Information Sharing:
Optimal Data Sets and Protocols for CI and ACOs

Using HIT to Optimize Clinical Quality Improvement

The National Pay for Performance Summit
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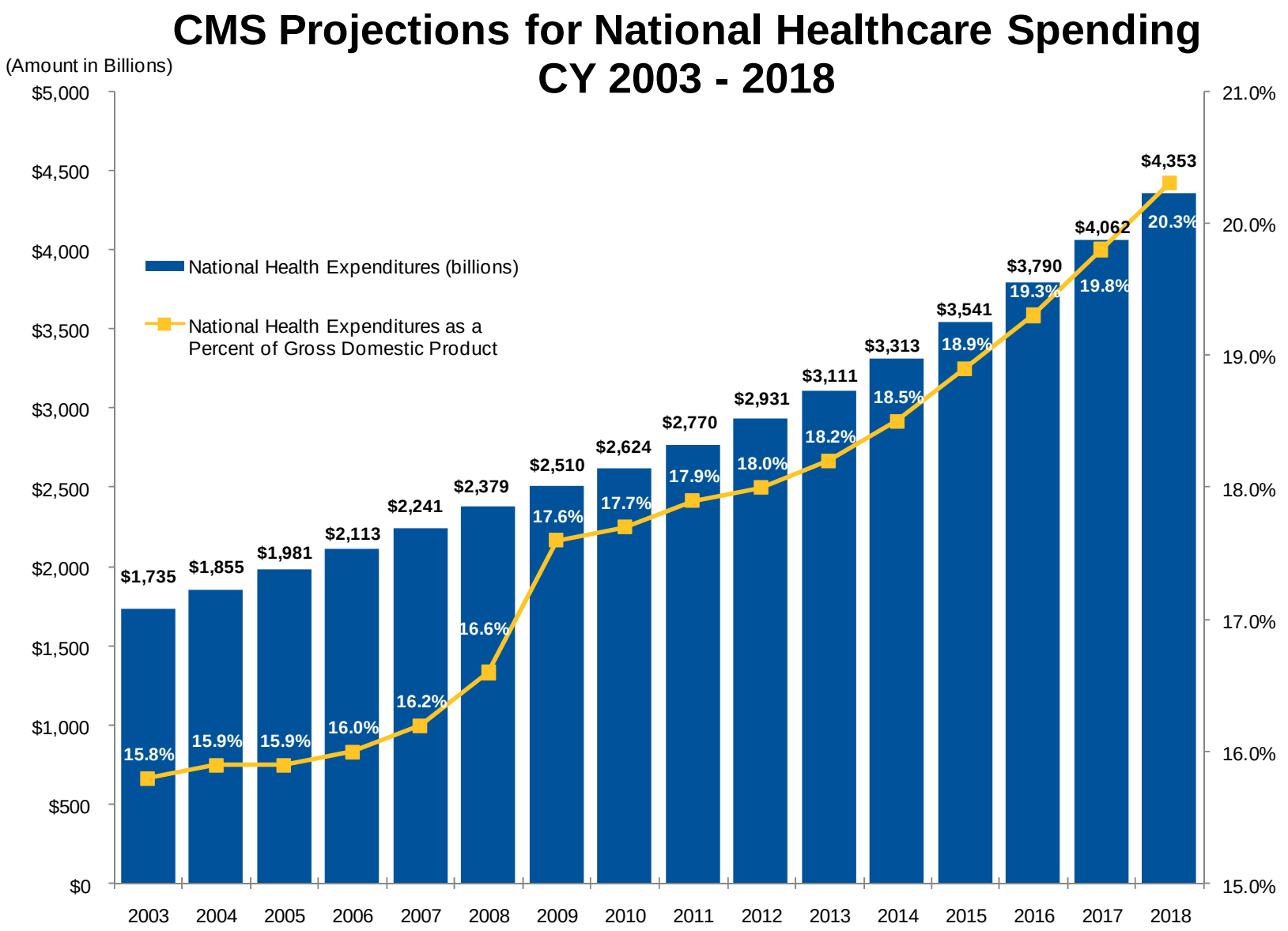
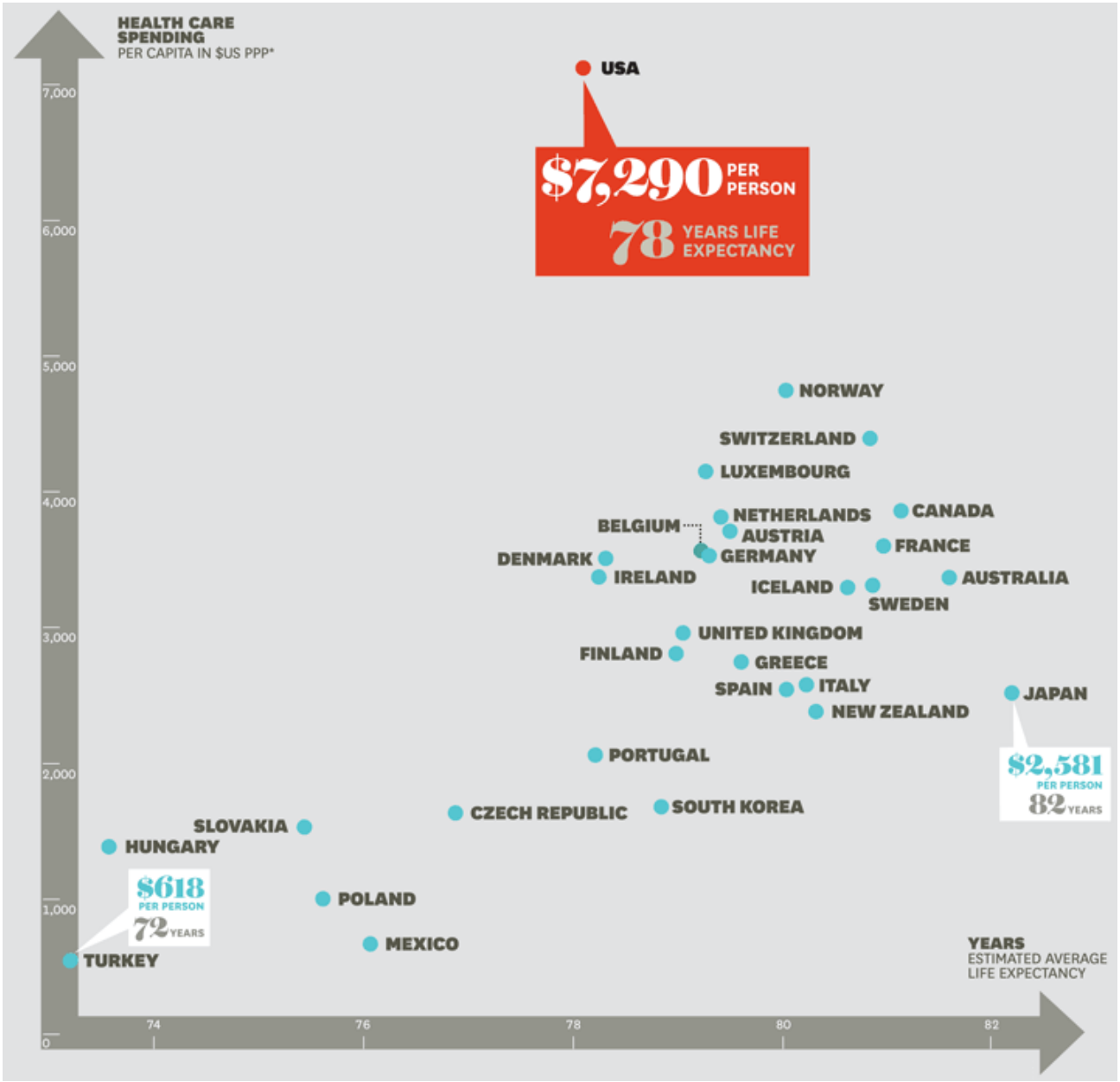
Healthcare Spending Growth



