The presentation will begin shortly.

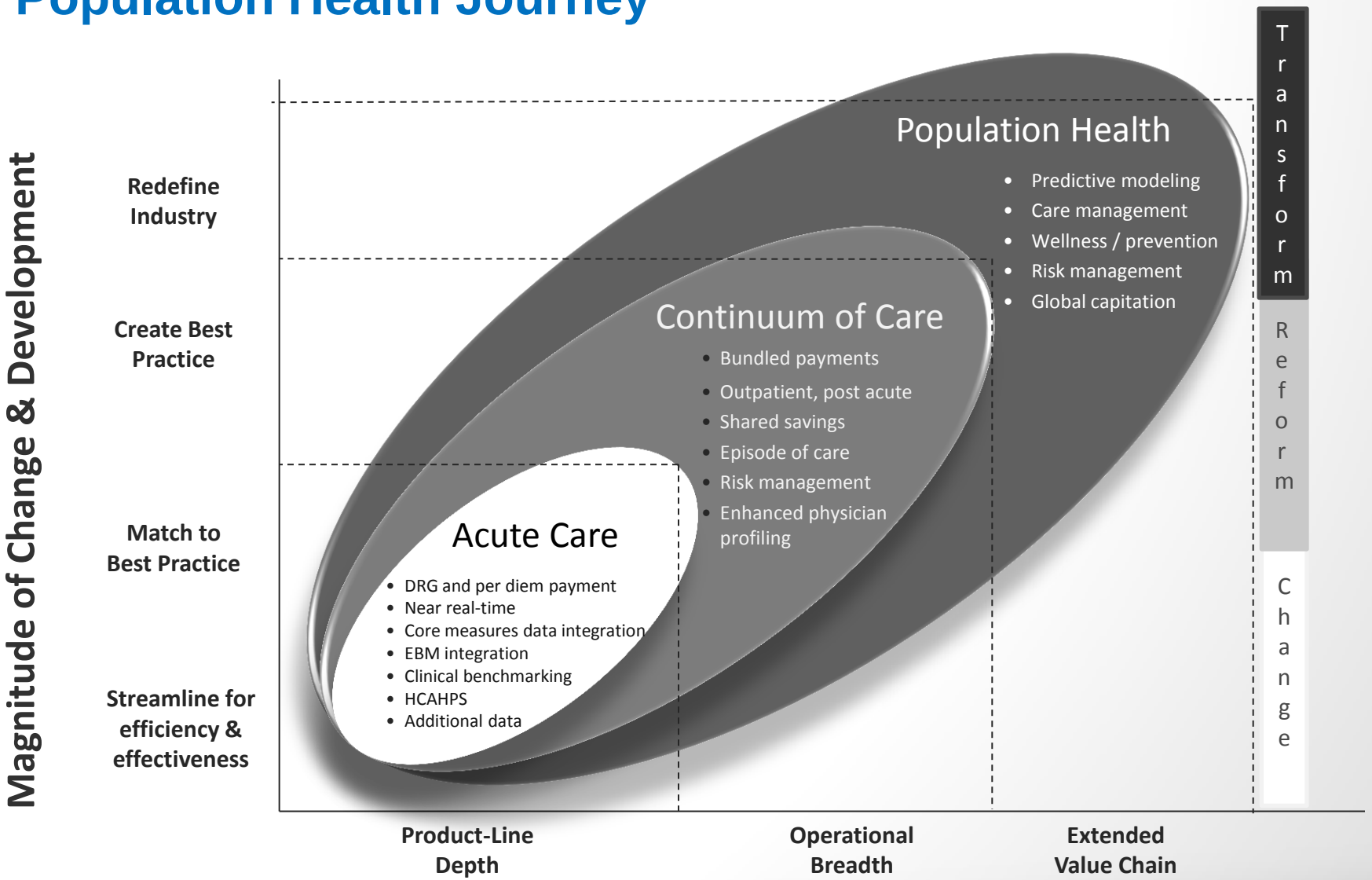
The Progressive Journey Toward Population Health Management

- **Lee B. Sacks, MD**
  CEO, Advocate Physician Partners
  EVP, Chief Medical Officer, Advocate Health Care
- **Michael Udwin, MD**
  National Medical Director, Truven Health Analytics

American Hospital Association

TRUVEN HEALTH ANALYTICS

Population Health Journey

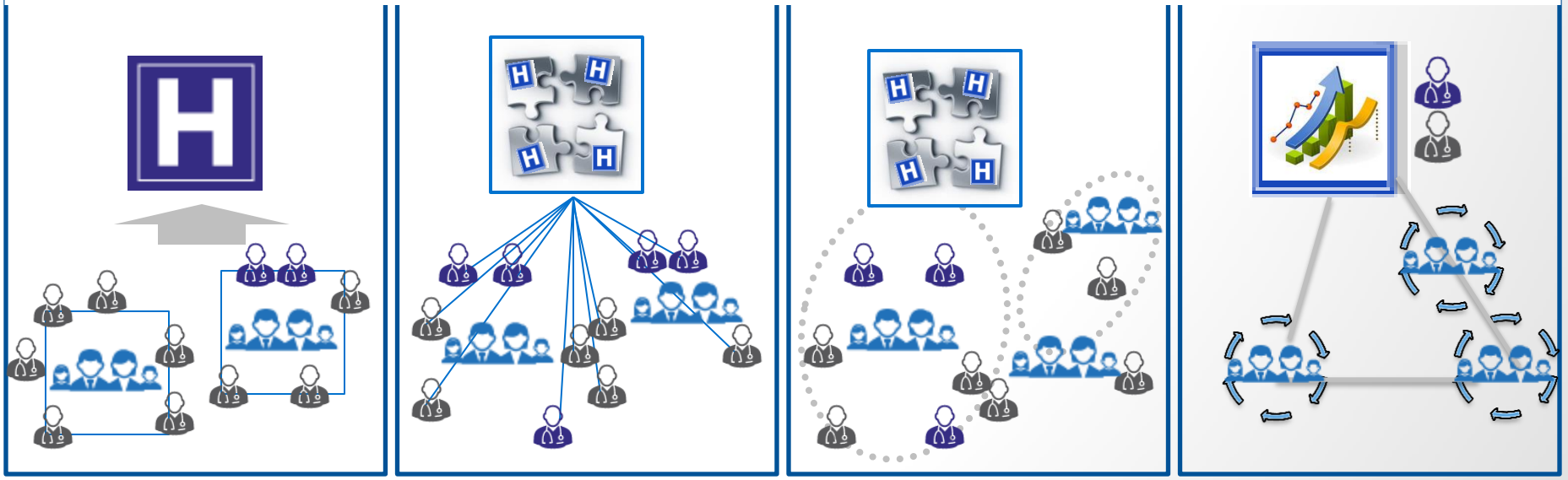


No one ever built a bridge just to build a bridge.
They built it to cross a chasm.

TRUVEN HEALTH ANALYTICS

Multi Stage Approach Towards Population Health

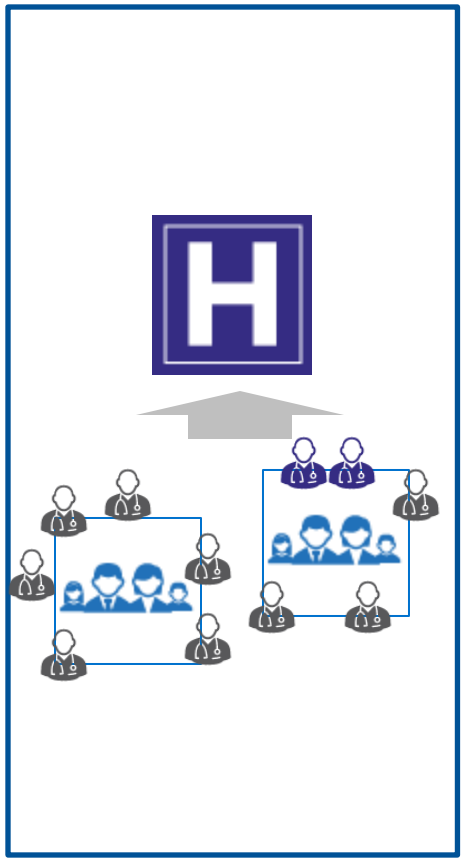
Affiliated Delivery	Engaged Delivery	Coordinated Care	Performance Focused Health
85%+ Fee for Service	70-85% Fee For Service + Pay for Performance	60-75% Fee for Service + Shared Savings + Bundled Payments	< 60% Fee for Service Shared Risk + Capitation



