Competing on Analytics

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NEXTGEN® HEALTHCARE

HIMSS CENTRAL & SOUTHERN OHIO Chapter

Using Data Analytics to Drive Success under Value-Based Payment

HIMSS
CENTRAL & SOUTHERN OHIO *Chapter*

Conflict of Interest

EagleDream Health, recently acquired by NextGen Healthcare, is a healthcare software analytics solutions company that delivers a SaaS-based, comprehensive, integrated solution that spans the entire clinical, financial and administrative spectrum. Jim Garnham provides consulting services to health care providers on the development and implementation of value-based contracting strategies.

Learning Objectives

1. Take a comprehensive view of healthcare data analytics
2. Articulate the differences between analytics to inform strategy and analytics to implement it
3. Differentiate three separate but related uses of Risk Adjustment
4. Understand how to use that knowledge to negotiate and implement better value-based relationships

Agenda

1. Environment
   - Value-based payment is upon us
2. Technology
   - New things are possible
3. Application
   - Know where you are
   - Navigate to where you want to be

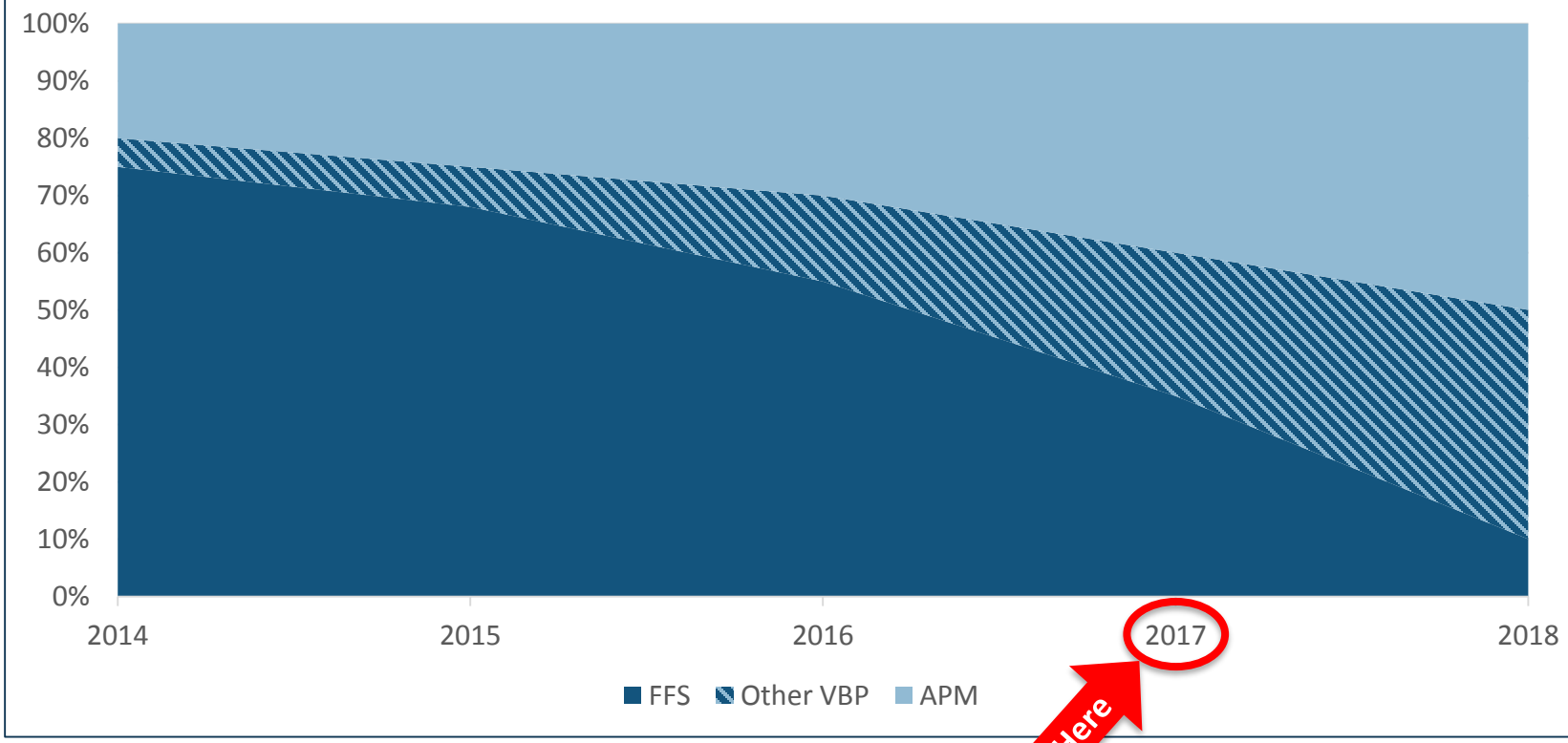
Need

Ability

Insight

Payers Setting the Pace to Value

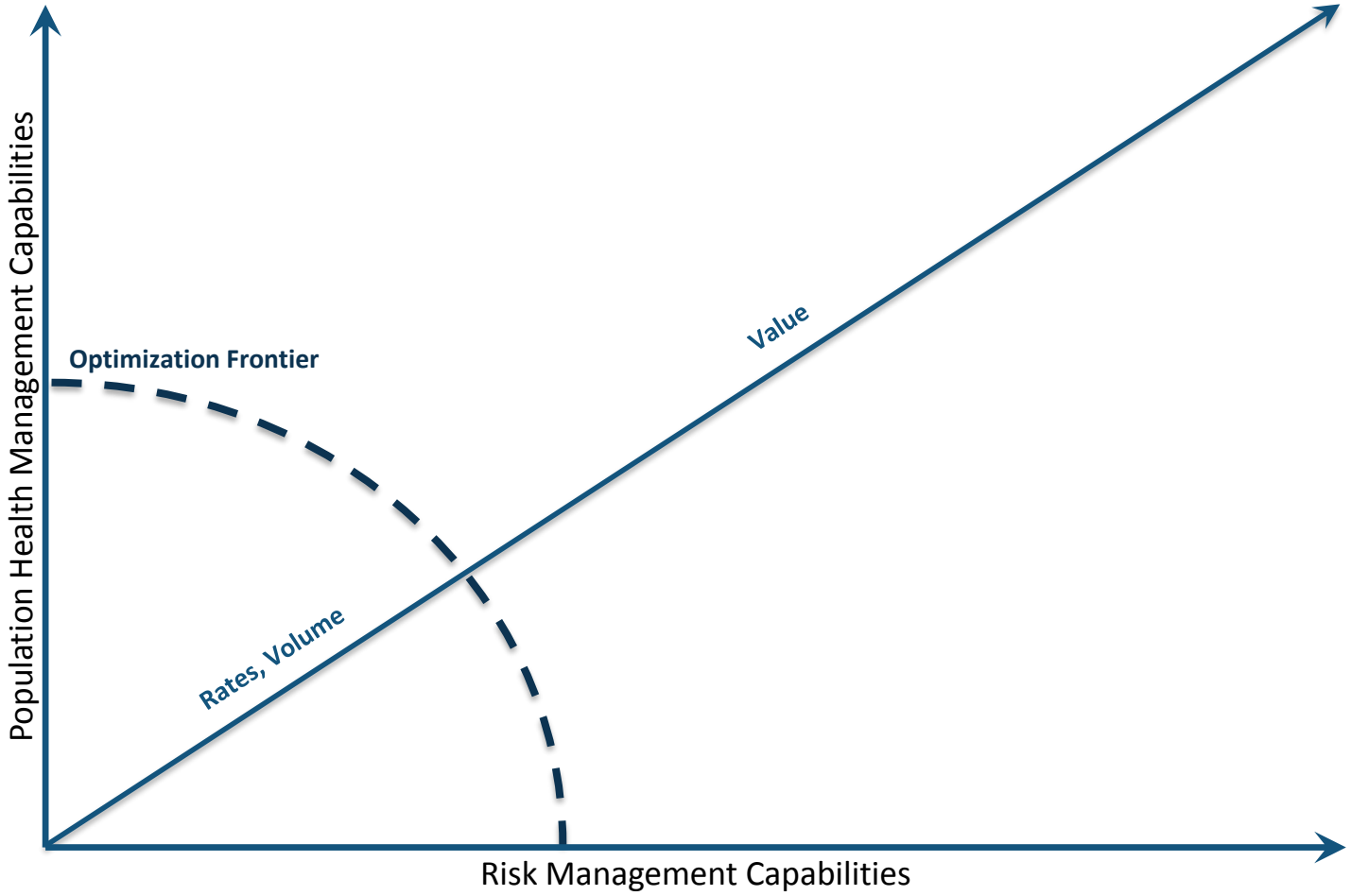
By the **end of 2018**:
90% of Medicare payments will be tied to value.