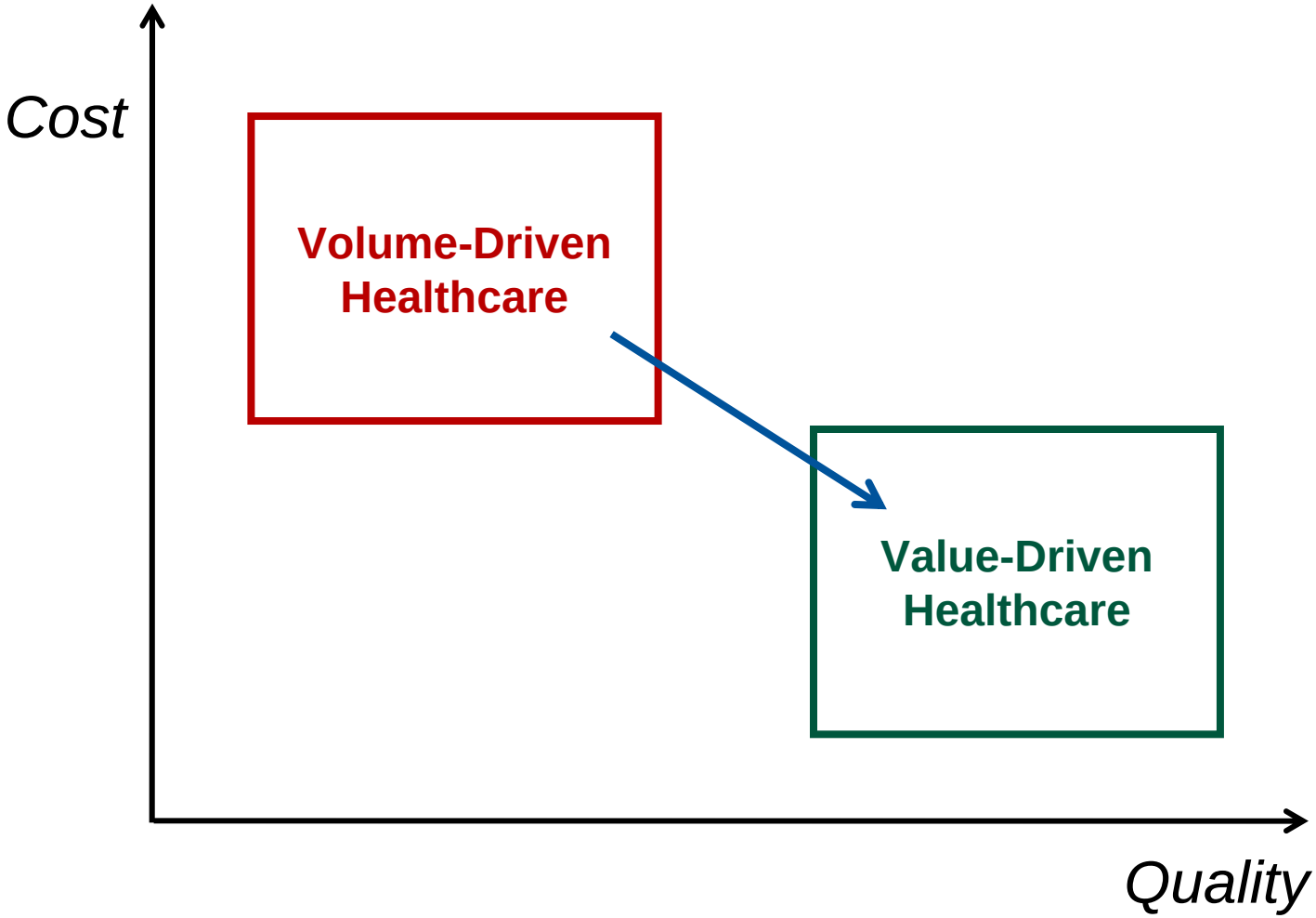
Source: Centers for Medicaid & Medicare Services - NHE Projections 2008-2018, Forecast Summary and Selected Tables

Premium Price, Poor Performance



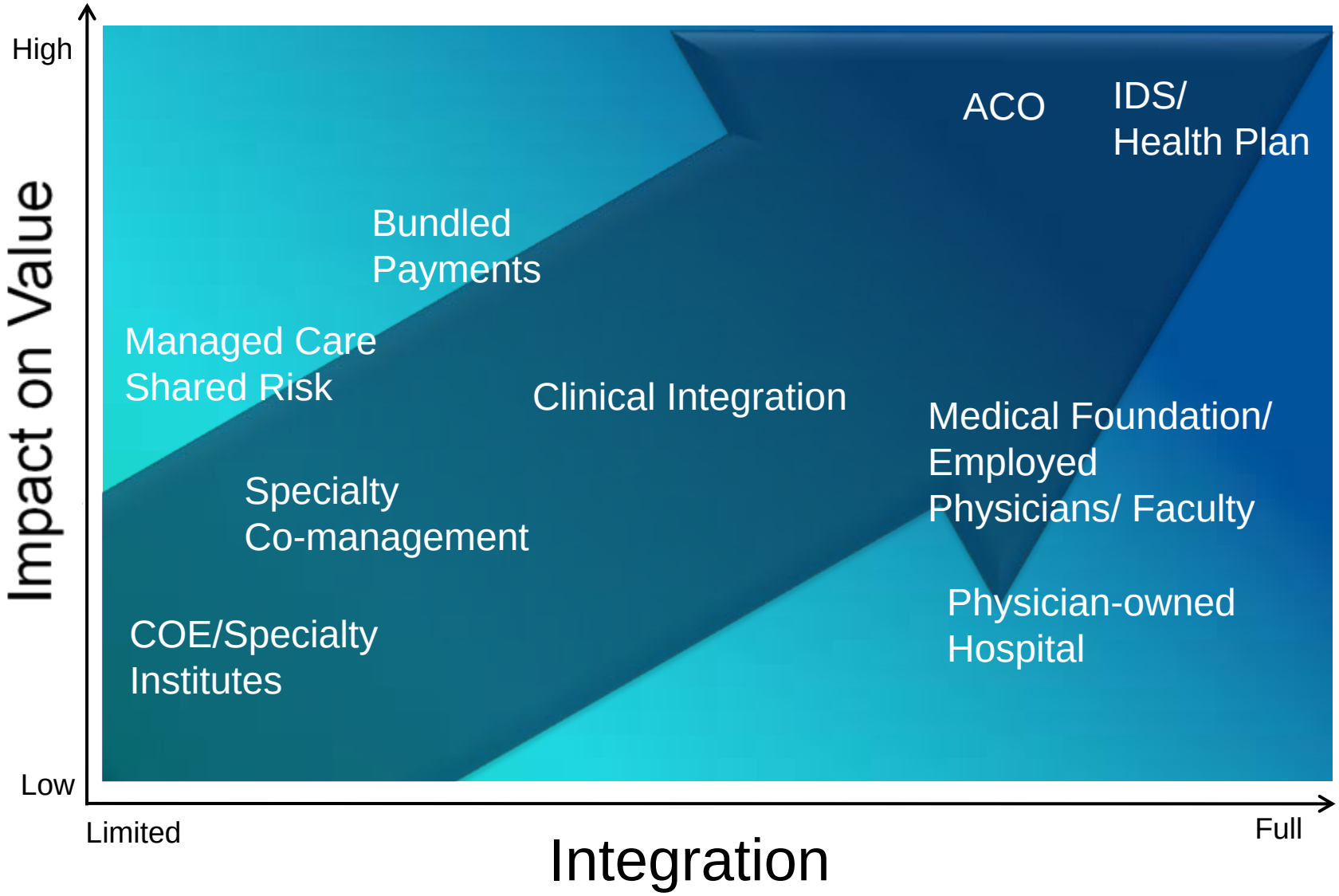
Source: Harvard Business Review. “Premium Price, Poor Performance.” By Jeff Levin-Scherz. Organization for Economic Cooperation and Development and the CIA World Factbook

Payment is Transitioning from Volume-driven to Value-driven



Source: Center for Healthcare Quality and Payment Reform

Physician-Hospital Integration: Driving the Value Proposition



Core Themes of Healthcare Reform

	How
Expand Coverage	■ Expand Medicaid ■ Subsidies for moderate income individuals ■ No exclusions for pre-existing conditions ■ Create new entrants/market competition for health insurance (e.g., co-ops, State exchanges) ■ Individual and employer mandates
Payment Reform	■ Reduced payment for hospital with higher than expected readmission rates ■ Implementation of value-based purchasing program for hospitals and doctors ■ Further payment reductions for healthcare-acquired conditions ■ Increase in payments for primary care services – more for shortage areas
Delivery System Reform	■ Medicare bundled payment pilots ■ Accountable Care Organizations ■ CMS Center for Medicare and Medicaid Innovation ■ Medicaid payment demonstration projects
Pay for It	■ Tax on “Cadillac” plans ■ Increase income tax on high income families ■ Disproportionate Share Hospital (“DSH”) payments reduced ■ Drug companies, medical device, health insurers, clinical labs assessed fees

