

AMDIS Presentation

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Decision Insights

Population Health

Decisions Summary

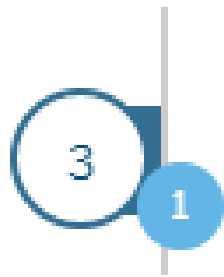
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Organizations making 'decisions'



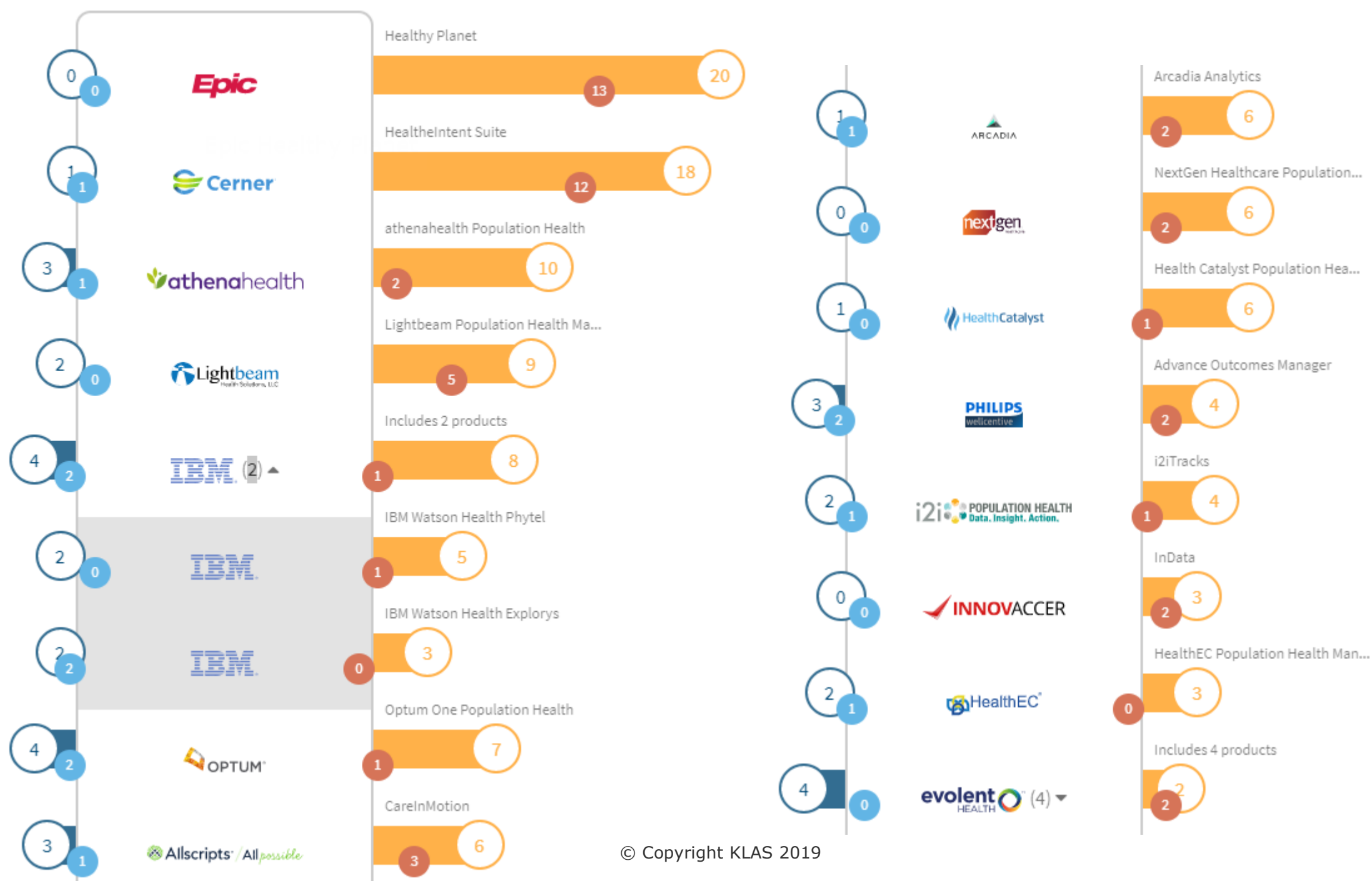
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Undecided

Orientation

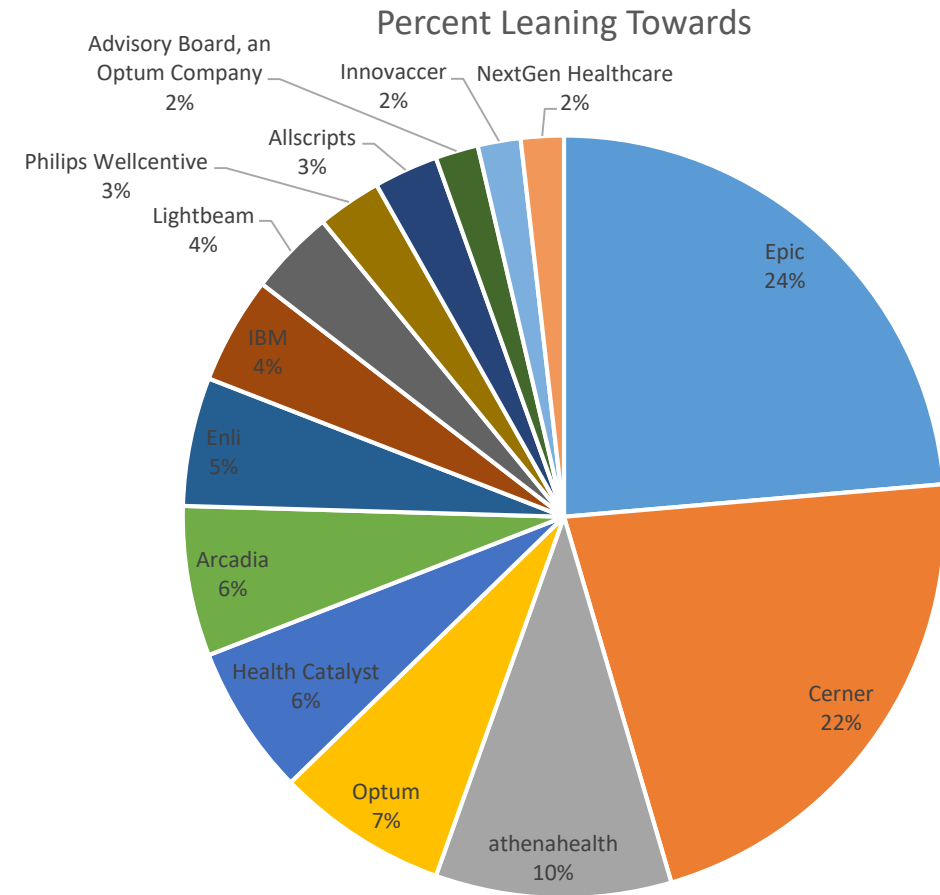
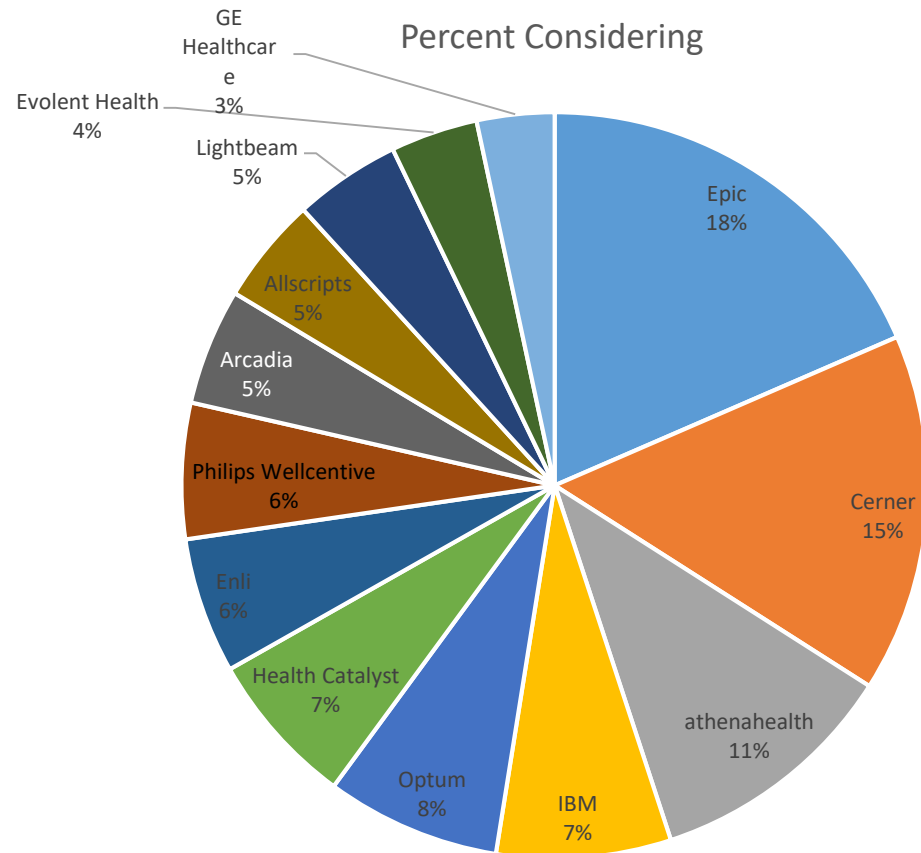