Environment

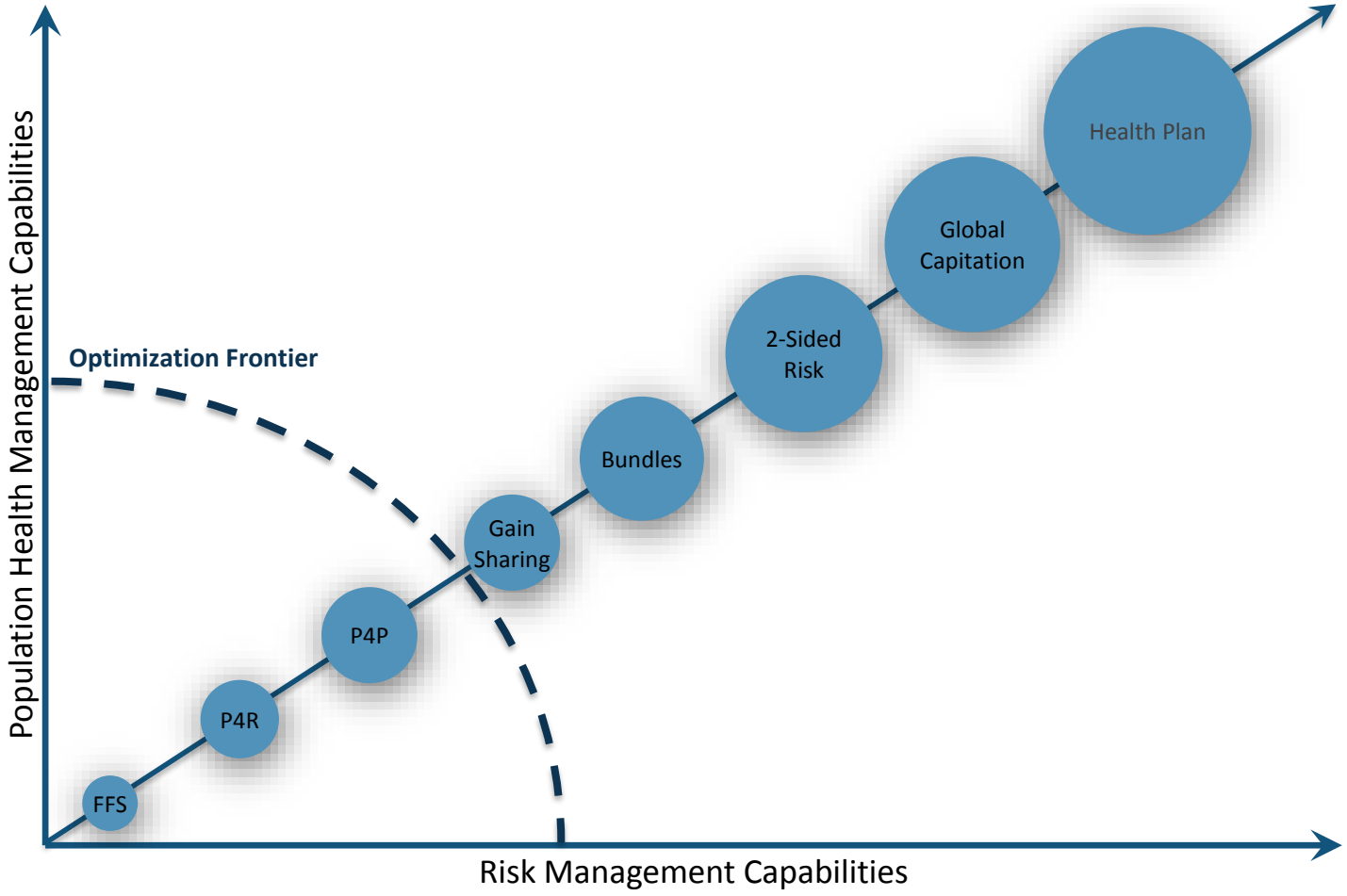
Environment

Value-Based Continuum



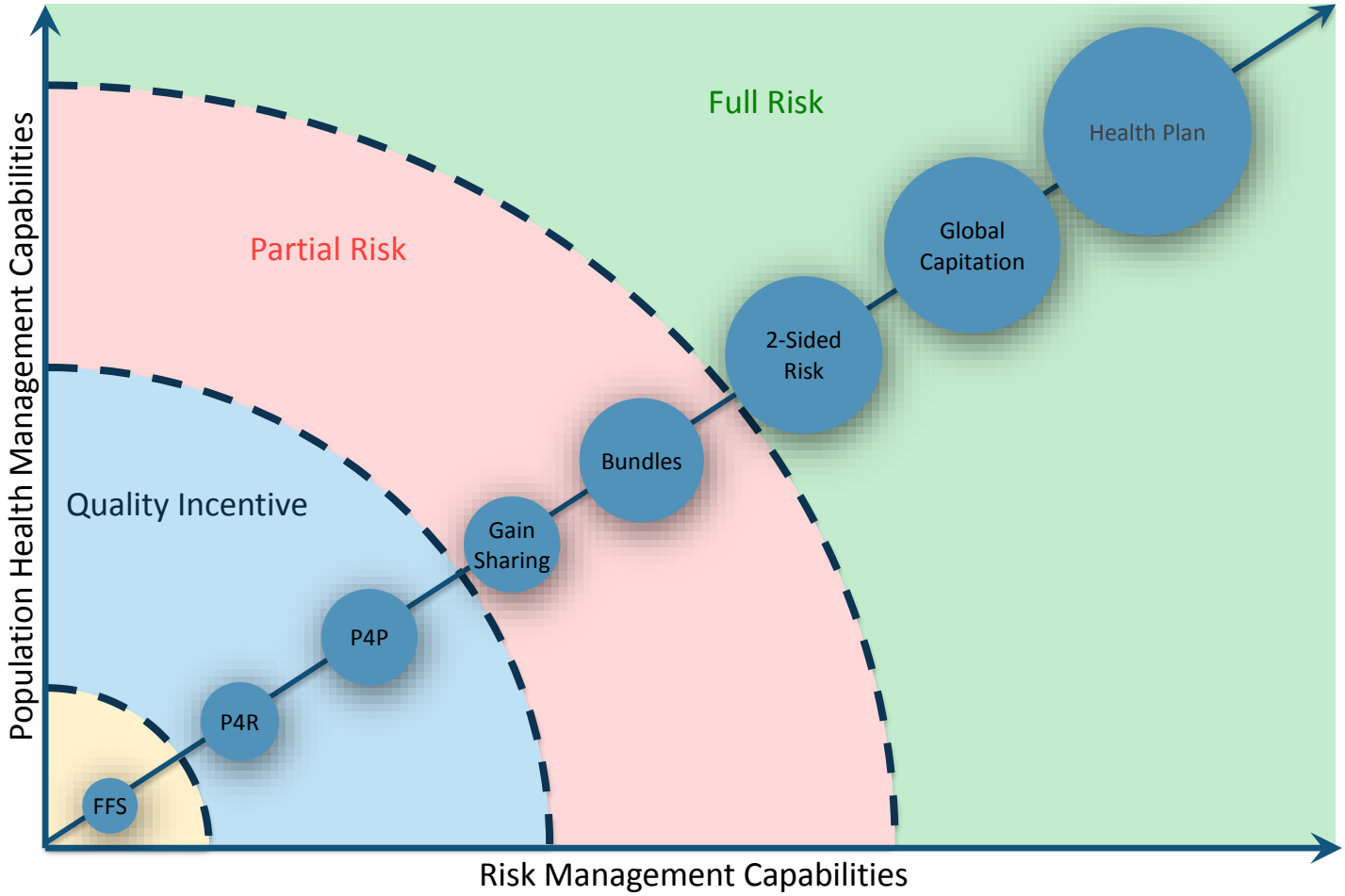
Environment

Value-Based Continuum



Environment

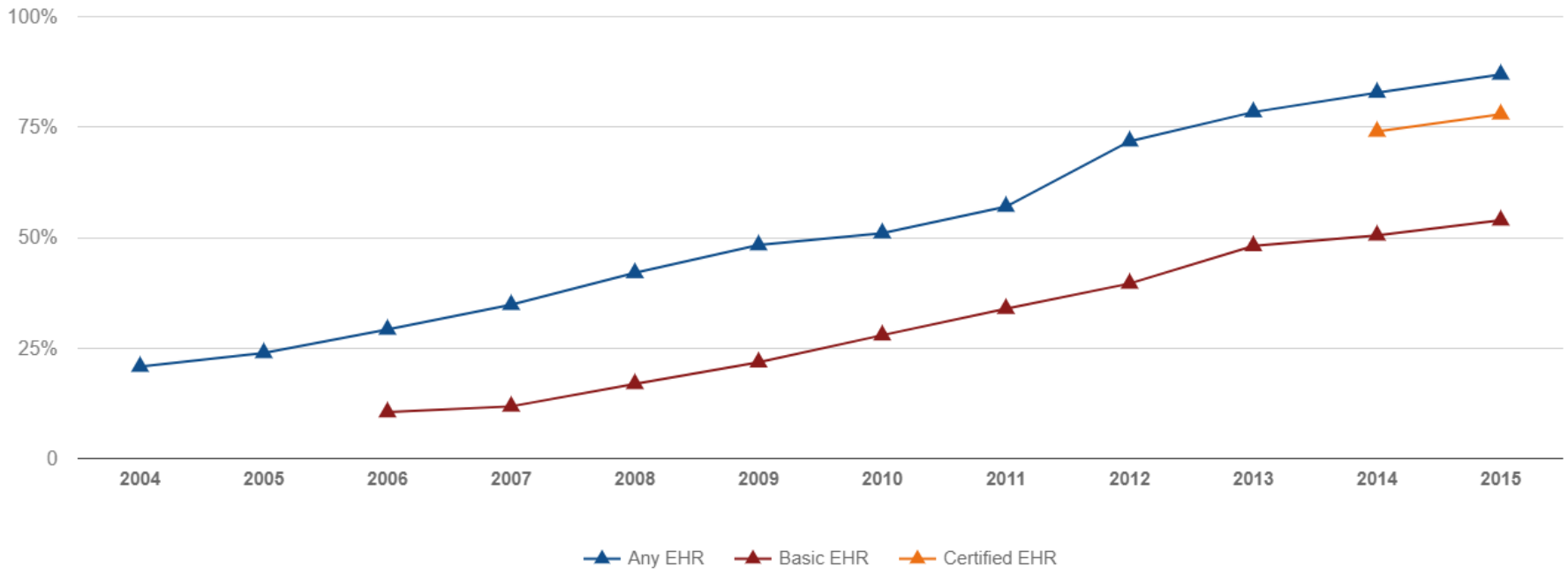
Value-Based Continuum



Enabling Technology

