



POPULATION HEALTH PLAYBOOK

Mark Wendling, MD | Executive Director LVPHO/Valley Preferred

Today's Agenda

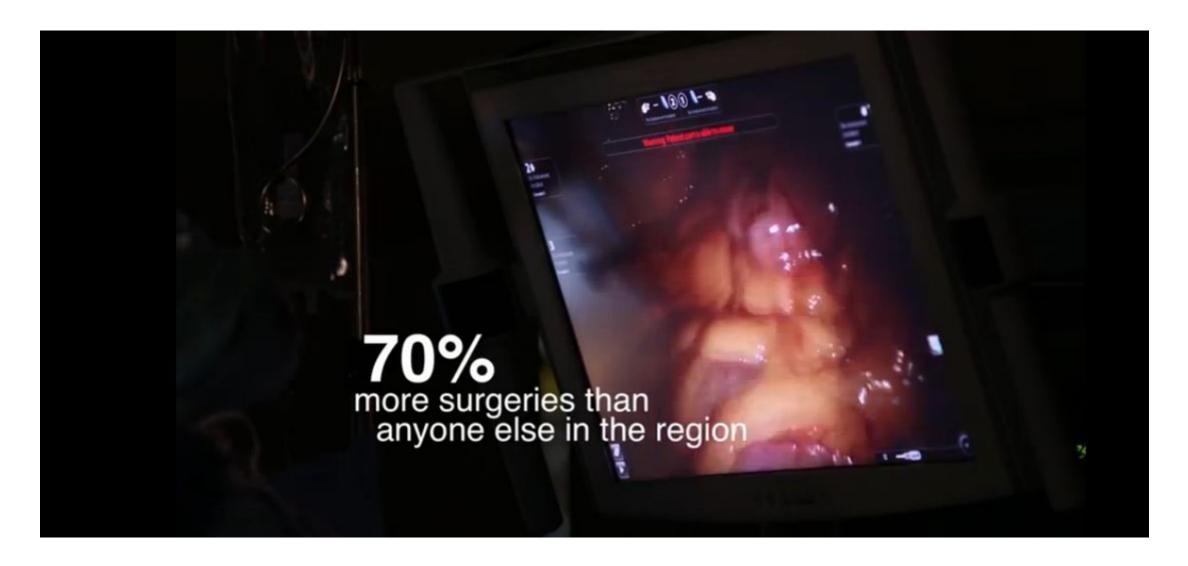
- Outline
- LVHN, LVPHO and Populytics Overview
- Population Health Approach
- Population Health Analytics
- Population Health Playbook
- LVHN Case Study Results
- Discussion

Lehigh Valley Health Network (LVHN)

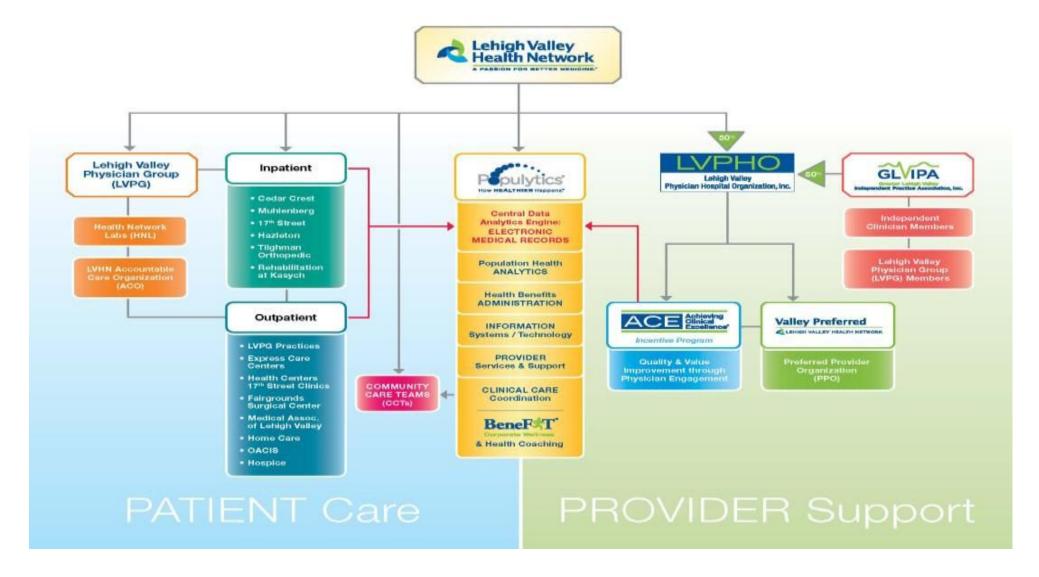
- In Allentown/Bethlehem/Hazleton/Schuylkill/Pocono
- Recognized by U.S. News & World Report, Fortune, Modern Healthcare, Leapfrog, others
- 8 hospital campuses,
 16 Health Centers
- 11 ExpressCARE locations
- 163 physician practices
- 17,000+ employees
- Physician Hospital Organization (1100+ member physicians)