 athenahealth



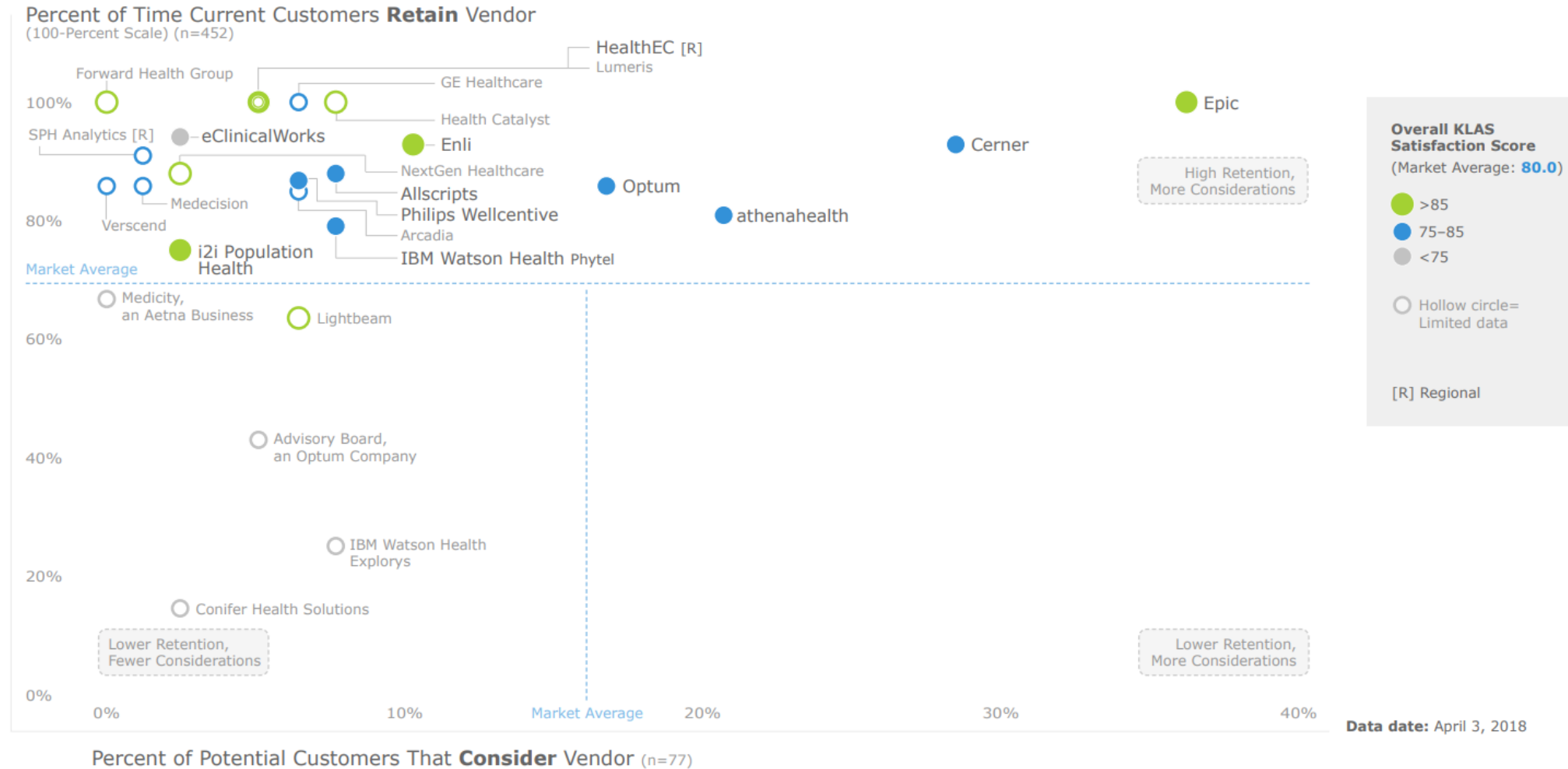


KLAS® Vendors Being Considered and Chosen



KLAS® Why are Pop Health Solutions Being Replaced?

Retention vs. Consideration



KLAS® Why are Pop Health Solutions Being Replaced?



What Drives New Energy?

The top reasons vendors are considered in a PHM purchase are product functionality and market forces (e.g., hospital consolidation and platform standardization). Company culture and customer relationships are the next-most-often mentioned reasons vendors make an organization's short list.

Reasons for Win

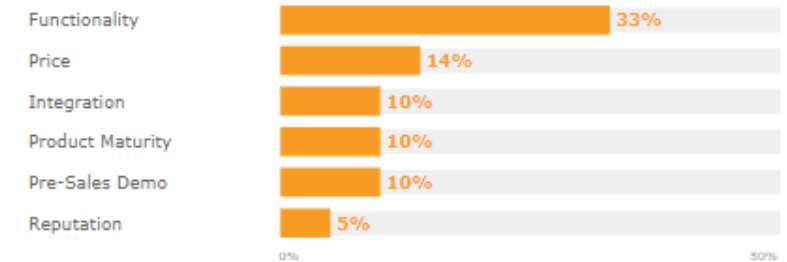
Number of Responses: ● 3+ ● 2 ● 1

	Market Forces	Culture	Product	Relationship	Value	Other
Advisory Board, an Optum Company	●		●	●		
Arcadia		●	●	●	●	
athenahealth	●	●	●		●	●
Cerner	●	●	●	●	●	●
Enli		●	●			●
Epic	●		●			●
Evolent Health			●	●	●	
IBM Watson Health Explore	●		●			●
Health Catalyst	●	●	●	●		●
NextGen Healthcare		●	●	●		●
Optum		●	●	●		●
Philips Wellcentive	●	●		●		
IBM Watson Health Phytel		●	●			●

Epic considerations are being driven by the fact that the product has now reached a viable maturity level, something that wasn't the case as recently as a year ago. **athenahealth** is seen as offering good value. Strong relationships drive considerations of **Philips Wellcentive**. Vendors drive better value when they help customers deploy functionality to address specific challenges or goals.

Despite continued development, **Allscripts**, **athenahealth**, **Cerner**, and **Epic** are viewed by some provider organizations as still immature in PHM. When established PHM vendor **Evolent Health** is not selected, it is often due to the cost of their managed services business model. Organizations that pass on **Health Catalyst**, a recent PHM entrant, often do so because they feel the system is more complex than they need or can implement.

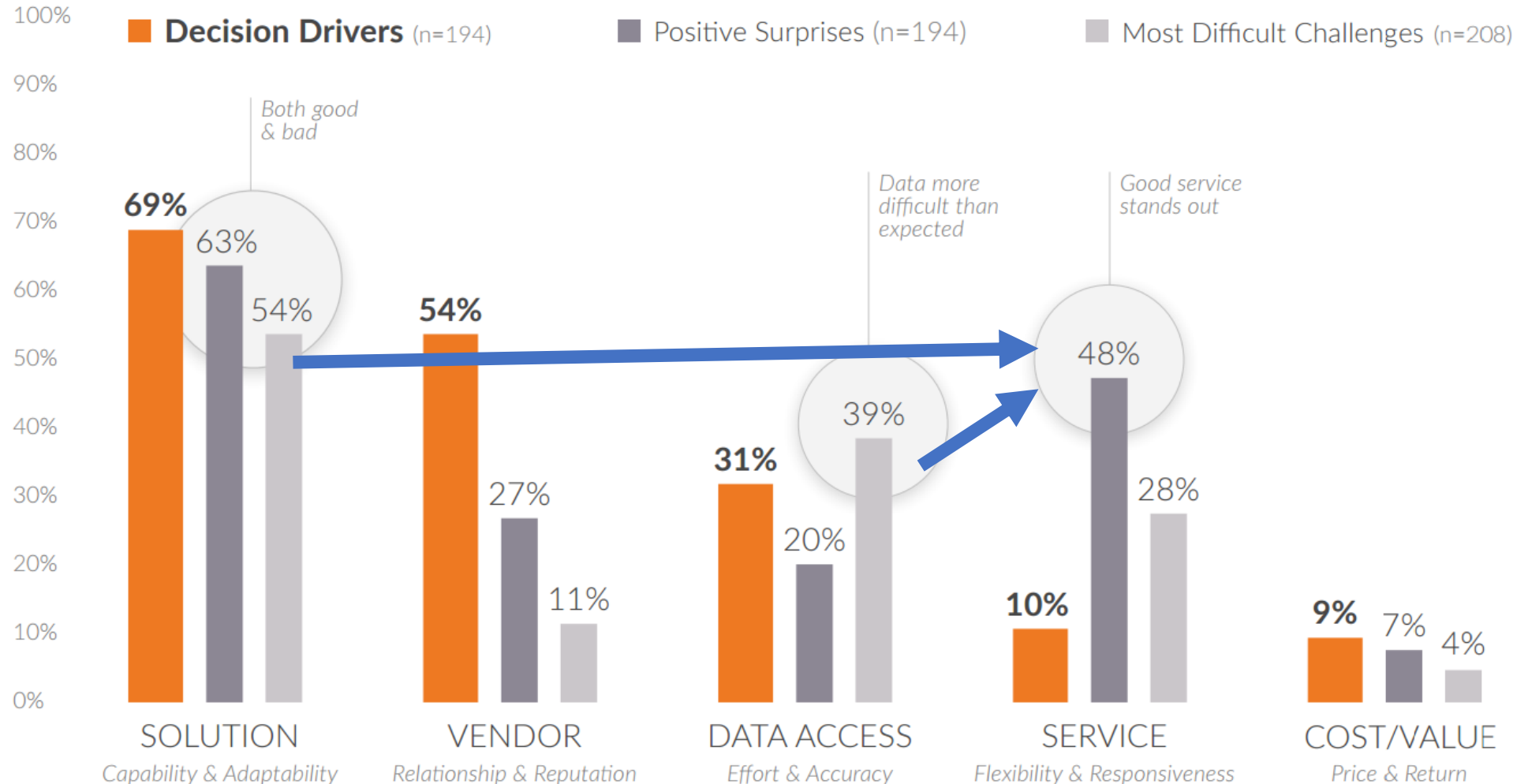
Top Reasons for Loss (n=80)



Less than 5%: Implementation, system design, business model, current experience, expertise, product flexibility, promises, responsiveness, ambivalence, facility too small, post-sales responsiveness, pre-sales contracting, prior experience, references, road map, sales, technology, vendor stability, vision, and workflow.

