

The Geisinger Experience

Hospital Association of Southern California
Annual Meeting
Santa Barbara, CA
April 14, 2016

Glenn Steele, Jr., MD, PhD
Chairman, xG Health Solutions
& Past President & CEO, Geisinger Health System



Where We Are Now Nationally

- Unjustified variation in quality, access, and cost of care
- Unwarranted and fragmented caregiving
- An addiction to perverse payment incentives
 - Piece rate Medicare/Medicaid payment model
 - Driving up units of work
 - Driving up cost
 - Diminishing value and quality
 - Piece rate quality payments + expanded “Pay & Chase”
- Transition to new payment incentives (but fundamentally hospital-centric delivery models)



Where Do We Want to Be?

- Affordable coverage for all
- Payment for value
- Coordinated care
- Continuous improvement/innovation
- National health goals, leadership, and accountability



Geisinger Health System

An Integrated Health Service Organization

Provider Facilities

- Geisinger Medical Center and its Shamokin Hospital Campus
- Geisinger Wyoming Valley Medical and its South Wilkes-Barre Campus
- Geisinger Community Medical Center, Scranton, PA
- Geisinger-Bloomsburg Hospital
- Geisinger-Lewistown Hospital
- Holy Spirit Health System
- Marworth Alcohol & Chemical Dep Treatment Center
- Outpatient surgery centers
- Nursing Homes
- Home health & hospice services
- Admissions/OBS & SORUs
- Licensed inpatient beds
- AtlantiCare Health System

But not like Kaiser!

Physician Practice Group

- Multispecialty group
- Physician FTEs
- Advanced practitioners
- Primary & specialty clinic sites
- Outpatient surgery center
- Outpatient visits
- Resident & fellow FTEs
- Medical students

Managed Care Companies

- Medicare Advantage members and Medicaid members
- Diversified products
- Contracted providers/facilities
- Offered on public & private exchanges
- Members in several states



Transforming Healthcare with Technology

Over \$200M invested (hardware, software, manpower, training)

Running Costs **~4.0%** of over \$3.9 Billion in annual revenue

Fully-integrated EHR **46** Community Practice Sites | **7** Hospitals | **7** EDs | **4** Surgical Centers | Etc...

Networked Patient Portal **~268,386 Active Users** (41% of ongoing patients)

“Outreach Health IT” **10,221 Users in 865** non-Geisinger practices

Active Regional Health-Information Exchange (KeyHIE) **22** hospitals, **175** practices, over **1M** patients consented, publish **700,000+** documents monthly, participants access **~89K** patients monthly

e-health (eICU®) Programs

Keystone Beacon Community

CDIS (Clinical Decision Intelligence System)

Functional ‘Apps’ Portfolio

...and no longer monogamous

The “Sweet Spot” for Partnership & Innovation

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



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

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

Strategic Priorities

Quality and Innovation

- Patient-centered focus
- Patient activation (empowerment)
- Culture of quality, safety, and health
- Value re-engineering