Owned Affiliates

TRUVEN HEALTH ANALYTICS

Stage 1: Affiliated Delivery



Business Model	• 85%+ Predominantly Fee for Service • Optimize encounter support via optimal outcomes and benchmarks
Operations Focus	• Optimize legacy data silos and insights • Boost encounter interfaces via coding and EMR • Migrate manual documentation via checklists
Network Focus	• Participate in networks opportunistically • Leverage panels/referrals based on regional dynamics
Patient Engagement	• Engaged via Community Needs Assessment and targeted outreach • Continuous Instruction via discharge notes • Coordinate care through PCP
Physicians	• Integrate via PHOs and MCO contracts • Moderate incentives on limited risk contracts
Analytics	• Tailored by service line preferences • Aggregate and normalize patient data • Reduce readmissions via root cause solution integration • Improve outcomes and comply with CMS metrics • Achieve targeted growth and margin

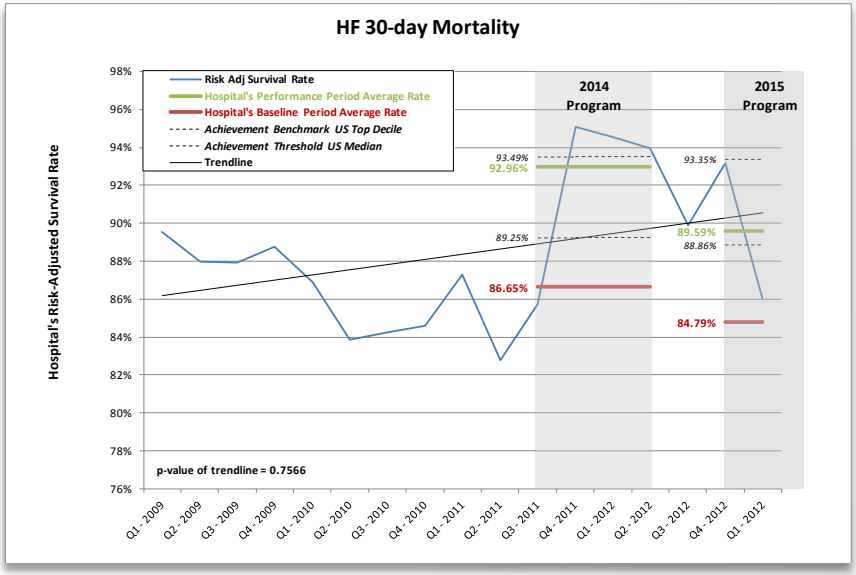
Moving from Affiliated to Engaged Delivery: Network Enabling Investment

- Pilot shared savings in risk contracts or set bundled care to align physicians as part of a risk-based system of care
- Integrate and contract with high value physicians for a market or geography (e.g. volume, referrals, outcomes, financial impact)
- Partner and contract provider site of care and specialty mix (PCP/Specialist/Allied Professional) to support risk-based strategies
- Build analytic information technology infrastructure to support clinical integration, care coordination and population health analytics

TRUVEN HEALTH ANALYTICS

Optimizing Affiliated Providers: Hospital Performance

- Do it with a dashboard:
  - Refining and Measuring Performance
- Trend over time
- Find the drivers: Quality impact on readmissions



Readmits	Obs readmits	Readmit comparative	Readmit oppty	LOS norm oppty*	LOS benchmark oppty*	Cost norm oppty*	Cost benchmark oppty*	Unadjusted cost per case	Total unadjusted cost
Same day	235	188.45	46.55	(16.00)	96.57	($147,811.68)	$44,053.86	$3,152	$740,780
1-7 days	559	515.11	43.89	627.70	1,088.81	($149,945.92)	$866,167.37	$7,651	$4,276,856
8-14 days	410	360.28	49.72	679.81	992.13	($50,032.43)	$631,746.30	$7,320	$3,001,388
15-30 days	662	560.74	101.26	823.43	1,363.70	($396,048.14)	$744,667.01	$7,135	$4,723,486
0-30 days	1,866	1,624.58	241.42	2,114.95	3,541.21	($743,838.17)	$2,286,634.53	$6,829	$12,742,510

* Benchmark: Large Community Hospitals (Top 10%)

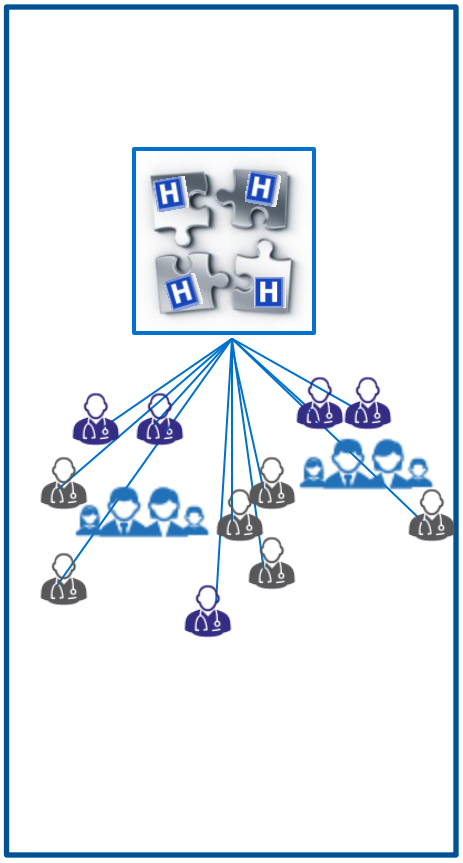
* Natl. norm uses the U.S. National Average.

* LOS and Cost comparisons are for initial admission.

Opportunity Strength Statistically significant

TRUVEN HEALTH ANALYTICS

Stage 2: Engaged Delivery



Business Model	• 70-85% FFS + P4P contracts (no downside implications) • Introduce new value management process
Operations Focus	• Clinical integration pilots underway • Portal deployment shows dashboards and clinical decision support with greater use demands
Network Focus	• Boost hospitals alignment to access contracts and trial risk • Scale drives clinical integration access to EMR, dashboard, and clinical decision tools
Patient Engagement	• Disease and health interest groups engagement • Discharge education via EMR fulfilling Meaningful Use
Physicians	• Stronger hospital alignment to access technology, contracts and service-line directions • Increased physician referral retention and clinical reporting
Analytics	• Deploy measures and dashboards • Launch benchmarks and real-time quality measures • Pilot disease and contract savings and outcomes

From Engaged Delivery to Care Coordination: Getting the Data to Manage Your Network

Data-Driven Strategy

- Optimize patient care venue
- Identify in-network patient outcomes with tracking for out-of-network expense, sites and outcomes to evaluate performance on an ongoing basis
- Establish population and contract-specific measures, drivers and reporting for dashboard, and drill down for each stakeholder group across the network
- Operationalize integrated data roadmap investment to prepare population health decision support

TRUVEN HEALTH ANALYTICS

Enabling Delivery For Each Stakeholder

Business Leaders

Risk Management

- Population risk management
- Performance management
- ROI analysis
- Contract management
- Network management
- Marketing campaigns
- Provider collaboration

Clinical Leaders

Clinical Improvement

- Clinical outcomes reporting
- Patient registries
- Population analytics
- Population and provider benchmarking
- Validate predictive risk assessment
- Measures and reporting

Care Givers Managers

Care Management

- Care management
- Longitudinal, single-patient record
- Evidence-based content and decision support
- Alerts, surveillance
- Secure messaging
- Work lists
- My patient registry
- Manual data capture

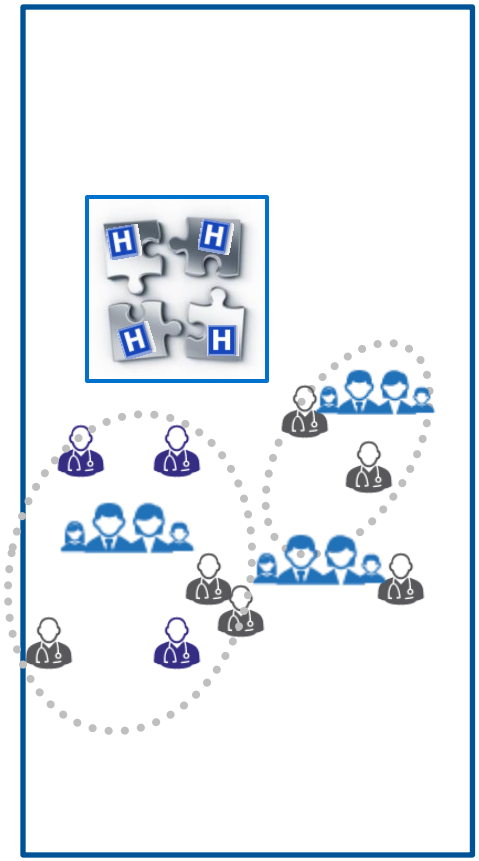
Consumers

Patient Engagement

- Consumer engagement
- My medical record
- Personalized health messaging
- Secure messaging
- Health-risk appraisal data
- Integrated health content