KLAS® What distinguishes vendors?

SELECTION CRITERIA VERSUS REALITY



KLAS® No one can do everything

We evaluated 12 different pop health vendors and we narrowed it down to 3 and ended picking the one that met our current needs and that is to do care management. One thing we learned was that no one can do everything. They all had their various strengths and weaknesses. We were looking for a tool that can pull data from other EMR's outside our core EMR. We will still leverage our EMR's Pop Health tools, but none of the tools out there can do everything that we need them to do. So we will likely continue to use multiple tools.

- VP of Population Health



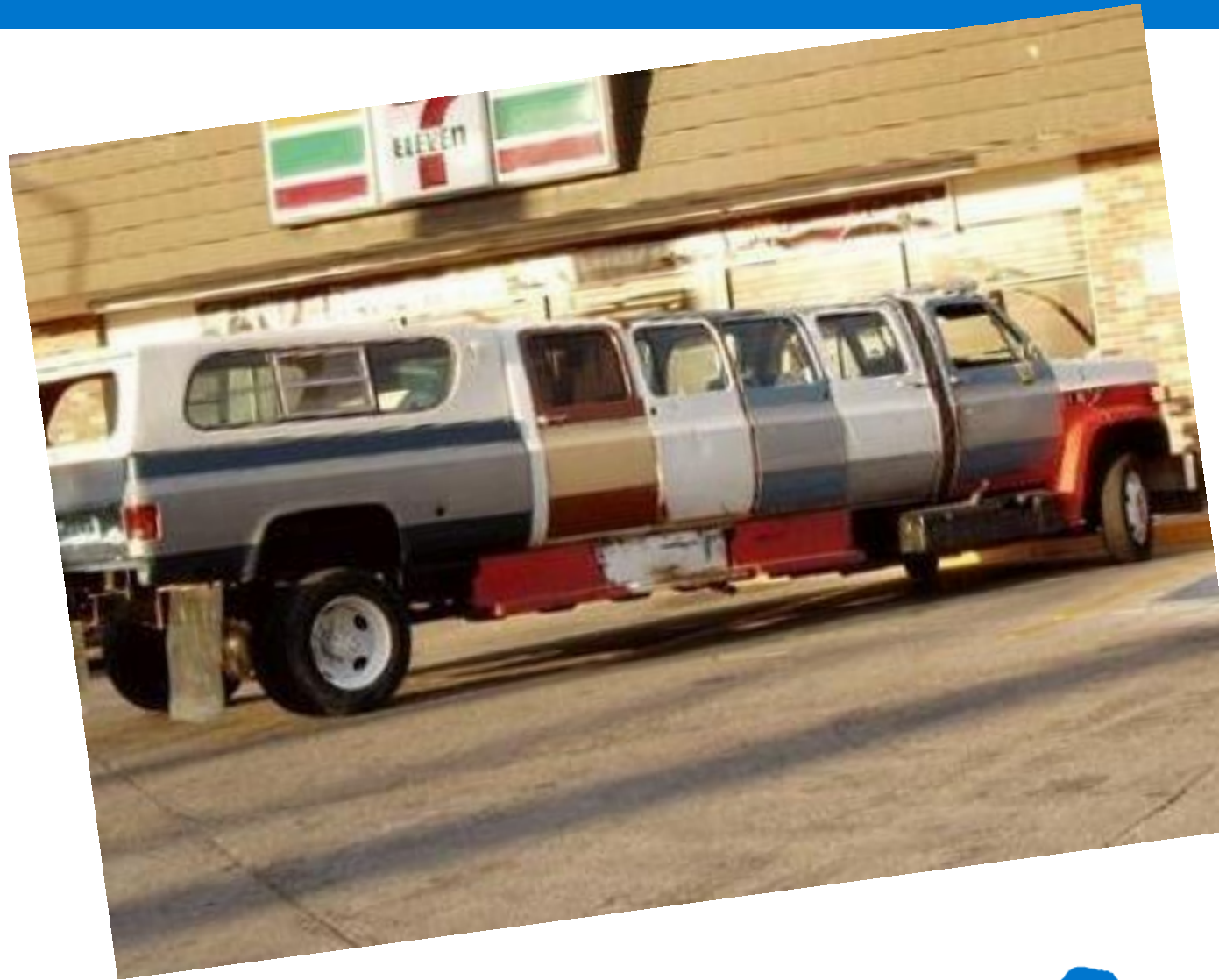
KLAS® Not Uncommon

“We are using several different tools. **Humedica**, with their recent upgrade, is more robust. They now have predictive analytics for COPD, diabetes, and coronary heart failure.

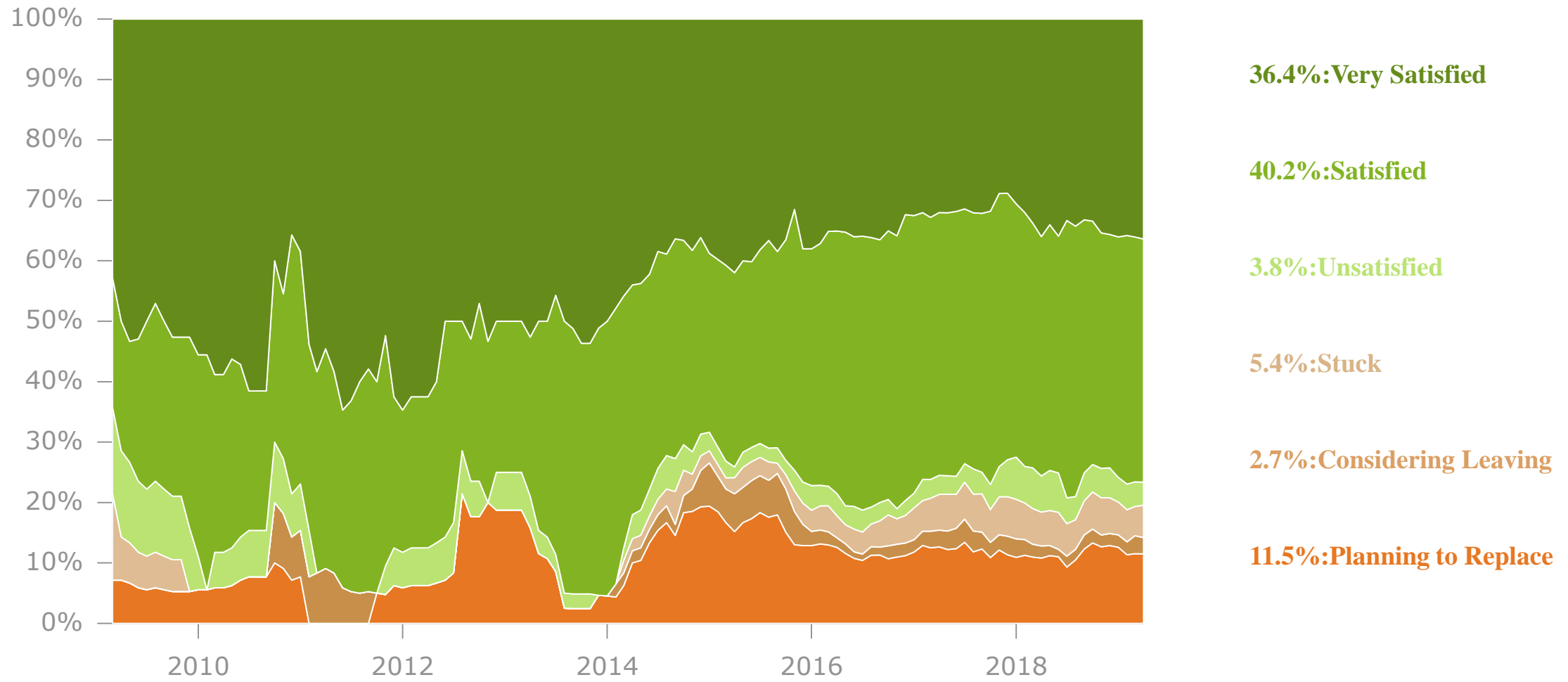
We have **Epic as our EMR**, and we pull data out of there for population management. We also use **Epic Clarity** for registries.

