

AHRQ Comparative Health System Performance Initiative

Annual Workshop

**Presentation at AHRQ Headquarters
Rockville, Maryland**

September 29, 2016

Mathematica Policy Research

Agenda for the Day

- **Welcome (9:00–9:20)**
- **CoE updates and progress (9:20–11:00)**

Break (11:00–11:10)

- **Compendium plan overview (11:10-11:40)**
- **Using data to identify health systems, Part 1 (11:40–1:00)**

Lunch (1:00–1:30)

- **Using data to identify health systems, Part 2 (1:30–2:30)**
- **Beyond “definitions”: Measuring health system attributes (2:30–3:20)**

Break (3:20–3:30)

- **Measuring health system performance (3:30–4:15)**
- **Plans for products and dissemination activities (4:15–4:45)**
- **Reflections on the day and closing (4:45–5:00)**

Welcome

Center of Excellence updates and progress

AHRQ Center of Excellence

Dartmouth–Berkeley–HVHC

Year 1 Progress and Year 2 Plans

September 29th, 2016

Rockville, MD

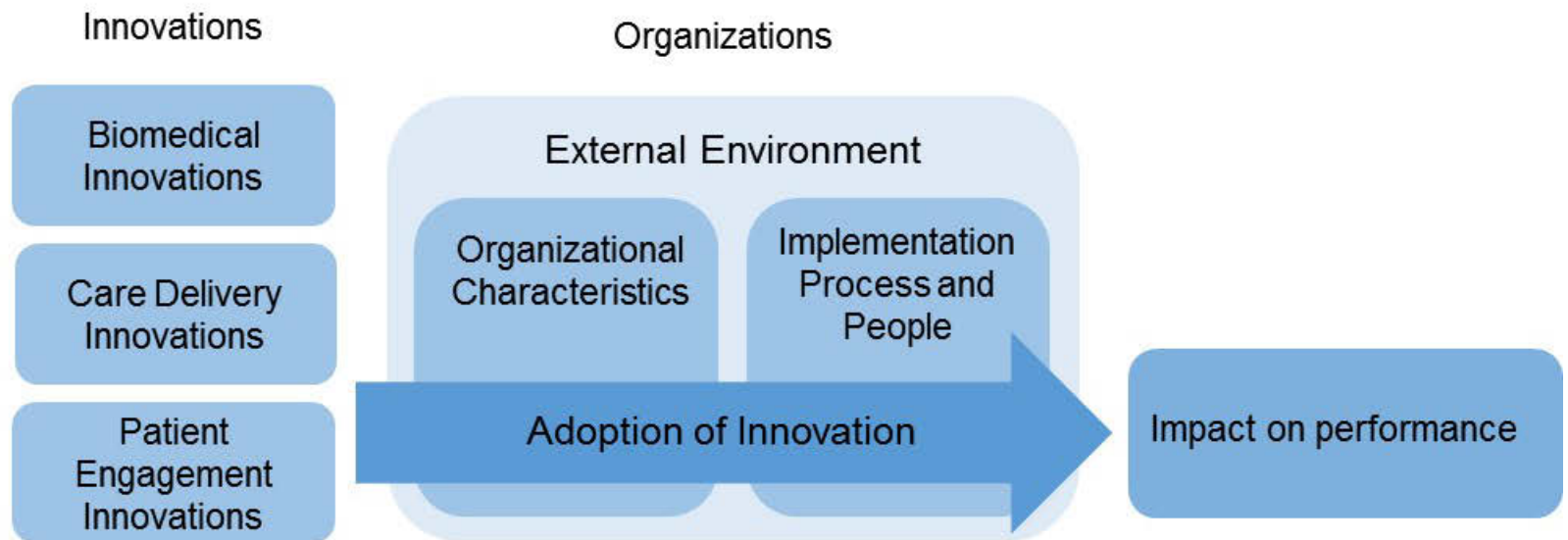
THE
Dartmouth
INSTITUTE

FOR HEALTH POLICY & CLINICAL PRACTICE

Overview

- Conceptual Model
- Center of Excellence Data Warehouse
 - Claims Data
 - Survey Data
 - Clinical Data
 - Market Data
- Health System Definition
- Distribution of Corporate Entities
- Progress Year 1, Plans for Year 2
- Year 2 Deliverables

Conceptual Model



Center of Excellence Data Warehouse

- Claims data
 - CMS claims, Medicare A, B, A/B, D for years 2006-2015
 - Commercial claims, e.g. large employer, medium employer, individual (HCCI)
- Survey data
 - National survey system, hospital and practice level data (n=5000) with 50% overlap
 - National Survey of ACOs (1-3, 4 pending)
 - National Survey of Physician Organizations (1-3)
- Clinical data
 - Clinical data from HVHC (12 high performing systems), linked to claims
- Market data
 - Demographic descriptions of markets across different geographies
 - ACO descriptions and coverage

Claims Data

- **Claims data**
- Survey data
- Clinical data
- Market data
- Medicare
 - 100% claims from Medicare Parts A and B, and a 40% sample from Part D (Part C not yet available)
 - Available for years 2006-2015 (54m+ beneficiaries)
 - Claims cover inpatient and outpatient medical care, skilled nursing facilities, hospice, home health, durable medical equipment, and prescription drugs
 - Includes additional beneficiary enrollment information including entitlement, managed care indicators, and demographics
- Medicaid
- Commercial
 - HCCI now available – currently in discussions with BHI, Truven, S&P

Survey Data

- Claims data
- **Survey data**
- Clinical data
- Market data

Domain	Subdomain	Example measure(s)
Environmental factors	Perceived competition	Inpatient/Outpatient perceived competition
Organization attributes	Governance/Leadership	Physician leadership
	Integration	Financial, Clinical, Structural, Relational integration
	Payment methods	Revenue / losses from shared savings, risk bearing
	Payment reforms	Prior and current participation in reform
	Organizational structure	Payer mix (Medicare, Medicaid, Commercial)
	Perceptions	Perceptions of ability to meet patient needs
	Policy reforms	Participation in AHCs/CPCI and CPC+
Internal mechanisms	Physician compensation	Compensation models, employed and contracted
	Performance monitoring	Active monitoring of programs and MD performance
	Performance management	Use of registry / decision support for specific conditions
	Clinical performance reports	Clinical performance reports
	HIT capabilities	Number of EHRs, EHR functionality
	Evidence-based guidelines	Perceived barriers to adoption
Characteristics of innovation	Pain management	Pain clinics, evidence-based pain management programs
	Care delivery	Behavioral health integration, high cost/high need care management, care transitions
	Patient engagement	Use of PROMs, Motivational interviewing, Shared Decision Making, and Shared Medical appointments