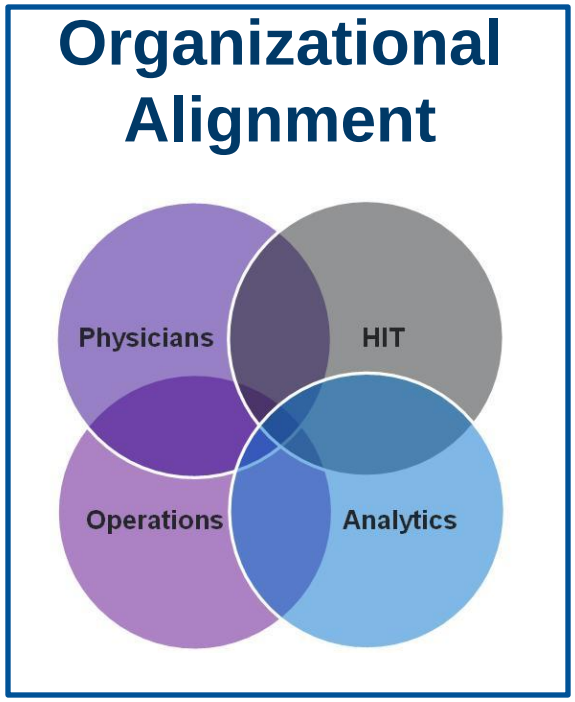
TRUVEN HEALTH ANALYTICS

Stage 3: Coordinated Care



Business Model	• 60-75% FFS/ 25-40% risk contracts • Implementation of shared savings and bundled payment contracts with FFS => FFV • Shifting from revenue to cost center
Operations Focus	• Improve cross-care setting communication via EMR with capacity to risk stratify patient data • Pilot patient engagement to solve care gaps and measure intervention outcome
Network Focus	• Optimize EMR information extraction and use • Deploy interoperable platform showing integrated clinical and administrative data
Patient Engagement	• Patient-centered care with disease or episode navigators and care teams • Self-help solutions for incented least-cost setting
Physicians	• Serve as care team “CEO”, preventing readmissions and adverse events • Shared risk for in-network care and bundles
Analytics	• Identify gaps, segment solutions • Improve intervention effectiveness • Attributed patient management Indicators • Population disease patient engagement savings or service cost

From Care Coordination to Performance Focused Health: Guiding Your Network



- Develop short- and long-term roadmap for perfect population health management capabilities
- Set metrics to leverage baseline performance, in-system best practice targets, and compare groups and perfect performance based on ROI targets
- Sequence strategies and investments to align workflow and analytics are aligned
- Establish innovation and change management means that are sensitive to patience centered care

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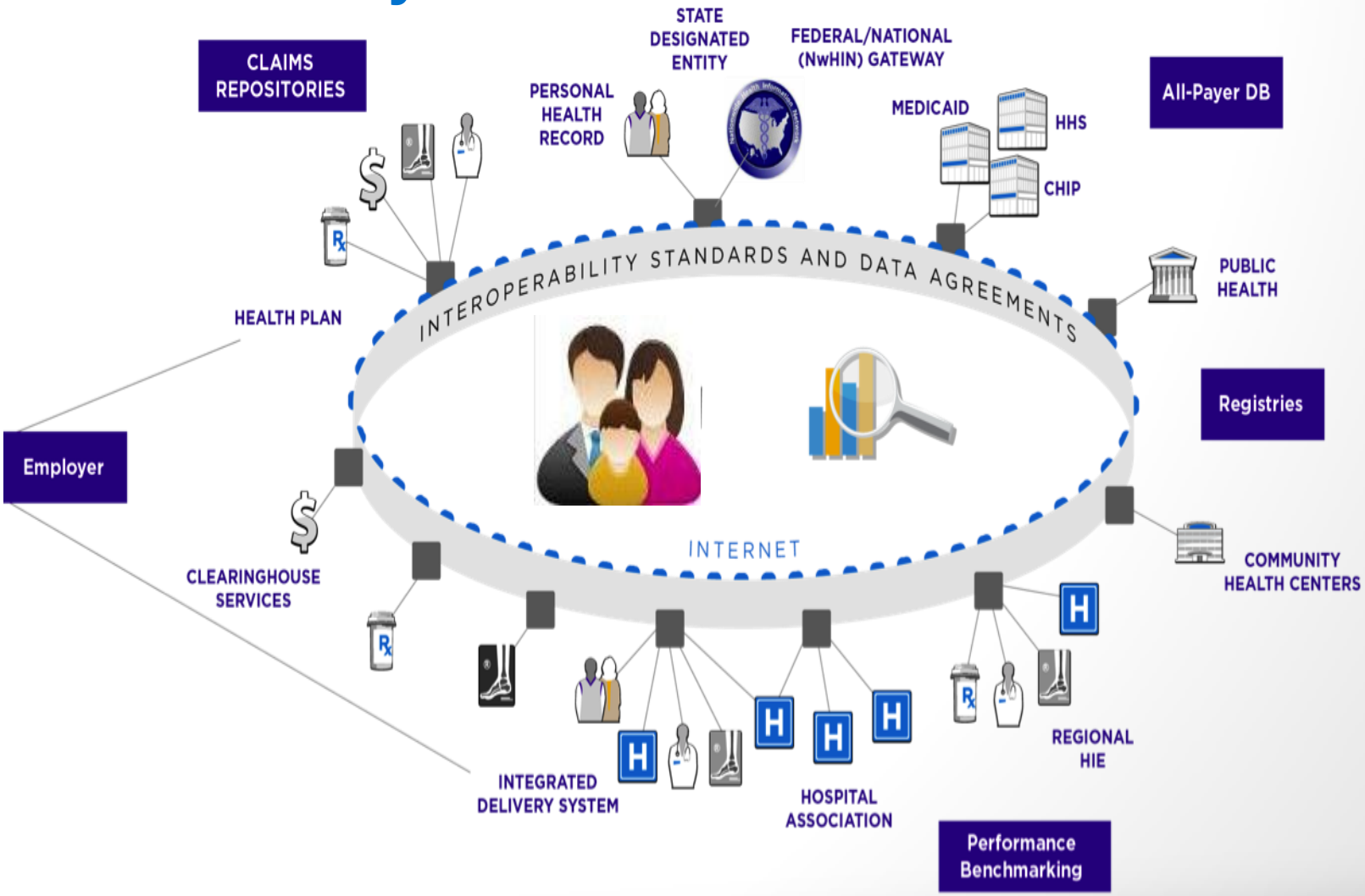
Building the Performance Driven Population Health Ecosystem