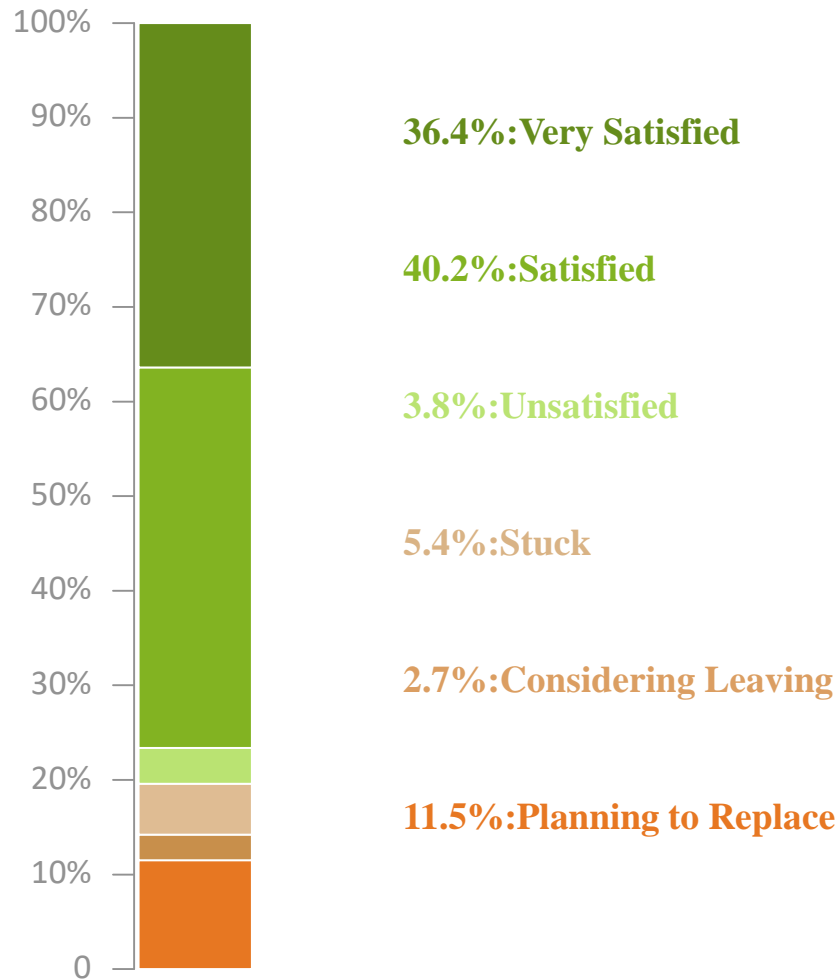
We pull financial information from **Crimson** by The Advisory Board so we can look at our patients who have been discharged from the hospital and get them in for follow-up care.

We will be using **Medventive** with our clinically-integrated network for data aggregation. We have people that are out on different EMRs. They are not all on Epic. We are going to have to gather all that data together, and that is what they are helping us with.”



KLAS® Organizational Plans Chart





Not Vulnerable: 76.6% (Very Satisfied + Satisfied)

Passive Vulnerability: 11.9% (Unsatisfied + Stuck + Considering Leaving)

Actively Vulnerable: 11.5% (Planning to Replace)

Total Vulnerability: 23.4% (Passive Vulnerability + Active Vulnerability)

Category Definitions

- **Very Satisfied:** Overall score is 90 or above
- **Satisfied:** Overall score is between 70 and 89
- **Unsatisfied:** Overall score is under 70
- **Stuck:** Those who say the product is part of their long-term plans but would not buy the product again; overall score is irrelevant to this category
- **Considering Leaving:** Overall score is under 70 and the customer is unsure about long-term plans
- **Planning to Replace:** Product is not part of long-term plans





Aggregation and Analytics



Aggregation and Analytics



Care Management



Aggregation and Analytics



Mixed Bag

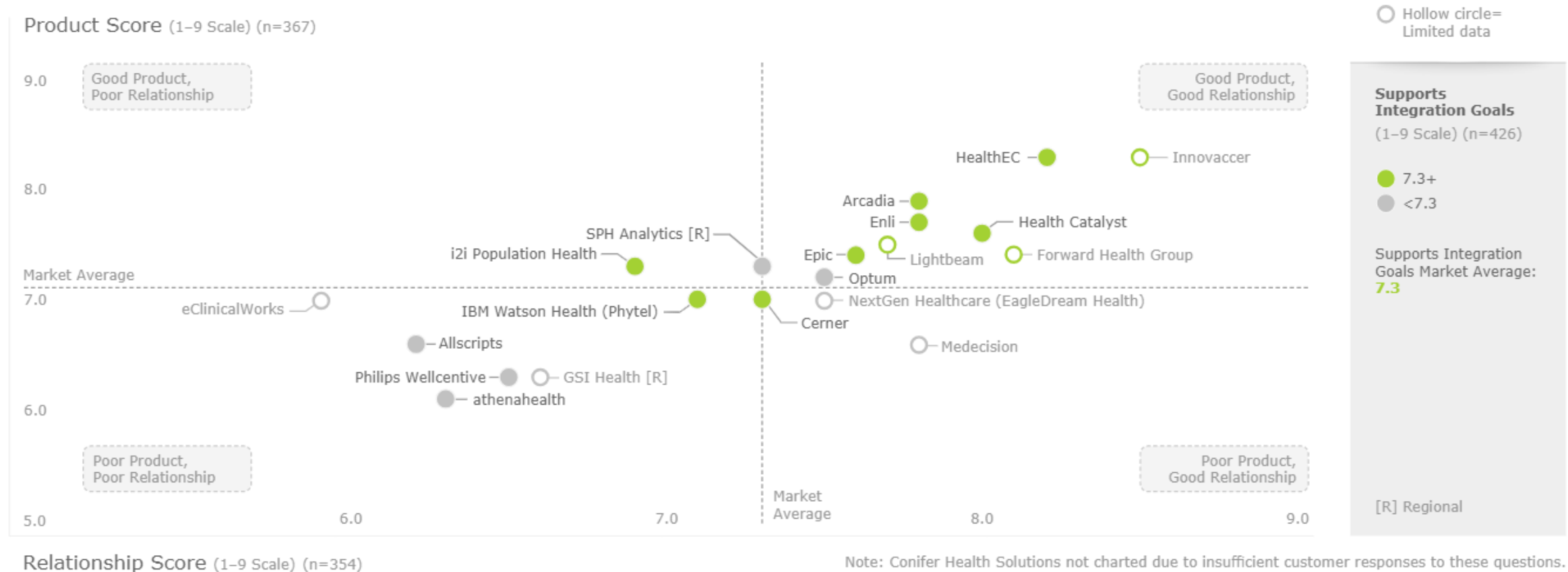
What are Providers Looking For?

PARTNERING

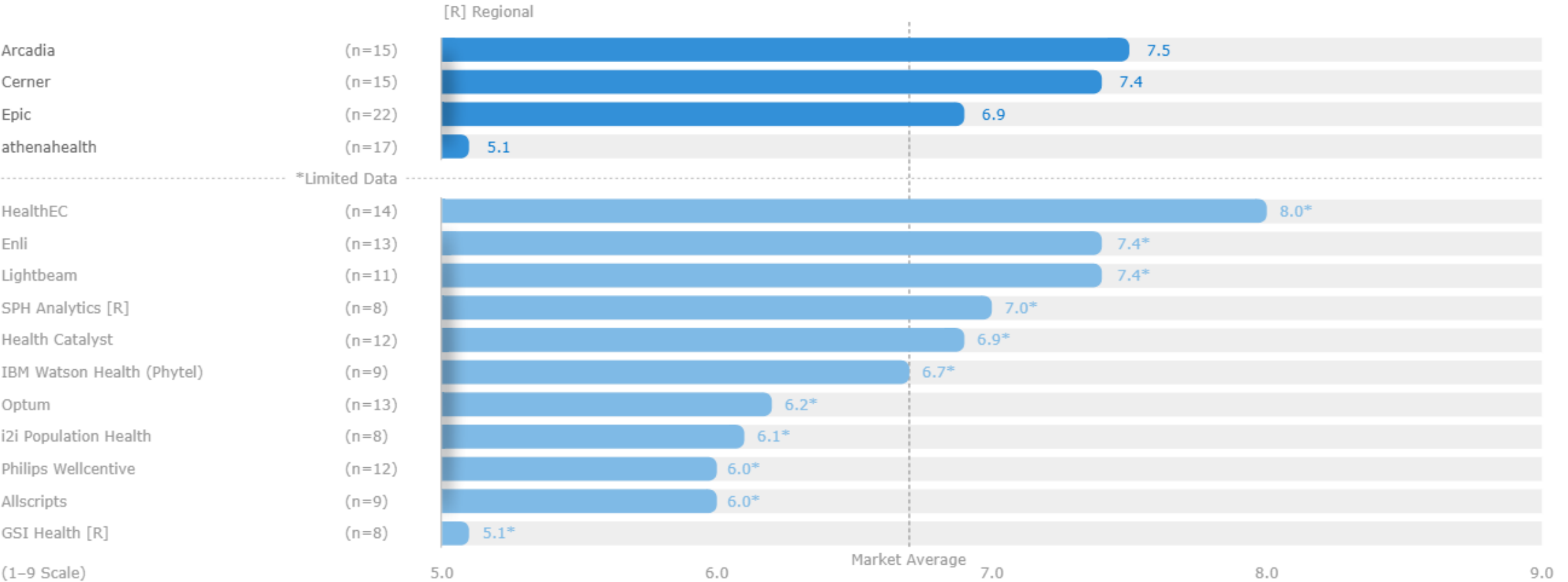
What Metrics Are Used to Measure Vendor Partnering?

In over 20 years of HIT research, KLAS has observed that a few core metrics form the main factors in whether a vendor is a strong partner. Some of these are obvious, like strong executive relationships or proactive support, while others, like delivering new, high-quality technology and providing strong integration, are less intuitive but just as indicative of a partnering approach.