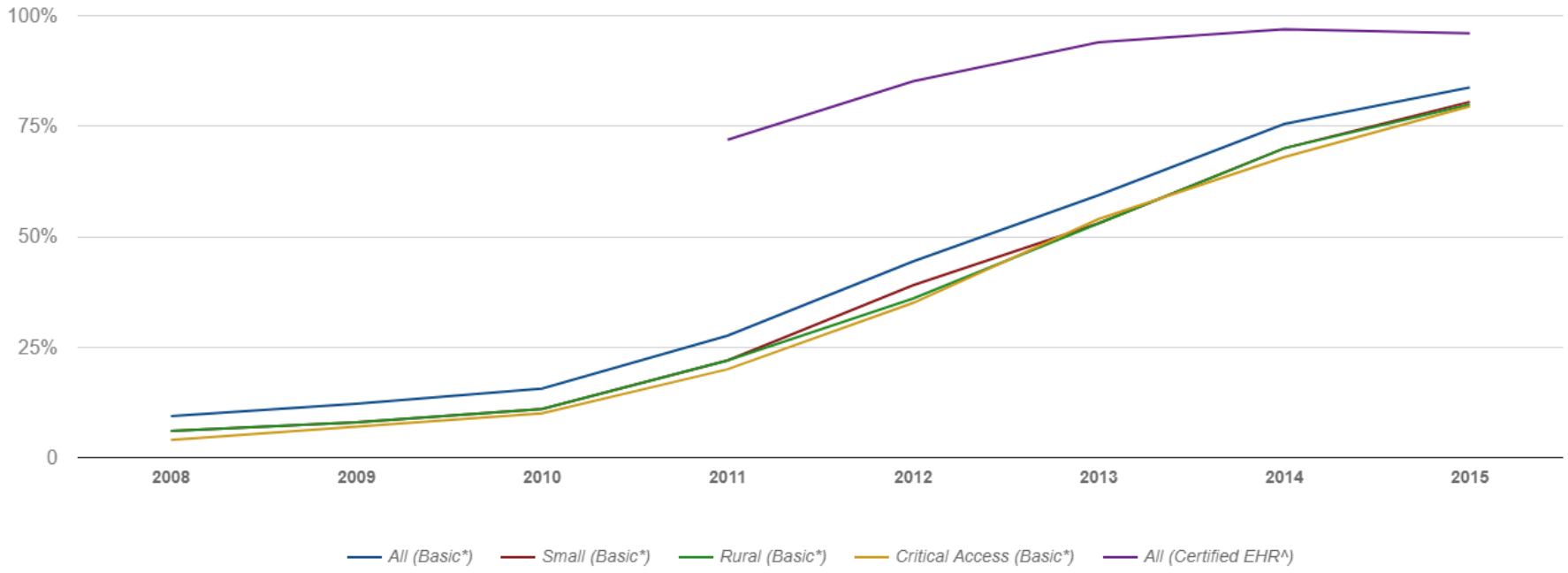
- Electronic Medical Records (EMRs/EHRs):
  - From minority to 9/10 in less than a decade
  - Structured data collection
  - Support revised workflows

EHR Adoption: Office-Based Physicians



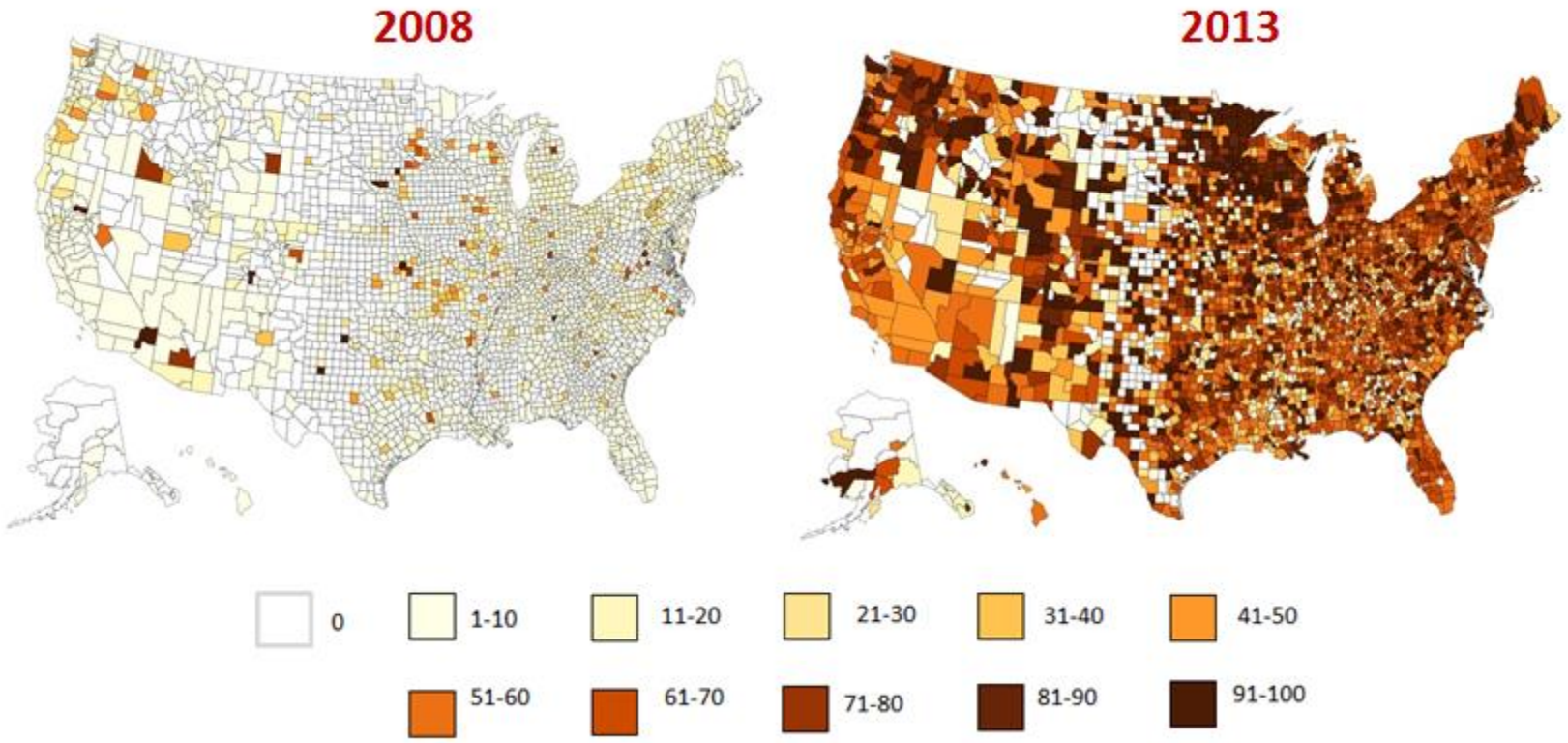
Office of the National Coordinator for Health Information Technology. 'Non-federal Acute Care Hospital Electronic Health Record Adoption,' Health IT Quick-Stat #47. dashboard.healthit.gov/quickstats/pages/FIG-Hospital-EHR-Adoption.php. May 2016.