Market Leadership

- Extending the GHS brand
- Scaling and generalizing innovation

The Geisinger Family

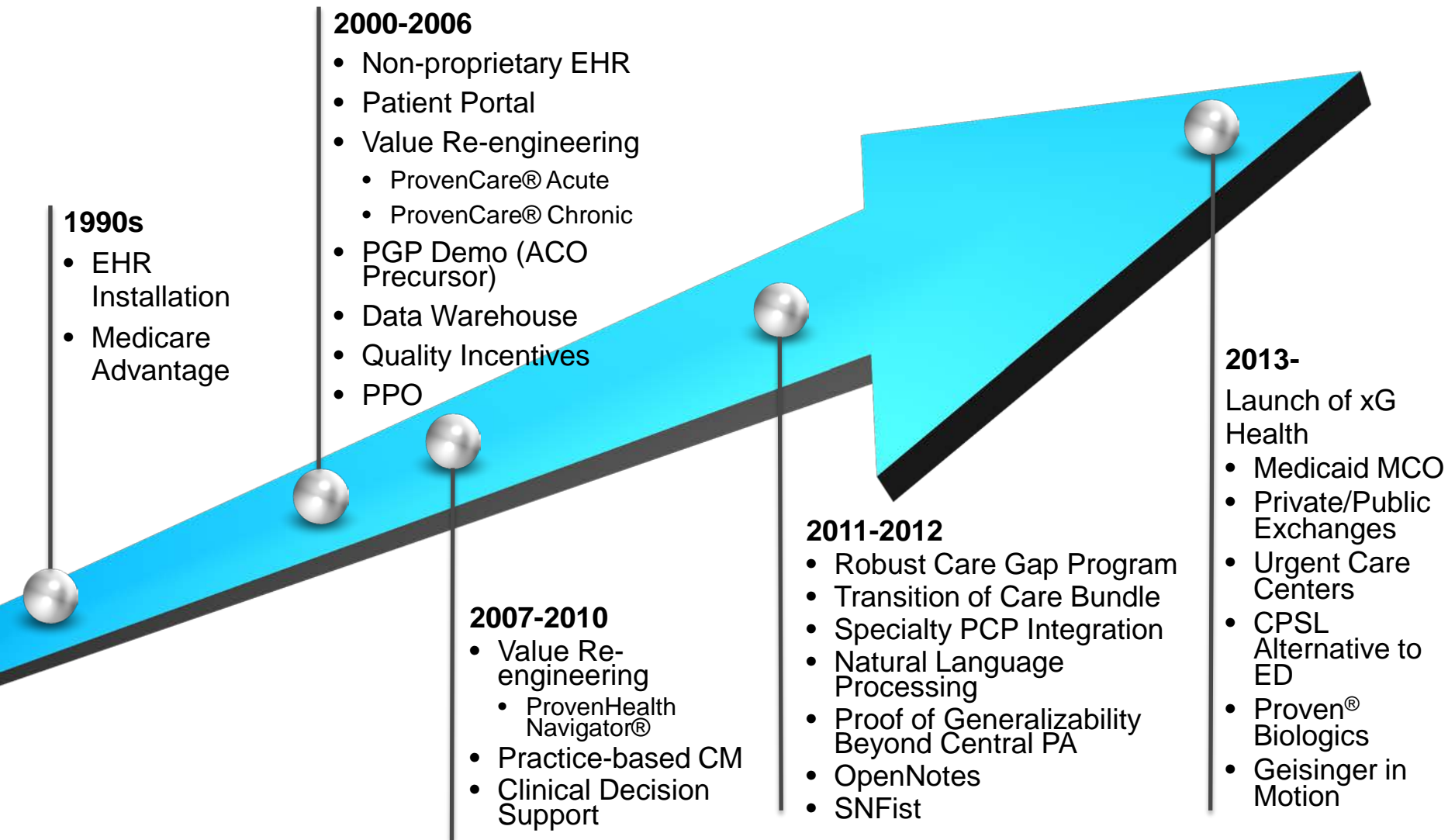
- Personal and professional well-being

The Geisinger Value Proposition

Re-engineering Touchstones:

- 1) Extract Hurtful Cost
- 2)  Quality =  Cost

Sweet Spot Innovations



Sweet Spot Innovations

Transforming Healthcare

ProvenCareTM | acute

The Beginning: ProvenCare CABG

ProvenCare

A provider-driven, pay-for-performance program for acute episodic cardiac surgical care

Casale A, Paulus R, Steele G, et al. ProvenCare : A provider-driven pay-for-performance program for acute episodic cardiac surgical care. *Annals of Surgery*. 2007;246(4).