Strength of Partnership



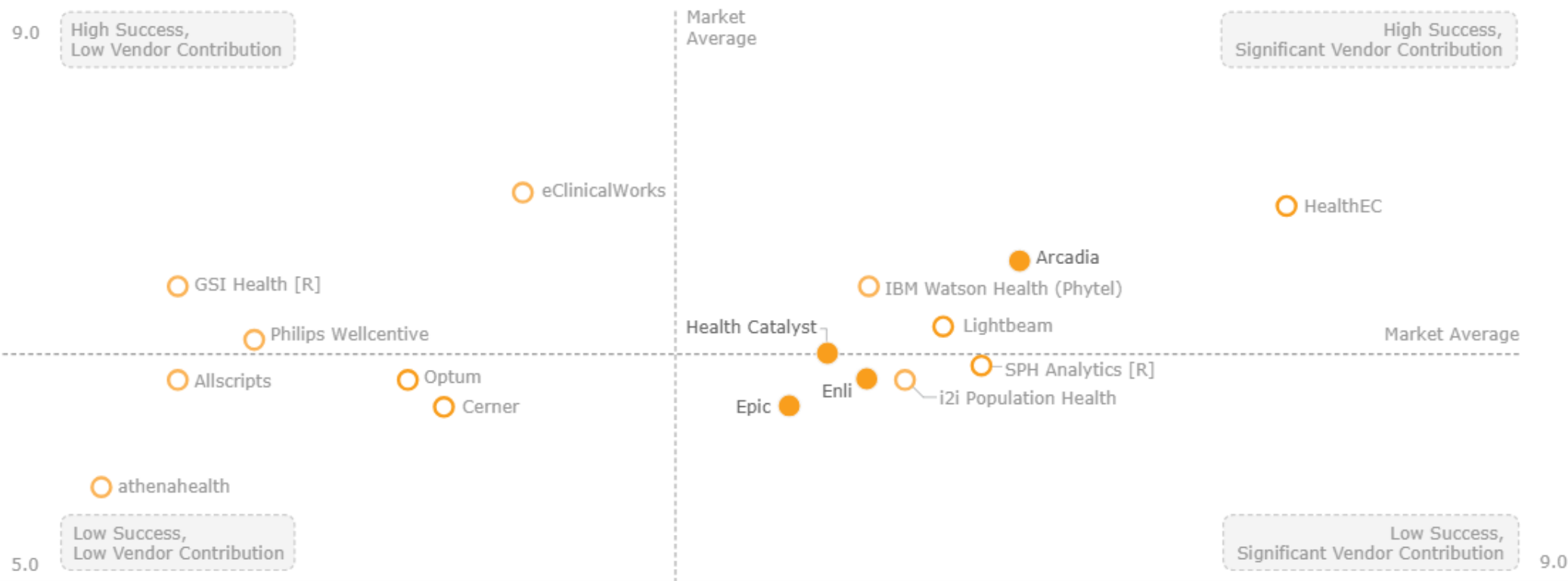
Strategic Guidance



FINANCIAL OUTCOME SUCCESS

Financial Outcome Success

Customers' Financial Outcome Success (1-9 Scale) (n=257)



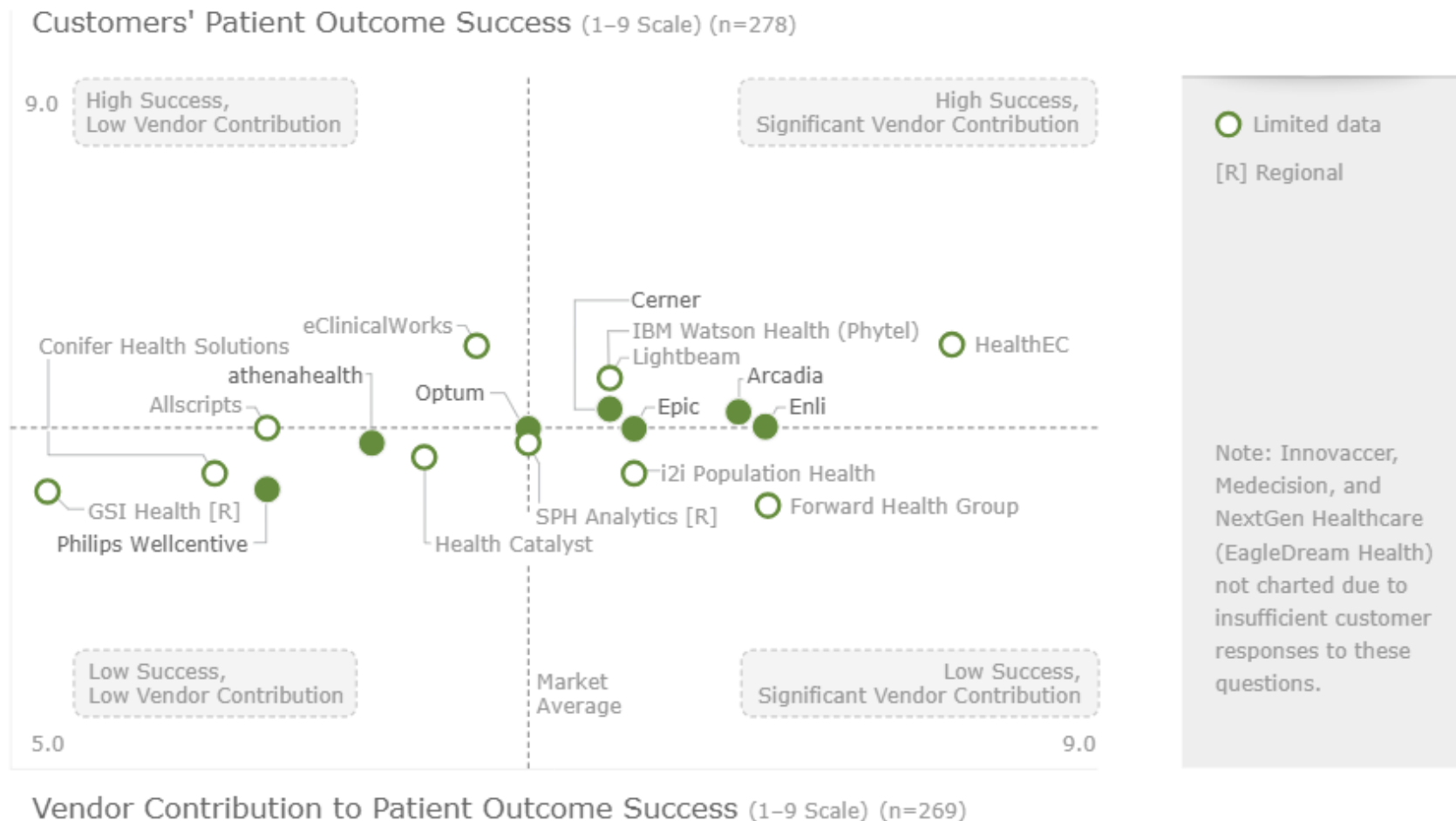
Vendor Contribution to Financial Outcome Success (1-9 Scale) (n=245)

○ Limited data
[R] Regional

Note: Conifer Health Solutions, Forward Health Group, Innovaccer, Medecision, and NextGen Healthcare (EagleDream Health) not charted due to insufficient customer responses to these questions.

PATIENT OUTCOME SUCCESS

Patient Outcome Success



Questions?

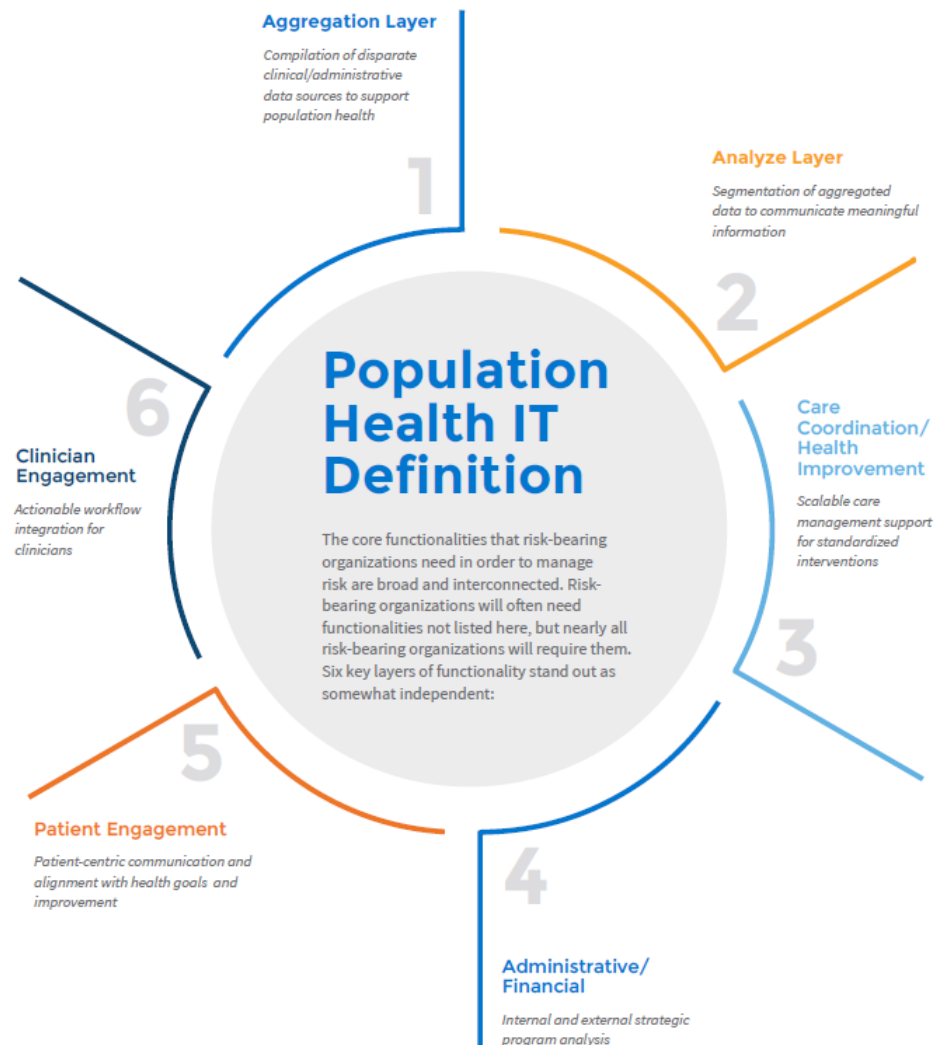
For additional questions or access to a KLAS report, please contact:

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Population Health IT Definition

DEFINITION AND CRITICAL CHALLENGES OF PROVIDER POPULATION HEALTH IT SOLUTIONS

In September of 2016, executives from 16 healthcare IT vendor companies, 3 healthcare services firms, 31 payer organizations met just outside of Salt Lake City for one day. Goals of the summit included the following:

- Definition of the required core competencies for a population health tool set
- Identification of critical challenges in vendor/provider partnerships, specifically those that might allow for more successful population health IT deployments

Population Health IT Framework

Objective
Define core competencies of a population health IT solution and recognize the vendors that have developed and widely implemented these solutions.