The One-two Punch

THE PATIENT PROTECTION AND AFFORDABLE CARE ACT

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

1. *Expand Coverage*
2. *Payment Reform*
3. *Delivery Evolution*

1. *Better Individual Care*
2. *Better Population Health*
3. *Lower Cost*

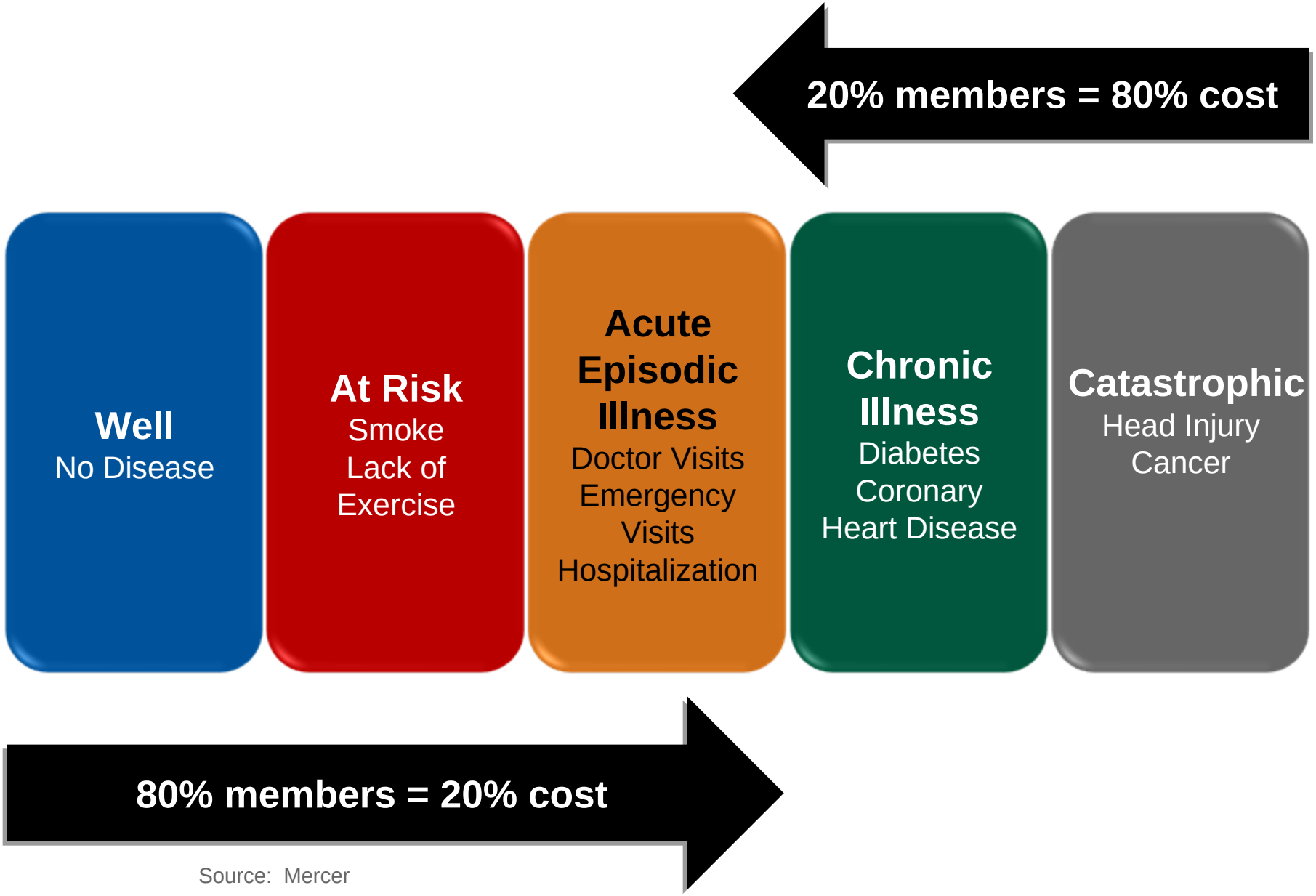
Another View on Healthcare Reform

Clinical Needs Have Changed

Year	Life Expectancy	Death Rate (per 100,000)	Leading Causes of Death	Clinical Need
1900	47	1,719	Pneumonia Influenza Tuberculosis Diarrhea GI disease	Acute
1950	68	963	Heart Disease Cancer Cerebrovascular	Acute Chronic
2000	77	865	Heart Disease* Cancer* Cerebrovascular	Chronic Acute Prevention
2020	?	?	?	Prevention Chronic Acute

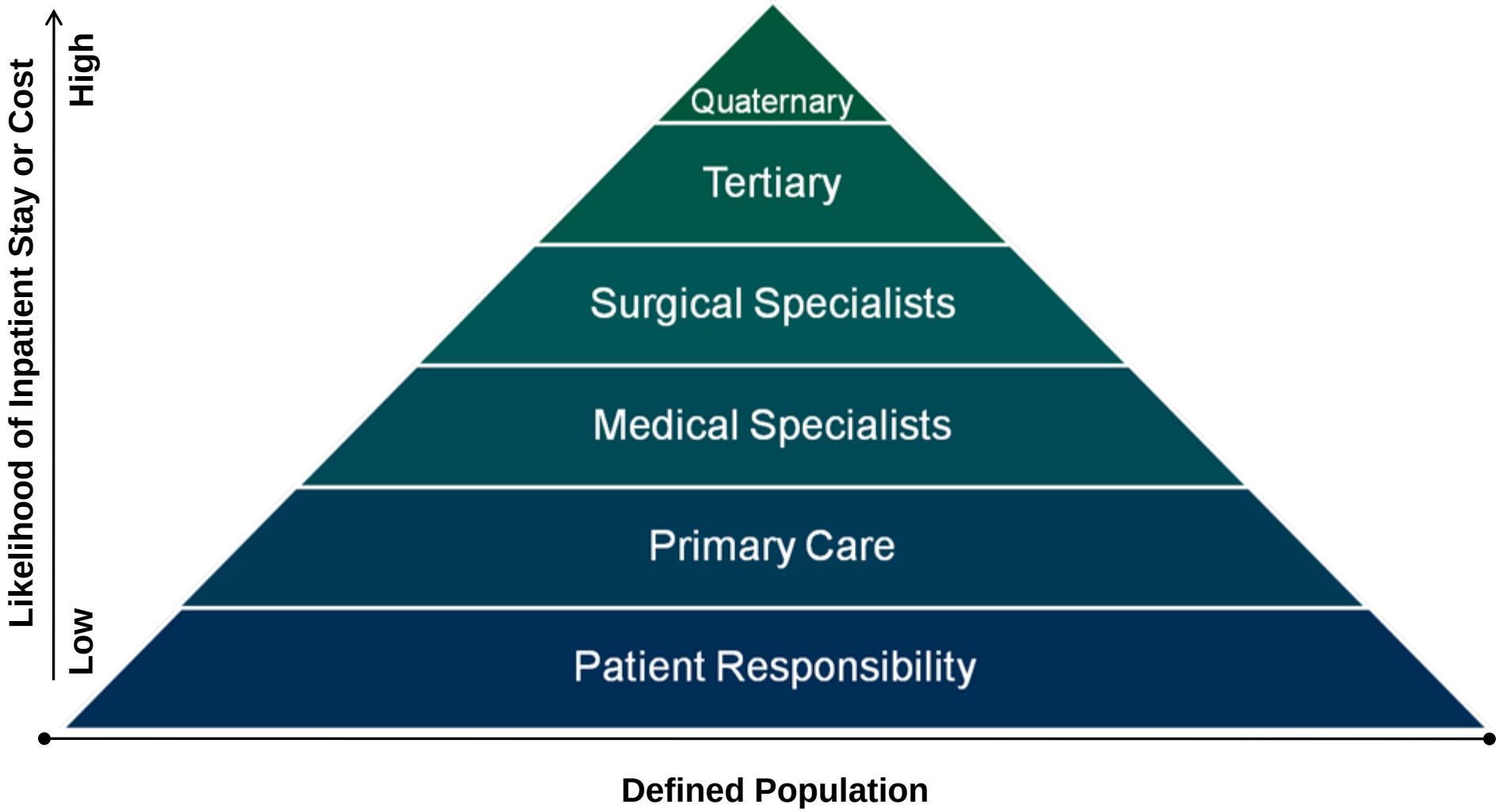
* Cancer is currently the leading cause of death for certain age groups

Changing Patient Care Needs



Source: Mercer

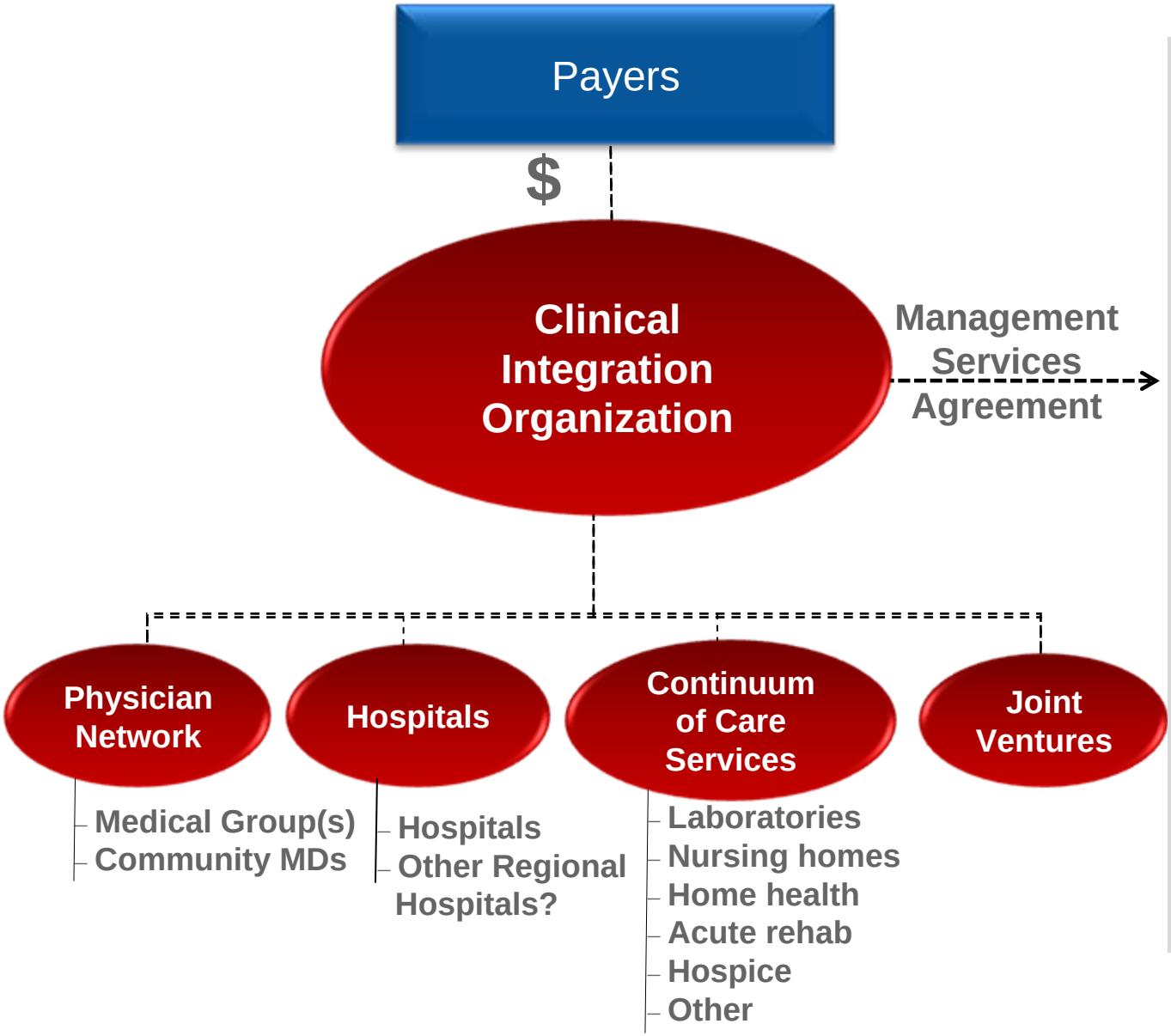
New Paradigm: Increase the Defined Population We Care For