Clinical Data



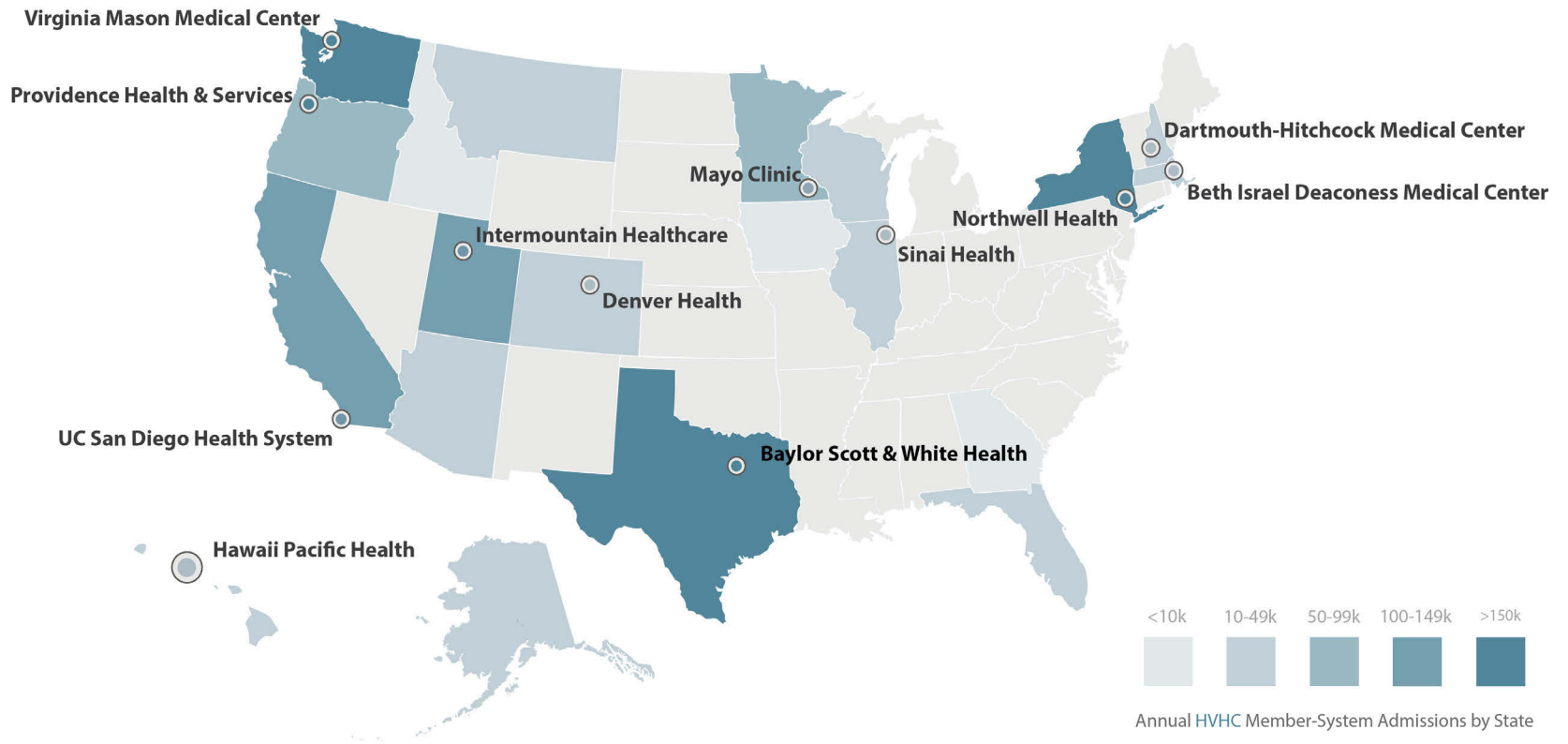
- Claims data
- Survey data
- **Clinical data**
- Market data

- HVHC is a provider learning network of 12 member organizations who share data and disseminate best practices for high value care

<u>Founding Members</u>	<u>Collaborative Members</u>
Dartmouth-Hitchcock	Baylor Scott & White Health
Denver Health	Beth Israel Deaconess Medical Center
Intermountain Healthcare	Hawai'i Pacific Health
Mayo Clinic	Northwell Health
<i>*The Dartmouth Institute</i>	Providence Health & Services
	Sinai Health System
	UC San Diego Health System
	Virginia Mason Medical Center

- Available data types include:
 - Administrative (e.g., ICD, CPT)
 - Clinical (e.g., EMR, pharma, lab)
 - Patient identifiers for linking member data to external sources
- Survey responses
 - Initial surveys completed 2016 (hip, knee, spine episodes; advanced illness & palliative care)
 - HVHC-specific adaptation of TDI CoE National Survey

HVHC Geographic Reach



HVHC Strategic Priorities

Projects by Program Area

 <p>Population Health</p>	 <p>Episode-Based Care</p>	 <p>Safety Programs</p>	 <p>Dissemination</p>
Advanced Illness and Palliative Care Practice	Hip, Knee, Spine Surgery Best Practice	Iatrogenic Delirium Prevention	Sepsis 3hr Bundle Dissemination & Implementation
Diabetes Visit Frequency Analysis		Sepsis Care for Patients with Congestive Heart Failure and/or Renal Failure	OpenNotes Project
			Meaningful Use Specialized Registry
			Maintenance of Certification for Providers

HVHC Data Warehouse

Clinical Data Availability



Market Data



- Claims data
 - Survey data
 - Clinical data
 - **Market data**
- ACO Tracking Data
 - Information since 2010 on ACO geographic coverage, participants, number of lives at risk, degree of risk (upside-only, two-sided, capitation), and contact information
 - Provides historical snapshots of ACO prevalence and allows for longitudinal and geographic analysis
 - Market & Demographic Data
 - Contains over a thousand variables on healthcare markets, organizations, and the general population
 - Categories include demographics, health data, provider and payer organizations, labor and economics, and financial performance
 - Contains both geographic and organization-specific information

Health System Definition

- The Dartmouth-Berkeley-HVHC CoE defines a “health system” as a **corporate parent** in HCOS that includes:
 - at least one hospital and group of physicians (3+ PCPs) or
 - at least one group of physicians (3+ PCPs)
- *Rationale: a primary focus is to explore cost and quality performance for primary care populations; including large primary care and multispecialty groups that do not own hospitals is important*
- We will also study:
 - Independent hospitals
 - Physician practices (linking back to National Survey of Physician Organizations)

Progress Year 1, Plans for Year 2

- Progress Year 1
 - JAMA article: A Potential Catalyst for Delivery System Reform
 - Developed, fielded, analyzed hip, knee and spine survey
 - Developed, fielded, analyzed appropriate use criteria survey (total joints)
 - Developed, fielded advanced illness survey
 - CMS DUA approved
 - Cross-walked HVHC member submitted data to CMS data
- Plans for Year 2
 - Explore synergies and opportunities with other CoEs
 - Complete and clean national survey (5,000 systems, hospitals and practices)
 - Link survey to claims, clinical data, HVHC data
 - Begun to define papers to be completed Year 2 (next page)

Year 2 Deliverables, Part 1

Year 2 Papers	
Data Core	<ul style="list-style-type: none">• Deriving a survey design with sampling probabilities and quantity of surveys depending on the size and composition of the survey units• Variation and trends in quality and cost across U.S. health systems
Project 1	<ul style="list-style-type: none">• What external factors predict value-based payment?• Describe spectrum of integration in ACOs
Project 2	<ul style="list-style-type: none">• What does population health mean to healthcare providers? A mixed methods study• What mechanisms do ACOs use to align front line physician initiatives with the ACO's goals?
Project 3	<ul style="list-style-type: none">• Are there patterns in the adoption of evidence-based appropriateness criteria for selected conditions (hip, knee)?• How do care patterns change following adoption of bundled payments for selected conditions (hips, knees)?• Are there patterns in the use of evidence-based high-value and low-value procedures for selected conditions and what outcomes are associated with these patterns?