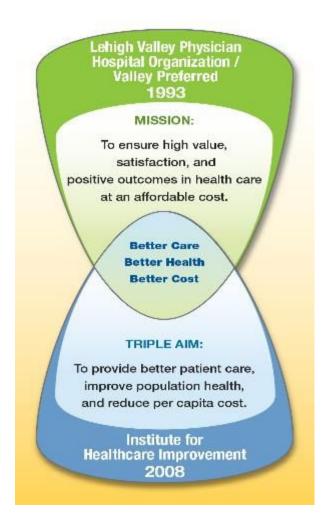
Lehigh Valley Health Network



Lehigh Valley Health Network Organization



Lehigh Valley Physician Hospital Organization (LVPHO) Mission



To ensure **high value**, **satisfaction**, **and positive outcomes** in health care at an affordable cost.

Populytics Overview

Established December 2013

Population health management and analytics firm

Integrated services

- Population health analytics
- Clinical care coordination
- Health benefits administration & consulting
- Corporate wellness programs

Expert professionals

- Payer & provider informatics
- Medical management services
- Advanced analytics
- Business development
- Insurance and risk management



How **HEALTHIER** Happens.SM

LVHN Vision

We will build on our foundation as a premier academic community health system and become an **innovative population health leader** that creates superior quality and value for the patients and communities we serve.

U.S. Healthcare Delivery System Evolution

- Healthy population—centered, population health—focused strategies
- Integrated networks linked to community resources capable of addressing psycho-social/economic needs
- Population-based reimbursement
- Learning organization: capable of rapid deployment of best practices
- Community health integrated
- E-health and telehealth capable
- Patient/person centered
- Transparent cost and quality performance
- Accountable provider networks designed around the patient
- Shared financial risk
- Health information technology-integrated
- Focus on care management and preventative care
- Episodic healthcare
- Lack of integrated care networks
- Lack of quality & cost performance transparency
- Poorly coordinated chronic care management

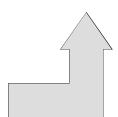
Community Integrated Healthcare System 3.0

Community
Integrated Healthcare

Coordinated Seamless Healthcare System 2.0



Acute Care System 1.0



Episodic Non-Integrated Care





LVPHO and LVHN Population Health Playbook

- Mutual accountability
 - Compact
- Aligned incentive plan
- Population Health support
 - Care management strategy
- Prioritized quality improvement
 - Care gap and utilization prioritization
- Populytics data and analytics

Population Health Management Executive Committee

Clinically driven and inclusive of key network leadership

Programmatic focus leverages clinical integration and care alignment

- Leakage
- Cardiovascular disease
- Diabetes
- Orthopedics (includes Back Care, TJR Pathway)
- Chronic Kidney Disease
- Chronic Obstructive Pulmonary Disease