Accountable Care Organization

- **ACO is an organization that:**
  - Can provide primary & basic med/surg inpt care for a population
  - Takes responsibility for overall costs and quality of care for a population
  - Have size & scope to fulfill this responsibility
- **ACO's could be:**
  - Integrated Delivery System
  - PHO
  - IPA
  - Partnership of PHOs / IPAs
  - Large group practice

Build Infrastructure



Infrastructure (Provided or Contracted Operations)

- Information Technology
- Care Management
- Health Network
- Financial/Payment Systems

ACO Goals of PPACA

- **Other Details from Section 1899:**
  - Establish a shared savings program that promotes accountability for a patient population
  - Encourage investment in infrastructure and redesigned care processes for high quality and efficient service delivery
  - Contract with ACOs for Medicare FFS not later than January 1, 2012

- **Preliminary ACO model:** Medicare Physician Group Practice Demonstration Project
  - Included ten physician groups, averaging 500 doctors and 22,000 beneficiaries
  - Five groups awarded $25.3 million out of possible $32.3 million in savings in 2009 (80 percent of savings to providers)

Source: MEDPAC, *Report to the Congress: Improving Incentives in the Medicare Program*, June 2009

Sample ACO Payment Calculation

	Year 1	Year 2	Year 3
Quality Standards Met?	Yes	No	Yes
Cost Savings Achieved?	No	Yes*	Yes*
Medicare FFS Payment	Medicare Fee Schedule	Medicare Fee Schedule	Medicare Fee Schedule
ACO Bonus Payment that year?	No	No	Yes X% of Savings**

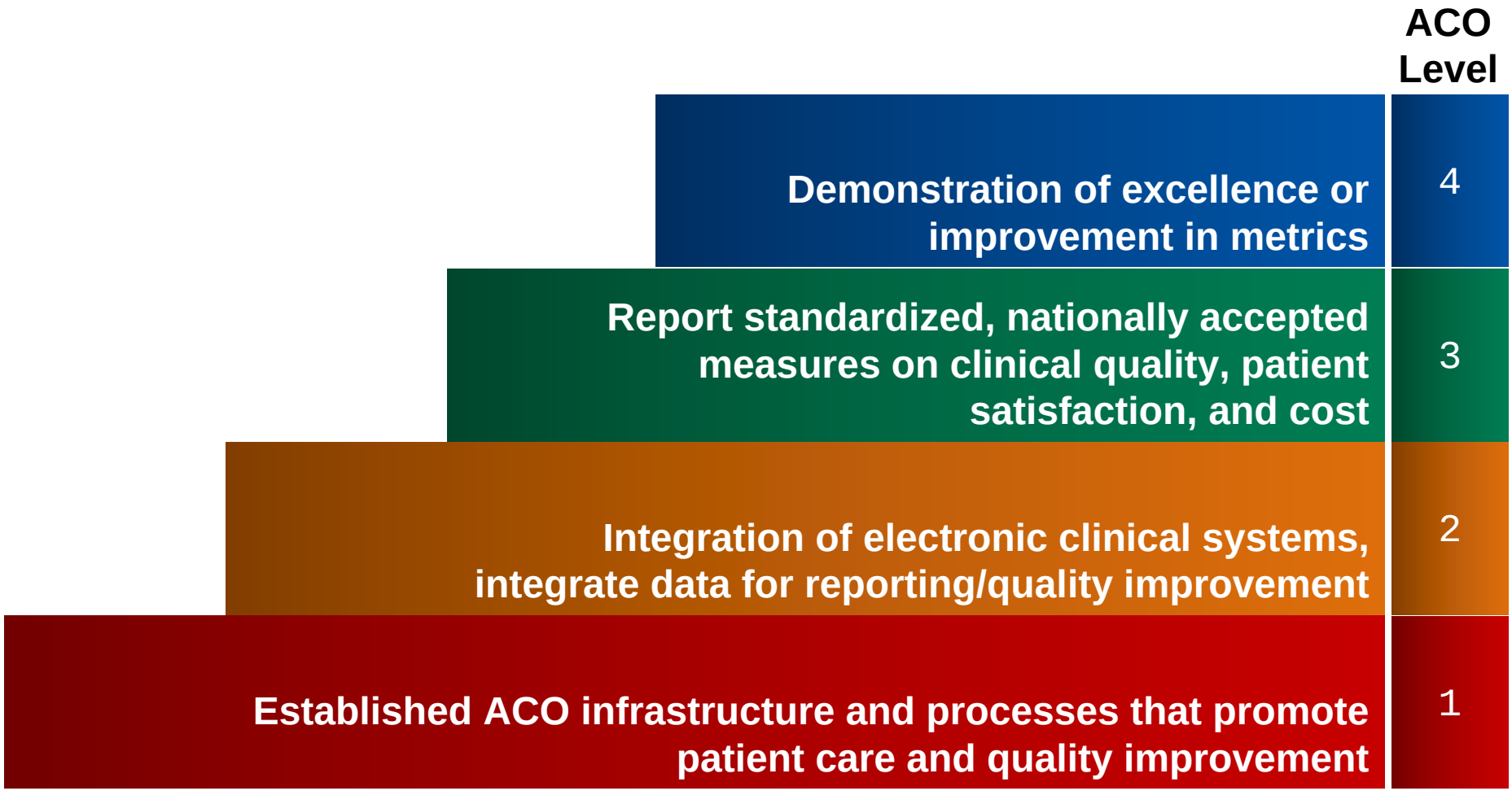
An organization must meet quality standards AND achieve cost savings to earn bonus payments

* Actual costs for "assigned" population are less than pre-set expected costs based on risk-adjusted trends

** PGP demonstration gave groups 80 percent of savings; actual split for ACOs to be determined

NCQA Draft ACO Scoring Levels

- Based on the organization's demonstrated capability to function as an accountable entity and achieve 1) improved quality, 2) increased patient satisfaction, and 3) lower per capita costs.



From NCQA's Accountable Care Organizations (ACO) Draft 2011 Criteria Overview – released October 19, 2010 for public comment

Before “ACO”, there was “Clinical Integration”

- Clinical Integration directly addressed the Antitrust Problem

- Sherman Antitrust Act prohibits agreements among private, competing individuals or businesses that unreasonably restrain competition

- Physicians want to contract with payers through provider-controlled entities
- Options:
  - Merging of practices – not preferred
  - Messenger model – no negotiation/incentive
  - Direct contracting – some win, most lose
  - Financial integration – risk of loss/no opportunity
  - Clinical integration - an achievable alternative permitting joint contracting

Clinical Integration: How do the FTC/DOJ define it?

"An ***active*** and ***ongoing*** program to evaluate and modify the clinical practice patterns of the physician participants so as to create a high degree of ***interdependence*** and ***collaboration*** among the physicians to ***control costs*** and ***ensure quality***."

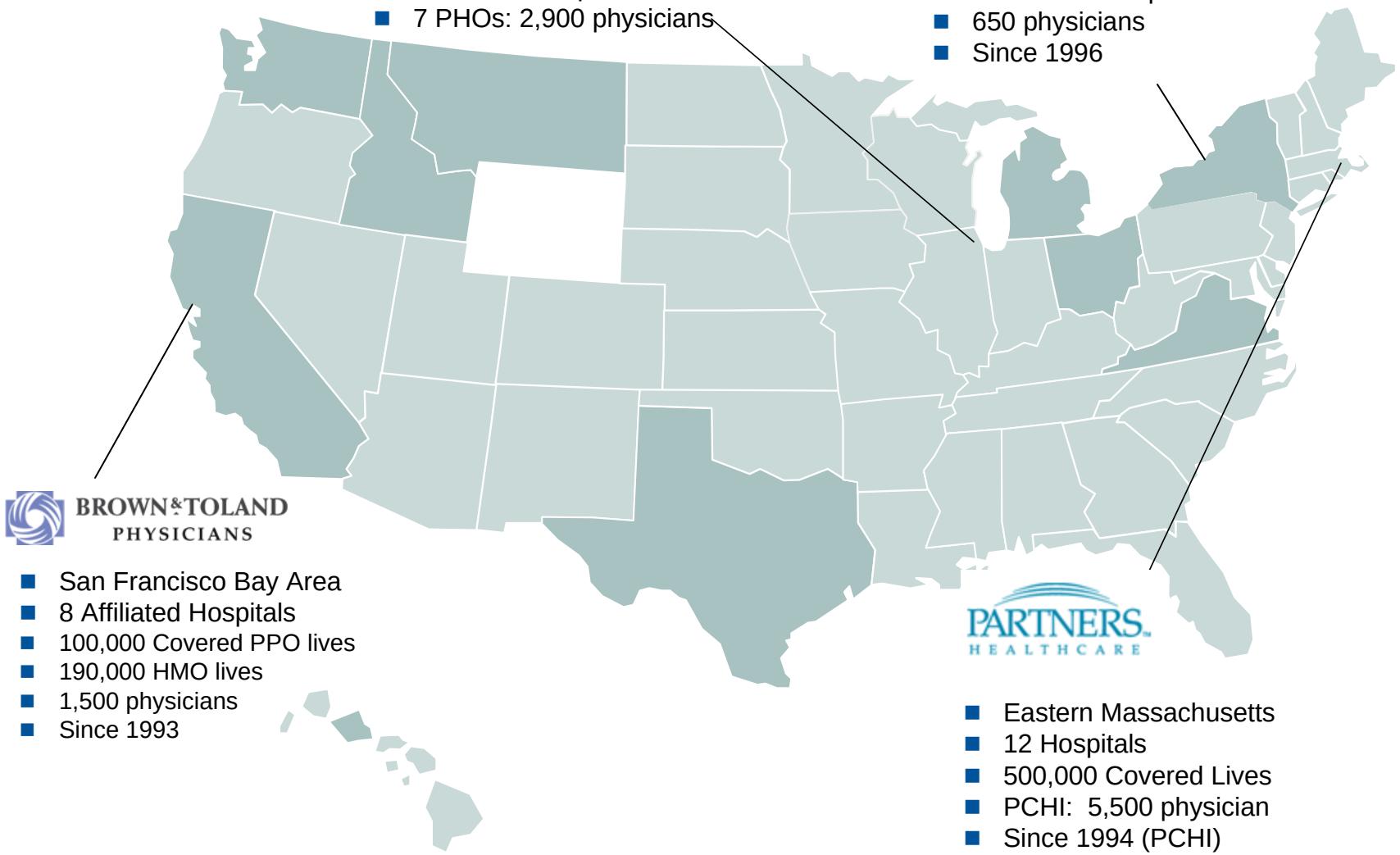
FTC/DOJ Statements of Antitrust Enforcement Policy in Health Care, #8.B.1 (1996)
http://www.ftc.gov/bc/healthcare/industryguide/policy/statement8.htm

What the FTC looks for (no cookie-cutter approach):

- "The development and adoption of clinical protocols
- Care review based on the implementation of protocols
- Mechanisms to ensure adherence to protocols."
- "The use of common information technology to ensure exchange of all relevant patient data"

FTC/DOJ, Improving Health Care: A Dose of Competition Ch. 2, p.37 (July 2004).