ProvenCare Portfolio

ProvenCare:

- ProvenCare Autism
- ProvenCare Bariatric Surgery
- ProvenCare Cellulitis
- ProvenCare Chronic Obstructive Pulmonary Disease
- ProvenCare Coronary Artery Bypass Graft
- ProvenCare CNS Mets
- ProvenCare Epilepsy
- ProvenCare Fragility Hip Fracture
- ProvenCare Heart Failure
- ProvenCare Hepatitis C
- ProvenCare Hysterectomy
- ProvenCare Inflammatory Bowel
- ProvenCare Lung Cancer (CoC Collaborative)
- ProvenCare Lumbar Spine
- ProvenCare Migraine
- ProvenCare Multiple Sclerosis
- ProvenCare Percutaneous Coronary Intervention
- ProvenCare Perinatal
- ProvenCare Psoriasis
- ProvenCare Rectal Cancer
- ProvenCare Rheumatoid Arthritis
- ProvenCare Total Hip
- ProvenCare Total Knee

ProvenCare Evidence-based Guidelines (EBG) (in conjunction with PRIDE):

- Chest Pain—R/O MI (ED)
- Kidney Stone (ED)
- Newborn Protocols
- Pediatric Abdominal Pain (R/O Appendicitis (ED))
- Pediatric Head Injury (ED)
- Pediatric Pulmonary Embolism (ED)
- Sepsis (ED) & Sepsis (Med/Surg)
- Vent Management

ProvenCare Biologics

Why	Targets	Scope	Approach
<p>Specialty drugs will account for nearly half of all drug sales in coming years</p>	<p>Hepatitis C</p> <p>Inflammatory Bowl Disease</p> <p>Multiple Sclerosis</p> <p>Rheumatoid Arthritis</p> <p>Oncology</p> <p>Psoriasis</p>	<p>GHS projected 2014 expense avoidance of \$58M</p> <hr/> <p>GHP expected to avoid expenses of \$172M</p>	<p>Process Redesign</p> <p>Channel Redesign</p> <p>Formulary Management & Contracting</p> <p>Total Cost of Care</p>

The company's new Centers of Excellence program is the first of its kind, partnering with six of the nation's foremost healthcare systems to provide better care.

“We devoted extensive time developing Centers of Excellence to improve the quality of care our associates' receive. We identified six **renowned health systems that meet the highest quality standards for heart, spine, and transplant surgery.** Through these organizations, our associates will have no out-of-pocket expenses and a **greater peace of mind knowing they are receiving exceptional care from a facility that specializes in the procedure they require.** This is the first time a retailer has offered a comprehensive, nationwide program for heart, spine, and transplant surgery.”

–Sally Welborn, SVP, Global Benefits, Walmart

ProvenCareTM | chronic

ProvenCare Chronic Disease

Portfolio of ProvenCare Chronic Disease programs:

- Diabetes
- Heart Failure
- Coronary Artery Disease
- Hypertension
- Chronic Obstructive Pulmonary Disease
- Prevention Set of Performance Measures

Improving Diabetes Care for 30,294 Patients

	3/06	12/14	11/15	12/15
Number of Patients	20,178	29,805	30,181	30,294
Diabetes Bundle Percentage	2.4%	19.2%	20.1%	20.2%
% Pneumococcal Vaccination	59%	80%	81%	81%
% Microalbumin Result	58%	76%	77%	77%
% HgbA1c at Goal	33%	50%	51%	51%
% w/LDL <100 or <70 with CAD or High Intensity Statin	50%	65%	66%	66%
% BP at Goal *Change to @ Goal on patient list July 2014	39%	76%	79%	79%
% Documented Non-Smokers	74%	85%	85%	85%

ProvenCare Type 2 Diabetes

Value-driven Care Outcome Improvements

Heart Attack

- Less than 3 years
- 306 prevented with estimated savings of \$27,111/case = **\$8.3M**



Stroke

- Less than 3 years
- 141 prevented with estimated savings of \$2,921/case = **\$412K**



Retinopathy

- Less than 3 years
- 166 cases prevented!
- Quality of life maintained
- Savings...priceless!



