



HEALTH SOLUTIONS™
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November 18, 2014

A close-up photograph of a hand holding a stethoscope, with the chest piece resting against the palm. The hand is wearing a white lab coat sleeve. The background is plain white.

Reliable Care – Every Patient, Every Time: ProvenCare®

Approaches from Geisinger
and xG Health

Your Presenters



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1 Explore the purpose and goals of ProvenCare®

2 Discuss key components and successes of ProvenCare® Acute

3 Discuss key components and successes of ProvenCare® Chronic

4 Discover how to get started and where to focus for early success



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Explore the purpose and goals of ProvenCare®:
Driving outcomes and reducing readmissions through quality and standardization



Why Was ProvenCare® Created?

- Uncertain appropriateness of care
- Unreliable compliance with evidence-based guidelines
- Stunning geographic disparities
- Widely variable outcomes
- Lack of accountability for outcomes and quality
- Often an inverse relationship between quality and cost
- Limited patient engagement
- À la carte payment for services
- Perverse incentives with more payment for complications



What Is ProvenCare®?

- Programs that have proven to facilitate delivery of highly reliable, evidence-based care - ***every patient, every time***
- Current **evidence-based best practice elements** (BPEs) to reduce unwarranted variation in the delivery of care processes
- A **multi-disciplinary clinical team** can use ProvenCare® to identify, and through consensus, agree on the critical evidence-based BPEs and then integrate them into practice.
- **Optimized electronic health record** (EHR) workflows ensure reliable delivery of BPEs