EHR Adoption: Acute Facilities



Office of the National Coordinator for Health Information Technology. 'Non-federal Acute Care Hospital Electronic Health Record Adoption,' Health IT Quick-Stat #47. dashboard.healthit.gov/quickstats/pages/FIG-Hospital-EHR-Adoption.php. May 2016.

Percent of Physicians e-Prescribing through an Electronic Health Record



Office of the National Coordinator for Health Information Technology. 'Percent of Physicians e-Prescribing through an Electronic Health Record,' Health IT Quick-Stat #17. dashboard.healthit.gov/quickstats/pages/FIG-Percent-Physicians-eRx-through-EHR.php. February 2014.

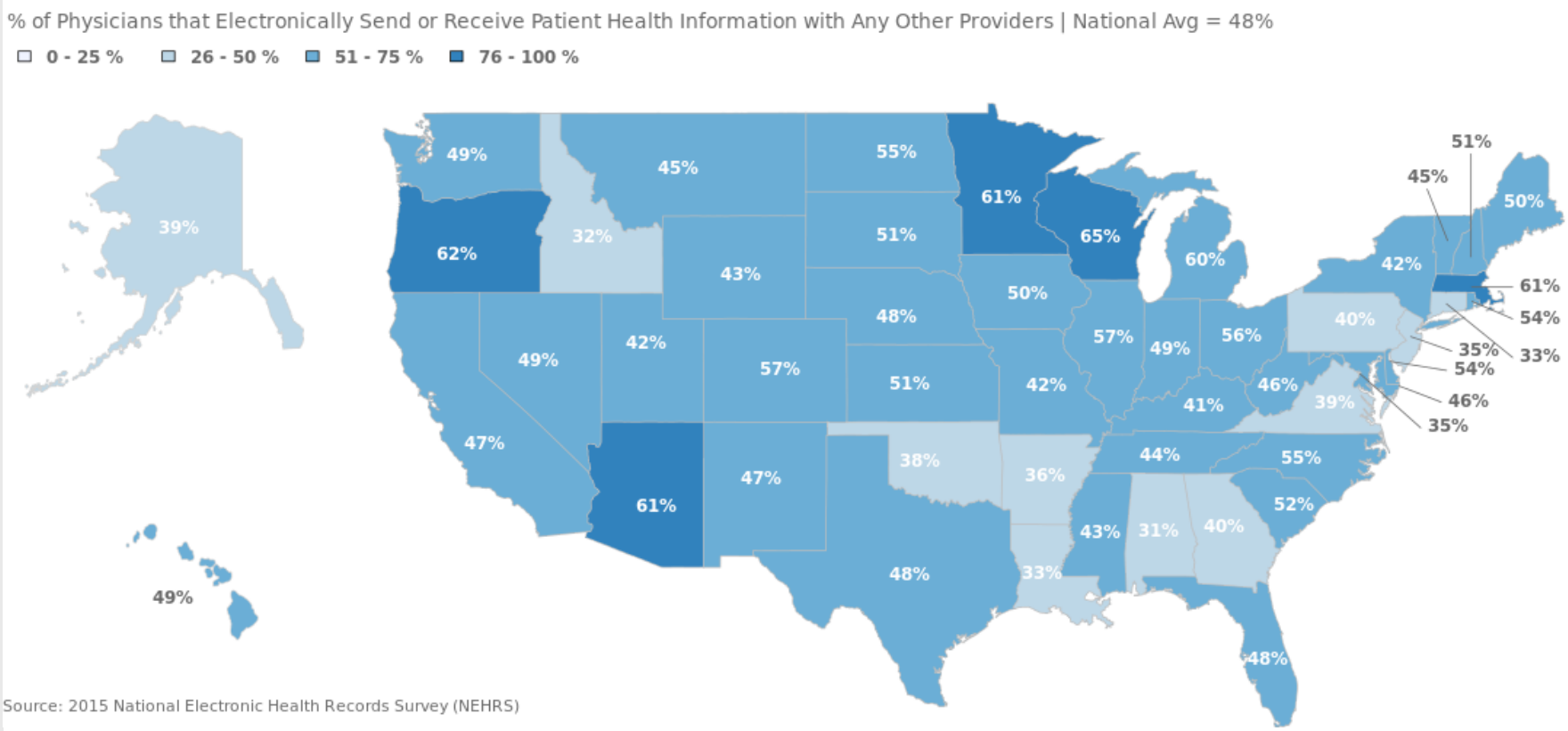
Enabling Technology

Technology

- Electronic Medical Records:
  - From minority to 9/10 in less than a decade
  - Structured data collection
  - Support revised workflows
- HIEs/Data Aggregation:
  - 277 Private HIEs, 165 Public (2015)[1]
  - Aggregate HC Data from multiple sources (clinical, claims, patient generated)
  - True “interoperability” remains elusive

[1] http://www.telequality.com/blog/2017/7/7/health-information-exchanges-one-solution-to-the-interoperability-dilemma

Physician Use of Electronic Information Exchange



Office of the National Coordinator for Health Information Technology. 'Office-based Physician Health IT Adoption,' Health IT Dashboard. http://dashboard.healthit.gov/apps/physician-health-it-adoption.php. December 2016.