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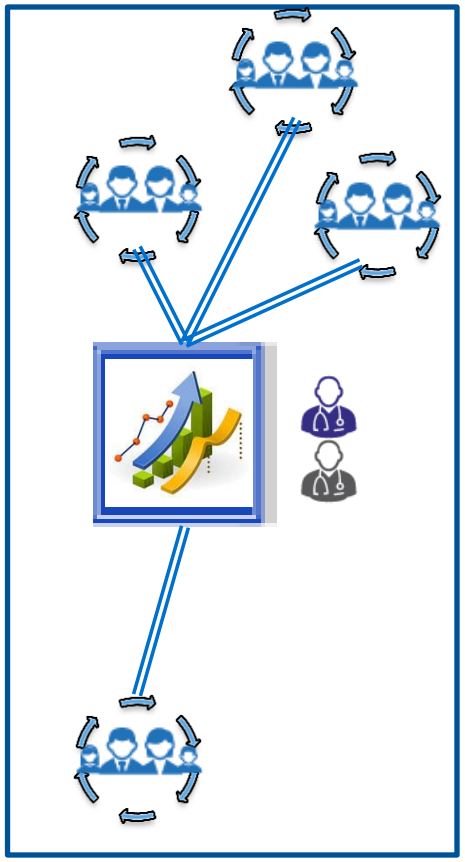
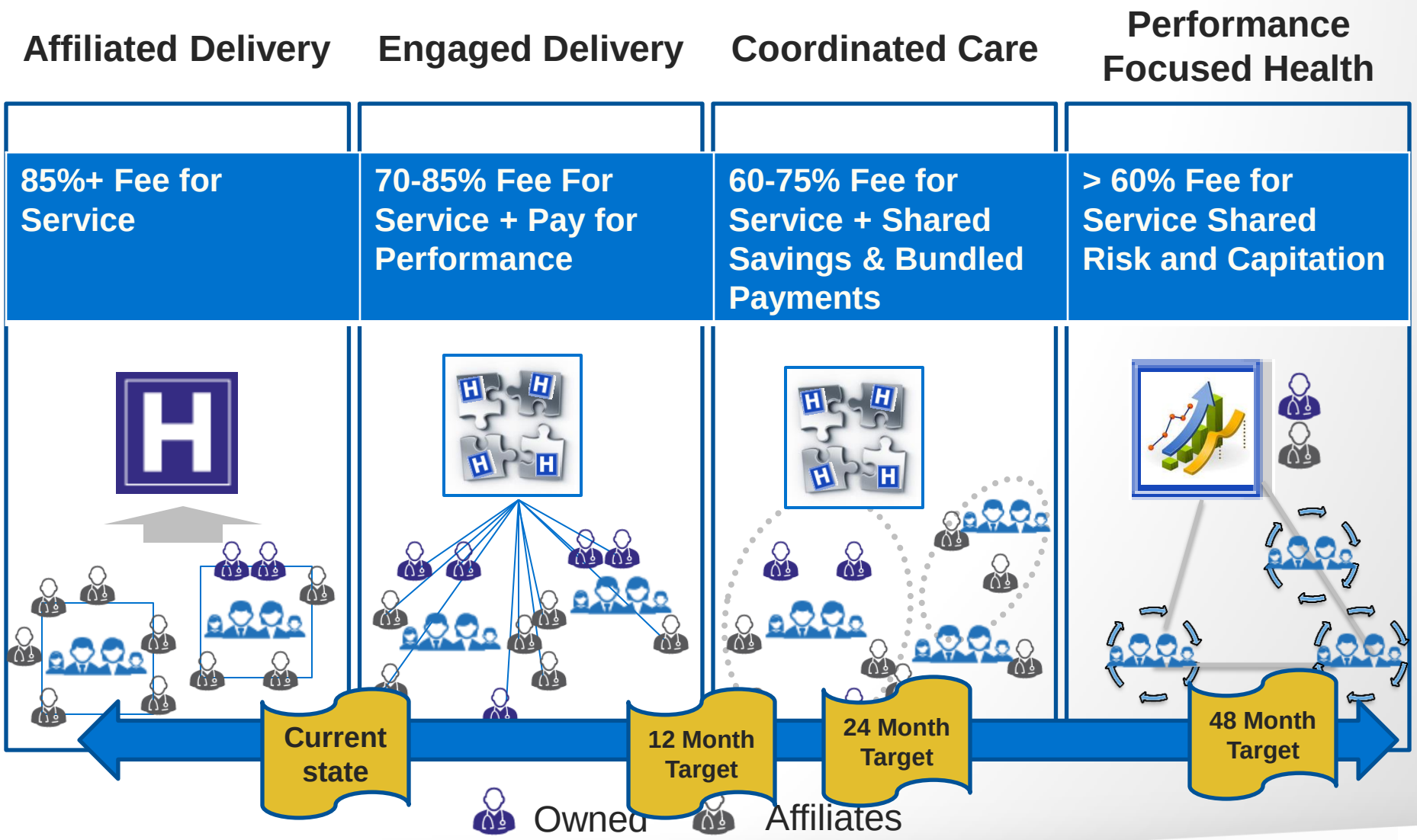
Stage 4: Performance-Focused Health



Business Model	• 40%+ at risk revenue and < 60% fee for service • Equivalent risk/ fee for service majority of revenue from shared risk, capitation • New partners to optimize cost center performance
Operations Focus	• Driven by achieving perfection and continuous improvement • Focus on innovation to reinvent care delivery
Network Development	• Expand network into adjacent services and solutions • Set portfolio for expanded risk and outcomes • Commit to innovations in care setting delivery
Patient Engagement	• Geared towards supporting patient decisions in patient-centered care model • Needed transparency for quality, cost and access care
Physician	• Physician lead or co-lead services to align ROI by population • Commit to physician-enabled 'CEO' innovations for care delivery
Analytics	• Anticipatory predictive indicators for real-time decisions • Honed optimized outcomes and resource use • Measure and feedback at-risk contract performance • Data to respond to shared risk resource/contract ROI indicators

Multi-Stage Approach Towards Population Health



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Questions?

1. How will we advance our P4P risk profile?
2. What's needed to perform well in payer/employer incentive programs?
3. What are our next-stage network requirements?
4. How will we engage patients in their self-care post encounter?
5. What is needed to align physicians as "CEO" of their care team?

Moving forward by choosing to make the right adjustments

TRUVEN HEALTH ANALYTICS

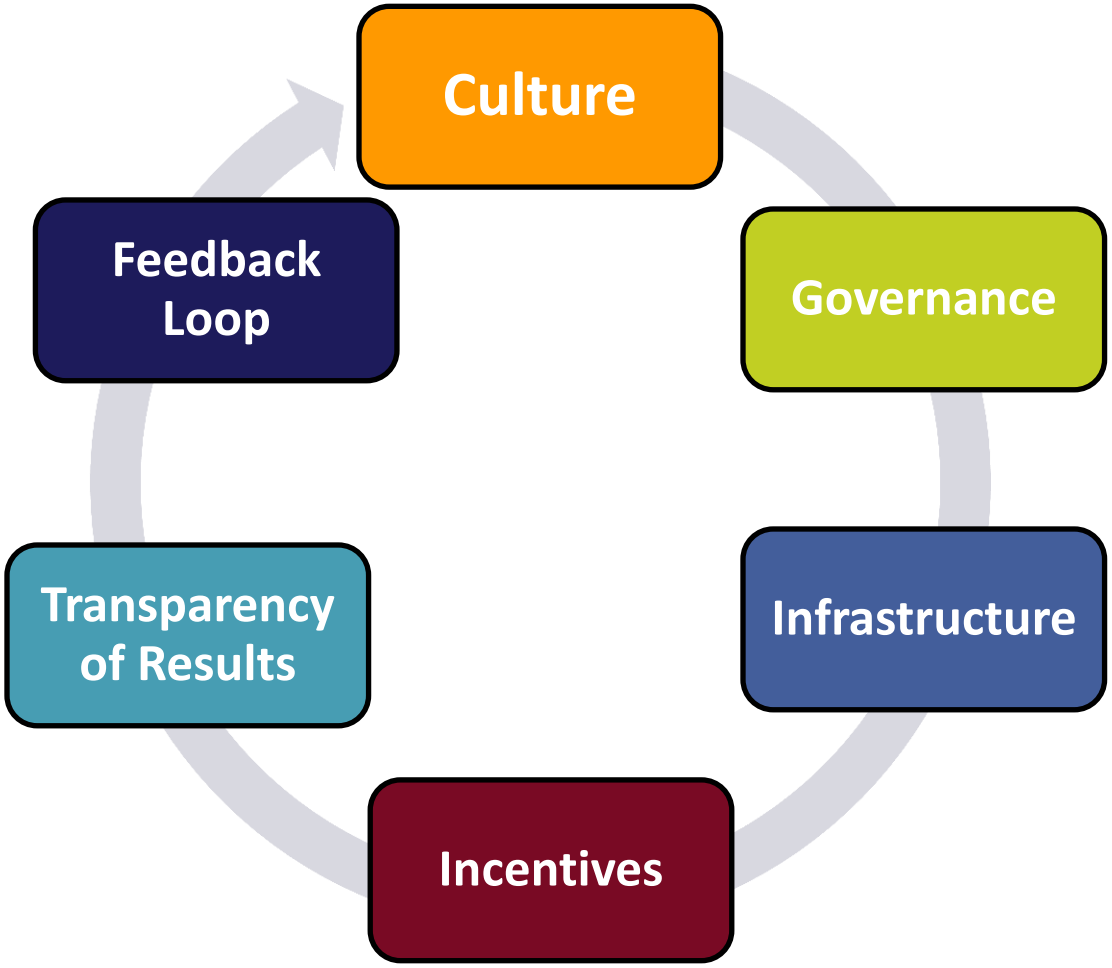
Creating A Culture Of Engaged Physicians For Population Health

Lee B. Sacks, MD
CEO, Advocate Physician Partners
EVP – Chief Medical Officer, Advocate Health Care