Improving CAD Care for 17,866 Patients

	9/06	12/14	11/15	12/15
Number of Patients	13,688	18,422	17,910	17,866
CAD Bundle Percentage	8%	30%	28%	26%
LDL < 100 or < 70 High Risk or High Intensity Statin	38%	70%	70%	70%
% ACE/ARB in LVSD,DM, HTN	65%	78%	78%	77%
% BMI measured	79%	99%	99%	99%
% BP < 140/90	74%	79%	76%	76%
% Antiplatelet Therapy	89%	95%	94%	94%
% Beta Blocker use S/P MI	97%	97%	96%	96%
% Documented Non-Smokers	86%	86%	86%	86%
% Influenza Vaccination	60%	72%	74%	68%

Improving Preventive Care for 264,530 Patients

	11/07	12/14	11/15	12/15
Number of Patients	203,074	260,367	263,329	264,530
Adult Preventive Bundle	9.2%	19%	21%	19%
Breast Cancer Screening (q 2 yrs 50-74) (discuss q 2 yrs 40-49)	46%	74%	74%	73%
Cervical Cancer Screening (q 3 yr Age 21-29) (q 5 yr Age 30-64)	64%	73%	73%	73%
Colon Cancer Screening (Colonoscopy q 10 yrs Age 50-74 or FOBT yearly)	44%	65%	66%	66%
Lipid Screening (Every 5 yr M > 35, F > 45)	75%	87%	88%	88%
Diabetes Screening (Every 3 yr > 45)	85%	93%	93%	93%
Documented Non-Smokers	75%	79%	79%	79%
Tetanus Diphtheria Immunization (every 10 yr)	35%	77%	78%	79%
Pneumococcal Immunization (Once Age >65)	84%	84%	85%	85%
Influenza Immunization (Yearly Age >18) **Change in age from Age>50 to Age>18 February 2013	47%	43%	44%	40%
Chlamydia Screening (Yearly Age 18-25)	22%	40%	38%	38%
Osteoporosis Screening (every 7 yr Age >65)	52%	77%	77%	77%
Zoster Vaccine (Age >60) **New Measure February 2013		40%	48%	48%

ProvenHealth Navigator (Advanced Medical Home) Results

Acute care admissions

27.5%

Demonstrated improvement in the risk of heart attack, stroke, and retinopathy in individuals with diabetes