Clinical Integration – Case Studies



Advocate Health Care

- Metro Chicago Area
- 8 Hospitals
- 300,000 Capitated HMO
  700,000 PPO patients
- 7 PHOs: 2,900 physicians

gripa health care could look like this™

- Rochester, New York
- 2 Affiliated Hospitals
- 650 physicians
- Since 1996

BROWN & TOLAND PHYSICIANS

- San Francisco Bay Area
- 8 Affiliated Hospitals
- 100,000 Covered PPO lives
- 190,000 HMO lives
- 1,500 physicians
- Since 1993

PARTNERS HEALTHCARE

- Eastern Massachusetts
- 12 Hospitals
- 500,000 Covered Lives
- PCHI: 5,500 physician
- Since 1994 (PCHI)

GRIPA's Approach to Implementing CI:

Physician Committees

- Develop guidelines
- Monitor compliance

Care Management Team

- Working more closely with physicians and their offices

Web Portal

- Include as much relevant clinical data as possible
- Store data in a central data repository

Clinical Decision Support System - Integrated With The Portal

- Improve quality at the point of care
- Report on conditions / guideline adherence / measurement

Additional IT Tools for Physicians

- Enhance workflow
- Improve quality at the point-of-care

GRIPA CI Committee Structure

Clinical Integration Committee (The CIC)

- Twelve member physicians (six PCPs or OB/Gyn and six specialists)
- Appointed for staggered three-year terms
- Overseeing the Clinical Integration (“CI”) Program
- Developing guidelines/measures used to monitor individual and network performance

Specialty Advisory Groups (SAGs)

- Each has representatives of all specialties affected by a guideline
- Discussion of diseases across specialties seen as positive experience by our physicians

Quality Assurance Council (QAC)

- 16 member physicians
- Staggered one-year terms, by lottery
- Monitor the performance of the individual members on measures for guidelines
- Develop Corrective Active Plans if necessary

Improving Guideline Compliance - Using Electronic Tools

Alerts – at patient level

- Available to all physicians at Point of Care
- Display services patient is overdue for or beyond goal(“Actionable Alerts”)
- Updated as transactional data is received
- Physicians are able to provide feedback if a patient is mis-identified with a disease or has a contra-indication related to an alert

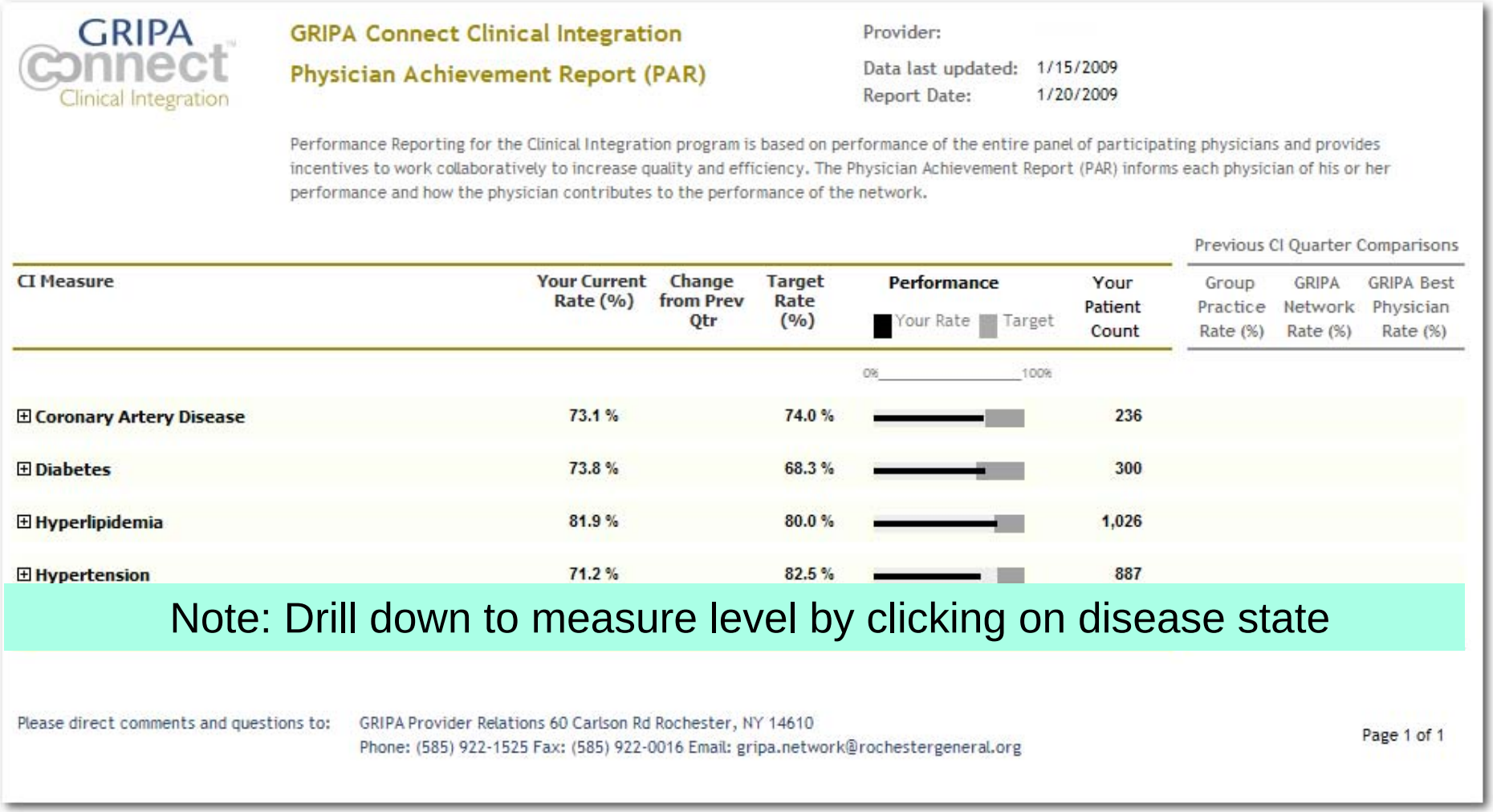
Outreach Reports – at practice/network levels

- Population report to look at all “actionable” items on all patients
- Filters allow physician to focus on a subset of population

Performance Reports

- Shared only with responsible provider(s)
- Dynamically updated
- Contains all measures approved for each guideline
- Used for case finding and to determine which providers need help
- Basis of Pay for Performance Program

Physician Achievement Report / Provider Top Level



GRIPA Connect Clinical Integration

GRIPA Connect Clinical Integration

Physician Achievement Report (PAR)

Provider:

Data last updated: 1/15/2009

Report Date: 1/20/2009

Performance Reporting for the Clinical Integration program is based on performance of the entire panel of participating physicians and provides incentives to work collaboratively to increase quality and efficiency. The Physician Achievement Report (PAR) informs each physician of his or her performance and how the physician contributes to the performance of the network.

CI Measure	Your Current Rate (%)	Change from Prev Qtr	Target Rate (%)	Performance (Your Rate / Target, 0%–100%)	Your Patient Count	Previous CI Quarter Comparisons: Group Practice Rate (%)	GRIPA Network Rate (%)	GRIPA Best Physician Rate (%)
⊞ Coronary Artery Disease	73.1 %		74.0 %		236			
⊞ Diabetes	73.8 %		68.3 %		300			
⊞ Hyperlipidemia	81.9 %		80.0 %		1,026			
⊞ Hypertension	71.2 %		82.5 %		887			

Note: Drill down to measure level by clicking on disease state

Please direct comments and questions to: GRIPA Provider Relations 60 Carlson Rd Rochester, NY 14610
Phone: (585) 922-1525 Fax: (585) 922-0016 Email: gripa.network@rochestergeneral.org

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Physician Achievement Report / Provider Drill Down

