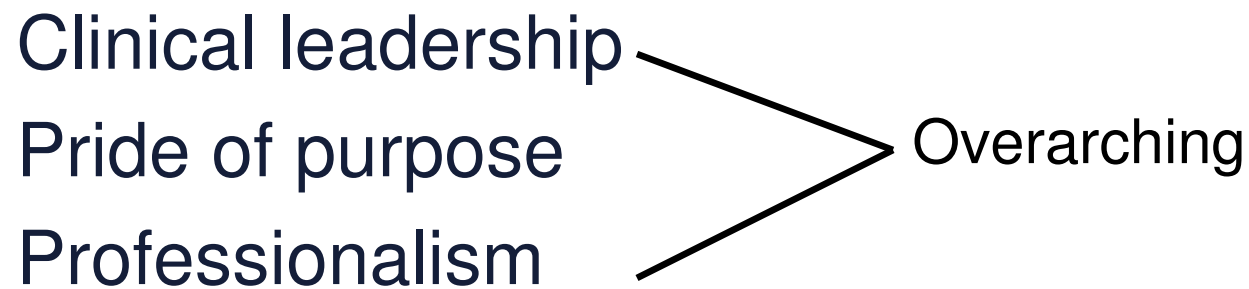
"POST REFORM"

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!!"

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