Validation of Solution Success
The following method for ongoing validation and reporting of which vendor solutions are "complete" has been developed by KLAS and the provider visionaries. Feedback on this process is also welcomed by summit participants.

- **Principle:** A solution is deemed complete after five provider organizations report to KLAS that all specified required functionalities in a vertical are implemented and live within their organization.
- **Method:** In order to ensure that these functionalities are implemented at scale, only provider organizations with more than 30,000 risk-based lives will be asked to report on their experiences. KLAS will continually ask organizations to report on these verticals until five fully adopted organizations can be identified.
- **Reporting:** KLAS will validate market and vendor progress toward the framework twice during 2017 (once mid-year and once at year-end). All providers and any subscribing vendors will have access to this research.

Framework Development
The initial definition was developed by four provider leaders:

- Shawn Griffin, MD: Chief Quality and Informatics Officer for Memorial Hermann Physician Network
- Richard Vath, MD: Chief Clinical Transformation Officer at Franciscan Missionaries of Our Lady Health System
- Keith Fernandez, MD: Senior Physician Executive at Priva Health
- Rick Schooler: VP and CIO at Orlando Health

It is expected that this strawman will evolve based on feedback before the Keystone Summit and during the summit from all participants.

The results of this summit are publicly shared in an effort to improve the success with which population health IT solutions are deployed and adopted.

After this Initial first draft, all summit participants were asked to give significant feedback into a second draft iteration developed and released before the September Summit. Subsequently, this final definition is released after feedback and agreement by Summit participants. While not all participants agree with all portions of the definition, this work represents a multidisciplinary, multi-organizational, and multi-interested work effort around a unified goal.

Population Health Framework

1

Data Aggregation

Functionality for compiling from disparate sources the data necessary to understanding the health of a population (e.g., claims, EMR, pharmacy, ADT).

Vertical Functionalities

Ability to Incorporate Data in a Timely Mannger Using Common Standards

Incorporation of ADT Data

Incorporation of Pharmacy Data

Incorporation of Claims/ Payer Data

Incorporation of Inpatient EMR Data

Incorporation of Outpatient EMR Data

Incorporation of Other Platform- Generated Data (e.g., state registries)

Ability to Normalize and Clean Incoming Data

Ability to Continuously Monitor Quality of Incorporated Data

Reliable Master Patient Index (MPI)

Compilation of A Longitudinal Patient Record

2

Data Analysis

Automated tools to stratify a population across risk factors and to facilitate communication through reports, benchmarking, and predictive analytics.

Patient Registries/ Patient Stratification/ Risk Stratification

Provider Attribution of Patients

Quality Measures and Analytics Scaled Down to Facility/ Caregiver Level

Common Predictive Analytics

Tracking of Internal Goal Targets, Simple Benchmarking

Regulatory Reporting Submission

3

Care Management

Tools that enable care managers to track, plan, and coordinate care for a population and that can also track the care managers themselves.

Tools for Care Coordination and Care Management Workflows

Tools for Chronic Disease Management

Configurable Care Plans

Supplemental Tools for Care Managers

Tools for Managing Care Managers

Population Health Framework

4

Admin/Financial Reporting

Dashboards and reporting used by executives to analyze financial and clinical results.

Financial Performance Tracking Under Risk-Based Contracts

Role-Based Dashboard Reporting for Physicians/Clinicians

Role-Based Dashboard Reporting for Executives/Administrators

Executive Level Performance Tracking Including Standard Quality Metrics

Total Cost of Care Analytics for Individual Patients, Patient Groups

Export/Import Capabilities for Integration with External Data Visualization Tools

5

Patient Engagement

Tools used to securely communicate with patients, track outreach, and keep patients informed of results.

Platform or Services for Patient Communication/Engagement

Secure Messaging Between Patients & Care Providers/Care Managers

Patient Education Delivery Functionality

Tracking of Outreach Efforts

Patient Accessible Health Dashboard

Patient Satisfaction Monitoring of Programs and Providers

6

Clinician Engagement

Functionality that enables physicians to use PHM data at the point of care and also tracks that utilization.

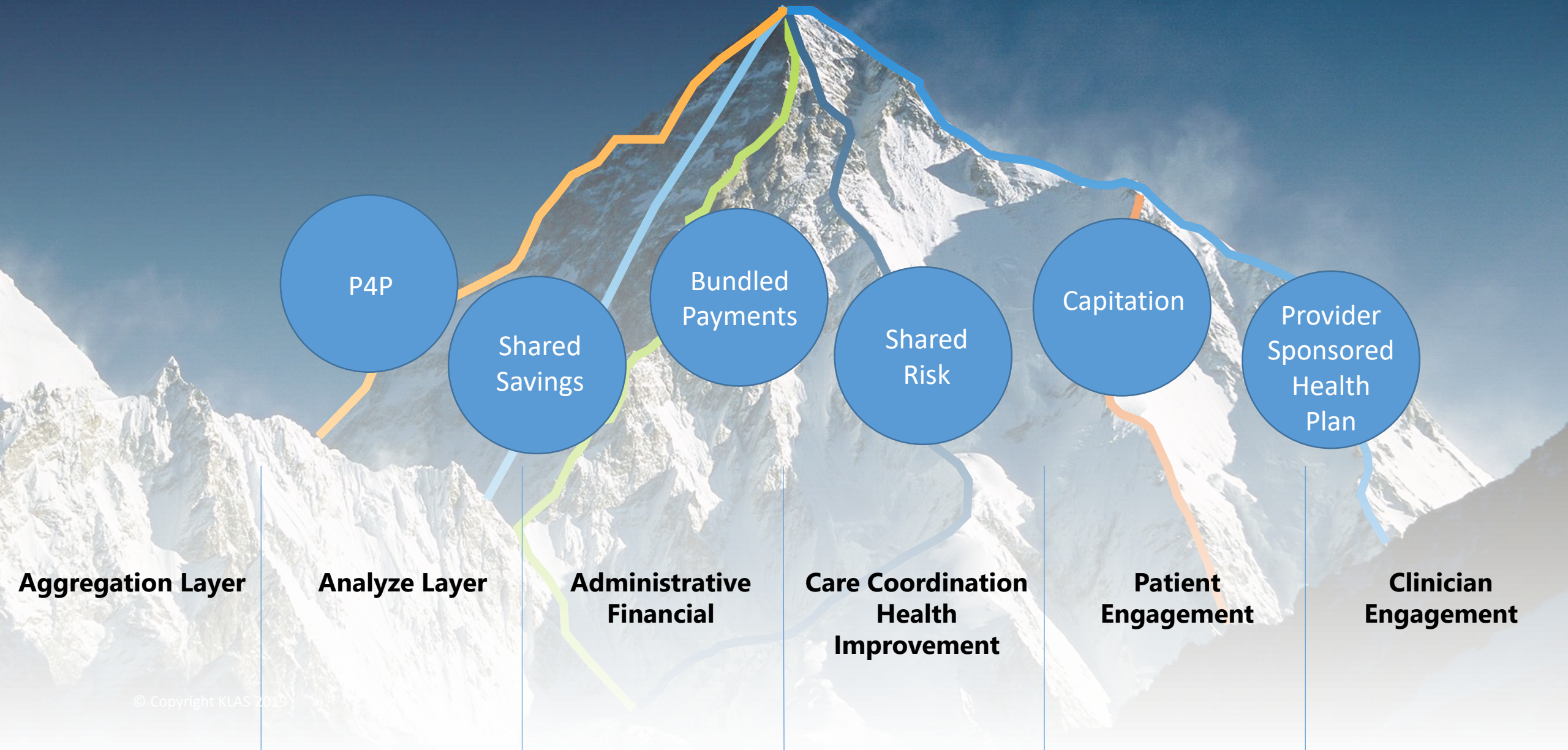
Supports Single Sign-On Integration

Integration Allows Care Providers Working in the PHM Tool to Initiate Actions within an EMR