GRIPA Connect Clinical Integration

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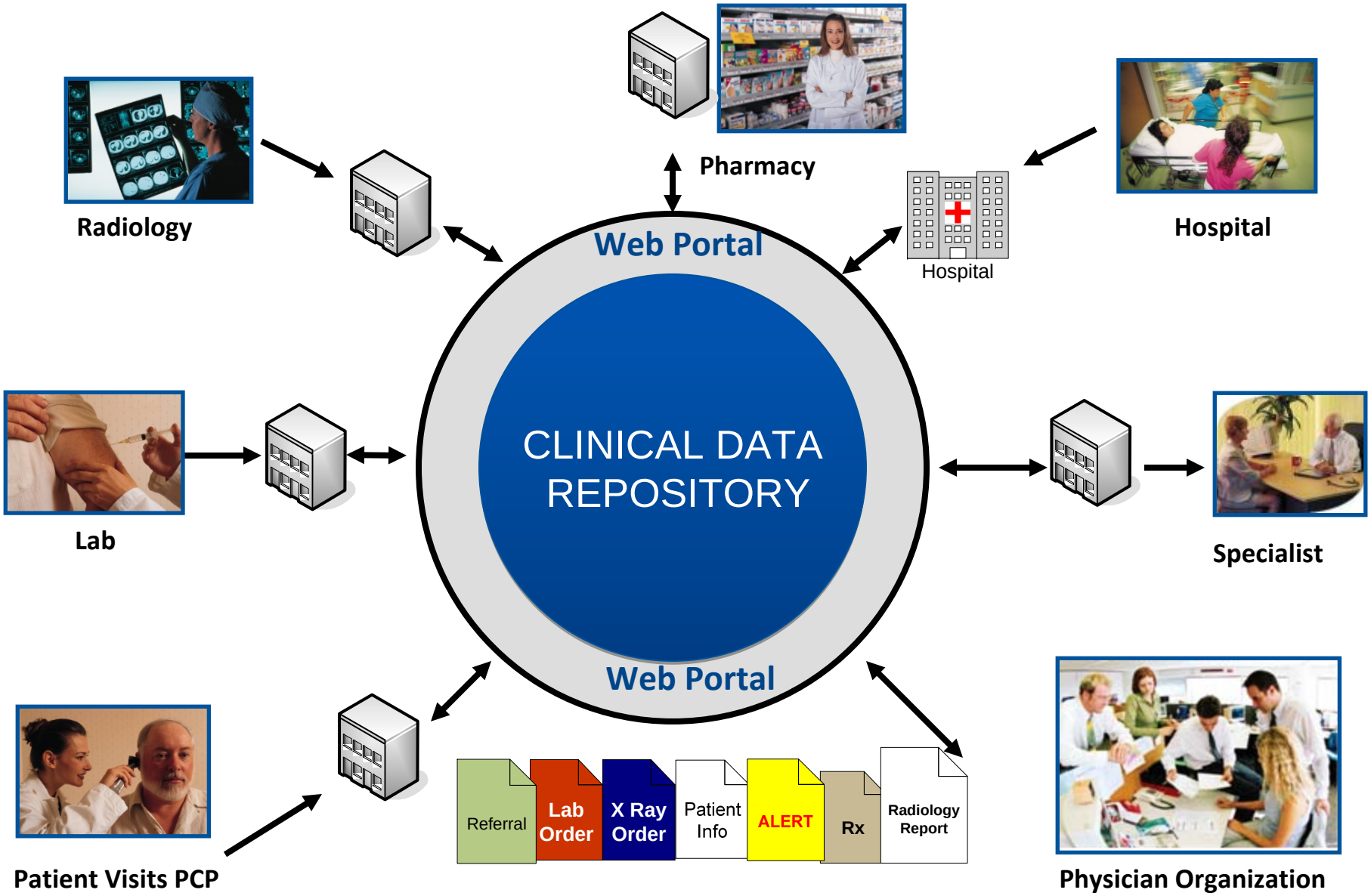
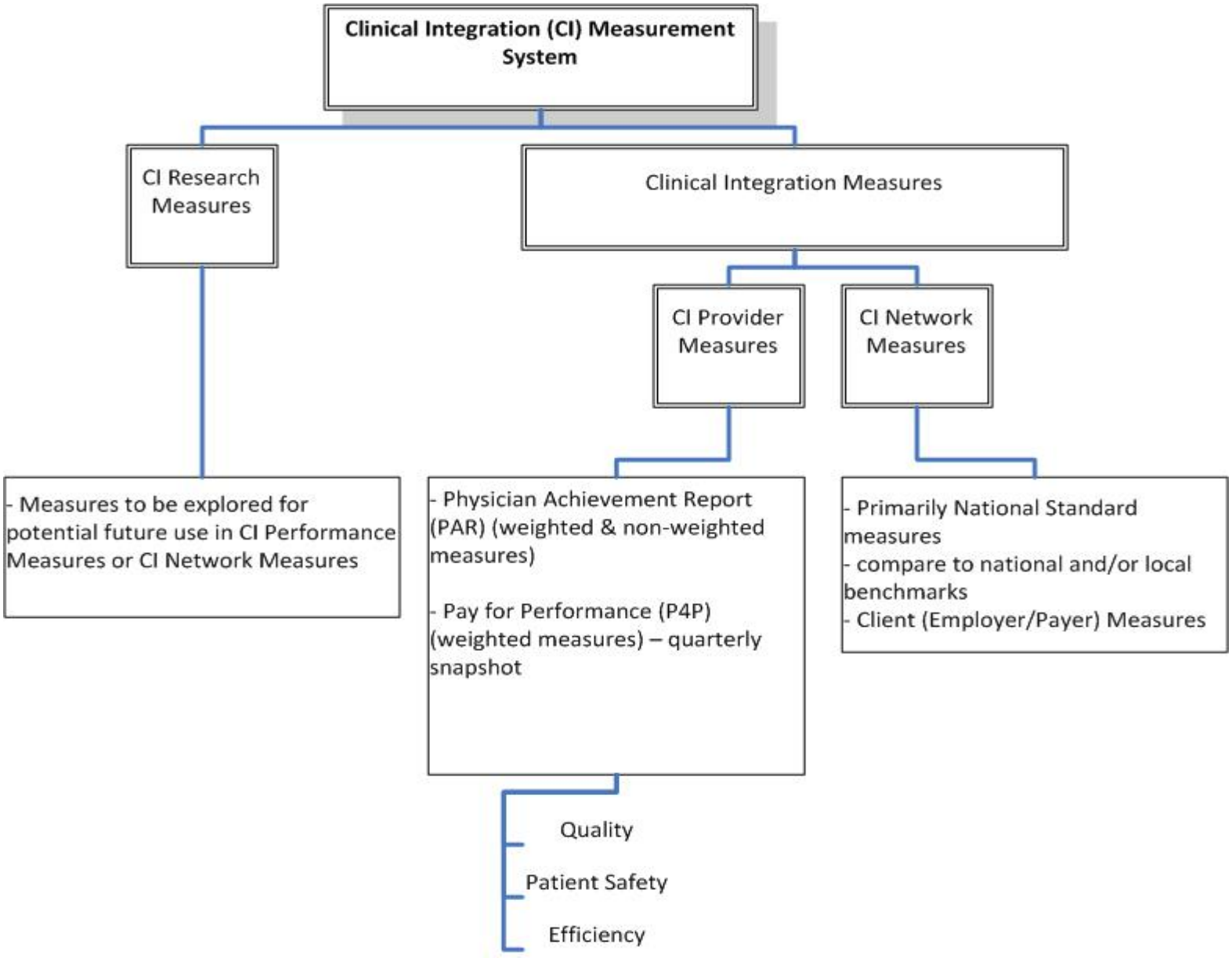
Coronary Artery Disease	**73.1 %**		**74.0 %**		**236**			
• Lipid Panel or one of the following components (Triglycerides, HDL or LDL) in last 12 months	76.7 %	+9.4	76.0 %		236	69.2 %	51.9 %	85.7 %
• Most recent LDL result in the last 12 months < 100mg/dL	74.8 %	-3.1	81.0 %		159	75.8 %	75.4 %	100.0 %
• Most recent HDL result in the last 12 months > 40mg/dL	66.0 %	-0.4	72.0 %		159	63.2 %	62.9 %	84.2 %
Diabetes	**73.8 %**		**68.3 %**		**300**			
• >=2 A1cs in the last 12 months	69.7 %	+5.9	65.0 %		300	51.2 %	56.0 %	89.5 %
• Most recent A1c in the last 12 months < 7	72.9 %	-2.3	70.0 %		229	65.8 %	56.0 %	83.3 %
• Lipid Panel or one of the following components (Triglycerides, HDL or LDL) in last 12 months	84.0 %	+6.6	79.0 %		300	66.4 %	69.2 %	94.1 %
• Most recent Triglyceride result in the last 12 months < 150mg/dL	72.1 %	-1.7	72.0 %		226	68.0 %	64.4 %	85.0 %
• Urine microalbumin in the last 12 months	72.7 %	+4.1	60.0 %		300	54.4 %	47.1 %	76.9 %

Note: Drill down to patient level by clicking on a measure

Clinical Integration Model in Action



Sample CI Performance Measurement Categories



Potential data sources for measures

- Adjudicated claims data from payers – 3-6 month lag
- Manual entry into registries – labor intensive
- ***Hospital ADT (admission, discharge, transfer) – current & available***
- ***Hospital claims – may be delayed***
- Enterprise EMR
- aEMR(s) in provider offices – multiple vendors
- ***Provider office electronic claims (direct/clearinghouse) – multiple vendors***
- Lab order entry
- ***Lab claims***
- ***Lab results***
- Imaging order entry
- ***Imaging claims***
- Imaging results – dictated text
- Provider office notes –dictated text
- Hospital admission/discharge notes – dictated text
- Scanned images of office/hospital notes
- Prescription fill data from SureScripts/RxHub – depends on PBM
- ***e-Prescription submission capture – multiple vendors***
- ***Electronic tracking of portal/EMR use – logon, navigation***
- Referral tracking system
- ***Patient satisfaction surveys***
- CMS' Physician Compare and other consumer websites

Sample measures from hospital claims data only

- 3-day re-admission rate
- 30-day re-admission rate in CHF
- ACEI/ARB in CHF
- LV assessment in CHF
- Aspirin on arrival in AMI
- Antibiotic <6 hrs from arrival in community acquired pneumonia
- Prophylactic antibiotic discontinued <24 hrs post-op.
- Mortality index observed/expected
- LOS compared to GMLOS
- Foley catheter prevalence