AHA / Truven Webinar
July 9, 2014

Advocate Health Care

Key Drivers Of Physician Engagement



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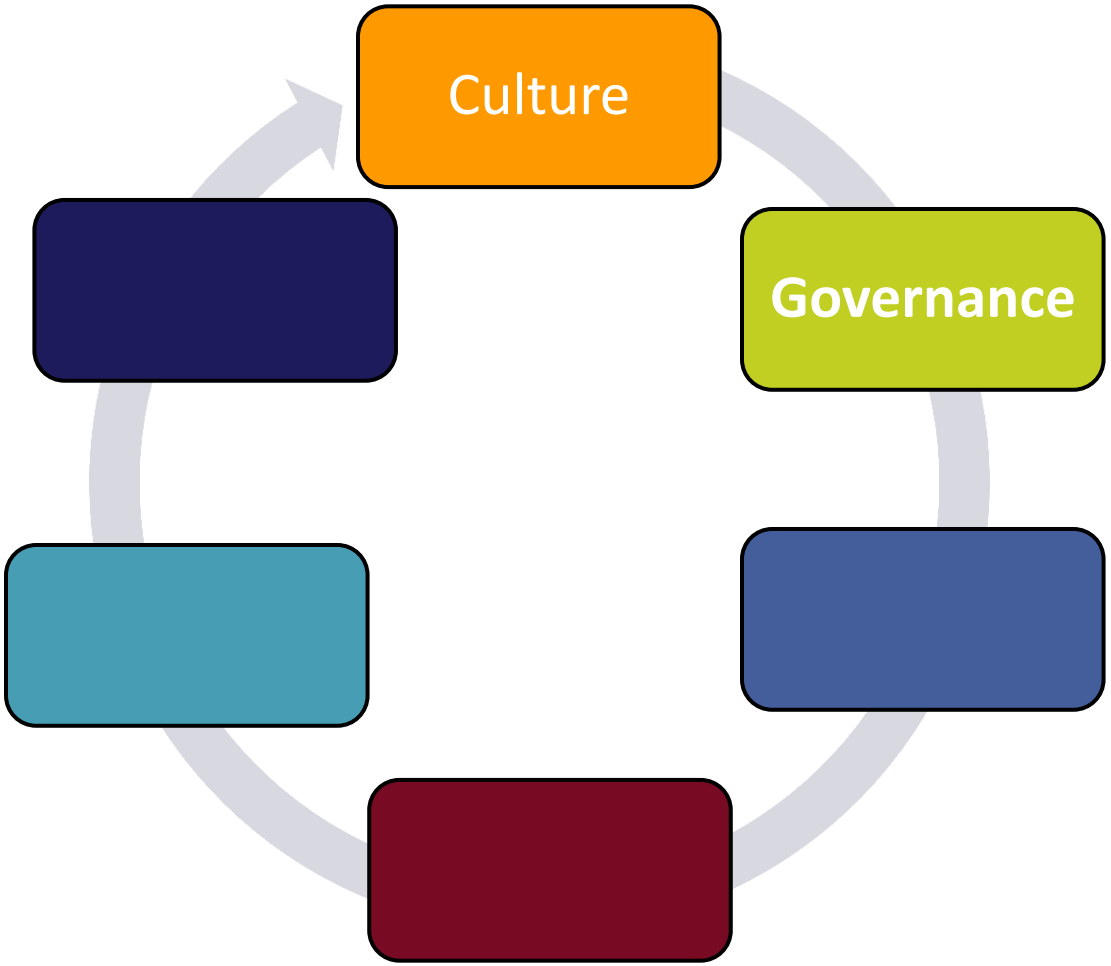
Key Drivers Of Physician Engagement



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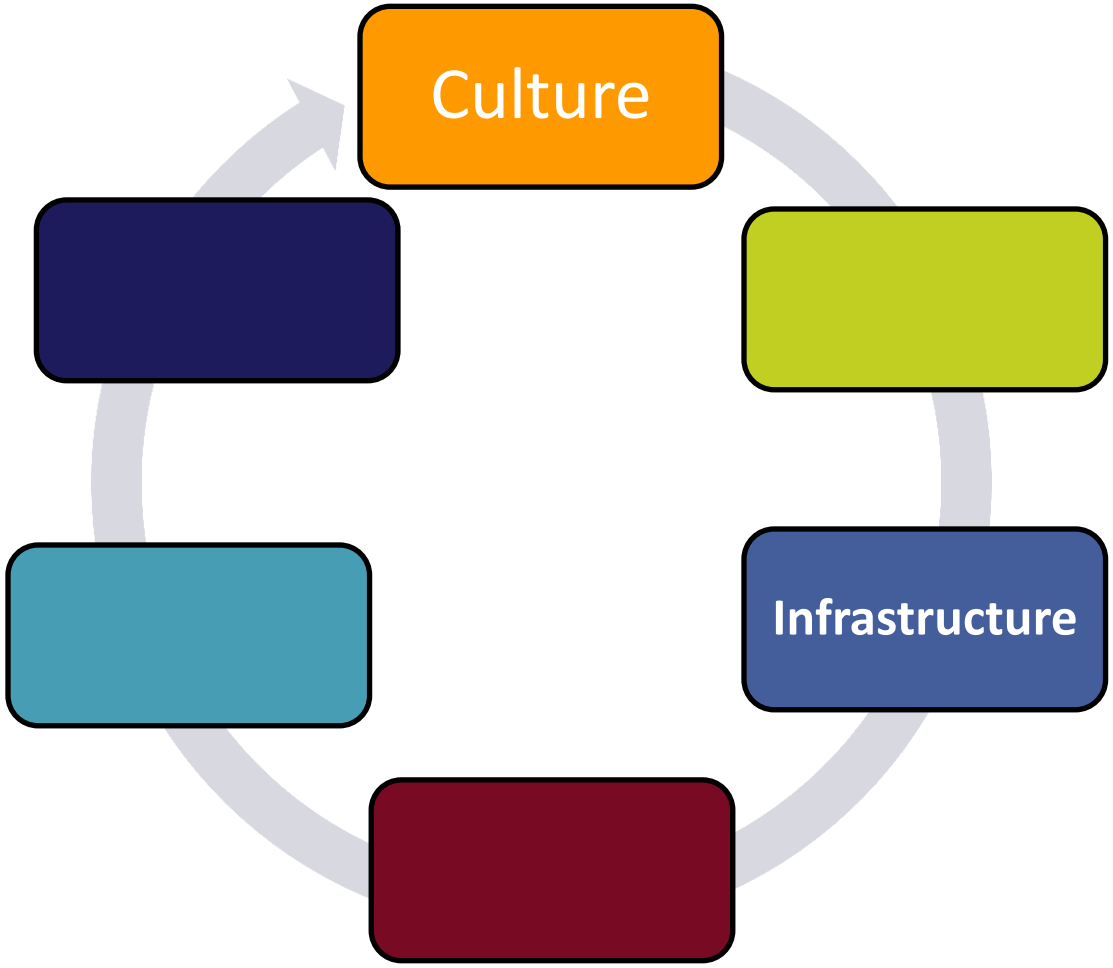
Shared Governance Model

- Physician leadership
- Robust discussion
- Data and analytics
- Common vision
- Healthcare is local
- Trust builds over time

Key Drivers Of Physician Engagement



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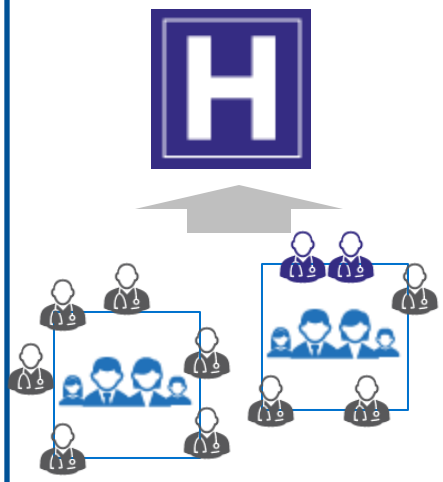
Multi Stage Approach Towards Population Health