Shared KPIs

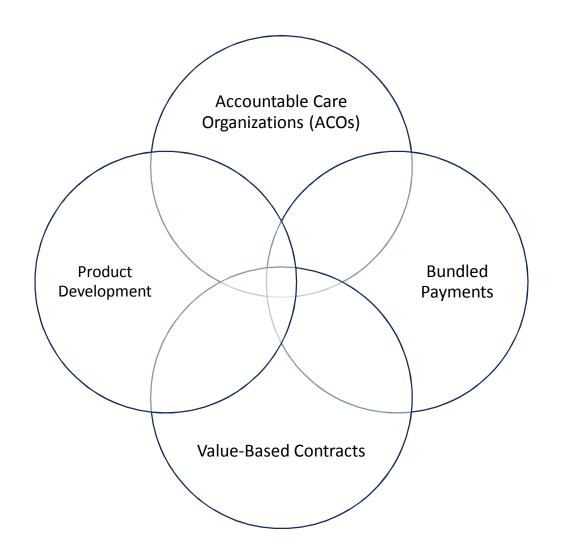
- Clinical pathway (variations)
- Costs/Spend
- Inpatient Utilization (includes readmissions)
- ED Utilization for ASC
- ED Utilization/1000
- Pharmacy Costs
- Select ACE, LVPG, ACO metrics

Informs and facilitates concurrent work

- Virtual Care
- Choosing Wisely
- Patient Activation and Engagement
- Advanced Care Planning
- Post Acute Care

Payment Innovation

- Manage commercial, Medicare and Medicaid populations
- Implement and manage shared savings and shared risk contracts
- Identify priority quality and utilization measures
- Align performance measurement on value based contracts
- Implement bundled payments
- Implement joint venture products

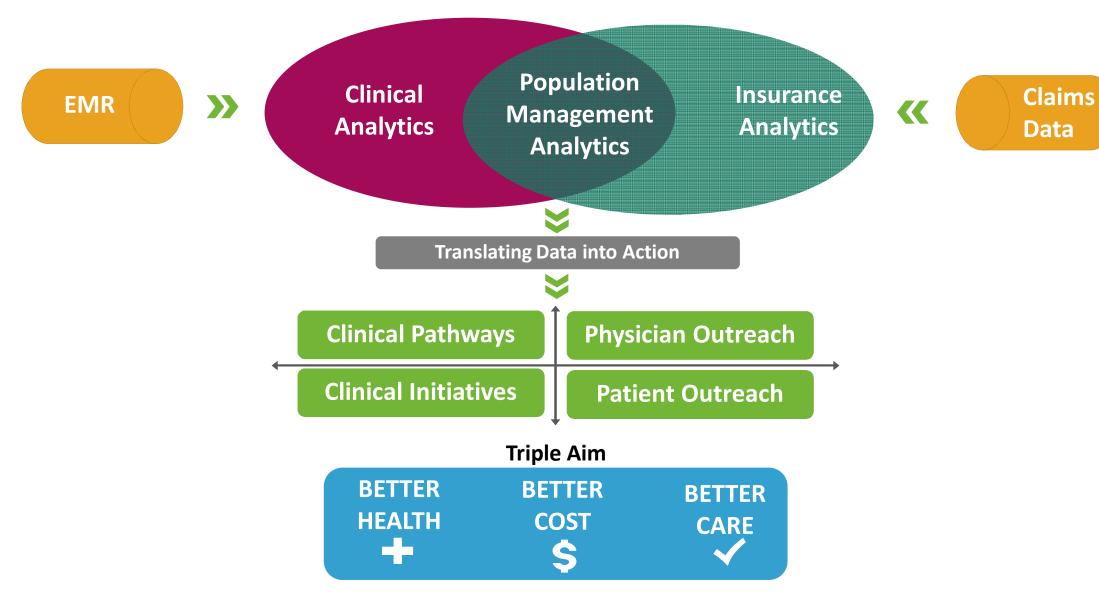


Approach to Value Based Contracts





A More Complete Picture



Foundations for Success: Managing Population Risk

CLINICAL & PHYSICIAN ANALYTICS

Data-driven review of populations to identify and stratify risk to reveal opportunities and inform providers

FINANCIAL MANAGEMENT

Strategy to monitor performance under accountable care arrangements

DATA MANAGEMENT

Acquisition, integration & maintenance of data critical to the management of populations