May use at aggregate and individual provider levels, for some or all specialties

Sample measures from hospital claims data only:

% of all **TIA** admissions in the last 12 months that had during admission:

- MRI or CT of head
- ECG
- Carotid ultrasound
- MRI or CT of head AND an ECG AND a carotid ultrasound ('perfect care' measure)
- All additional CT/CTA/MRI/MRA tests ordered by a neurologist (appropriateness measure)

% of all **Syncope** admissions in the last 12 months that had during admission:

- ECG
- All CT/MRI/MRA tests ordered by a neurologist (appropriateness measure)
- No carotid doppler tests completed (appropriateness measure)
- No EEG tests completed (appropriateness measure)
- No carotid doppler tests AND no EEG tests completed (appropriateness measure)

Outpatient guidelines (measures from provider office claims & lab results)

- Allergic Rhinitis
- Asthma
- Back Pain, Acute , Chronic
- CAD & Other Atherosclerotic Vascular Diseases
- Childhood Immunizations
- Cholelithiasis
- Colon Cancer, Screening & Surveillance
- COPD
- Depression, Major (Management)
- Depression, Major (Screening)
- Diabetes Mellitus, Adult, Pediatric
- Diverticulitis
- Deep Vein Thrombophlebitis
- Heart Failure
- Hyperlipidemia
- Hypertension
- Ischemic Stroke/TIA (Secondary Prevention)
- Kidney Disease, Chronic, End Stage
- Melanoma, Cutaneous
- Men (Preventive Care)
- Migraine Headache (Management)
- Neuropathic Pain (Management)
- Obesity (Management)
- Osteoarthritis/Degenerative Joint Disease Pain (Management)
- Osteoporosis (Management)
- Osteoporosis (Screening)
- Pain, Chronic
- Pediatrics (Preventive Care)
- Pharyngitis, Acute
- Prenatal Care
- Prostate Cancer (Management)
- Rheumatoid Arthritis (Management)
- TIA (Management)
- Urolithiasis
- Women (Preventive Care)

Sample measures from HIE portal use only

Numerator	Denominator
# times provider views patient alert page	# of encounters during measurement period
# times provider responds to alerts	"
# times provider enters or corrects data	"
# times provider enters BP	"
# times provider enters BMI or weight	"
# times provider accesses e-prescribing application	"
# logons by provider	"
# logons by staff in provider office	"
# referrals generated (PCP)/accepted SCP)	"
# times provider accesses outreach reports	"
# times provider accesses performance reports (PR)	"
# times provider clicks to PR measure level	"
# times provider clicks to PR patient level	"
# times provider opens a critical message	# of critical messages delivered to provider
# of patients for whom Height is recorded at least once	# of patients attributed to provider
# patients (not) needing missing test alerts	"
# patients (not) needing preventive visit alerts	"
# patients with notation of advance directives	
# of denominator patients with advance directives	# patients with chronic disease or >64

Why is Clinical Integration Important?

- **Summary:**
  - Legal vehicle to negotiate
  - Get physicians/hospital all practicing in similar way → creates efficiencies
  - Key foundational step on path to becoming an ACO

How do you get there?

It’s an Evolutionary Process…

Small steps leading to eventual big changes and gains…

- **Clinically Integrate a network**
  - Aligning quality goals
  - Implement a shared data system/registry
  - Measure change
- **Implement tools to understand your population and manage its risk**
  - Drug utilizations
  - Financial trends
  - Care management needs
- **Adopt best practices**
  - Measure change
  - Manage resources against risk
- **Continuously improve processes through insight into the data and experience**

Population vs Risk Management

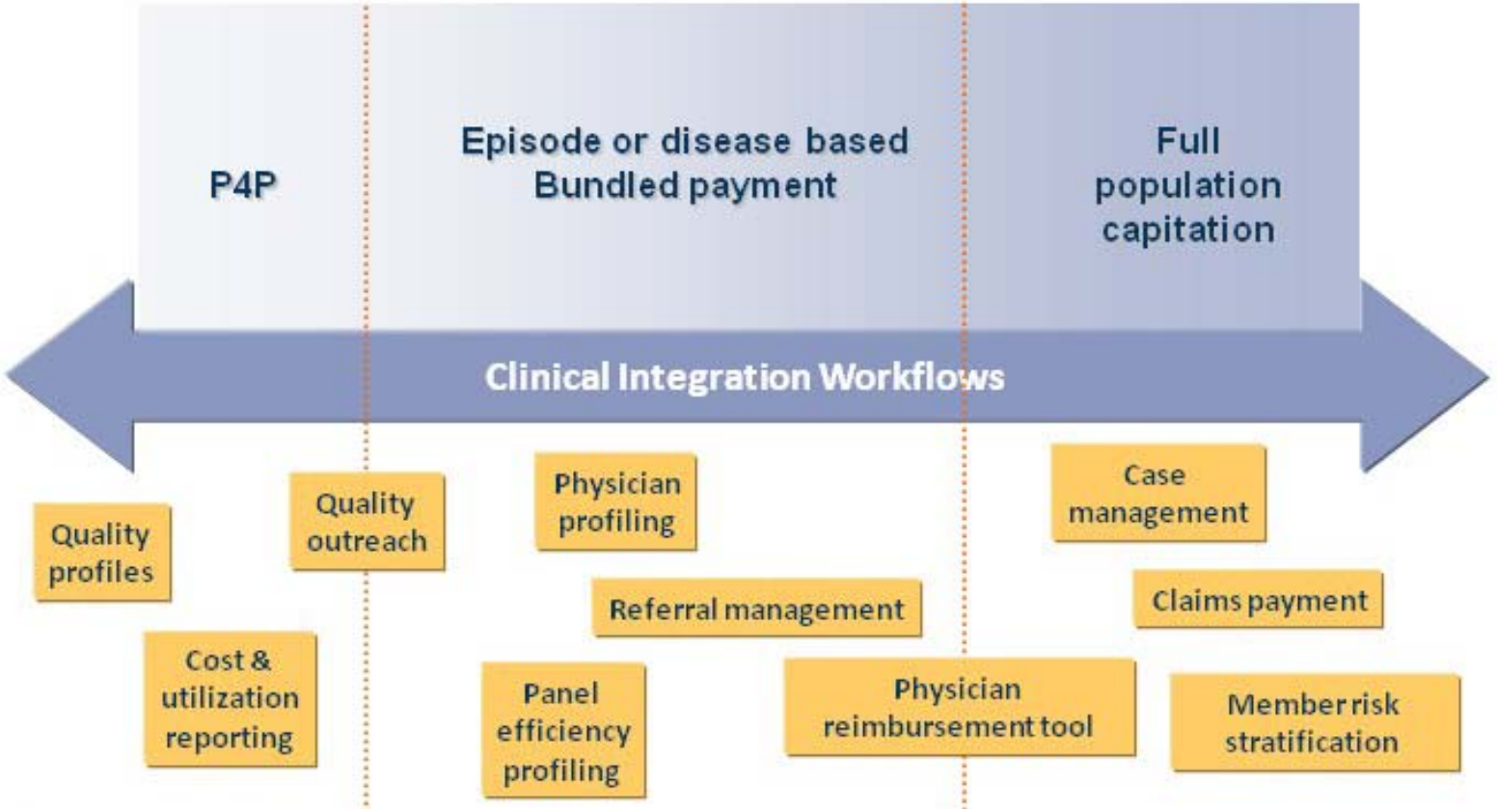
- **Clinical Integration** → collaboration to improve quality
  - Care Guidelines/Protocols
  - Care coordination to promote care efficiency and patient safety
  - Acting on gaps in care
  - Measuring improvement

- **Accountable care** → managing risk
  - Quality
  - Cost and Utilization
    - Reducing variations in care
      - ED Use
      - Imaging
      - IP Stays and length of those stays
      - Drug utilization
      - …