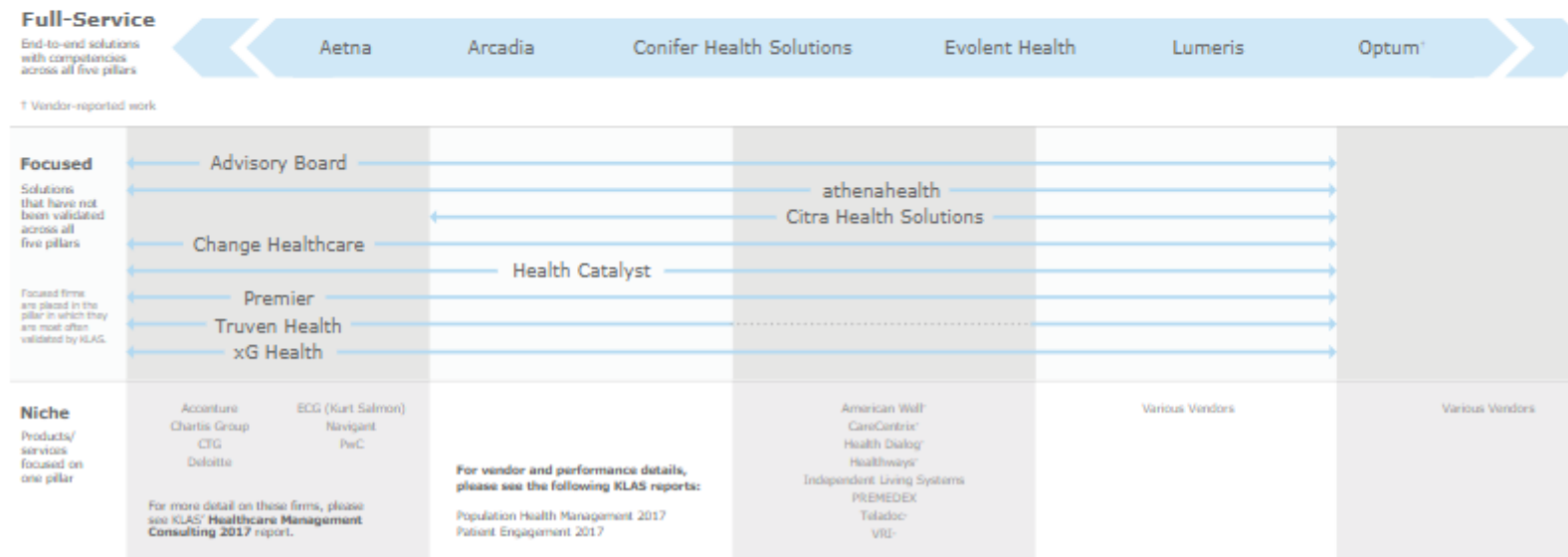
Integrations Allows Care Providers Working in an EMR to See Care Gaps and Alerts from the PHM Tool

Ability to Track Clinician Usage and Activity within PHM Tools

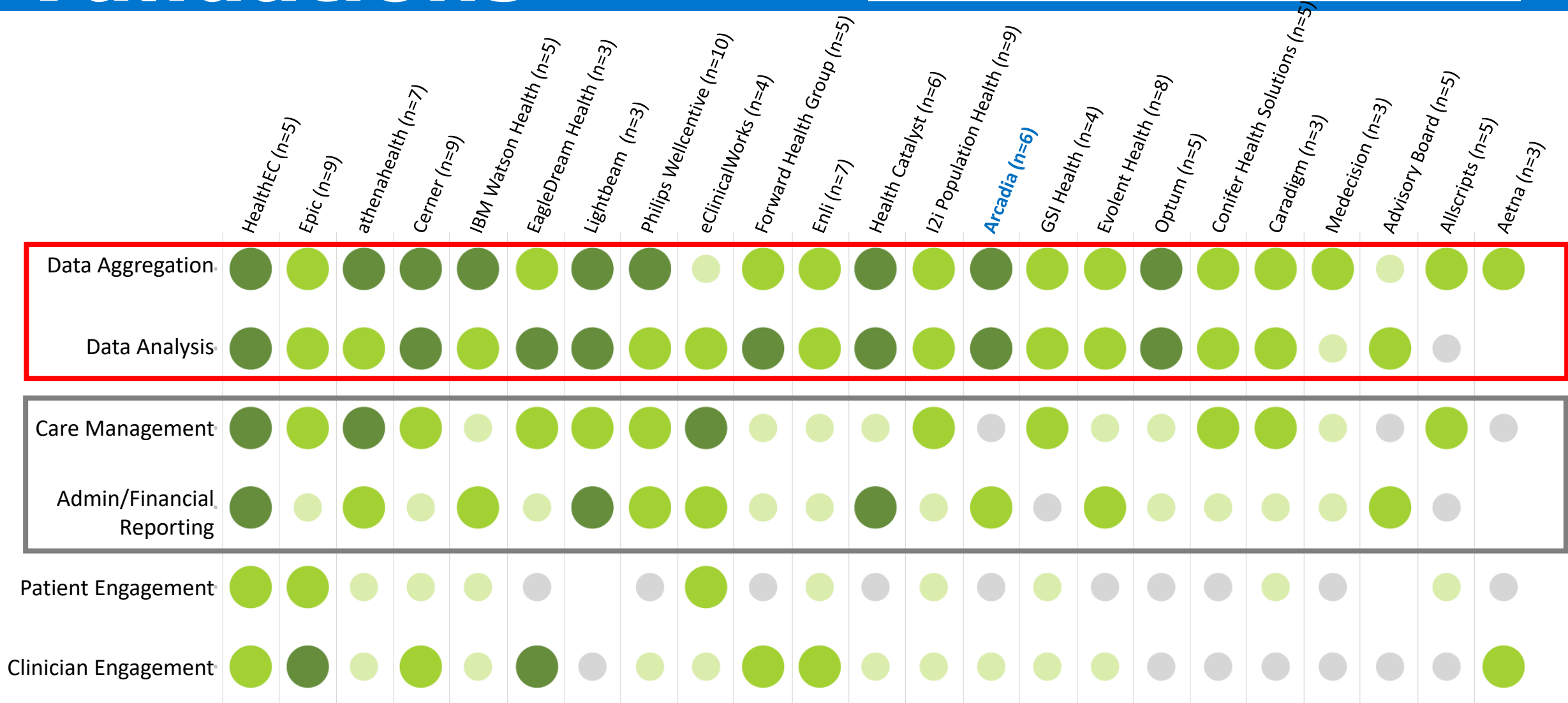
Climbing the Population Health Mountain of Success