Successful population health management to thrive in value-based care models

CONSULTATIVE SUPPORT

Leverage the experience of our experts for the benefit of your strategic goals

Overview of Clinical & Physician Analytics

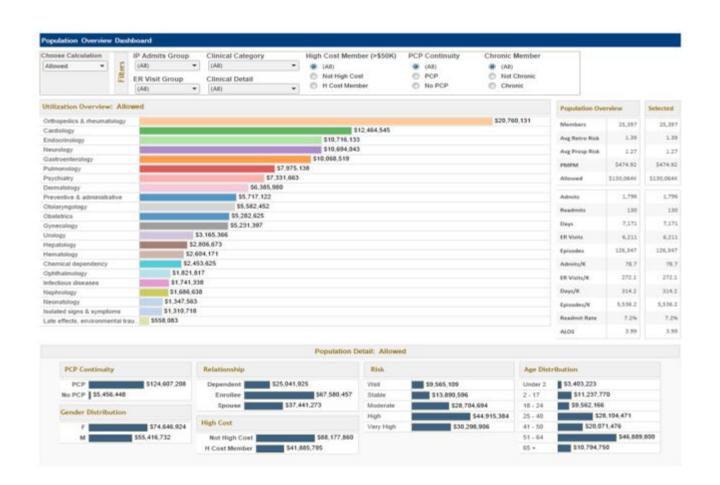
- Clinical Analytics that use EMR data to identify Gaps in Care, High Risk Patients, etc.
- Risk Analytics that use Claims Data to track prospective costs and stratify risk
- Registries with patient level profiles
- Predictive Analytics
- Easy to use Dashboards



Stakeholders

Clinical & Physician Analytics

- 11 drillable analytic dashboards to identify achievable opportunities to improve overall population health
- Create customized data segments around demographic, financial and health information to support targeted initiatives including:
 - Clinical pathways dashboards for COPD, oncology, CHF & AFIB

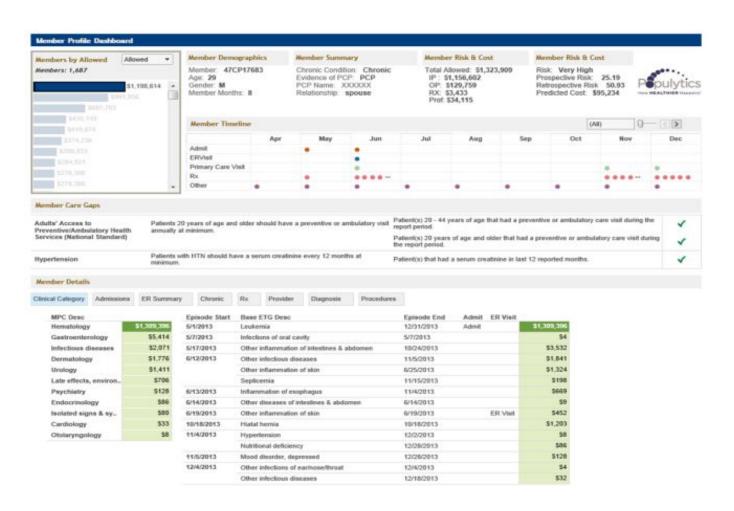


Population Health Dashboards – Drillable to Patient Level

- Overview of the At-Risk Population
- Inpatient Activity: High utilizers, risk stratification, ACSC, chronic, high cost
- Emergency Room: High utilizers, risk stratification, ACSC, chronic, high cost
- Chronic Care Members
- RX: Review Rx utilization by drug class, brand, generic, high utilization members
- Care Gaps: Identification of key care gaps for attributed population
- Provider/Outmigration: Outmigration by clinical condition, specialty, PCP
- Choosing Wisely®
- Cancer (collaboration with MSK)
- Diabetes, COPD
- Dropped HCCs

Closure of Gaps in Care

- Highlight gaps in care and opportunities for intervention at the individual level
- Align patient intervention strategies with health system programs
- Interface with EPIC for point-ofcare management