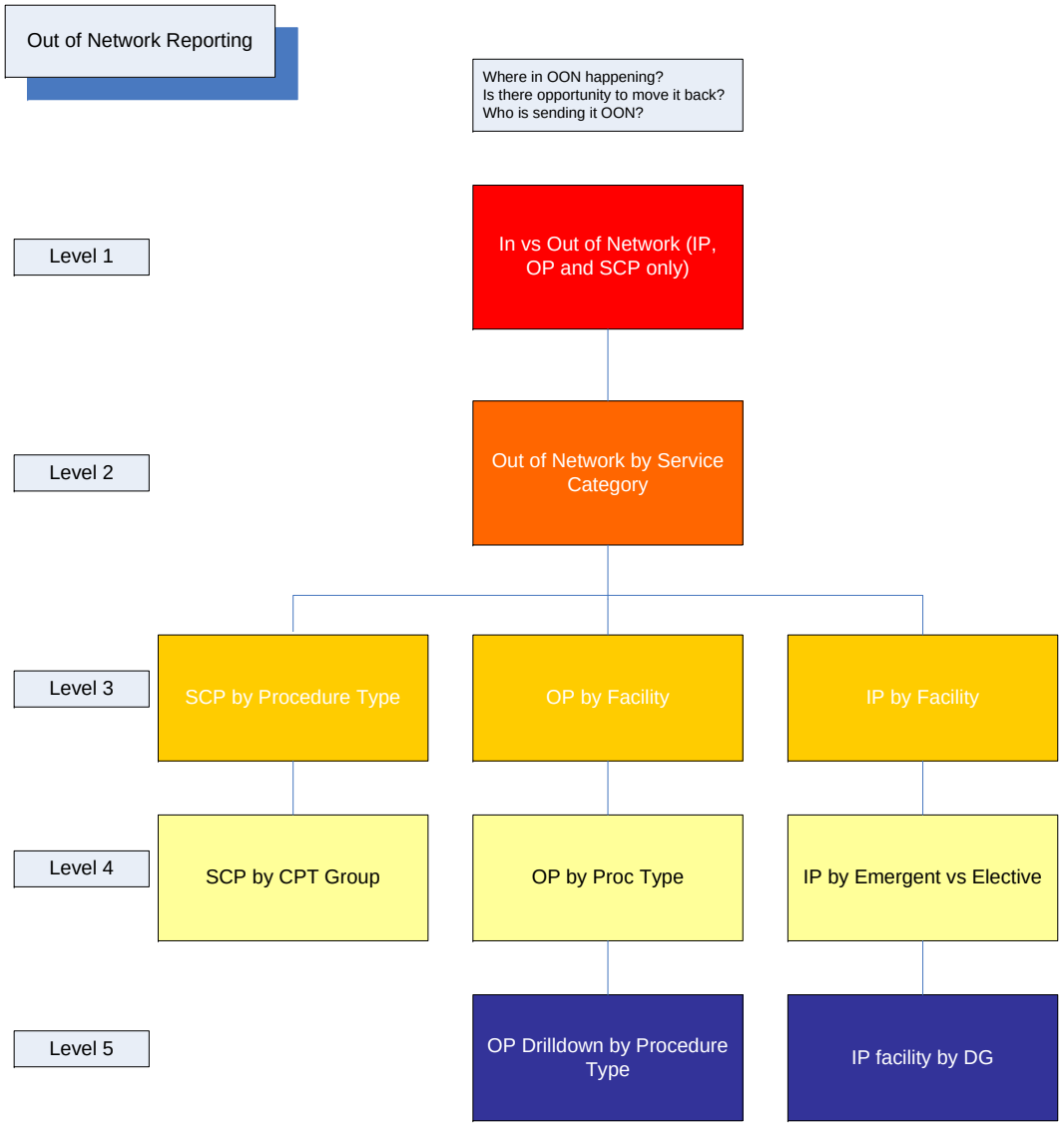
Rules of the ACO Road

- **Only take risk for what you can manage**
  - What can you measure?
    - If you can't measure it, you can't effectively manage it
  - What data do you have available?
    - To measure, you need data
  - What tools do you have in place?
    - To measure consistently and accurately, you need tools!
  - What can you influence?
    - All parties need to be aligned
    - To manage costs, you need to manage behaviors
  - What incentives do you have in place?
    - Must be aligned
    - Must be the right incentives

Increased risk → More Data, More tools



With many levels of data to analyze….



Adherence to best practices must be tracked

- **Profiling and reporting**
  - **PCPs & Specialists**
    - Quality measures
    - Efficiency profiling
  - **Facilities**
    - IP Usage (vs ED or Observation Stays)
    - Length of Stay
    - ED Usage (vs Urgent Care)
    - Adherence to hospital pathways
  - **Drug Profiling**
    - Generics
    - Inefficient dosing
  - **Leakage**
    - Cost effective providers

Finding the Opportunities

- **Case and Disease Management**
  - **Risk stratification**
    - Probability of using IP services
    - Future Medical Expense
    - Multiple Co-morbidities
    - Abnormal Lab Results
    - Age/Gender
  - **Frequency of Services**
    - Frequent ED use
    - Multiple drugs
    - Multiple providers
  - **Disease Prevalence**
    - Pre-cursor conditions (e.g. pre-diabetes, essential hypertension, obesity)

ACO Optimal Data and Algorithms

- **To track measures for ACO, critical data components include:**
  - Financial data
  - Clinical indicators/triggers
    - Developed from claims data
      - ICD9
      - CPT
  - Provider attribution
  - Hospital data – IP and ED

- **Optional data elements** (extremely helpful but not deal breakers)
  - Lab results
  - Rx

ACO Reporting

- **Medical Expense PMPM Trend**
  - Determine reason for trend
    - Increased utilization
    - Increased intensity of services
    - Increased unit cost (fee schedule changes, out of network utilization)
    - Increased ‘Illness Burden’ of population

- **Out of Network Utilization**
  - What is going out of network?
  - Can we bring it back in?
  - Who is sending it out of network?

ACO Reporting – cont'd

- **Identify Underuse, Overuse and Misuse**
  - **Underuse** – analyze quality indicators
    - Preventive services needed
    - Lab testing overdue
    - Medication non-compliance
  - **Overuse**
    - Multiple lab tests by different providers
    - ED usage for minor illnesses
  - **Misuse**
    - MRI before X-ray for Low Back Pain
    - Drug prescribing inefficiencies

ACOs – New Challenges, New Level of Analysis

- **ACOs are about risk management which requires:**
  - **Consistent data sources**
  - **Consistent reporting**
  - **Constant analysis**
  - **To determine Actionable Items!!**

Clinical Integration – What's in it For…

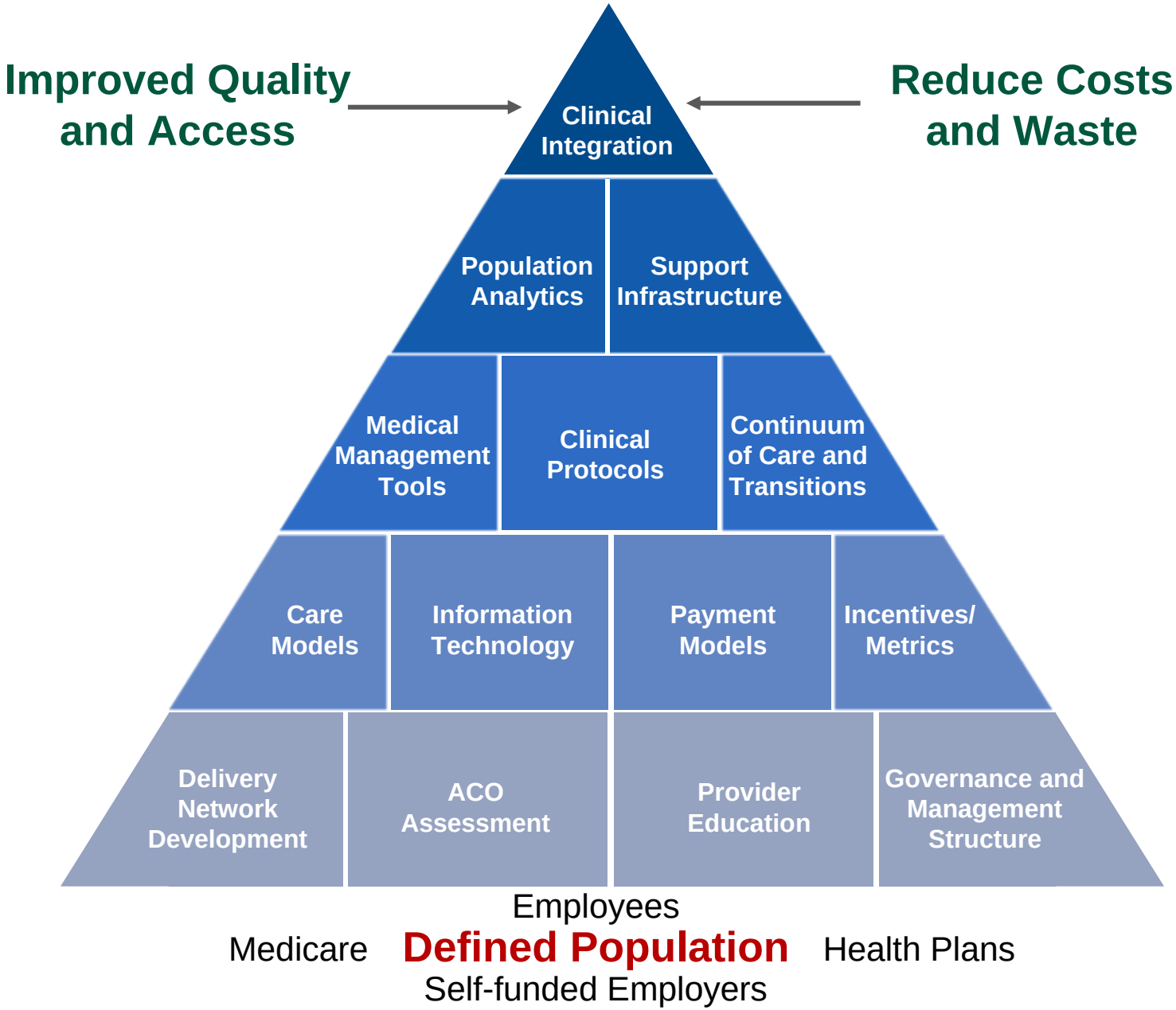
Hospitals?

- Enhanced linkage and alignment with physicians
- Facilitates implementation of quality improvement initiatives
- "Branding" consistency to patients and payers
- Expand physician leadership in clinical care redesign
- Improve revenue yield: pay-for-performance, global payments

Physicians?

- Access to electronic tools to enhance patient care efficiency
- Improve revenue yield: pay-for-performance, global payments
- Enhance market positioning, referrals, "preferred" network
- Enhanced satisfaction with clinical delivery model

Accountable Care Building Blocks



Lessons Learned & Latest Thinking on Clinical Integration/ACO

- **Must be Physician led**
- **Takes time! Establish guidelines, measure and parameters to improve care and prove value!**
- **Establish strong infrastructure and IT for hospitals and physicians to:**
  - Efficiently gather, analyze, report and provide alerts based on clinical data and financial information **in near real time**
  - Systems must support care givers by facilitating immediate high quality care, enabling follow up, and feedback
- **Uniform metrics across the System to evaluate quality of care and cost effectiveness, across the population**
- **Establish one incentive system that physicians & hospitals control, understand, and that gets results**
- **Relentless focus on redesigning clinical care delivery across the continuum to find new ways of improving efficiency, service, and quality.**

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