Year 2 Deliverables, Part 2

Year 2 Papers	
Project 3	<ul style="list-style-type: none">• What is the impact of policy, public health and local experience on the implementation of next generation opioid prescribing practices?• Is there adherence to sepsis bundle intervention while facing an evolving evidence base?
Project 4	<ul style="list-style-type: none">• Where and how are care delivery innovations (ie care transition programs and integrated behavioral health) being implemented?• Where do patients get their care, and how many patients are truly getting their care from integrated systems?
Project 5	<ul style="list-style-type: none">• To what extent is practice-level adoption of shared decision-making interventions for patients with preference sensitive conditions associated with better experiences of chronic illness care?• To what extent is patient-level exposure to shared decision-making interventions associated with lower overall health care costs for patients with preference sensitive conditions?
Taxonomy	<ul style="list-style-type: none">• Do patients receiving care from physicians associated with different kinds of systems have better outcomes?• Do patients receiving care from physicians associated with systems that are both highly differentiated and highly integrated have better outcomes?

Clarifying questions?

NBER CoE: The Structure of Health Systems

David Cutler, Harvard and NBER (Overall PI)
Nancy Beaulieu, Harvard (PI of Data Core)

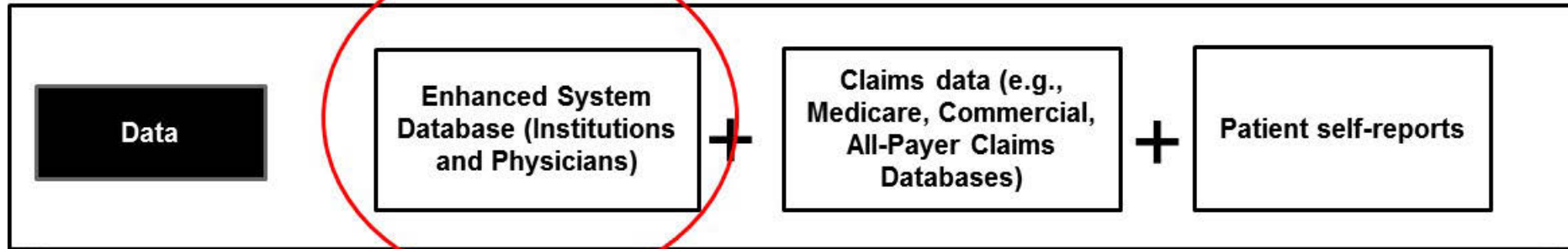
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Overview

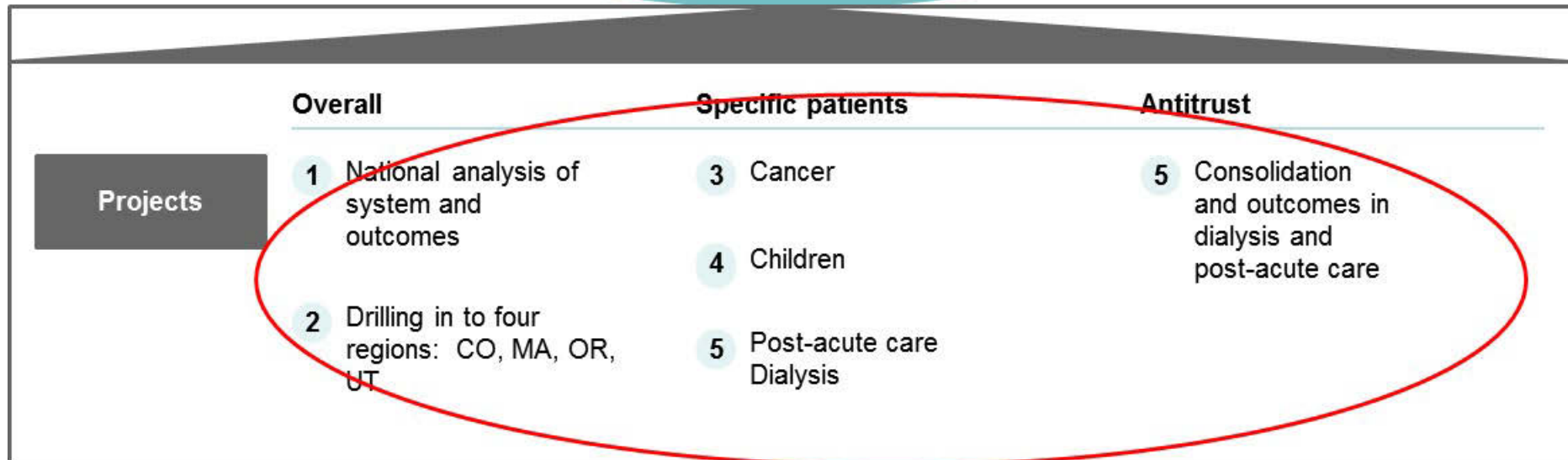
- Mapping Health Care Delivery Systems 2013
- Performance Measures
- Challenges & Next steps