Awareness

Adoption

Implementation

Institutionalization

Innovators

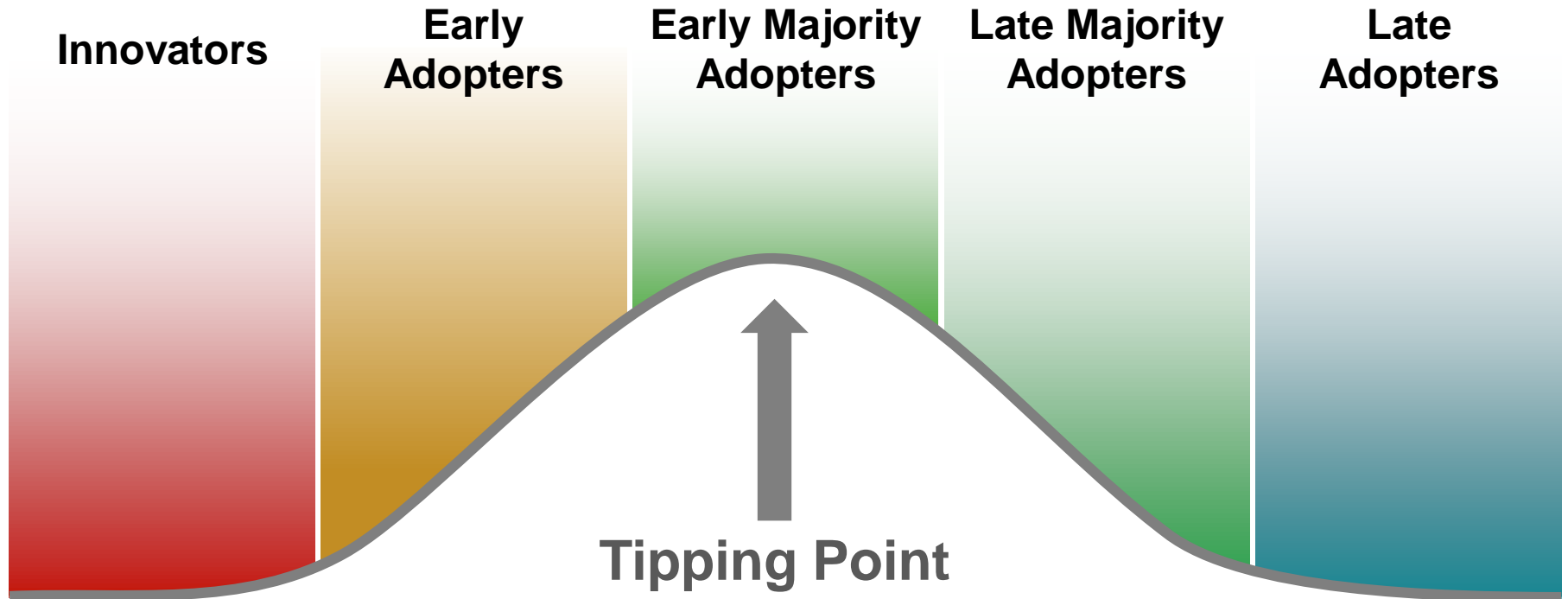
Early Adopters

Early Majority Adopters

Late Majority Adopters

Late Adopters

Tipping Point



Eliminate

Automate

Delegate

Incorporate

Activate

1. **Eliminate** non-value-added work
2. **Automate** any manual tasks possible
3. **Delegate** office visit-related work to trained non-physician staff
4. **Incorporate** new workflows into provider practice — use *hardwired* reminders and EHR tools to enhance care reliability and efficiency
5. **Activate** patients and families

Tie-in with Bundled Payments

- The ProvenCare® approach can be used to create bundled payments.
- When taking risk, you need more than just the data to be successful...care redesign is crucial!
- ProvenCare® provides the framework to bundle episodes of care.
- Geisinger serves as a facilitator convener for 20+ hospitals engaged in the CMMI Bundled Payment Collaborative.





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Discuss key components and successes of ProvenCare® Acute



- A structured approach to providing quality care and reducing cost
- Uses reliability science to redesign care processes integrated into the EHR to create and standardize evidence-based BPEs
- Well-defined patient population
- Uses a process design tool
- Outcomes:
 - Increased adherence with guidelines
 - Improved clinical outcomes
 - Coordinated and organized care that aligns population management and reduces costs



ProvenCare® Acute Method

Six Components

- Deliver substantially improved quality and value to patients, families, referring physicians, and payers for a defined set of healthcare services:
 - Document appropriateness of care
 - Establish evidence or consensus-based BPEs
 - Reliably deliver these by redesign of complex clinical systems, embedding them into everyday patient care flow
 - Engage patients and families in the care process
 - Provide a packaged price for the episode of care, with a bundled payment component
 - Transfer risk for financial effects of preventable complications to health system



- Patient-centered, equitable, efficient, and timely
- Evidence-based practices are Class I and Class IIa recommendations that the sub-specialty's national governing body publishes
- Applicable regulatory requirements are incorporated
- 100% physician consensus
- Measurable and actionable



High-level Flow for Coronary Artery Bypass Graft (CABG)