Affiliated Delivery

85%+ Fee for Service

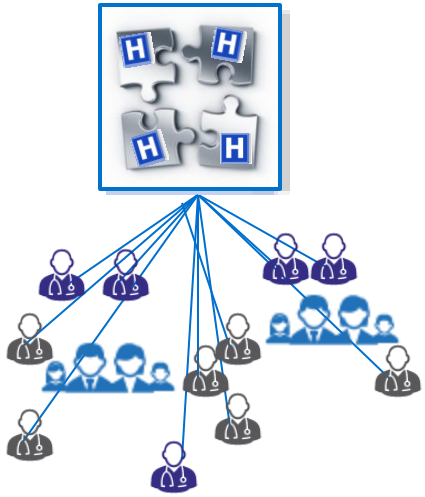
FFS Only | P4P | PCCM + P4P



Engaged Delivery

85%+ Fee for Service

PCMH | PCMH + Health Home | Network of PCMH

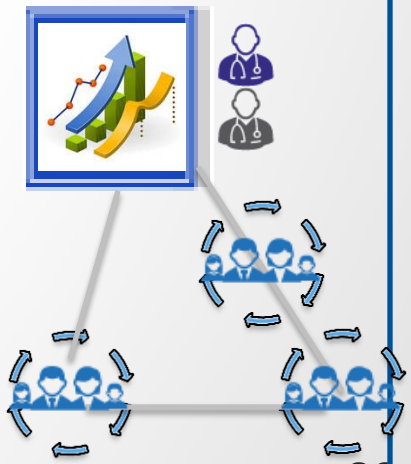


Coordinated Care

Bundled Care | Employer Bundles

Performance Focused Health

ACOs | MCOs



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Owned Affiliates

TRUVEN HEALTH ANALYTICS

Infrastructure

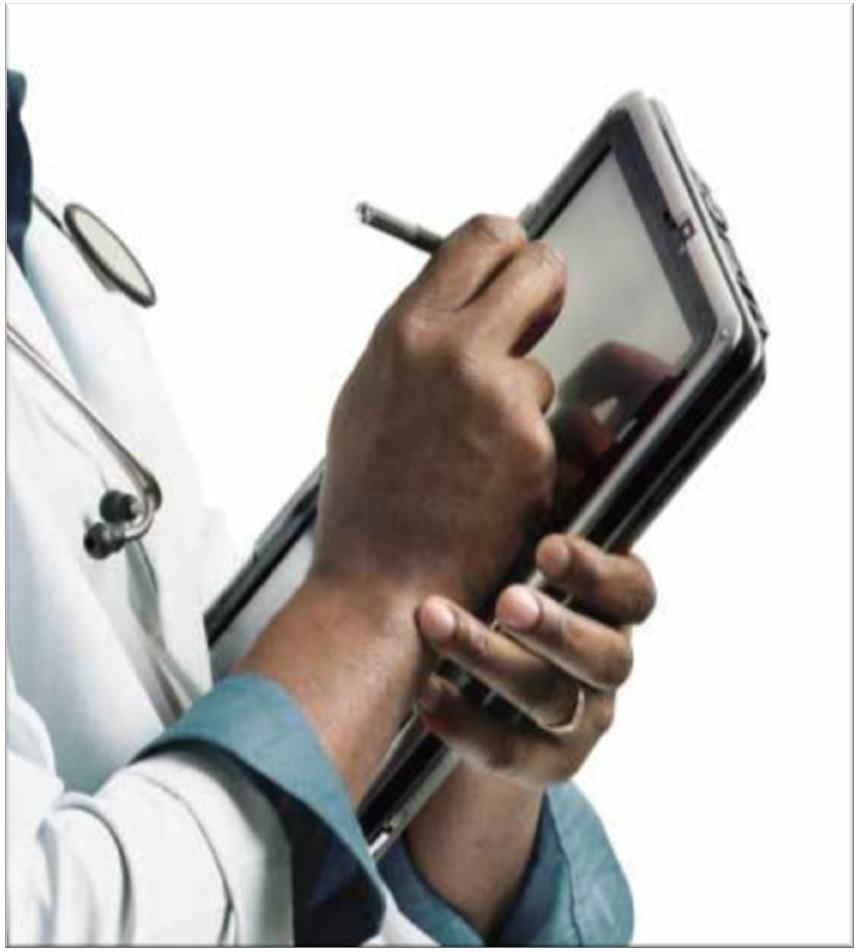
- Local leadership
- Supports small aligned practices
- Technology
- EMR
- Value-added services
- Coaching

Physician Support: Advancing Technologies

Year	
2004	• High speed internet access in physician offices • Centralized longitudinal registries • Electronic referral management application/clinical decision support for HMO • Access to hospital, lab and diagnostic test information through a centralized clinical data repository (CareNet and CareConnection)
2005	• Electronic Data Interchange (EDI)
2006	• Computerized Physician Order Entry (CPOE) • Electronic medical record roll out in employed groups
2007	• Electronic Intensive Care Unit (eICU) use
2008	• E-Prescribing
2009	• Web-based point-of-care integrated registries (CIRRIS)
2010	• E-learning physician continuing education • Electronic medical records roll out in independent practices
2011	• Care management software plus analytics
2012	• Electronic referral management application/clinical decision support for PHO

IT Solutions

- Risk stratification
- Care management workflow and patient documentation
- Web-based data warehouse and reporting
- Predictive modeling
- Advanced disease registries



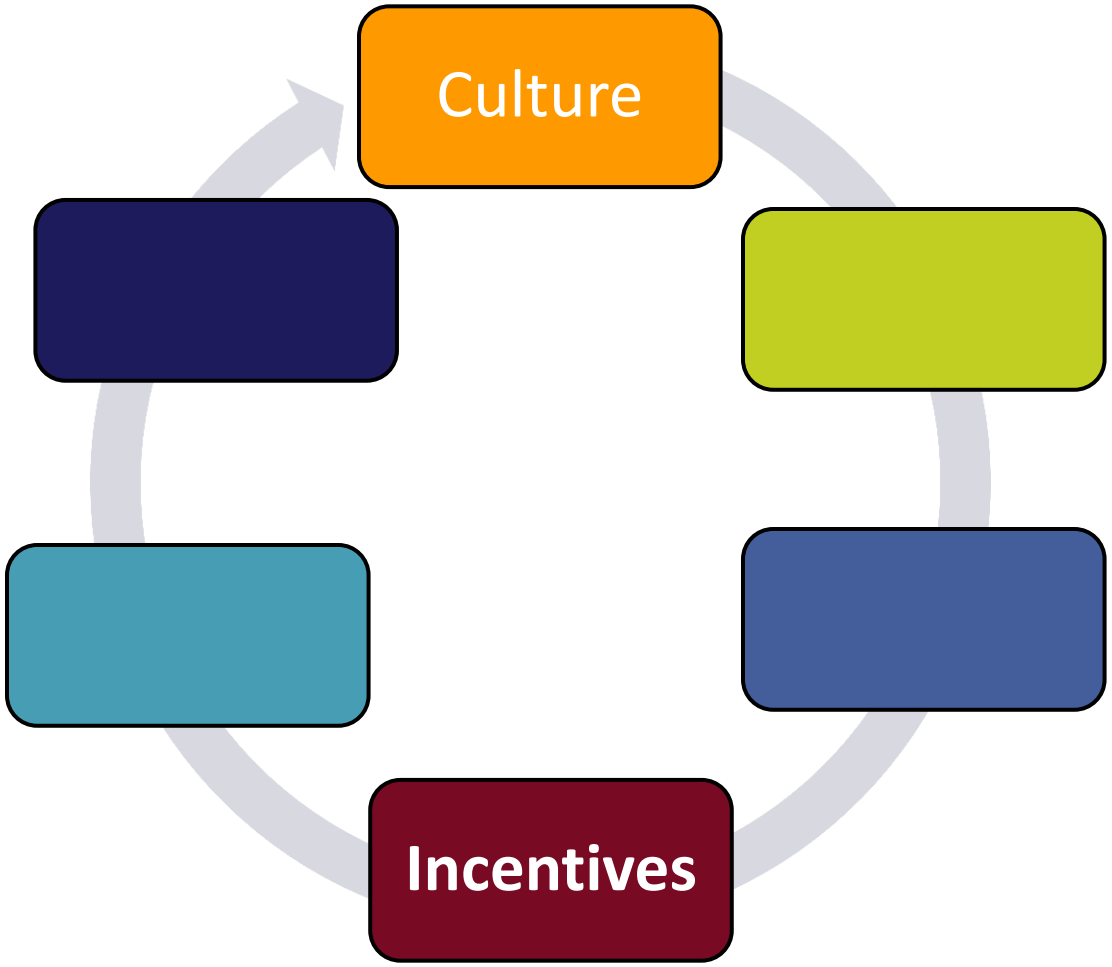
Advancing Evidence-Based Medicine & Care

Year	
2004	• Physician reminders for care • Chart-based patient management
2006	• Patient outreach
2007	• Physician office staff training • Pharmacy academic detailing program • Generic voucher program
2008	• Diabetes collaborative • Patient coaching program • Hospitalists
2009	• Diabetes wellness clinics • Asthma and HF/CAD collaborative
2011	• Access and COPD collaborative
2012	• Patient experience CME and coaching • Practice coaching (data sharing)

Value-Added Services For APP Physicians

- Group health insurance
- Group dental insurance
- Banking services and financial counseling
- Office supplies, equipment and furniture
- Medical and surgical supplies
- Immunizations
- Life insurance
- Professional liability insurance

Key Drivers Of Physician Engagement



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Aligning Physician and Hospital Incentive