Targeted Population Health Patient Registries

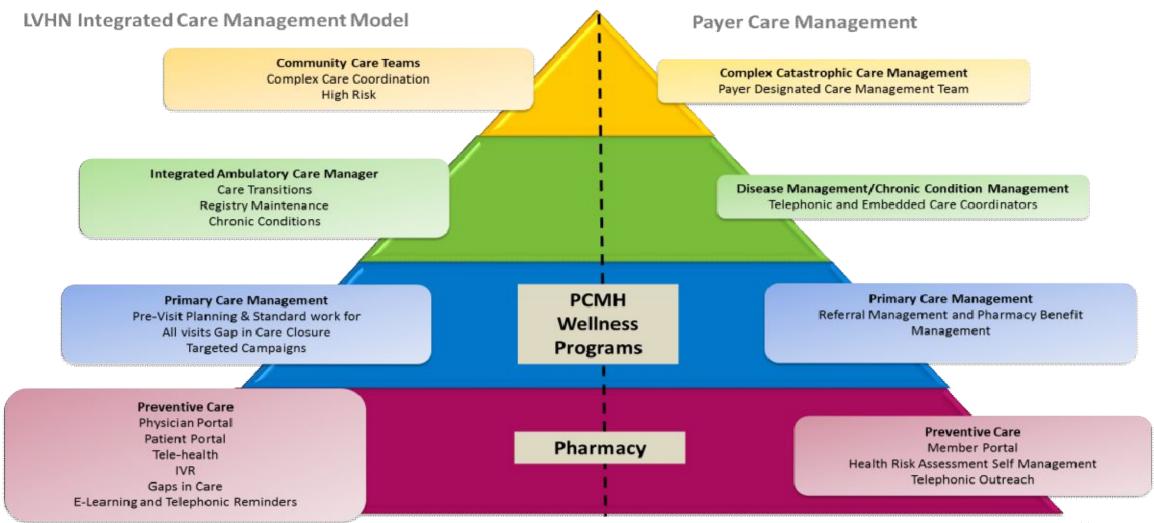
- **High Risk:** HCC Score > 3 & Likelihood of Hospitalization > 80%
- High Utilization: 2 Inpatient Admits or 3 ER visits in a 6 month time period
- High Cost: > \$100K in a 12 month period
- High Risk/Low Cost: HCC Score > 2 & < \$15K in a 12 month period
- Newly Identified Chronic Patients: Education opportunity
- Newly Identified High Risk Patients: Using claims & clinical data
- Members with No PCP Visits: Dropped attribution
- Members with Visits to Multiple Specialists Same Specialty: "Doc Shopping"

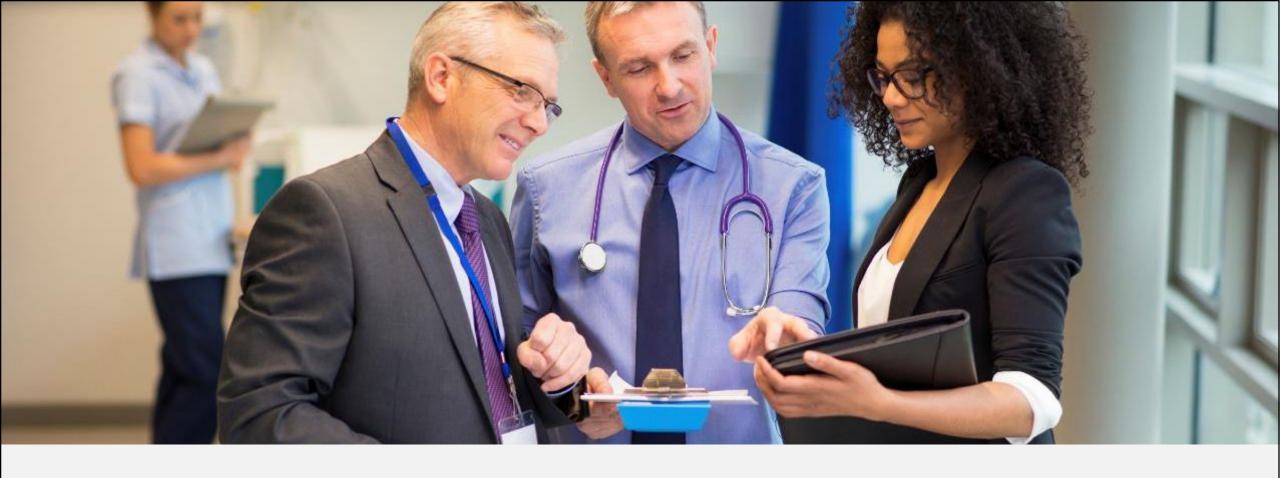
Aligned Incentive Plan

Achieving Clinical Excellence® (ACE)