Structure of Project

Mapping delivery systems



Project Management



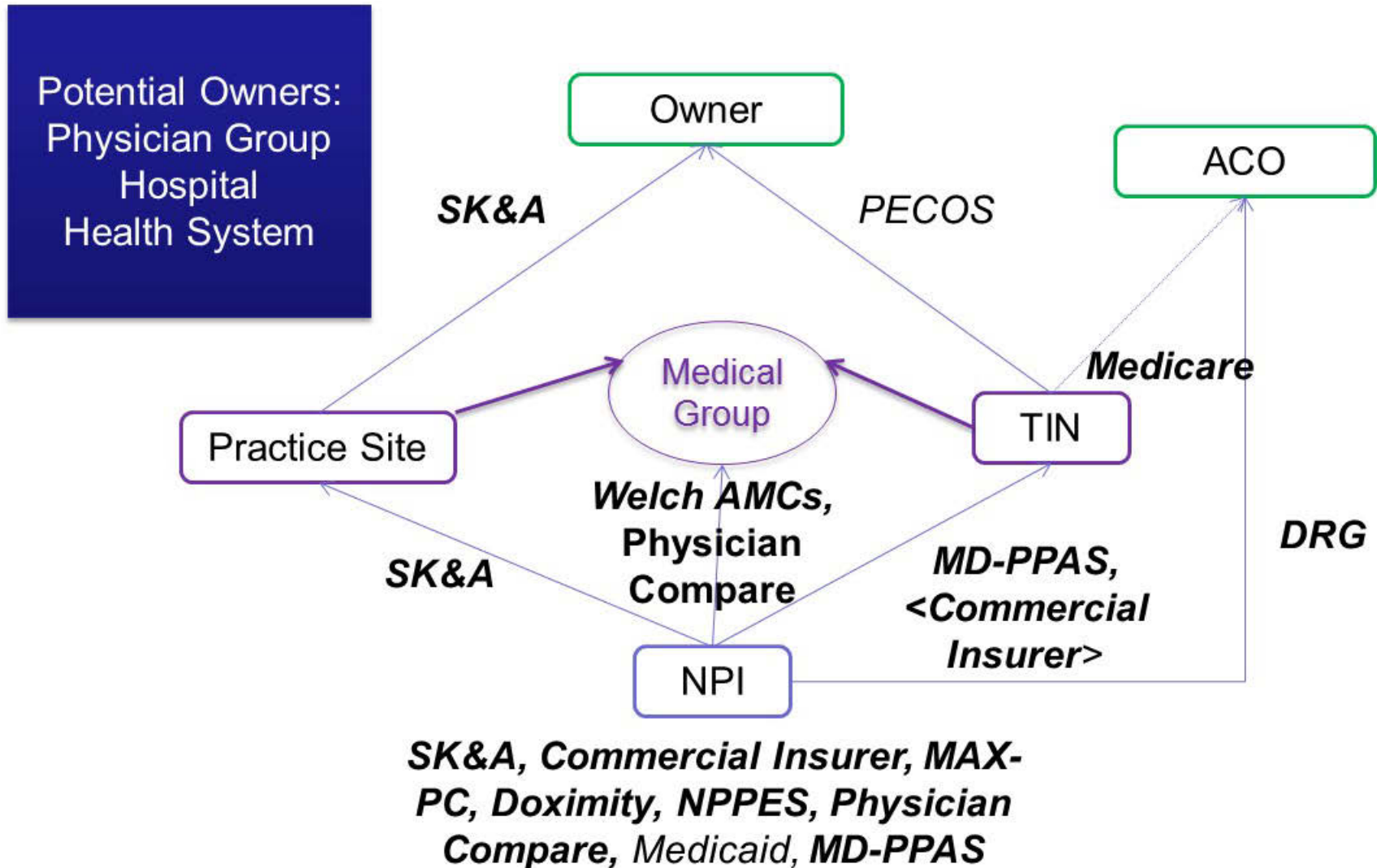
Performance measures

Enhanced Database Components

Provider Databases (characteristics)	Linking Databases	Other Databases
Health Systems	Health system components	Market characteristics
Physicians	Hospital System components	Community characteristics
Practice Sites and Medical Groups	Medical Groups (physicians)	State (for policies)
Hospitals (+ ASCs)	PAC and dialysis systems/ chains	Patient flows
Long-term care facilities	NPI-TIN	Hospital M&A
Skilled nursing facilities	ACO participants	Physician practice M&A
Inpatient rehab facilities	Market definitions	Health system M&A
Home health agencies		
Dialysis facilities		
Hospice companies		
ACOs		

Physician Database

Schema for Physician Organization Data



Data already accessible are in **bold**

Physician Database

- Unit of observation is a physician
- Not all physicians in our data sources have an NPI (yet):

Select Variables in Physician Database

- Not all physician observations have complete data – depends on data source
- NPPES and Doximity can fill in some gaps

	SK&A	MD-PPAS	Commercial Insurer	Physician Compare
MD Name	X			X
Practice Site	X			X
Group Practice	X		X	X
TIN		X	X	
Specialty 1	X	X	?	X
Specialty 2	X	X	?	X
Hospital affiliation	X			X
System Ownership	X			

Physician Organization Measures

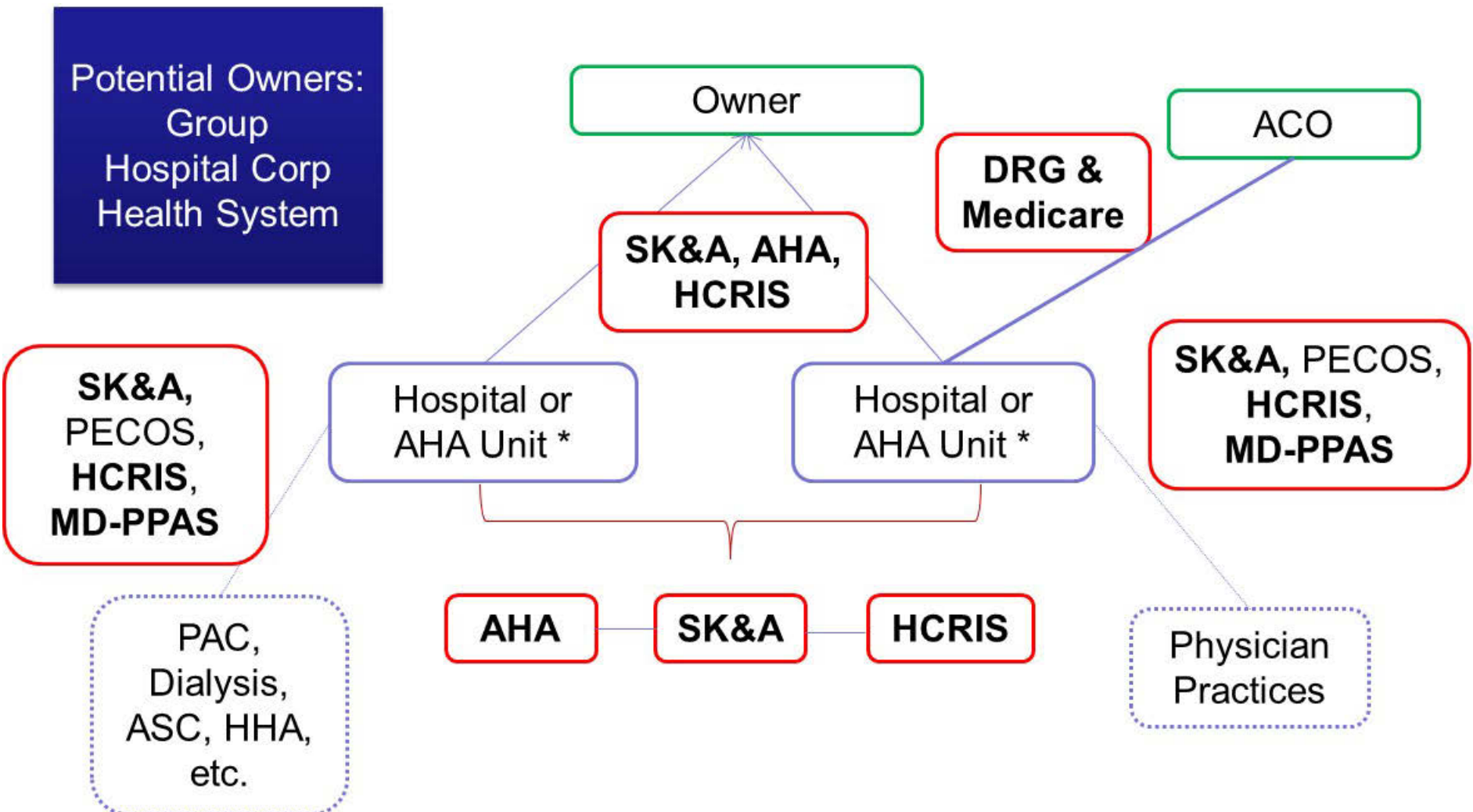
- SK&A
- Physician Compare
 - Based on PECOS
 - NPIs in multiple groups, Group may be > site
 - Snapshot and update on quarterly basis beginning March 2014
 - Imperfect match to TINs

Hospital Database

Hospital Database

- Develop a comprehensive list of unique hospitals
- Gather/generate characteristics of hospitals
- Link to physicians
 - Hospital ownership of group practices (SK&A, Medicare claims)
 - Physician affiliations (SK&A, Physician Compare)
- Link to AHA and SK&A systems