Clinic

**Pre-
Operation**

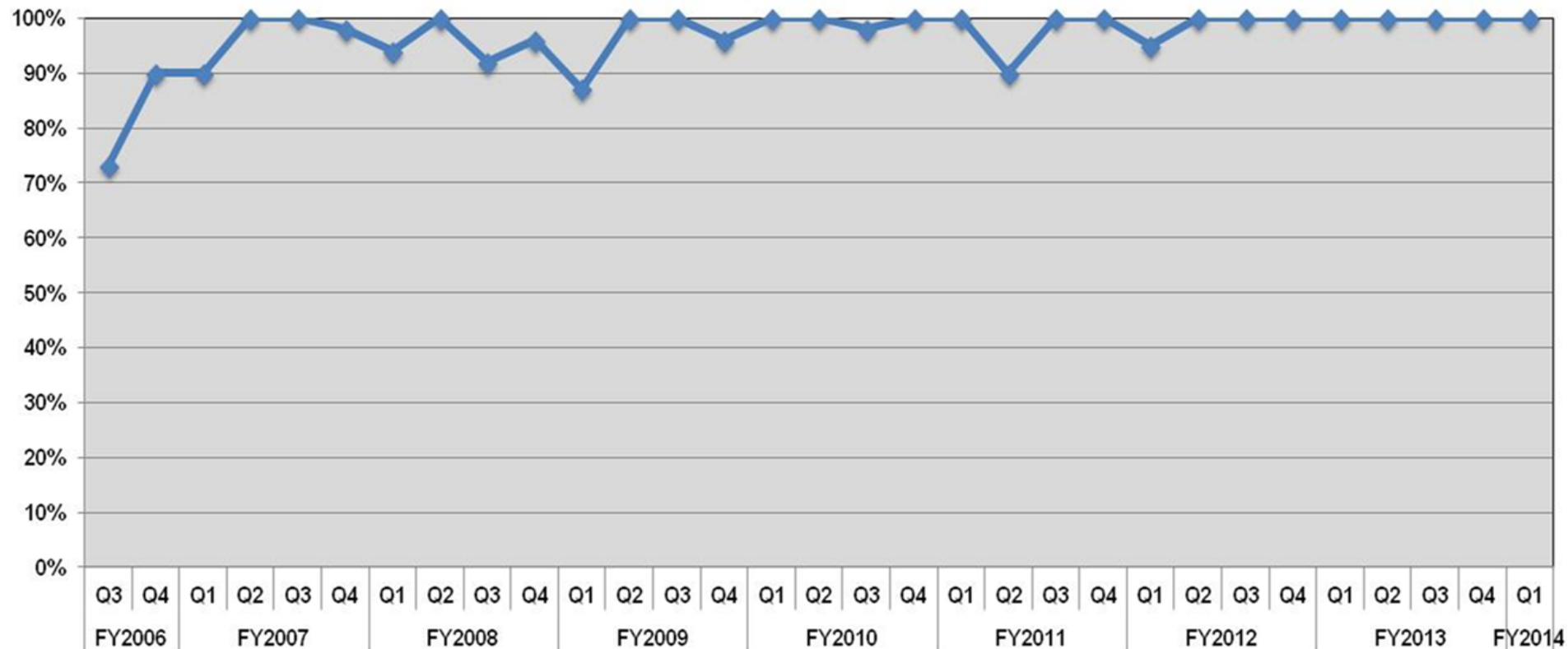
**Operating
Room**

**Post-
Operation**

**Return
Clinic**

ProvenCare[®] CABG

% of Patients Receiving All ProvenCare[®] Best Practice Elements



* As of 2013

- Identify EHR tools for data collection
- Vet EHR tools through IT
- Document EHR tool details/complete process design tool
- Develop reports for internal and external agencies/registries
 - Feedback to all levels of the organization
- Track BPE and performance measure compliance
- Develop outcomes reporting

- **Comparing before (n=132) and after (n=554) ProvenCare® improvements:**
 - 67% fewer in-hospital mortality
 - 40% fewer re-intubations
 - 76% fewer deep sternal wound infection rate
 - 13% fewer neurologic complications
 - 48% fewer patients transfused
 - 20% fewer 30-day readmissions reduced average length of stay 8%

Source: Internal interval analysis, 2006- 2011

	Baseline (FY 2006)	Look Back (FY 2010)	Variance
Cases	116	131	15
Length of Stay	7.60	6.28	(1.32)
Contribution Margin Per Case	\$\$	\$\$	19% increase from 2006

Sources: Casale AS, Paulus RA, Selna MJ, et al. *Ann Surg.* 2007;246(4):613-621.
Internal interval analysis, 2006- 2011



Paid out:

- 4.8% less per CABG case with ProvenCare®
- 28% to 36% less for CABG at Geisinger than other providers





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**Discuss key
components and
successes of
ProvenCare® Chronic**