Enabling Technology

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- HIEs/Data Aggregation:
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  - Aggregate HC Data from multiple sources (clinical, claims, patient generated)
  - True “interoperability” remains elusive
- Advanced Analytics:
  - Performance Metrics - Reporting
  - Risk Adjustment
  - Target Population Health Management Resources

[1] http://www.telequality.com/blog/2017/7/7/health-information-exchanges-one-solution-to-the-interoperability-dilemma

Now that we have all this technology…

…are we asking it the right questions?

Application

Requirements for Success in the World of Value Payment

- Improve Clinical Outcomes through:
  - Identification of best practices
  - Data driven care management
- Improve Financial Performance by:
  - Identifying and eliminating low value care
  - Reducing unwarranted variations
  - Improving risk-based reimbursement
- Create Sustainability with:
  - Engaged network of effective, collaborative, informed practitioners committed to delivering high quality, low cost care that improves health outcomes
  - Improved patient, physician and staff satisfaction with health care delivery
  - Sustainable business model that provides sufficient revenue to support investments in innovation and non-fee activity

A Tale of Two Perspectives

Understand
Where You Are

- Clinical Opportunities
- Value Proposition
- Descriptive Risk (Retrospective)

Manage
Where You Want to Go

- Performance Goals
- Trends, gaps
- Focus limited PHM Resources
- Predictive Risk (Prospective)

Application

Approach 1:
Care Management/Navigation

- **Understand - Where does my practice have gaps?**
  Looking at the clinical quality metrics (contracts, compensation), identify areas that need attention to improve performance.
- **Manage - Who do we need to engage to fill them?**
  Identify specific patients not meeting goals to prioritize limited care management resources.

Triggers Driving Specific Care Management Interventions

- Metrics
  - Certain Diagnoses – Malignancy, Dementia
  - Not meeting targets

Metrics


All Initiatives
All Specialties
All Practices
All Providers
ROLLING 12 MONTHS
2/18/2016 - 2/18/2017
GOAL 80%
46%
13,272 | Patients
Breast Cancer Screening
GOAL 82%
38%
13,783 | Patients
Pneumococcal Vaccination Status
GOAL 82%
53%
20,300 | Patients
Cervical Cancer Screening
75%
GOAL 50%
19,561 | Patients
Access to Preventive/Ambulatory Health Services 20-44
79%
GOAL 50%
18,824 | Patients
Access to Preventive/Ambulatory Health Services 45-64
79%
GOAL 50%
14,157 | Patients
Access to Preventive/Ambulatory Health Services 65 & up
77%
GOAL 50%
52,542 | Patients
Access to Preventive/Ambulatory Health Services
GOAL 84%
93%
44,273 | Patients
Adult BMI Assessment