Outline of Acute Care Hospital Data



* Physical location

AHA Survey Data

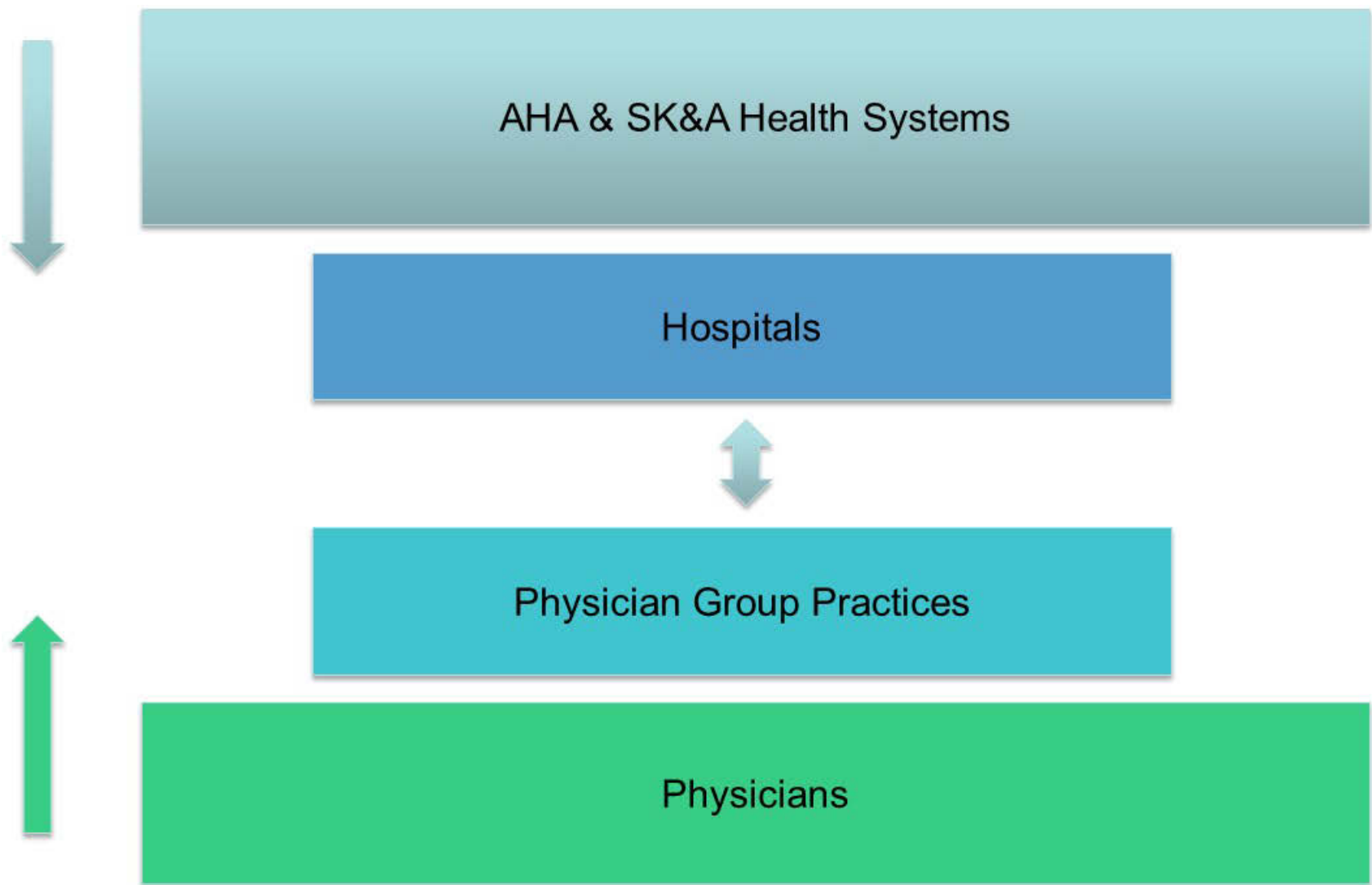
- Captures most hospitals in U.S.
- Approximately 700 hospitals respond to survey in small groups (parent-units) instead of individually
- AHA system definition: A system is a corporate body that owns, leases, religiously sponsors and/or manages health providers

A Set of Unique Hospitals in 2013

- Data Sources: AHA survey, SK&A, HCRIS
- Matched AHA hospitals to SK&A hospitals
- Still looking to match 181 HCRIS hospitals

Health System Database

Two approaches to systems



Top Down Approach

- Data Sources: SK&A and AHA
- HCRIS
 - Post-Acute Long term care chains
 - Home office?
- Definitions
 - SK&A definition: provider organizations owned by common corporate entity
 - AHA definition: A system is a corporate body that owns, leases, religiously sponsors and/or manages health providers

Rich Diversity of Systems

- “Classic” integrated health systems
 - E.g. Kaiser, Mayo
- Hospital companies that have acquired physician practices
 - E.g. HCA, Tenet
- Academic Medical Centers that have grown
 - E.g. Partners Health Care, Johns Hopkins
- Church sponsorship
 - E.g. Ascension, Trinity, Mercy, Baptist
- New type of systems
 - Joint ventures
 - Clinically integrated networks

AHA and SK&A Systems: Name and HQ Address Matching

- Regional sub-systems
- M&A: if systems merged Jan-June, include as post-merger system in 2013

* Mostly nursing home chains and group purchasing organizations

Health System Composition

- Hospital, physician, other
- PAC, Academic Medical Center, Insurance
- Based on SK&A 2013 system data:

Bottom-Up Approach

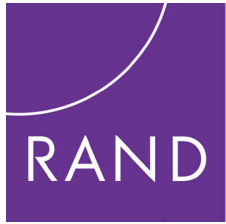
- Identify physician group practices as a set of physicians billing under a common set of TINs
- Two different relationships among physicians we will leverage:
 - Physicians billing through common TINs: MD-PPAS Welch's groups, & (soon we hope) commercial insurer
 - Physicians practicing together at same site/group: SK&A, Physician Compare, Welch
- Beginning with MD-PPAS, identify pairs of TINs with large percentage of billing by NPIs associated with both TINs. Combine TIN pairs with a common TIN (e.g. {A, B} with {B,C})
- Compare sets of TINs with physician groups in SK&A, Physician Compare and Welch's list
- SK&A: system assignment of physicians practicing at same site
- Still working this out

Challenges and Next Steps

Challenges and Next Steps

- Too many independent medical groups
- Missing NPIs
- Capturing JVs (multiple TIN owners) and CINs
- Physicians in more than one system possible

Clarifying questions?