3-year results in 25,000 patients



305 MIs prevented
140 strokes prevented
166 cases of retinopathy prevented



All cause 30-day re-admissions

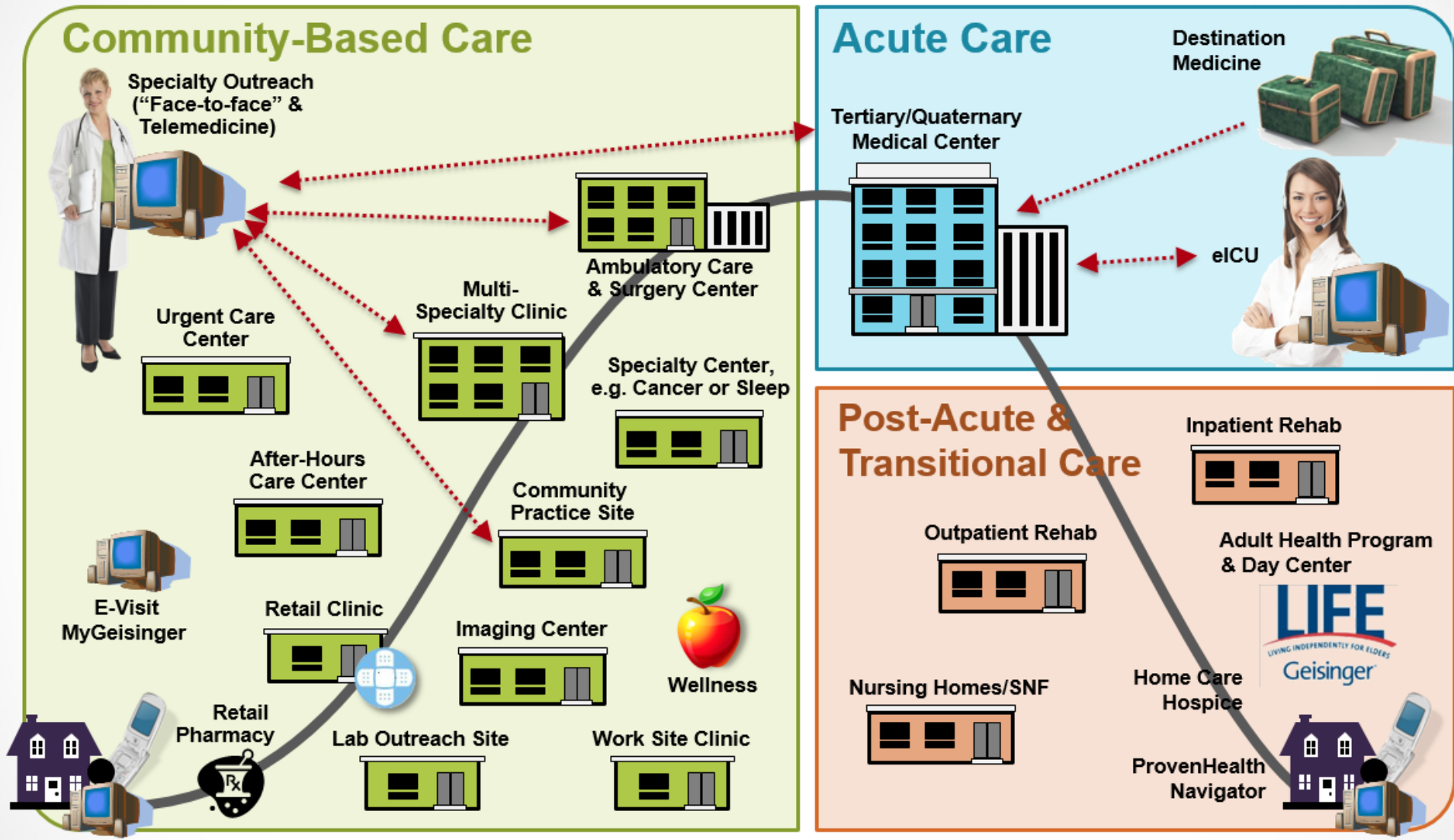
34%

Patients say quality of care improved when they worked with a case manager

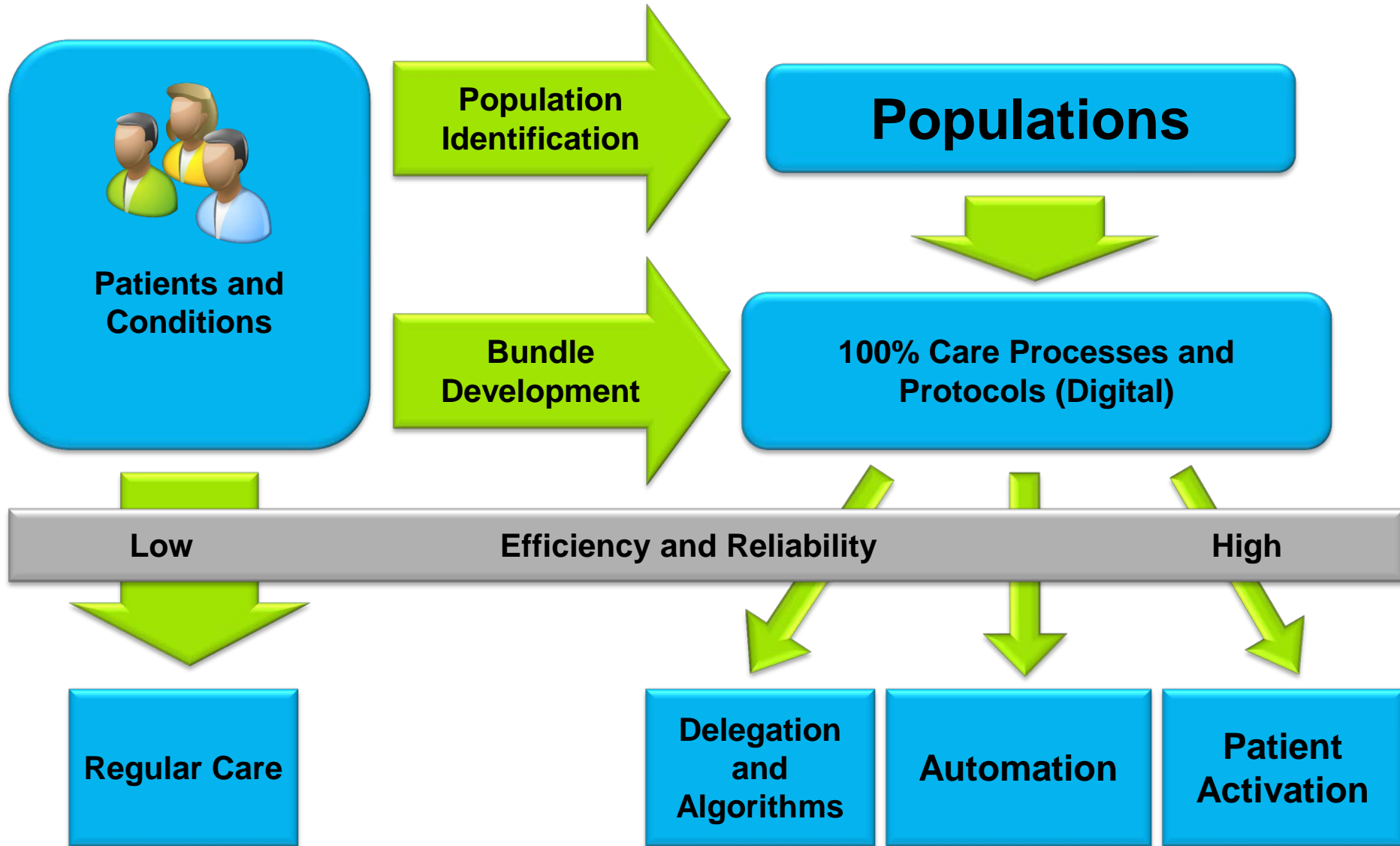
72%

ED Visits Remain Flat

Geisinger Patient-centered Continuum of Care



Disruptive Innovation & Value Re-engineering



Transforming Healthcare Enabled by Technology

Re-engineering Primary & Specialty Care Integration

- PCP and specialists coordinate patient management

- CKD/ESRD high-risk management
- Psychiatric care management
- Neurology/dermatology/endocrinology/cardiology/autism

- Convenient care redesign of primary care/ emergency medicine

- 14 urgent care/after hours care sites
- Coordinated, low-cost alternative to ED



Activating Patients Through Transparency: “OpenNotes”



- **Background:**

- 12-month research project started in 2010

- **Results:**

- 99% of patients requested continuation of the pilot

- **Current Status:**

- >1,400 Geisinger providers are live for >220,000 patients

Innovations in Personalized Medicine

- Regeneron partnership to advance genomic medicine
- Clinical data warehouse grows
- Data analytics deployed to identify care gaps, permitting clinical intervention
- Focused population health research initiatives: obesity, autism, etc.
- Institute for Advanced Application
- Geisinger in Motion