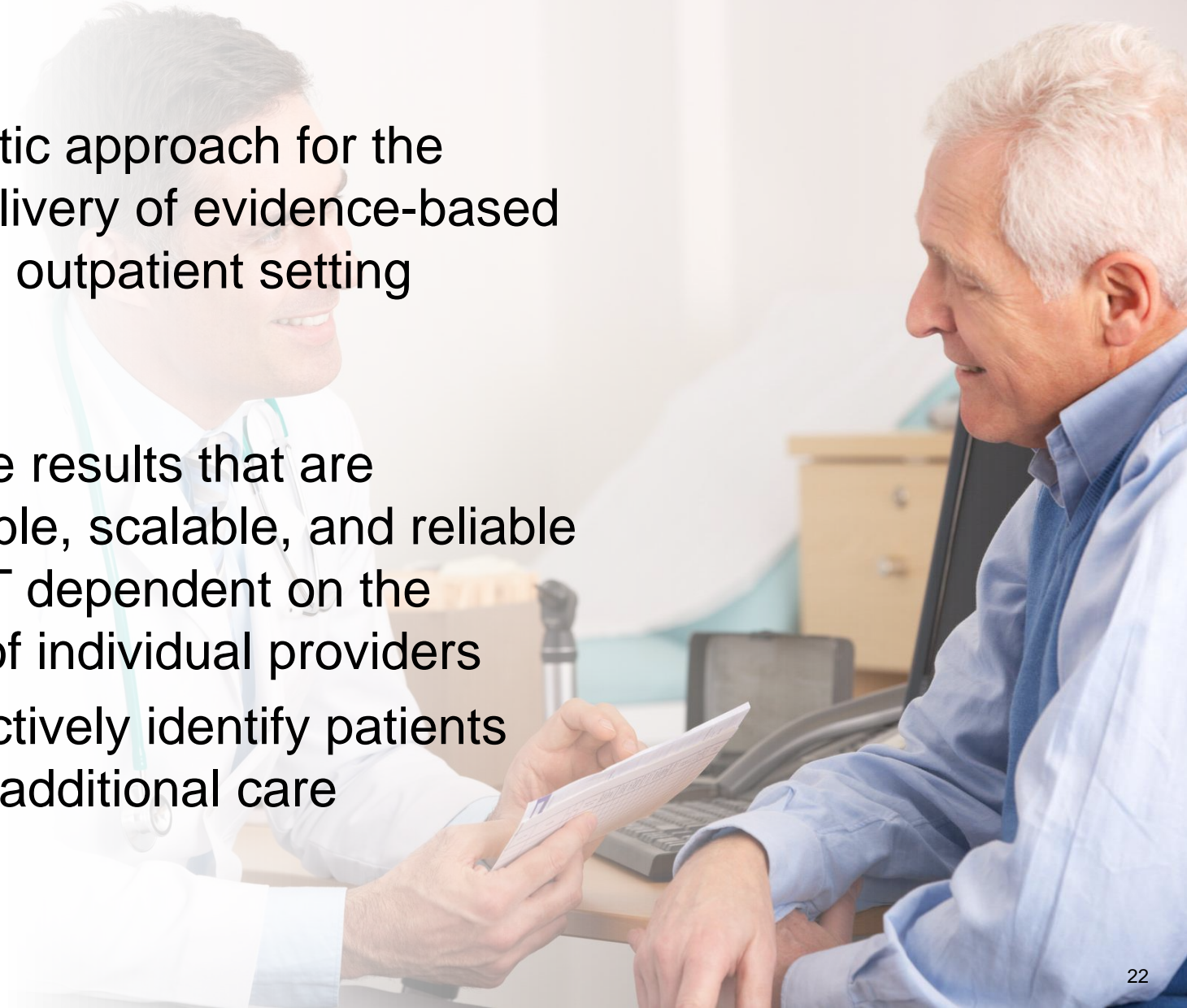


Definition:

- A systematic approach for the reliable delivery of evidence-based care in the outpatient setting

Goals:

- To produce results that are measurable, scalable, and reliable – and NOT dependent on the diligence of individual providers
- To prospectively identify patients who need additional care