KLAS® Value-Based Care Framework

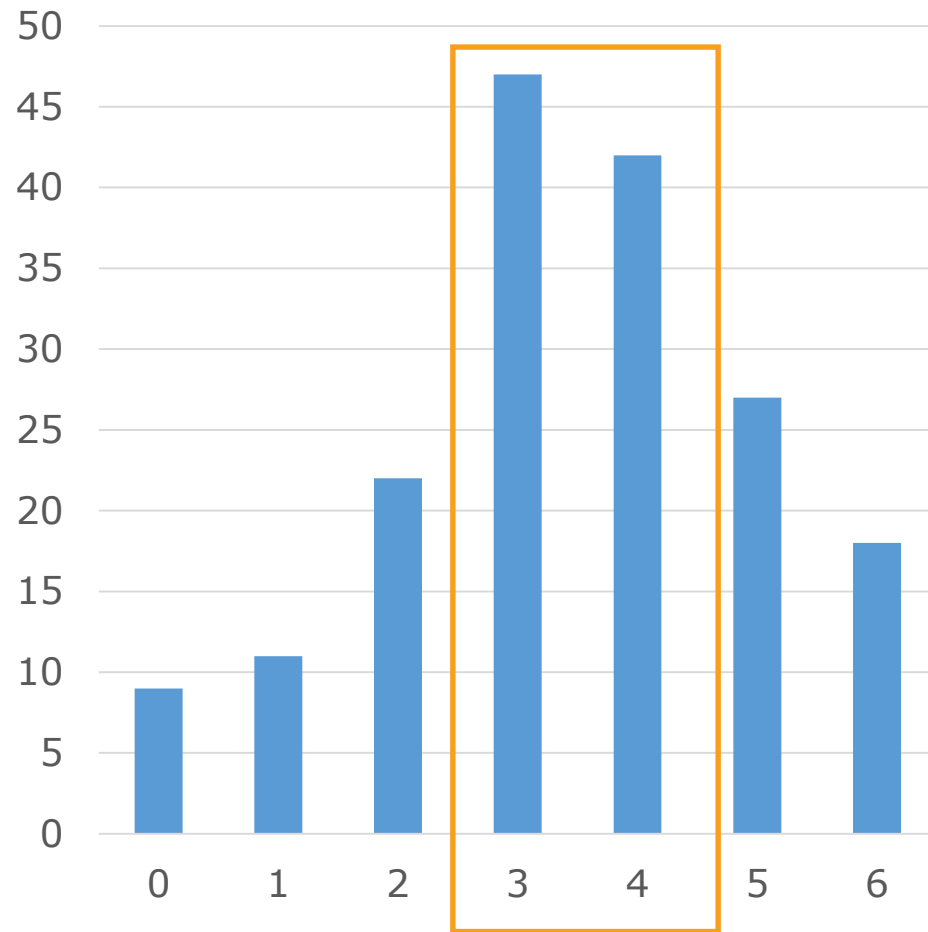


Depth of Adoption by Vertical

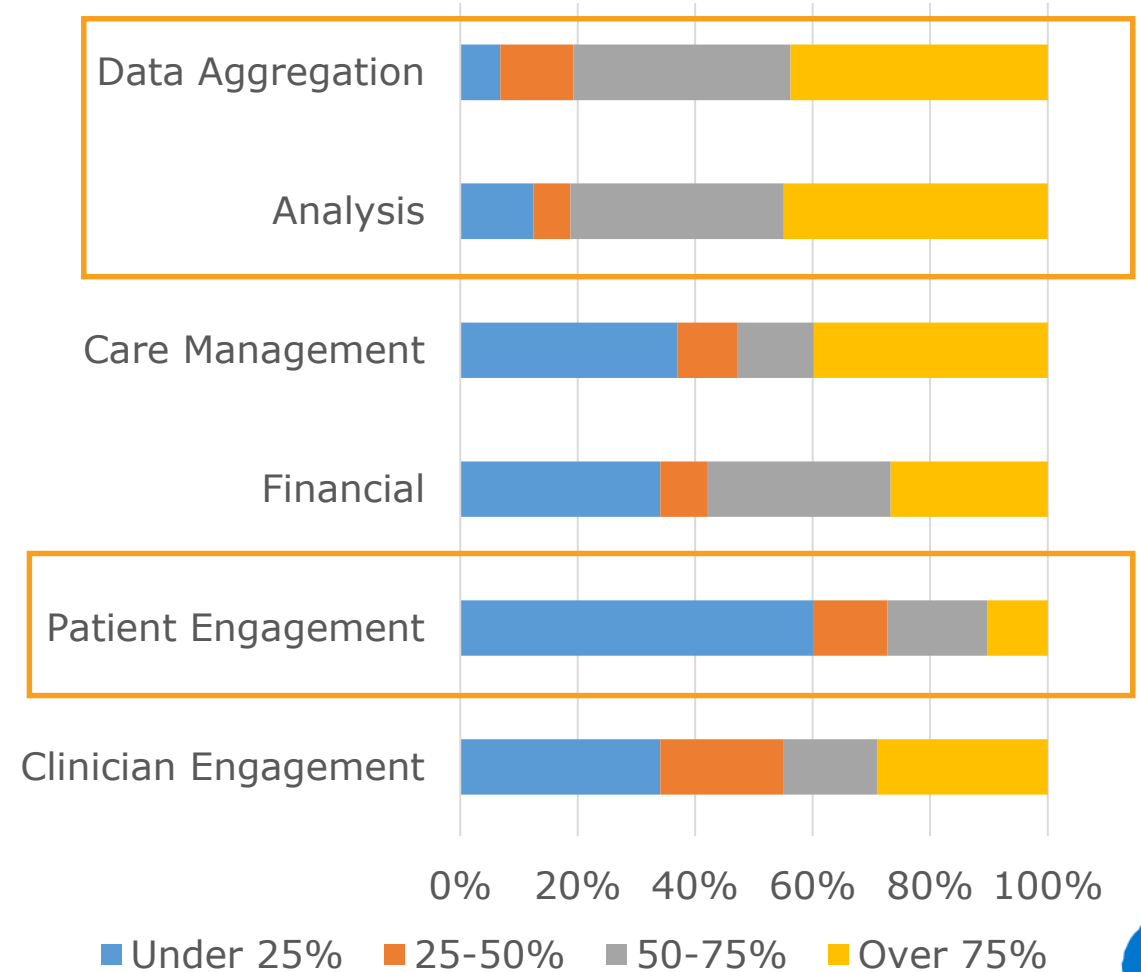


KLAS[®] Population Health Validation Report

Frequency of the deployed verticals



Percentage of deployed functionality within each vertical

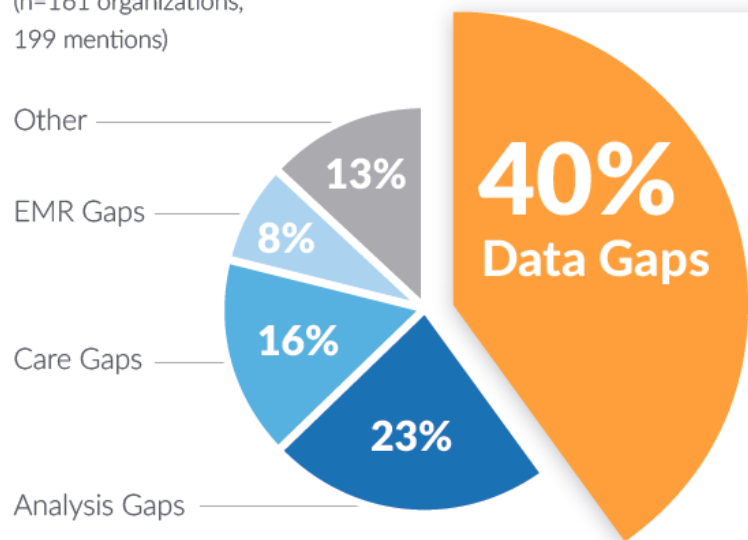


PROVIDER ATTENTION SHIFTS TO DATA-RELATED GAPS

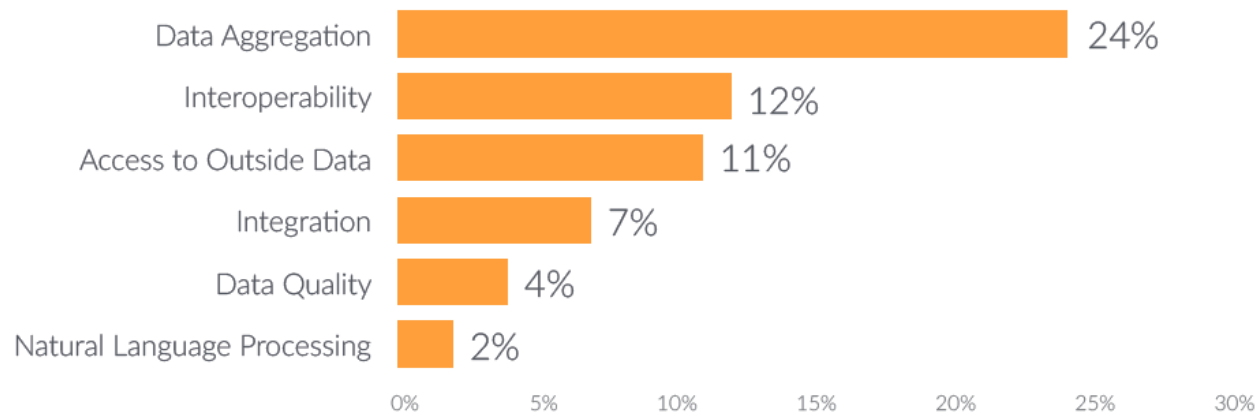
Earlier KLAS research confirmed vendor claims of data expertise, but provider needs have become more complex as focus has shifted from claims-based analytics to comprehensive care management. Hurdles in data collection and quality are now providers' largest concern. Interest in enterprise data warehouses that mesh clinical and claims data is growing. Providers decry the lack of interoperability that would ease collection of outside data into integrated EMR-based solutions. Even the most capable aggregation solutions require extensive configuration efforts.

PROVIDERS' POPULATION HEALTH TECHNOLOGY GAPS

(n=161 organizations,
199 mentions)



What Data Gaps Are Providers Experiencing?



KLAS® Population Health Performance 2017

TYPE OF DATA FEEDS VALIDATED

FULLY RATED

		EMR Feeds	PA/PM Claims Feeds	Payer Claims	Data WH Feeds	HIE Feeds	Other Feeds
Advisory Board	(n=12)						
Allscripts	(n=14)						
athenahealth	(n=12)						
Cerner	(n=18)						
Enli	(n=17)						
Epic	(n=22)						
i2i Population Health	(n=17)						
IBM Watson Health	(n=15)						
Optum	(n=15)						
Philips Wellcentive	(n=16)						
Valence Health	(n=10)						
Verscend	(n=10)						

Chart depicts current customer reporting and validation of data integration sources. Vendors may provide more capabilities than what customers currently use or adopt.

Percent of each customer group:

66% or More

33% to 65%

Up to 32%

BELOW KONFIDENCE

		EMR Feeds	PA/PM Claims Feeds	Payer Claims	Data WH Feeds	HIE Feeds	Other Feeds
Aetna	(n=3)						
Arcadia Healthcare	(n=9)						
Best Doctors	(n=6)						
Caradigm	(n=6)						
Conifer Health Solutions	(n=6)						
eClinicalWorks	(n=7)						
Evolent Health	(n=6)						
Forward Health Group	(n=8)						
Health Catalyst	(n=5)						
HealthEC	(n=6)						
Lightbeam	(n=3)						
McKesson	(n=4)						
Medecision	(n=6)						

KLAS® Value Based Care Timing Report 2016

Top 5 Reasons for LOW CONFIDENCE

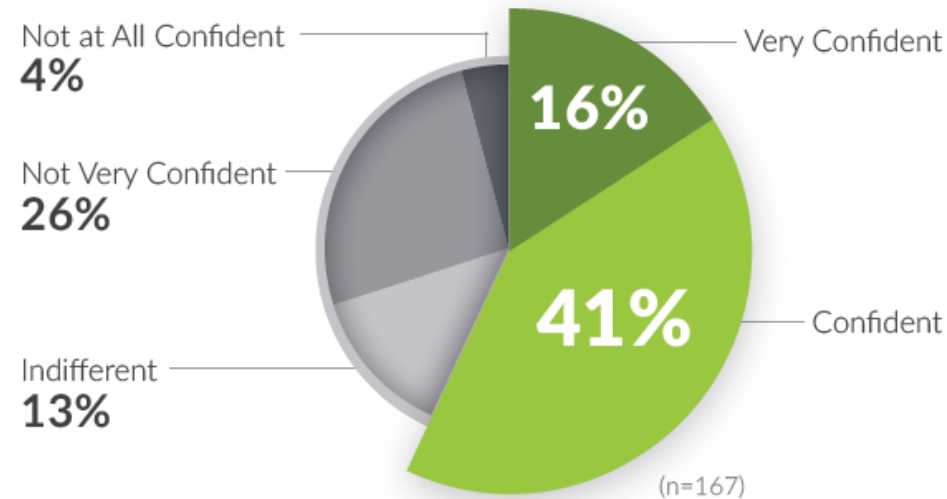
(n=79)



0% 10% 20% 30% 40% 50%

CONFIDENCE IS GROWING

How confident is your organization in its current ability to manage a population's health?



Top 5 Sources of HIGH CONFIDENCE

(n=66)



0% 10% 20% 30% 40% 50%

KLAS® Value-Based Care Provider Profiles

Managed Services

Engaging a third party for VBC managed services: Some organizations engage managed services firms, which offer a suite of end-to-end solutions to manage the transformation and provide *ongoing* support for VBC initiatives.

VBC Consulting

Engaging a third party for VBC consulting/advisory services: Some organizations engage firms in an advisory capacity to support them as they learn the skills needed to sustain their own VBC initiatives.

PHM Technology

Tackling the transition in-house: Some advanced organizations may have the necessary experience and capabilities to make the transition to VBC independently.

KLAS® Value-Based Care Provider Profiles Online Downloads