Patient Registry

Application

BACK Condition Registry

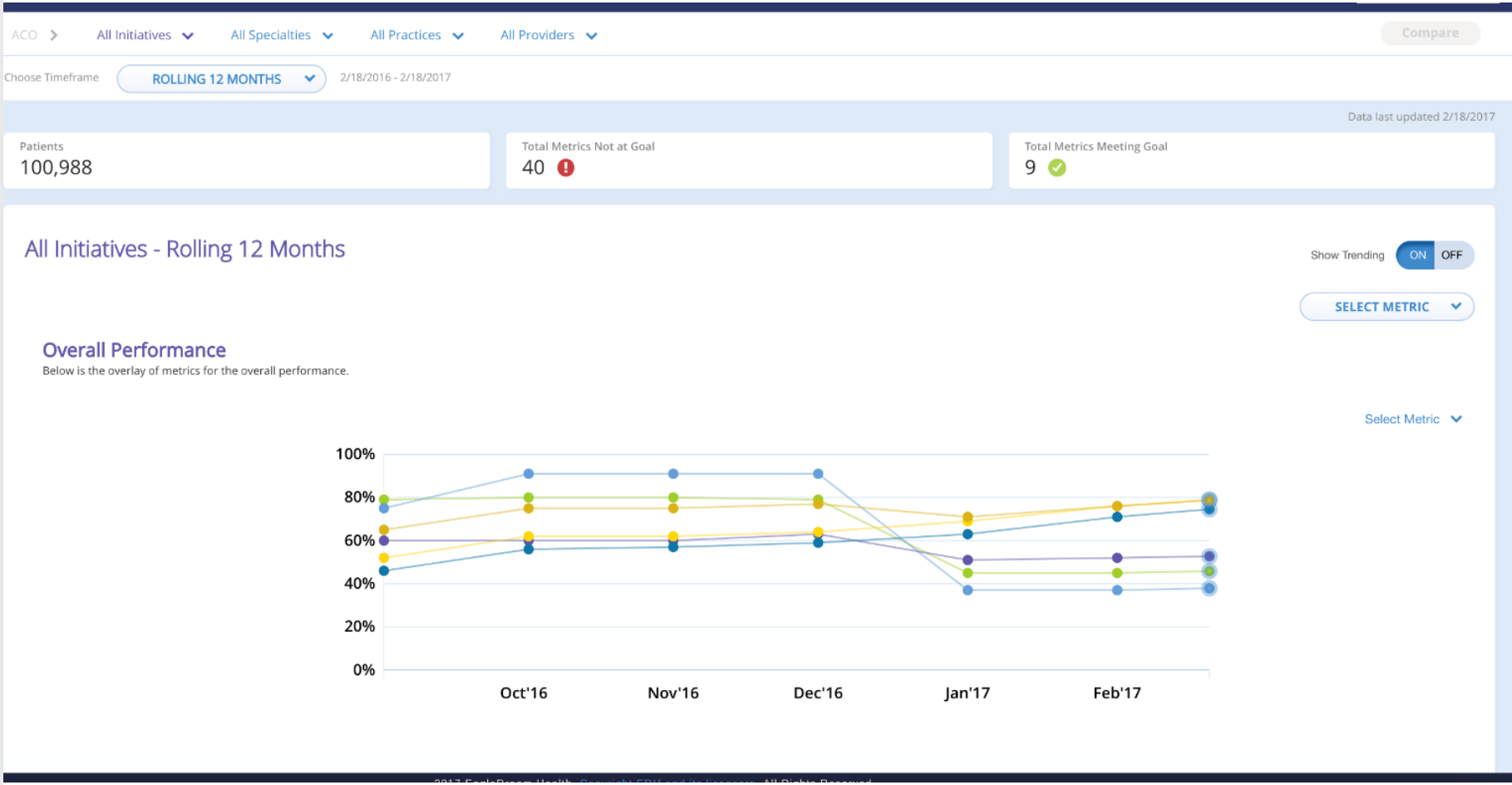
Search Patients

Conditions: Diabetes & Hypertension & CAD Patients: 2,030 Initiative: All Initiatives (EMR + Claims)

SETTINGS EXPORT PRINT

NAME	DOB	MRN #	LAST APPT.	CONDITION 1	CONDITION 2	CONDITION 3
Todd Abels	6/27/1964 52 yrs old	61001749	7/24/2014 2 yrs 7 mo	Mixed hyperlipidemia	Type II or unspecified type diabetes mellitus without mention of complication	Unspecified essential hypertension
Dawn Abreau	12/7/1937 79 yrs old	61727428	9/26/2016 5 mo	Mixed hyperlipidemia	Type II or unspecified type diabetes mellitus without mention of complication	Unspecified essential hypertension
Walter Acerno	5/11/1951 65 yrs old	61167405	7/8/2014 2 yrs 7 mo	Type II or unspecified type diabetes mellitus without mention of complication	Unspecified essential hypertension	Embolism and thrombosis of iliac artery (CMS-hcc)
Curtis Achorn	8/28/1950 66 yrs old	61731546	1/13/2017 1 mo	Mixed hyperlipidemia	Unspecified essential hypertension	Unspecified cardiovascular disease
Peggy Acoba	7/6/1961 55 yrs old	59463645	2/8/2017 22 days	Mixed hyperlipidemia	Type 2 diabetes mellitus with other oral complications	Unspecified essential hypertension
Brian Acrey	10/23/1954 62 yrs old	61322115	5/11/2016 9 mo	Mixed hyperlipidemia	Type II or unspecified type diabetes mellitus without mention of complication	Unspecified essential hypertension
David Adjei	12/11/1952 64 yrs old	61047613	11/28/2016 3 mo	Mixed hyperlipidemia	Type 2 diabetes mellitus with diabetic neuropathy	Unspecified essential hypertension
Rebecca Aegerter	10/31/1928 88 yrs old	61271438	1/24/2017 1 mo	Other and unspecified hyperlipidemia	Unspecified essential hypertension	Dementia in other diseases classified elsewhere with

Trending



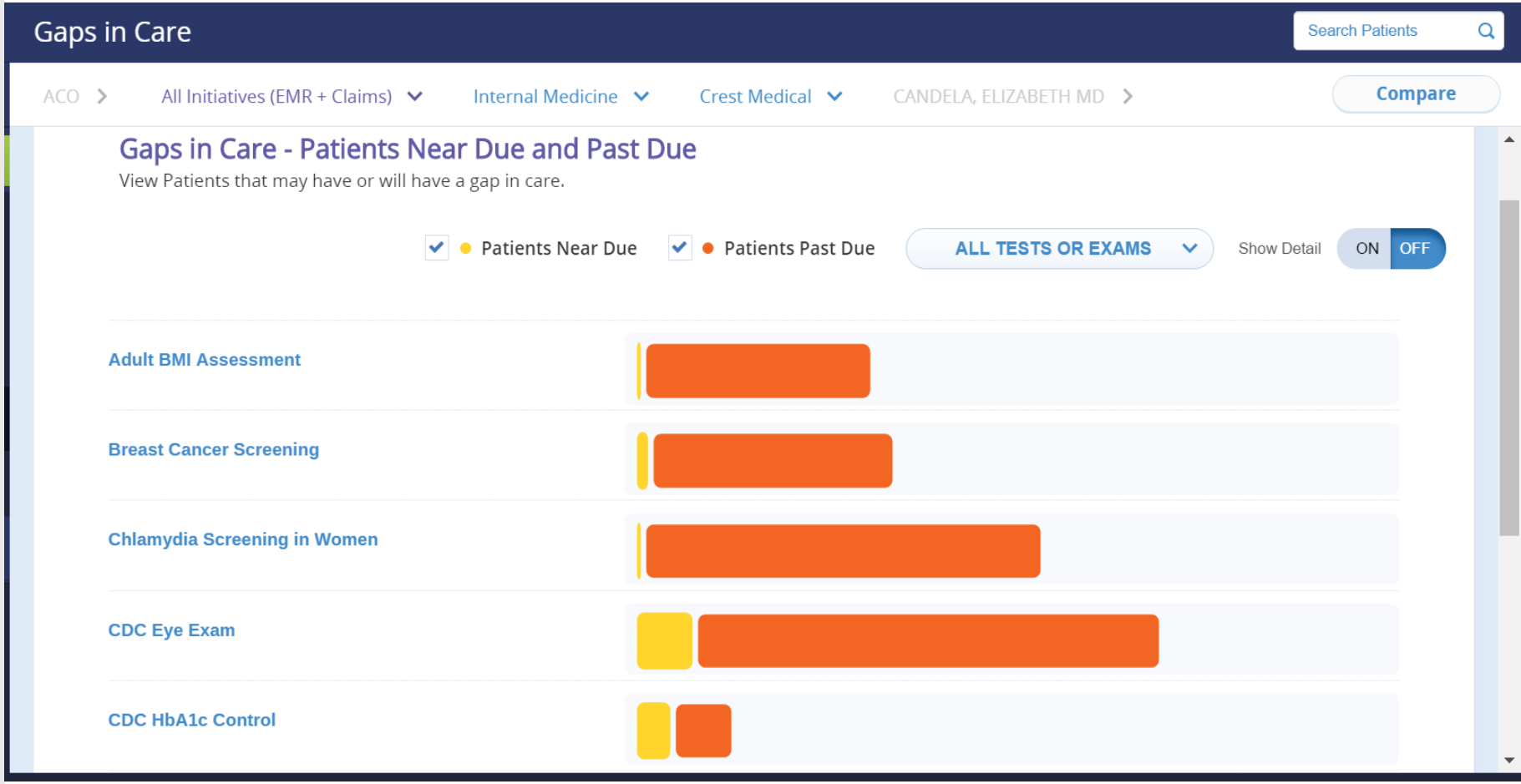
Application

HIMSS CENTRAL & SOUTHERN OHIO Chapter

Triggers Driving Specific Care Management Interventions

- Metrics
  - Certain Diagnoses – Malignancy, Dementia
  - Not meeting targets
- Gaps in Care
  - Patients overdue or nearly so