ProvenCare® Chronic Disease and Prevention Management: Key Components/Strategies

- Use clinical process redesign to **enhance team-based care** — eliminate, automate, delegate, incorporate, activate
- Use **Best Practice Teams** to lead performance improvement initiatives and hardwire clinical decision support into the EHR
- Identify **care gaps** and use registries to develop patient-specific and population-based interventions
- Employ **all-or-none performance measures**
- Align **provider incentives**
- Promote **patient engagement** through patient-centered strategies — portals/report cards



ProvenCare® Chronic: *Diabetes Process Redesign*

Automate	Delegate	Incorporate	Activate
EHR Plan pre-visit Reminder letters - Care Gaps Outreach	Clerical Schedule flu/pneumococcal, follow-up	Nurses Rooming process, process measures, evidence-based alerts	Patients Patient portal, patient report cards
	Clinical Nurse Immunizations, lab testing, foot exam		
	Case Manager High-intensity care coordination/education	Providers Alerts and reminders for complex decisions	

Clinical Quality Measures – Adult Diabetes

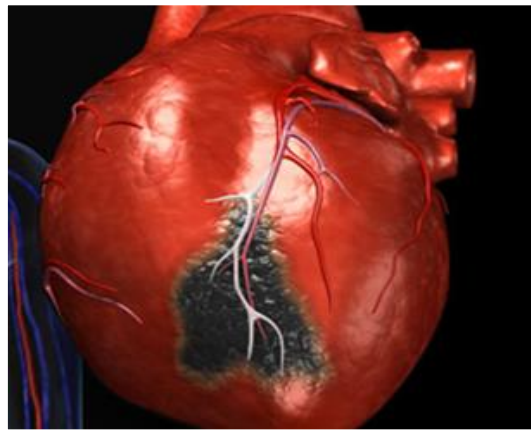
<u>Measures</u>	<u>Quality Standard</u>
HbA1c measurement	Every 6 months
HbA1c – patient specific goal	Meets patient goal on problem list
LDL measurement	Yearly
LDL – patient specific goal	Meets goal or on high intensity statin
Blood pressure goal	<140/90
Urine protein testing	HbA1c measurement
Influenza immunization	Yearly
Pneumococcal immunization	Once before 65, once after 65
Smoking status	Non-smoker
Patients who achieve ALL of the above standards	DM Performance Measure Percentage

Improving Diabetes Care for 28,937 Patients

	3/06	3/07	7/14
Diabetes Performance Measure Percentage	2.4%	7.2%	19.8%
% Influenza Vaccination	57%	73%	74%
% Pneumococcal Vaccination	59%	83%	79%
% Microalbumin Result	58%	87%	77%
% HbA1c at Goal	33%	37%	50%
% LDL at Goal	50%	52%	65%
% BP <140/80	39%	44%	77%
% Documented Non-Smokers	74%	84%	85%

As of July 2014

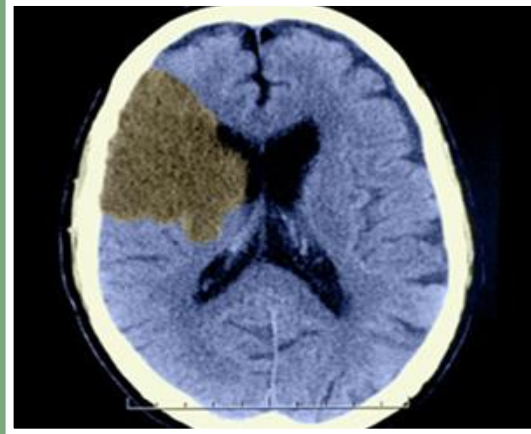
Three-Year Results in 25,000 Diabetes Patients