- Semi-Annual Practice-Based Group Incentive Plan: Designed to provide physicians with incentives to meet the Triple Aim
- Measurement Categories
 - Better Care: CG CAHPs participation, Meaningful Use standards
 - Better Cost: Risk Adjusted ALOS, Risk Adjusted Episode Cost, Admissions and Readmissions,
 ED visits, and generic Rx Utilization
 - Better Health: Evidence-based Quality Measures, QI Projects
- Funding Sources: Include employer, payers & shared savings distribution
- CME Opportunities/Online Modules

Care Management Strategy







CASE STUDIES AND EXAMPLES

Dropped HCC's Dashboard

Dropped HCCs in 2015 from Prior Calendar Year (2012 - 2014)



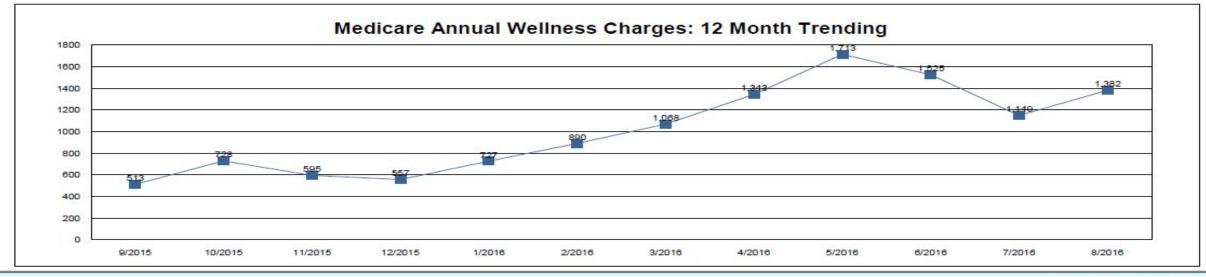


	and the second s						
Filters	Claims Payer		Current PCP's Clin	ic	Current PCP		
	(All)	•	(All)	•	(All)		-
		# Patients			# PCPs		
Summary		24,874			1,282		
Dropped HC	C Categories*						
Major Depressive	e/Bipolar/and Paranoid Diso					1,341	
	Vascular Disease				966		
Breast/Prostate/a	and Other Cancers and Tum			834			
Dia	abetes without Complication			783			
Coagulation Defe	ects and Other Specified He			762			
Rheumatoid Arth	hritis and Inflammatory Con			682			
	Morbid Obesity			646			
	Specified Heart Arrhythmias			630			
Chronic Obstructive Pulmonary Disease			516	6			
Diabetes with Chronic Complications			515	5			
Congestive Heart Failure			470				
Other Significant	Endocrine and Metabolic D		334				
Unstable Angina	and Other Acute Ischemic	29	n				+
				# Patients			
*HCC Categories	s without text description represe	nt more than 1 dropped H	CC category. The cat	egory numbers are displayed.			
PCP Practic	e			Current PCP			
LVPG	- Internal Medicine of the LV	1,623	*	HISTORICAL, PROVIDER,	761		_
LVPG Int	ternal Medicine - Muhlenberg	1,566		TWADDLE, HUGO, Interna	285		
I VPG F	amily Medicine - Treylertown	706		LAKATA THOMAS Intern	284		

Medicare Annual Wellness

Medicare Annual Wellness appointments since Epic GoLive (2/18/15)
Grouped by PCP Practice, then Provider
Filtering on Entity
Report only includes Patients with a defined PCP Practice.
Listing of Medicare patients with their most recent Medicare Annual Wellness charge dates.

Medicare Annual Wellness Charge Codes: G0402 - PR INITIAL PREVENTIVE EXAM (Welcome) G0438 - PR PPPS, INITIAL VISIT G0439 - PR PPPS, SUBSEQ VISIT



Grand Totals:

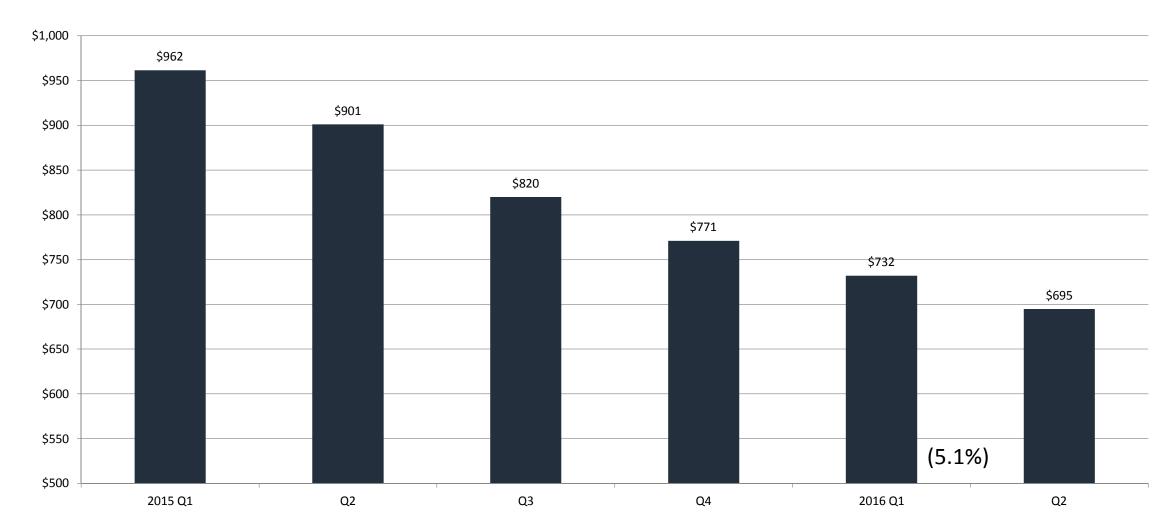
Total Medicare "We Patients Count 47.458 865

"Welcome" Count % 865 1.82% "Initial"
Count %
2,303 4.85%

"Subsequent" Count % 10,320 21.75% Next Scheduled Practice Appt Count % 30.161 63.55%

We have achieved ~ 28.42%! GOAL – 50% by end of FY 17

SNF Expenditures



Quarterly Reports are based on Rolling Years



Choosing Wisely®: Launched in 2012 by ABIM Foundation with coalition of medical

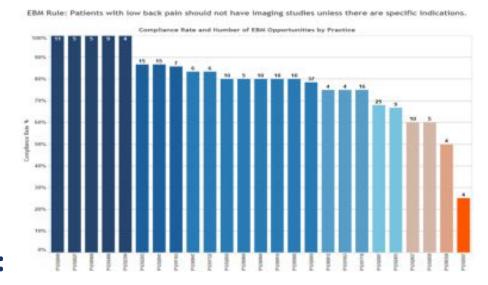
specialty societies and Consumer Reports

 Encourages conversations between physicians and patients about overuse in health care

- Supports physician efforts to help patients make smart and effective choices
- Educational modules

Care Pattern Analyzer/Physician Network Assessment: Review effectiveness & efficiency physician panels

- Episode cost overview with drill down to drivers of variance
- Provider affiliation (group, practice, practitioner)
- Service type (facility, ancillary, professional, pharmacy)
- Benchmarking against peer groups
- Promotes discussion regarding variances in practice patterns