2009
- CPOE
- Core measures

2010
- CPOE
- Core measures
- Readmissions
- Length of stay

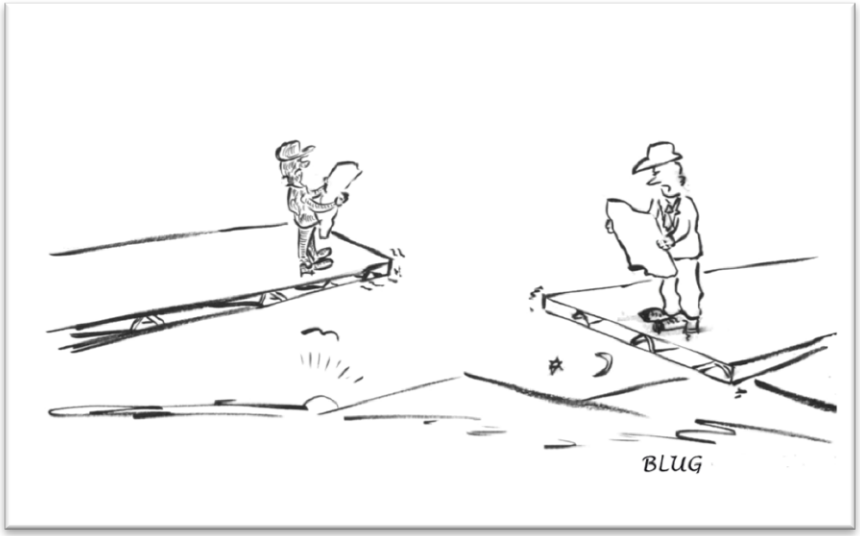
2011
- ED efficiency
- Meaningful use
- Core measures
- Readmissions
- Length of stay

2012
- ED efficiency
- Core measures
- Readmissions
- Length of stay
- Transfusion safety
- Elective induction of labor

2013 and 2014 Aligned Incentives

AdvocateCare Index

- Length of stay
- Admits/1000
- ED visits/1000
- 30-day readmissions
- % days in-network



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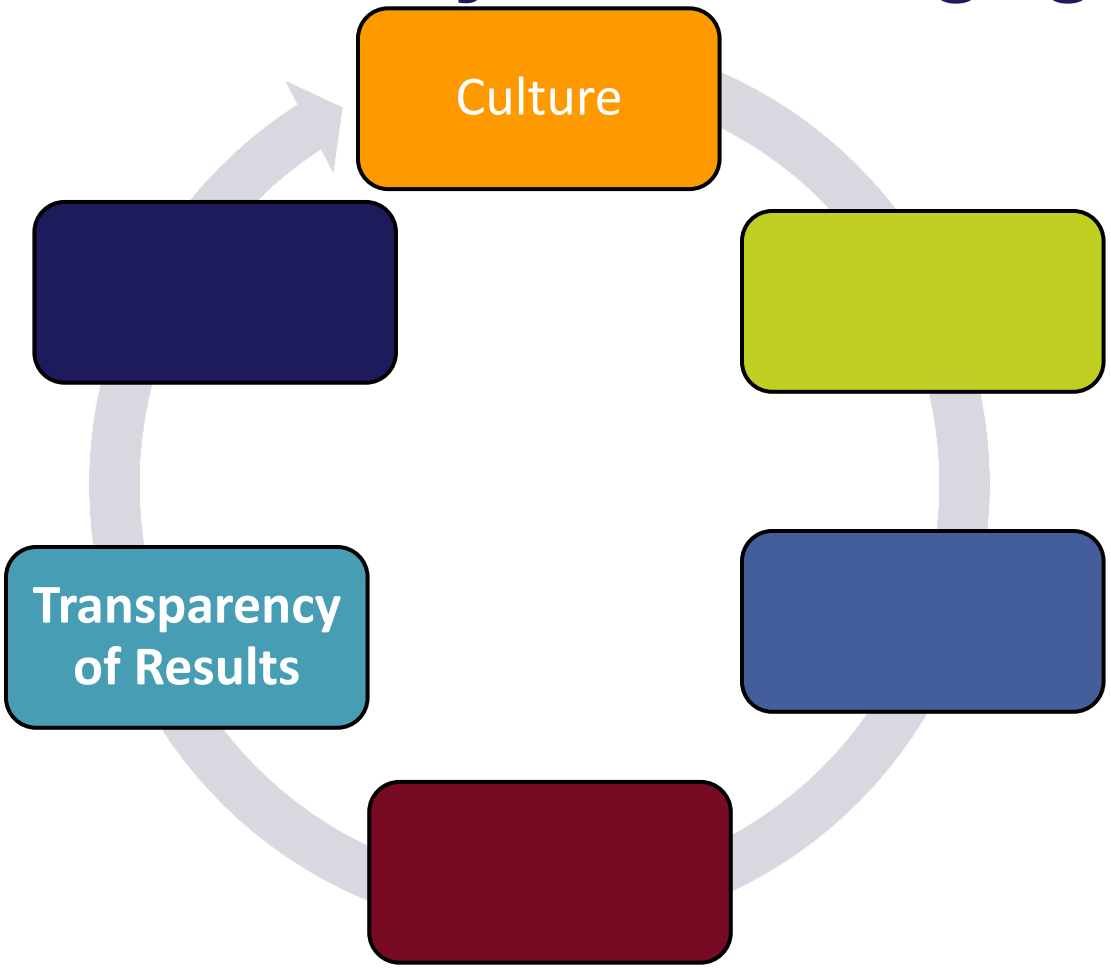
Incentive Funds

- Evolve over time
- Individual vs. group
- Primary care vs. sub-specialists
- Hospital or other facility incentives
- Improvement vs. absolute targets
- Unearned funds roll over
- Non-physician clinicians

Key Drivers Of Physician Engagement



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Strategy For Transparency

Timeframe	Activity
Year 1	External via annual Value Report
	Internal via annual Value Report and organizational level reporting
Year 2	Blinded comparative overall organizational level reporting
Year 3	Blinded comparative overall physician-level reporting with outstanding physician performance recognition
Year 4	Unblinded overall physician scores within metrics
Year 5	Unblinded across all organizations and physicians

2014 Value Report

To download a copy of the 2014 Value Report, go to:
advocatehealth.com/valuereport

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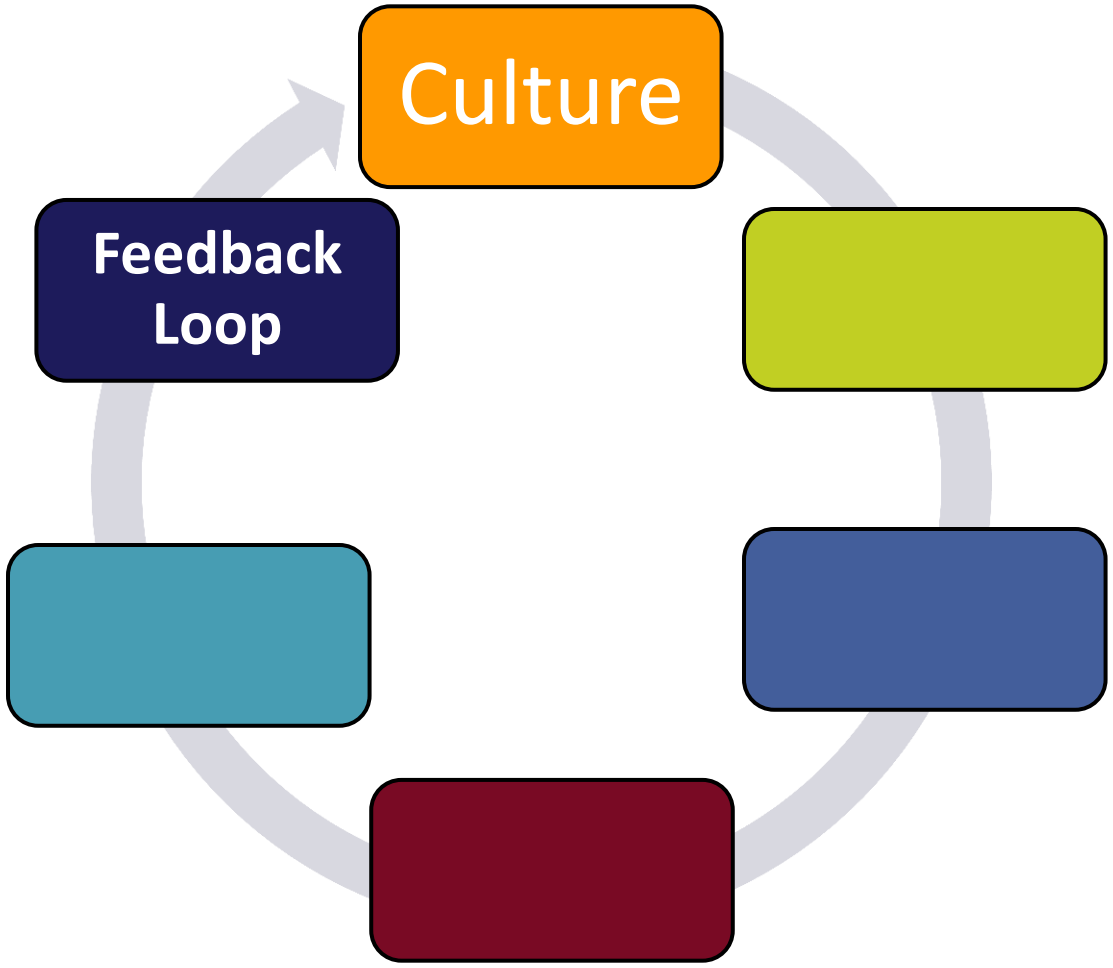
Key Drivers Of Physician Engagement