**305 MIs
prevented**

NNT to prevent
1 MI

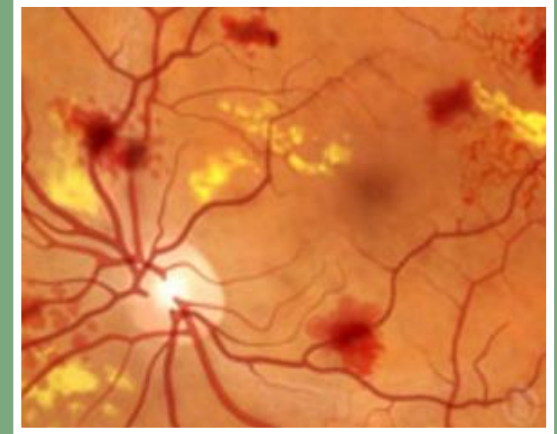
82 patients



**140 strokes
prevented**

NNT to prevent
1 Stroke

170 patients



**166 cases of
retinopathy
prevented**

NNT to prevent
1 retinopathy

152 patients

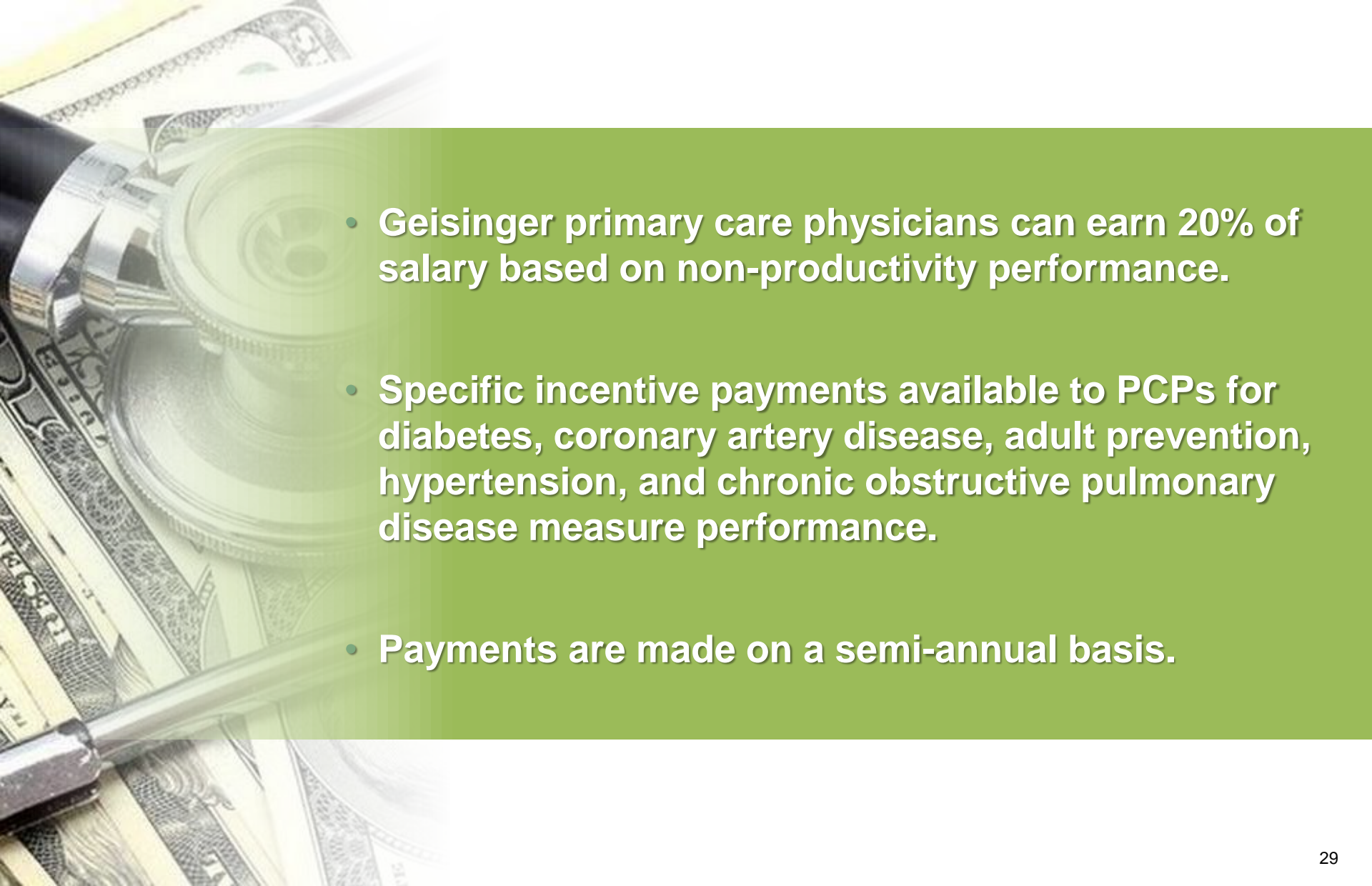
Source: *Am J Manag Care*. 2014;20(6):e175-e182.