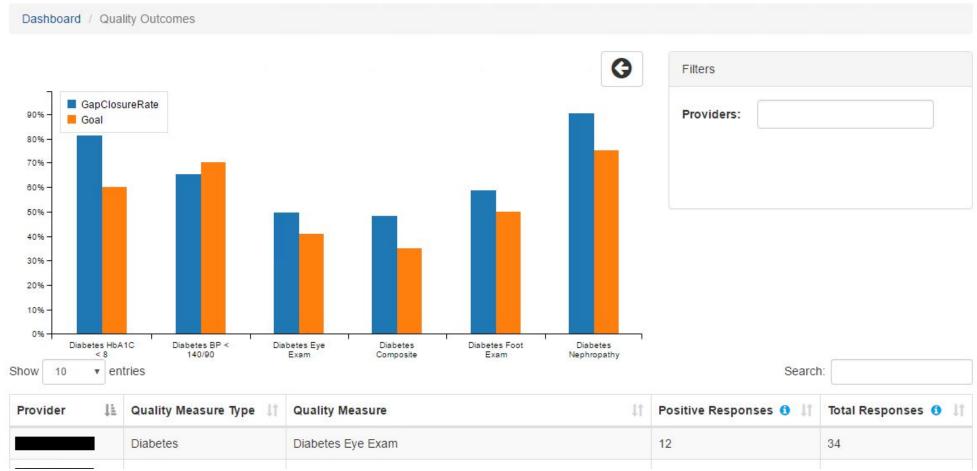
Secure Provider Portal



ACE CG CAHPS Help

Current View Go

Quality Outcomes





Key Initiatives to Improve Financial Performance

- Identification of drivers of trend to target key initiatives that improve financial performance in shared risk arrangement
- Maximize performance in quality incentive programs
- Strategies and programs to ensure proper documentation of coding
 - Case Mix Index
 - HCC
- Operationalizing bundled payment arrangements

Financial Management

Care Cost Review: Monthly process of monitoring care cost

- Review across all arrangements and drillable to the specific agreement
- Identify opportunities to improve quality and reduce cost
- View progress compared to targets and benchmarks
 - PMPM/Utilization/Cost per Unit
 - Quality Metrics
 - Trending at procedure & episode level
 - MarketScan dataset



Medical Expense Budget Dashboard





Population Health Education

Populytics Academy: Programs for physicians & administrators to provide education on topics including:

- Insurance metrics
- Clinical support programs
- Population health analytics
- Pay-for-value reimbursement
- Value of population health



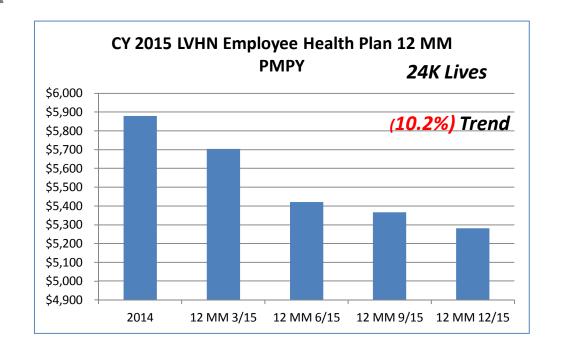
Example AllSpire Dashboard



Lehigh Valley Health Network

Employee Health Plan

- Set targeted PMPM as a network goal & tied to employee incentives
- Established initiatives with savings of \$3.1M
- Achieved savings of over \$5M



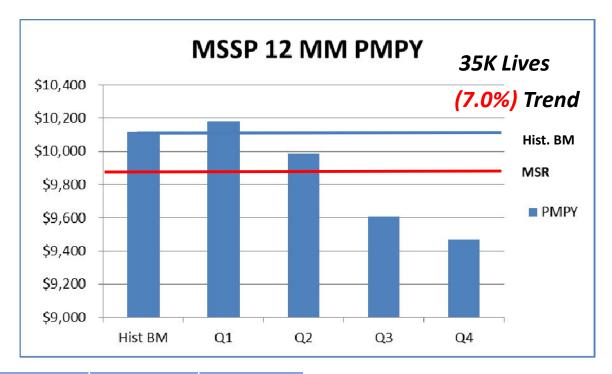
Category	MM 2014	L2 MM ec 2015	Var	iance	Percent
Inpatient PMPM	\$ 1,242	\$ 969	(\$	273)	(22%)
Outpatient PMPM	\$ 1,883	\$ 1,712	(\$	171)	(9%)
Professional PMPM	\$ 1,427	\$ 1,264	(\$	163)	(11%)
Total PMPM	\$ 5,879	\$ 5,281	(\$	598)	(10%)

Lehigh Valley Health Network

Results

Year 1 MSSP 12 Months ended Dec 2015

- Based on CMS data received through the fourth quarter 2015
- Waiting for final reconciliation from CMS due in August timeframe



Category	12 MM Dec 2014	12 MM Dec 2015	Variance	Percent
Inpatient PMPM	\$ 3,281	\$ 3,014	(\$ 267)	(7%)
Outpatient PMPM	\$ 2,064	\$ 2,023	(\$ 41)	(2%)
SNF PMPM	\$ 979	\$ 771	(\$ 208)	(21%)
Total PMPM	\$ 10,180	\$ 9,469	(\$ 711)	(7%)
Readmissions	178/K	163/K	(15/K)	(8%)