HEALTH

***RAND Center of Excellence on
Health System Performance:
Update***

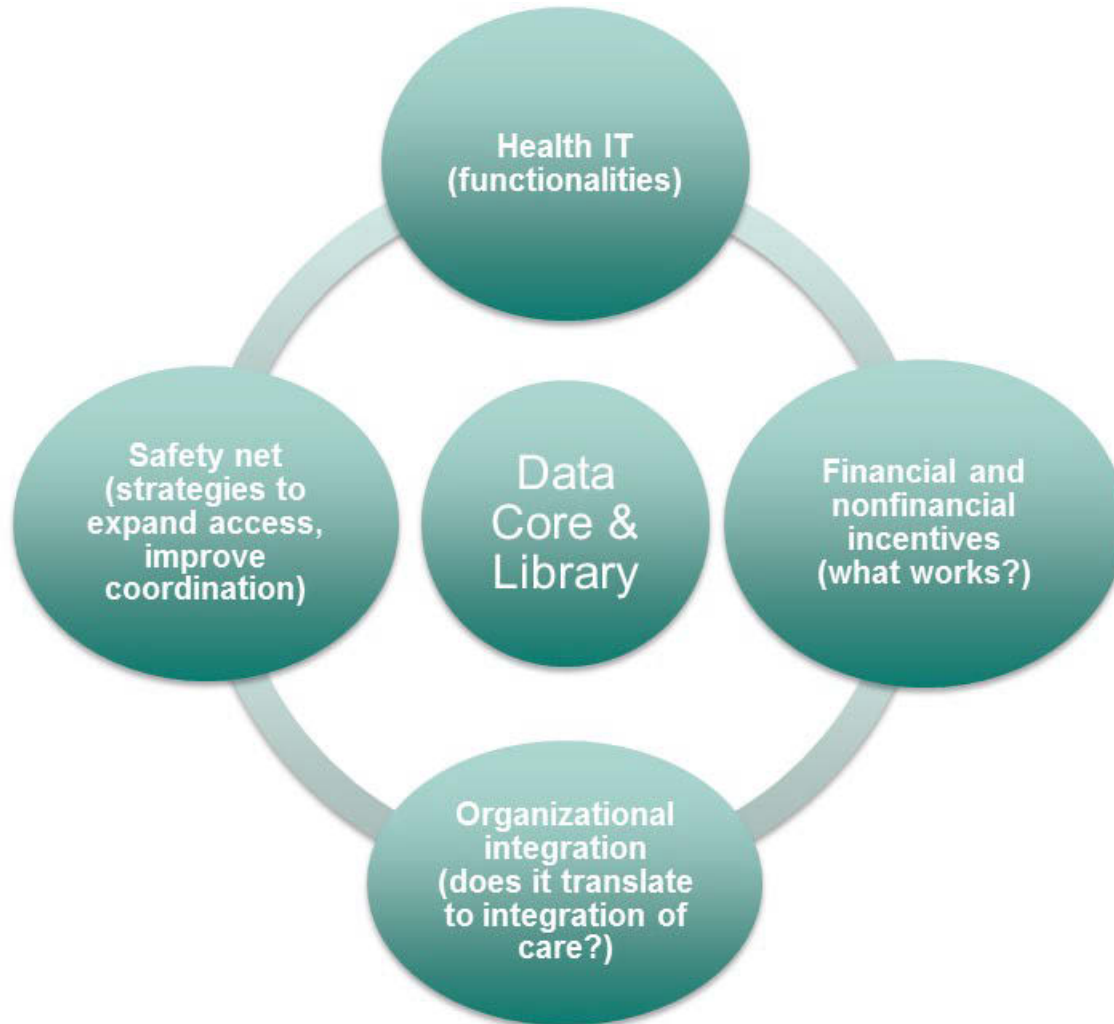
Cheryl Damberg, Susan Ridgely & José Escarce

September 29, 2016

Goals of RAND's Center of Excellence

- **Identify, classify, track, and compare health systems in today's complex health care markets**
- **Identify characteristics of *high-performing health systems***
 - **Defined as health systems that can more effectively translate new research evidence into routine clinical practice**

Center's Organization: Data Core and Four Interrelated Study Teams



RAND's Definition of a Health System

- **Two or more health care organizations affiliated with each other through shared ownership or a contracting relationship for payment and service delivery**
- **A health system must have:**
 - **at least 1 acute care hospital**
 - **at least 1 physician organization**
- **“Specialty-only” systems are excluded (e.g., cardiac, cancer, orthopedics, pediatrics)**

Our Regional Partners

Washington
State Health
Alliance

Minnesota Community
Measurement

Wisconsin
Collaborative for
Healthcare Quality

Integrated
Healthcare
Association
of California



Purpose of Our Analyses

- **Identify health systems in the regions for which we have performance data**
- **Enable sampling of physician organizations (POs) for “deep dive” data collection**
- **Contribute information to AHRQ compendium of systems**
- **Gather information about attributes of health systems to support taxonomy work**

Secondary Data Sources: Minnesota, Wisconsin, and Washington

- **Health Market Review (Baumgarten)**
 - Large systems in each state, affiliated hospitals, number of affiliated physician organizations, counties of operation
- **American Hospital Association Annual Survey of Hospitals**
 - Hospital-level information on system membership
- **CMS Physician Compare**
 - Physician-level information on members
- **SK&A Physician Database**
 - Physician-level information on physician organization and system membership

Methods for Minnesota, Wisconsin, and Washington

- **Used Health Market Review to identify health systems affiliated with POs that report performance data to our partners**
- **Matched physicians to POs to link information from S&KA to performance data: identify additional systems, number and specialties of physicians, affiliated hospitals**
- **Matched physicians to POs to link information from CMS Physician Compare to performance data: number and specialties of physicians**
- **Used AHA Survey to verify and enhance list of hospitals affiliated with health systems**

Secondary Data Sources: California

- **California Department of Managed Health Care (DMHC)**
 - **Group-level information on health system membership**
- **California Office of the Patient Advocate (OPA)**
 - **Group-level information on number and specialties of physicians and affiliated hospitals**
- **Cattaneo & Stroud Medical Group Reports**
 - **Group-level information on numbers and specialties of physicians**

Methods for California

- **Used Department of Managed Health Care data to identify health systems affiliated with POs that report performance data to our partner**
- **Matched DMHC identification numbers to link information from OPA to performance data: number and specialties of physicians, affiliated hospitals**
- **Matched names of POs to link information from Cattaneo & Stroud to performance data: number and specialties of physicians**

Identifying Health System Attributes

- **Identify domains and variables (health system, PO, and hospitals)**
- **Define the variables/identify metrics**
- **Can the variables be obtained from secondary data?**
 - **Health care (AHA, SK&A, MD-PASS, HIMSS)**
 - **Business (Bloomberg, D&B, M&A)**
 - **News (Lexis/Nexis)**
 - **State regulatory agencies**
- **Which variables might predict high performance?**

Identifying Data for Measuring Health System Performance

- **Gather performance data from regional partners**
 - **HEDIS**
 - **Preventive, acute, and chronic care**
 - **CAHPS**
 - **Total cost of care (2 regions)**
 - **Resource use (ED utilization, generic Rx, readmits, etc.)**
- **3 regions have measures at PO and practice site level; one region has data only at PO level**

Constructing Performance Measures

- **Cross walk measure sets to identify common measures across regions**
- **Construct performance measures (HEDIS, outcome measures) using secondary data**
- **Construct an overall measure of health system performance**
 - **What dimensions of performance are measured?**
 - **How are they combined?**
 - **What level of performance is required to be “high performing?”**



HEALTH

Clarifying questions?

Discussion/other questions?

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Compendium plan overview

AHRQ's goals for the compendium

- **Primary objective of CHSP: promote broad dissemination of information on the characteristics and practices of high-performing health systems**
 - Particularly those practices focused on the use of patient-centered outcomes research (PCOR)
- **Additional goals:**
 - Synthesize findings on the association between health systems' performance and the use of PCOR
 - Enable users to access health system data and information about practices aimed at improving patients' outcomes
 - Interactive website will house information in a variety of formats, including a research linkage file

Audience for the compendium

- **Primary audience: the research community aiming to inform health care policy and practice**
- **Others:**
 - **Health system leaders and managers seeking to better understand how their systems compare to others**

Compendium plan

- **Web-based resource to allow users to access data on health care systems and their practices to improve patients' outcomes**

Coordinating Center's Compendium for Comparative Health System Performance

Informational Resources:

- CoE fact sheets
- Issue briefs and white papers
- Best practice documents
- Synthesis of literature
- Case studies

Data Resources:

- Guide to data sources
- Data tables
- Research-ready data files
- Data file documentation

Using data to identify health systems

Agenda: Using data to identify health systems

- **Hear from work by AHRQ and the 3 CoE teams**
- **Review lessons learned, challenges, successes**
- **Discuss options for summarizing (and disseminating) lessons learned**
- **Next steps for the data workgroup**