Scaling and Generalizing

GEISINGER

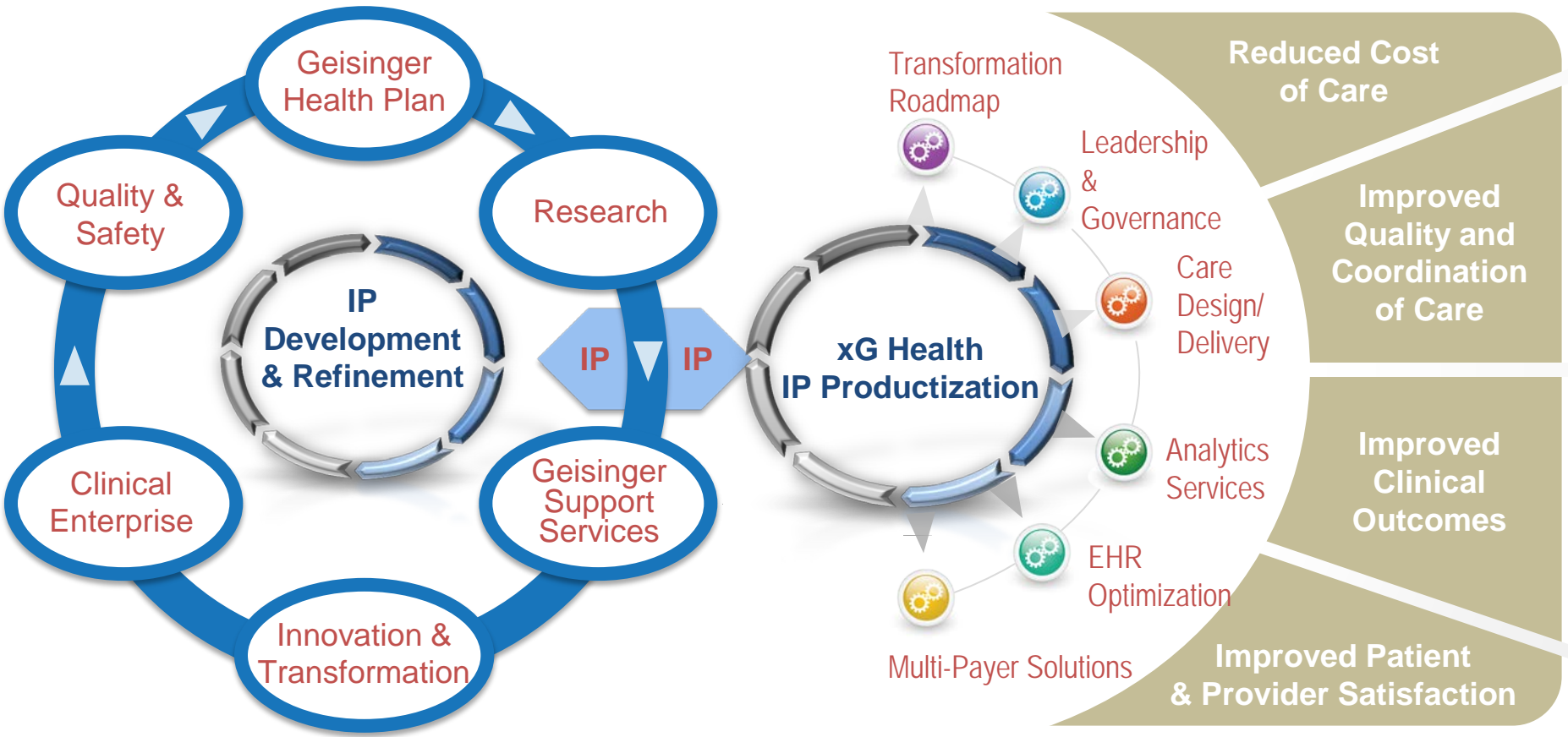
**CORE
OPERATIONS**

Mission: Execute Core Business / Innovate



**PRODUCT DEVELOPMENT
& SERVICE DELIVERY**

Mission: Generalize / Disseminate / \$ Return



xG Health Solutions®

Strong Foundation, Accelerating Growth

MISSION: Help providers committed to high-quality, value-based care succeed under risk-based payment