Improving Preventive Care for 254,177 Patients

	11/07	11/12	7/14
Adult Preventive Performance Measures	9.2%	33%	20%
Breast Cancer Screening (q 2 years, age 50-74) (discuss q 2 years, age 40-49)	46%	64%	72%
Cervical Cancer Screening (q 3 years, age 21-29) (q 5 years, age 30-64)	64%	68%	74%
Colon Cancer Screening (Colonoscopy q 10 years, age 50-74 or FOBT yearly)	44%	67%	65%
Prostate Cancer Discussion (age 50-74)	72%	76%	56%
Lipid Screening (Every 5 years, age M >35, F >45)	75%	88%	86%
Diabetes Screening (Every 3 years, age >45)	85%	91%	91%
Obesity Screening (BMI in EHR)	77%	98%	98%
Documented Non-Smokers	75%	79%	79%
Tetanus Diphtheria Immunization (every 10 years)	35%	75%	76%
Pneumococcal Immunization (Once, age >65)	84%	86%	83%
Influenza Immunization (Yearly, age >18) <i>**Change in age from age >50 to age >18, February 2013</i>	47%	59%	45%
Chlamydia Screening (Yearly, age 18-25)	22%	35%	39%
Osteoporosis Screening (every 7 years, age >65)	52%	70%	76%
Alcohol Intake Assessment	84%	95%	97%
Zoster Vaccine (age >60) <i>**New measure, February 2013</i>			39%

As of July 2014

Aligning Provider Incentives – P4P

- 
- Geisinger primary care physicians can earn 20% of salary based on non-productivity performance.
 - Specific incentive payments available to PCPs for diabetes, coronary artery disease, adult prevention, hypertension, and chronic obstructive pulmonary disease measure performance.
 - Payments are made on a semi-annual basis.



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How to get started and where to focus for early success



How to Get Started

- Identify a condition or procedure you want to improve
- Gain executive/leadership support
- Determine who the clinical champion might be
- Commit to change
- Develop a customized approach and work plan



Our Approach to Working with Clients to Implement ProvenCare®

**Educate You About
Geisinger/ xG Health
Methods**

**Accelerate Adaptation
in Your Organization**

**Support Implementation
at Your Organization**

**Teach You How to
Track Performance**

“Engaging all relevant staff is necessary to ensure proposed aims are achieved at each stage from pathway adoption to implementation and maintenance.”*

- Leadership endorsement
- Engaged physician champion who can lead the medical staff
- Allocation of IT resources and willingness to build EHR to support workflow and delivery of best practices to patients
- Multidisciplinary teams
- Ability to keep team and clinicians engaged for duration of project, and continue engagement across teams
- Solid analytic infrastructure necessary to support growing needs
- Patient activation

*Source: Evans-Lacko S, Jarrett M, McCrone P, Thornicroft G. *BMC Health Serv Res.* 2010;10:182.

ProvenCare® Acute:

- Coronary Artery Bypass Graft
- Heart Failure
- Perinatal
- Total Hip Arthroplasty
- Fragility Hip
- Total Knee Arthroplasty

ProvenCare® Chronic and Prevention:

- Diabetes Management
- Adult Prevention
- Child Prevention

Other modules in development:

- Chronic Obstructive Pulmonary Disease
- Bariatric Surgery
- Lumbar Spine Surgery
- Percutaneous Coronary Intervention
- Rectal Cancer



Want More Information?



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