Guide to data sources

- **Develop user-friendly tool summarizing data sources**
 - Data owner
 - Cost
 - Data time period
 - Key data elements
 - Linkability

Next steps for Data Workgroup

- **Serve as forum to collectively develop manuscript?**
 - Describe data sources and steps involved to identify parent system and attribute physicians and hospitals
- **Explore opportunities across CoEs to share early findings in identifying systems**
- **Discuss ongoing data issues**

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Using data to identify health systems, Part 2

Agenda: Using data to identify health systems, Part 2

- **Discussion of other definitions of health systems**
- **Potential data sources**
- **Next steps**

Other health system concepts of interest to CoEs

- Interested in multiple levels within a system (e.g., individual practices, physician organizations) (Dartmouth)
- Contractually integrated organizations (e.g., ACOs) (NBER)
- Informal care systems, such as common referral arrangements (NBER)
- Organizations can be members of multiple health systems, such as a physician organization that participates in more than one ACO (RAND)

Coordinating Center literature review on health systems definitions

- **Objective**

- Assemble definitions of health systems

- **Approach**

- Snowballing approach based on initial set of literature
- Inclusion criteria: seminal pieces; otherwise, pieces from 2007 forward; US only
- Qualitative analysis of health system definitions, including their defining characteristics and types of providers and organizations included
- Planned:
 - Deeper dive into the characteristics of systems

Next steps in defining health systems

- Identify key gaps in the literature relevant to defining and characterizing health care systems
- Finalize issue brief
- Consider opportunities for a collaborative manuscript on “defining health systems”

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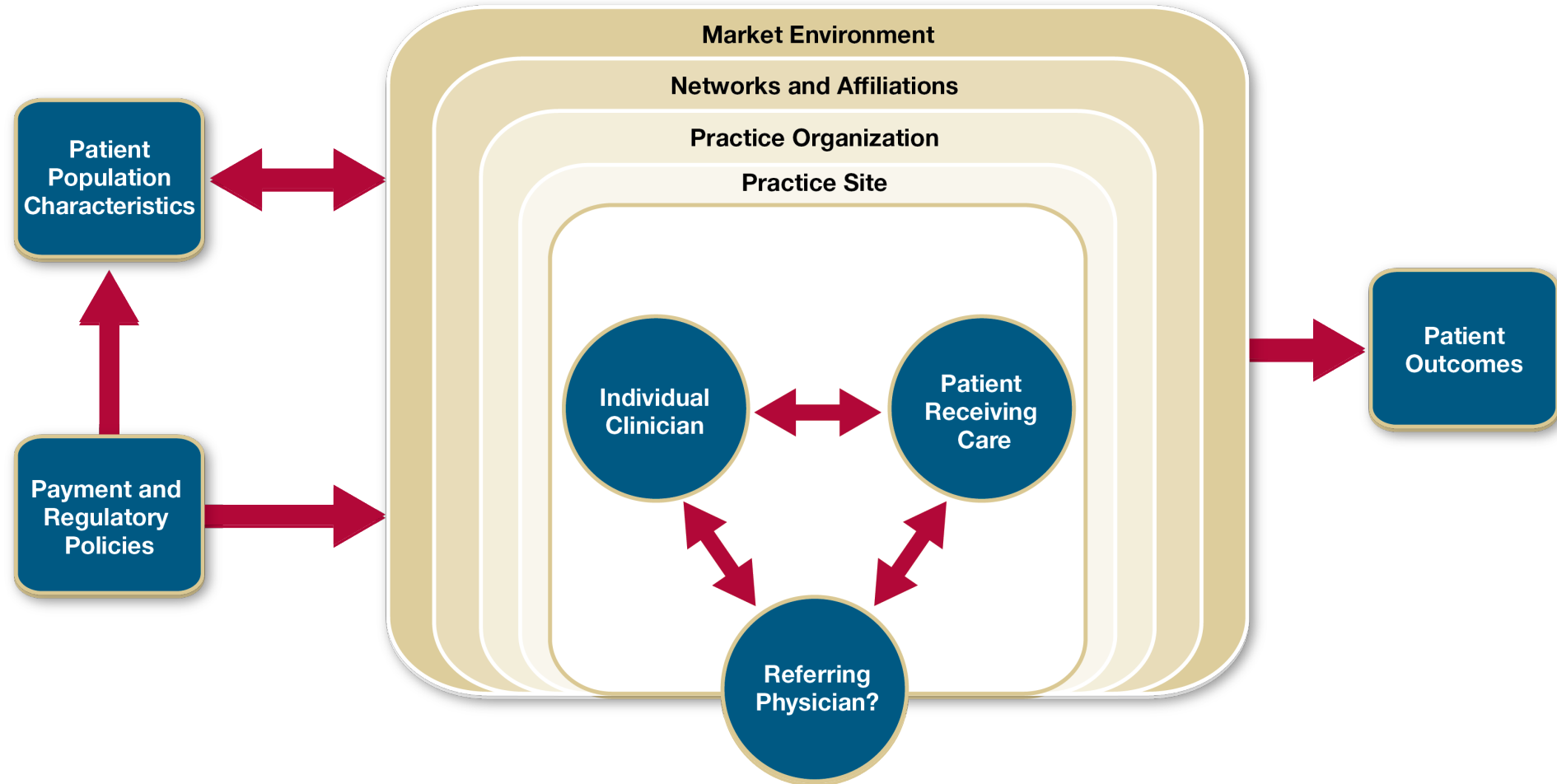
Beyond definitions: Measuring health system attributes

One AHRQ-funded framework for describing organization characteristics

- **Capacity**
 - Physical assets, capital assets, services
- **Organizational structure**
 - Configuration, leadership structure and governance, research and innovation, professional education
- **Finances**
 - Payment received, provider payment systems, ownership, financial solvency
- **Patients**
 - Patient characteristics, geographic characteristics
- **Care processes and infrastructure**
 - Standardization, performance measurement, health information systems, care team, clinical decision support, care coordination
- **Culture**
 - Patient centeredness, cultural competence, competition-collaboration continuum, community benefit, innovation diffusion, working climate

These categories were identified based on the following report: Pina, I.L., P.D. Cohen, D.B. Larson, L.N. Marion, M.R. Sills, L.I. Solvert, and J. Zerzan. "A Framework for Describing Health Care Delivery Organizations and Systems." *American Journal of Public Health*, vol. 105, no. 4, 2015, pp. 670–679.