Launched in 2013

Investors:

OAK
INVESTMENT
PARTNERS

GEISINGER

30 clients

130 employees

What matters is results

Customer

Eastern Maine Health System

- 8 hospitals; 950 beds; 1,970 employed and affiliated MDs
- ~6,400 employees
- Target population: ~12K self-insured lives; Pioneer ACO ~8300 attributed lives

Services deployed

- TPA services
- 5 patient-centered medical homes
- Population health analytics
- Embedded case managers
- Best practice sharing

Results

Reductions in Utilization

- 32% Med-Surg Admits/1000
- 72% Med-Surg Readmits/1000
- 7% ED Visits/1000

Savings

\$8.6MM
reduction
in total cost
of care

Significant Reduction in Utilization at Eastern Maine Health System.

What matters is results

Customer

West Virginia United Health System—largest system in West Virginia

- 8 hospitals; 1,286 beds; 866 physicians
- 4,700 employees
- Population: 10K self-insured lives

Services deployed

- TPA
- 3 PCMHs with our embedded case managers
- Pop. health data analytics
- Utilization management (hospitalizations, high end radiology; transitions of care)
- Condition management

Results

Reductions in Utilization

- 17% Med-Surg Admits/1000
- 20% Med-Surg Readmits/1000
- 33% 1-Day Med-Surg Admits/1000
- 10% ED Visits/1000


Savings

\$3M to \$6M reduction in spending + additional \$1.4M to \$2.8M in savings due to increased worker productivity

Significant Reduction in Utilization at West Virginia Health System

 *Quality* +  *Cost* =   *Value*

Where We Are Now at Geisinger

- Consolidation of providers
- Payer-provider integration model expansion
- Value re-engineering
- Medical tourism (i.e., Walmart ProvenCare®)
- Reference pricing
- Bundling episodic care/ACOs
- Population health (aka,  total cost of care)
- “Ultimate” Patient Satisfaction

Where Do We Want to Be at Geisinger?

- Distributed data
- Personalized medicine/genetics
- Healthcare in the cloud
- “Activated” patients/people
- Transparency and availability of standardized data on cost and quality
- New provider surrogates/locations
- Social network enabling
- Behavior change analytics
- Generalizing value re-engineering

Predicting the Future

Predicting the Future Post ACA Baseline • Insurance

Turbulence

Medicaid ↑

Exchanges ↑↑

Public ↑↑

Private?

Medicare ↑ (+ “Redistribution”)

Declining Cost Trends?



Cost Shift ↓

Volume to Value Reimbursement

– Public ↑↑

– Commercial?

Consolidation ↑↑↑

– Value Based (Fact or Fiction?)

HEALTH
insurance

Predicting the Future

Post ACA Baseline • Provider

Integrated Care (fact or fiction?)

Vertical Integration

Structural

Virtual (ACOs, DSRIPs, etc.)

Consolidations

Value Based (fact or fiction?)

Physician Groups

Employed

Self Employed

For Profit or Not (Any Difference?)

Predicting the Future Disruptive Forces

P.O.C. Alternatives

“Self” Care

Defined Benefit → Defined Contribution

Transparent / Understandable Value?

- Insurance Products
- Provider Products

Behavioral “Carve-in”?

Functional Apps on Transactional EHRs?

Global Healthcare Budgets

Predicting the Future Demography

↑ Increased Access for:

Younger

More Diverse

More Skeptical?

More Entitled?

More Involved (less asymmetric)

More Self Absorbed?



Predicting the Future Demography

Changing Workforce:

More Diverse

Aging

Work/Life Balance Issues

Non-Hospital Centric

Non-Physician Centric?



Enabling Behavior Change

Providers and Patients

 *Quality* +  *Cost* =   *Value*