Advocate Health Care

Practice Report Card

	APR '10 – MAR '11				
	PROVIDER				
	HMO	PPO	TOTAL	BENCHMARK	% VARIANCE
ENROLLMENT					
AVERAGE PATIENTS	182,968	249,860	432,828		
DEMOGRAPHIC INDEX	1.023	1.060	1.044	1.044	0.0%
RETROSPECTIVE RISK	0.94	1.29	1.14		
INPATIENT FACILITY UTILIZATION					
ADMITS/1000	72.4	57.7	63.9	63.9	0.0%
NON-MATERNITY ADMITS/1000	53.2	38.6	44.7	44.7	0.0%
SHORT STAY MEDICAL ADMITS/1000	8.7	6.1	7.2	5.6	17.1%
CHRONIC ADMITS/1000	4.4	2.7	3.4	3.4	0.0%
DISCRETIONARY ADMITS/1000	4.2	3.8	4.0	4.0	0.0%
AMBULATORY ADMITS/1000	2.3	1.9	2.1	2.1	0.0%
READMISSION RATE	14.3%	10.8%	12.5%		
C-SECTION RATE	38.8%	38.3%	38.5%	38.5%	0.0%
DRG CASE-MIX ADJUSTED PAID/ADMIT	$23,000	$25,704	$24,357	$24,357	0.0%
% IN-NETWORK DAYS	70.6%	48.0%	59.1%	59.1%	0.0%
OUTPATIENT FACILITY UTILIZATION					
ER VISITS/1000	189.5	183.1	185.8	185.8	0.0%
NON-EMERGENT ER VISITS/1000	10.0	12.2	11.2		
CHRONIC ER VISITS/1000	7.7	7.5	7.6		
% FREQUENT ER USERS	23.1%	23.2%	23.2%		
% ER VISITS LEVEL 1 & 2	13.7%	14.2%	14.0%		
ER PAID/VISIT	$2,748	$2,820	$2,789	$2789	0.0%
% OUTPATIENT SURGERY AT ASF					
PROFESSIONAL UTILIZATION					
E&M VISITS/1000	3,369.6	4,990.2	4,305.1	4305.1	0.0%
PREVENTIVE VISITS/1000	400.2	627.9	531.6		
HIGH COST RADIOLOGY SERVICES/1000	148.5	217.4	188.3		

Competencies For Population Health

- Risk stratification
- Predictive modeling
- Post-acute network
- Advanced care planning
- Patient engagement
- Integrated behavioral health
- Health plan partnership(s)

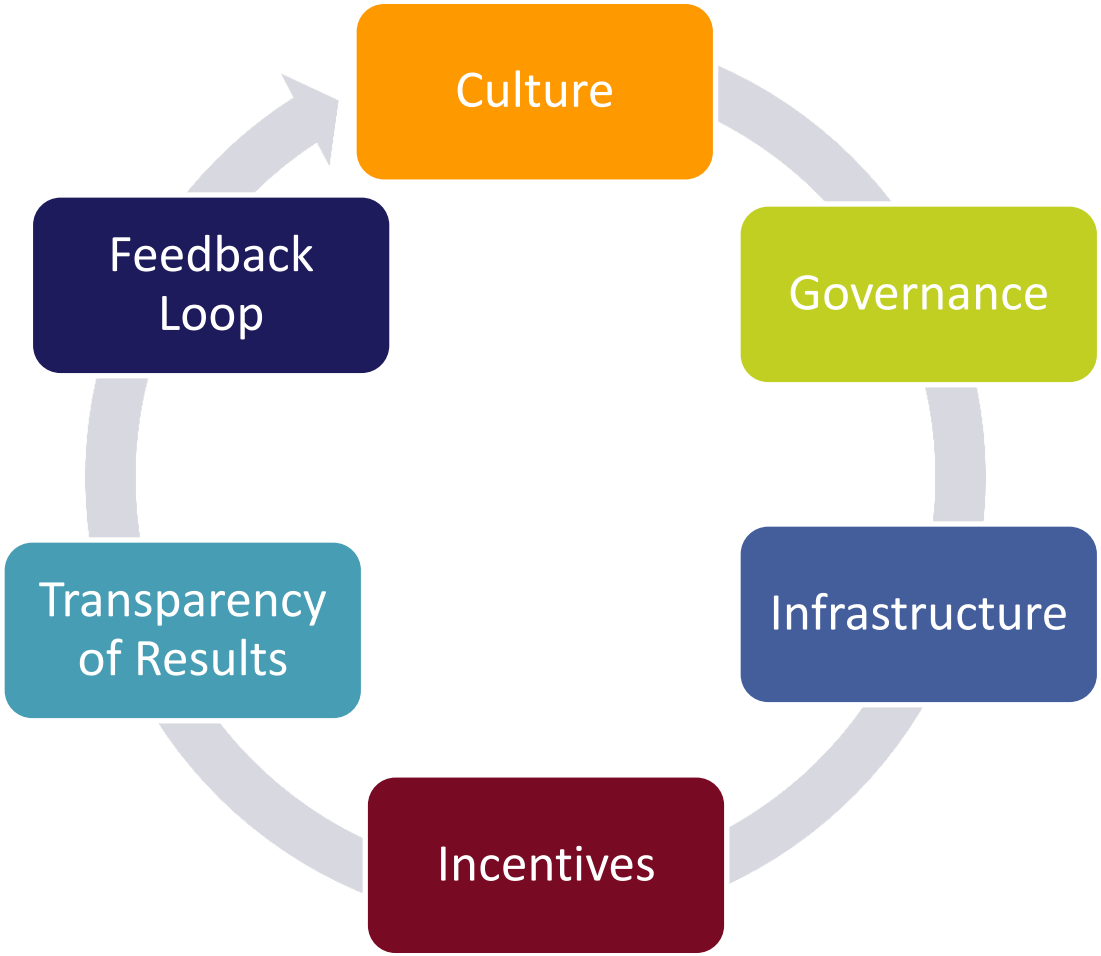
Attributed Patient Cost Concentration Supports Care Management Model

Verisk Categories	Person Years		Predicted Expenditures	
	Number	Percent	Mean $	Percent
Very Low Risk	54,398	30.5%	$ 784	3%
Low Risk	78,520	44.1%	$ 4,054	22%
Moderate Risk	24,906	14.0%	$ 11,517	20%
High Risk	16,056	9.0%	$ 24,054	27%
Very High Risk	4,270	2.4%	$ 91,062	27%
Total	178,149	100.0%	$ 7,987	100%

Impact Of Benefit Plan Design
Performance Period: August 2012 – July 2013

Plan	Average Membership	ER Visits/ 1000	Admits/ 1000	LOS	Readmission Rate	Care Coordination
Advocate Employee EPO	**3,168**	***104.2***	***35.7***	***2.52***	***5.31%***	***94.7%***
HMO	**198,022**	**184.2**	**70.3**	**3.85**	**7.45%**	**86.5%**
Medicare Shared Savings	**96,815**	**345.8**	**337.9**	**4.92**	**11.21%**	**61.4%**
Commercial ACO	**162,524**	**156.5**	**38.3**	**3.13**	**5.04%**	**42.3%**

Key Drivers Of Physician Engagement



Advocate Health Care

Questions

The Progressive Journey Toward Population Health Management

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TRUVEN HEALTH ANALYTICS

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Accelerating Performance Improvement

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- Strategies for health care transformation
- Reducing health care disparities
- Reducing avoidable readmissions
- Managing variation in care
- Implementing electronic health records
- Improving quality and efficiency
- Bundled payment and ACOs
- Others

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