Another AHRQ-funded framework for influences on evidence-based recommendations



Adapted from Reschovsky et al Factors Contributing to Variations in Physicians' Use of Evidence at The Point of Care. JGIM August 2015

Key attributes noted by TEP

- Presence of unified electronic communication/ health IT system
- Presence of a “parent” organization
- Degree to which decision making is centralized or decentralized
- Degree to which the system provides care along the continuum and across specialties
- Financial integration and alignment of incentives
- Multiple levels of influence within health systems
- Contractual relationships

Priorities for work on health system attributes- given “working definition”

- **Foundation model?**
- **“Comprehensive care”- Specialty composition?**
- **Other health systems attributes to use for near-term reports(short-term goal of the compendium)?**
- **Characterizing “integration” in health systems**
- **“Market” for health systems**

Market environment

- **At the May meeting, noted the need to develop a “shared language” re market characteristics**
- **Several potential considerations noted**
 - **“Traditional” metrics for market competitiveness/consolidation (Payers; providers)**
 - **Provider competition on what? (Primary care, specialty care, hospital care, specific specialized services?)**
 - **Provider competition where? (Within MSA? Within local region? Multi-state-region? National?)**

Health system attributes: Markets

- **Describe aspects of three example health systems**
 - Organizational structure
 - Historical roots
 - Payers
 - Providers
 - Services offered
 - Size and reach
- **Consider market attributes from a health system perspective**

Example Health System: Kaiser Permanente

- Large vertically integrated healthcare system comprised of Kaiser Foundation Hospitals, the Kaiser Foundation Health Plan, and the Permanente Medical Group
 - founded in 1945
 - Operates in 7 markets
 - Annual operating revenue >60 billion
- Payer mix: Kaiser Foundation Health Plans
- Health care services generally include: primary care, specialty care, hospital, laboratory and pharmacy services
 - Featured clinical programs in cancer care, cardiac care, stroke care, and diabetes care
 - Available specialized services
 - Gamma knife: yes
 - Spine care: yes
 - Bone marrow transplant: yes
 - Robot-assisted prostate surgery: yes
 - Service availability: *varies by region*
 - Direct access to specialty care: *no*

Kaiser Permanente (2)

- **Since 1973 they've used a computerized medical record for all patients**
 - Previous homegrown EHR replaced with EPIC in 2004
- **Promote multiple ways to access care: online, phone, email, and in person**
- **Operates in seven local markets**
 - Northern California, Southern California, Colorado, Georgia, Hawaii, Mid-Atlantic States, Northwest
- **Comprised of:**
 - 38 hospitals
 - 630 medical offices
 - More than 18,000 physicians, 51,000 nurses and 190,000 employees

Example Health System: Catholic Health Initiatives

- National faith-based nonprofit formed in 1996 through the consolidation of four catholic health systems
 - Annual operating revenue of 15.2 billion
 - Facilities in 19 states
- Payer mix
 - 40% managed care
 - 34% Medicare
 - 11% Medicaid
 - 6% commercial
- Health care services generally include: primary care, specialty care, hospital and laboratory services
 - Featured clinical programs in oncology, orthopedic and spine care, and cardiovascular care
 - Example specialized services
 - Gamma knife: yes
 - Spine care: yes
 - Bone Marrow transplant: yes
 - Robot-assisted prostate surgery: yes
 - Service availability: *varies by region*
 - Direct access to specialty care: *yes*

Example health system: Catholic Health Initiatives

- **Recently developed 12 “clinically integrated networks” to promote new models of care**
 - Networks partners affiliate hospitals with its employed physicians and community providers to improve efficiency and provide the full spectrum of services
 - Promotes home visits and virtual health
- **Comprised of:**
 - 103 hospitals in 19 states, including four academic health centers and 30 critical-access hospitals
 - Other health care services include community health service organizations, home health agencies, and long term care facilities
 - Also includes 10 insurance plans /100,000 covered lives
 - 95,000 employees including 3,950 employed physicians and advanced practice clinicians

Example health system: Southern Illinois Health Care

- **Regional integrated healthcare system begun in 1938 by two physicians**
 - Acquired first hospital in 1946
 - Annual operating revenue of 528 million
 - 7 county area of southern Illinois
- **Payer mix (in the service area)**
 - 33% employer sponsored 16% Medicare
 - 30% Medicaid 11% uninsured
- **Health care services include: primary care, specialty care, hospital and laboratory services**
 - Featured clinical programs in cancer, heart and vascular, rehabilitation, and joint replacement
 - **Example specialized services**
 - Gamma knife: *no* Bone Marrow transplant: *no*
 - Spine care: *yes* Robot-assisted prostate surgery: *yes*
 - **Direct access to specialty care: *yes***

Example health system: Southern Illinois Health Care

- **Joined the BJC Collaborative in 2013, a partnership among health care systems throughout Illinois, Missouri and Eastern Kansas**
 - **While remaining independent, BJC Collaborative members work together to improve access to and quality of medical care for patients**
- **Operates in Southern Illinois, serving a seven county area/population of ~340,000**
- **Comprised of:**
 - **SIH Medical Group consisting of 200 providers in primary care and specialty care practicing in physician offices, outpatient clinics and four walk-in clinics**
 - **Three inpatient hospitals located within 19 miles of one another**
 - **3,400 employees**

Some characteristics of health system “market”

- **Demographics**
- **Organization of health care services**
 - Clinicians
 - Hospitals
 - Other community resources
- **Other local market factors (for example)**
 - The presence and focus of local multi-stakeholder initiatives
 - Local employer dominance and expectations
 - Local payer dominance, reimbursement models/ payment arrangements
 - Payer rate differences (Commercial, Medicaid)
 - Level of per capita health care spending and utilization
 - Malpractice environment
 - Community roots (e.g., some health systems have long histories in their communities)

Discussion/questions

- Other features relevant to understanding the “market” for a health system?
- Key challenges in defining market characteristics for health systems?
- Value in developing a bibliography on characterizing the “market” for health care systems?

Next steps for work group on health system characteristics?

- Identifying Foundation model systems?
- Defining “Comprehensive care:” Specialty composition?
- Identifying other key health systems attributes to use for near-term reports
- Characterizing “integration” in health systems?
- Exploring challenges in defining market characteristics for health systems?

Agenda for the Day

- Welcome (9:00–9:20)
- CoE updates and progress (9:20–11:00)

Break (11:00–11:10)

- Compendium plan overview (11:10-11:40)
- Using data to identify health systems, Part 1 (11:40–1:00)

Lunch (1:00–1:30)

- Using data to identify health systems, Part 2 (1:30–2:30)
- Beyond “definitions”: Measuring health system attributes (2:30–3:20)

Break (3:20–3:30)

- **Measuring health system performance (3:30–4:15)**
- **Plans for products and dissemination activities (4:15–4:45)**
- **Reflections on the day and closing (4:45–5:00)**

Measuring health system performance

Proposed process

- **Identifying common measurement topics**
- **Review planned measures by topic area**
- **Discuss opportunities for harmonization***

***NOTE: We recognize that the ability to compare results will depend on the data source that is used and the time period from which the data is derived**

Topics identified during July call

	Dartmouth	NBER	RAND
Utilization	X	X	X
Cost	X	X	X
Care coordination/ transitions of care	X	X	X
Evidence-based care	X	X	X
Patient safety	X	X	X
Patient experience	X	X	X

Data sources

- **Alignment of data sources**
 - Claims (Medicare, commercial)
 - PQRS scores
 - CAHPS results (Medicare, commercial, other)
 - Other?
- **Alignment of data collection time frame**

Next steps for future work group discussion on performance measures

- Finalize core set of measures
- Consider data sources
- Identify “efficiency” and “quality” constructs to use in review of literature – gaps in evidence regarding “health systems”

Plans for products and dissemination activities

Agenda: Plans for products and dissemination activities

- **CHSP initiative website demonstration and future plans**
- **Review day's discussions on the Compendium and pipeline of products for dissemination**

CHSP website demo

- Initiative's website content will evolve as new resources become available
- Home page
 - Highlight new products
 - Spotlight areas of high interest to key stakeholders
- Future content
 - Reports and briefs
 - Topical bibliographies
 - Multimedia
 - Data Compendium
 - Data visualizations
 - Data dashboard
- <http://www.ahrq.gov/chsp>

Next steps for dissemination activities

- **Compendium development**
- **Products pipeline**
- **Public “Launch”**
 - **Website**
 - **Webinar**

Reflections on the day/next steps

Thanks!!