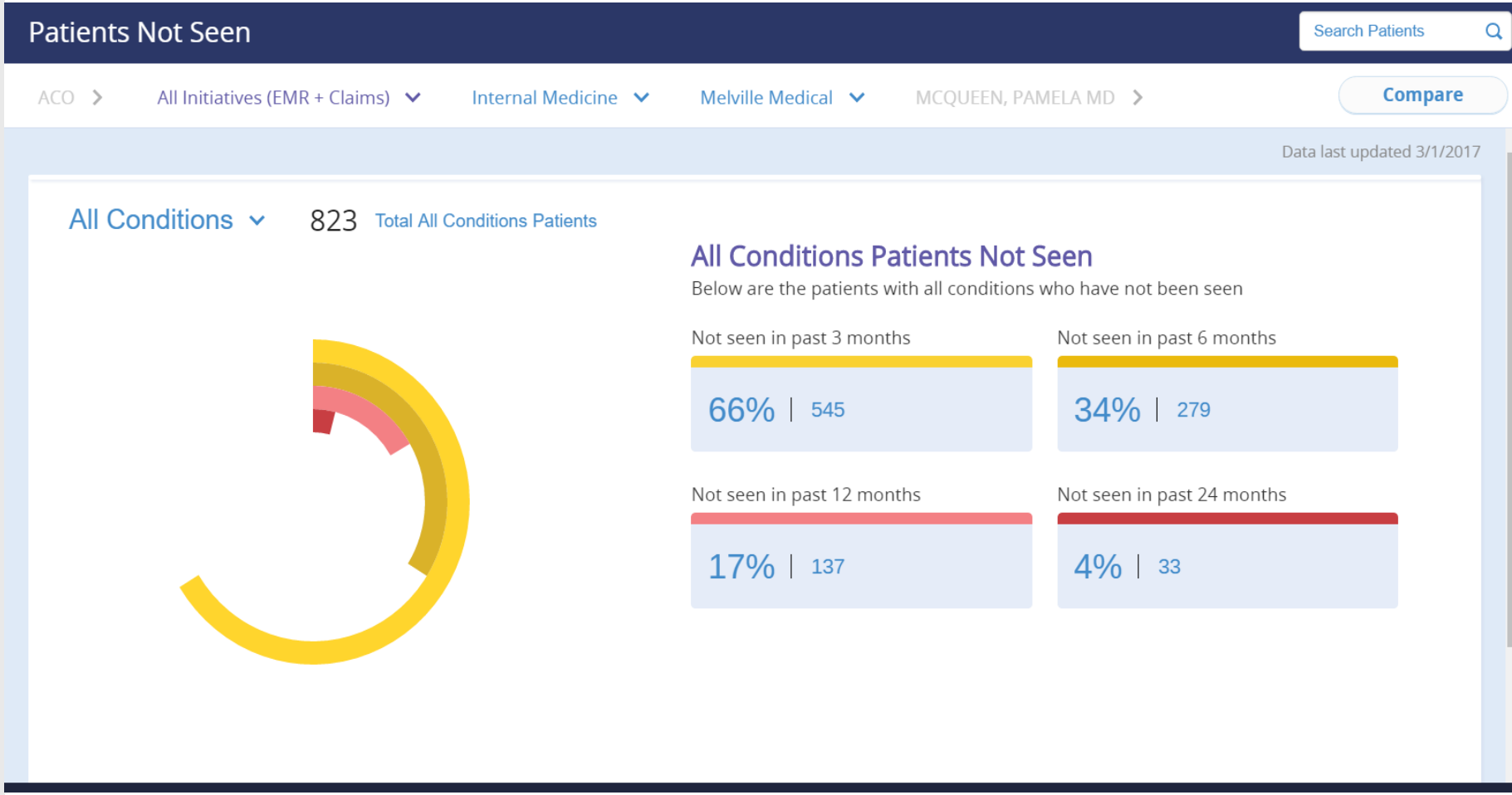
Gaps in Care



Application

Application

Gaps in Care



HIMSS CENTRAL & SOUTHERN OHIO *Chapter*

Triggers Driving Specific Care Management Interventions

- Metrics
  - Certain Diagnoses – Malignancy, Dementia
  - Not meeting targets
- Gaps in Care
  - Patients overdue or nearly so
- Events
  - Transitions of care
  - Pre-visit Planning

Events

Application

Pre-visit Planning

ACO > | All Initiatives (EMR + Claims) | All Specialties | All Practices | ACHOR, SARAH MD

Appt. Date 2017-03-01 - 2017-03-15 | Total Patients 41 | SETTINGS | EXPORT | PRINT

FILTERS | Data last updated 3/1/2017

NAME	DOB	PHONE NUMBER	NEXT APPT.	GAPS IN CARE	CONDITIONS	RISK SCORE
Robin Ferrington	4/28/1954 62 yrs old	999-999-9999	3/3/2017 Friday	6	2	3
Norma Harkley	4/15/1956 60 yrs old	999-999-9999	3/7/2017 Tuesday	4	0	3
Angela Robicheaux	1/29/1956 61 yrs old	999-999-9999	3/6/2017 Monday	4	2	4

Show 25 of 41 | First ‹ 1 2 › Last

Triggers Driving Specific Care Management Interventions

- Metrics
  - Certain Diagnoses – Malignancy, Dementia
  - Not meeting targets
- Gaps in Care
  - Patients overdue or nearly so
- Events
  - Transitions of care
  - Pre-visit Planning
- Risk Flags
  - Predictive flags – such as frailty, med compliance, care density, complexity, risk of admission or re-admission

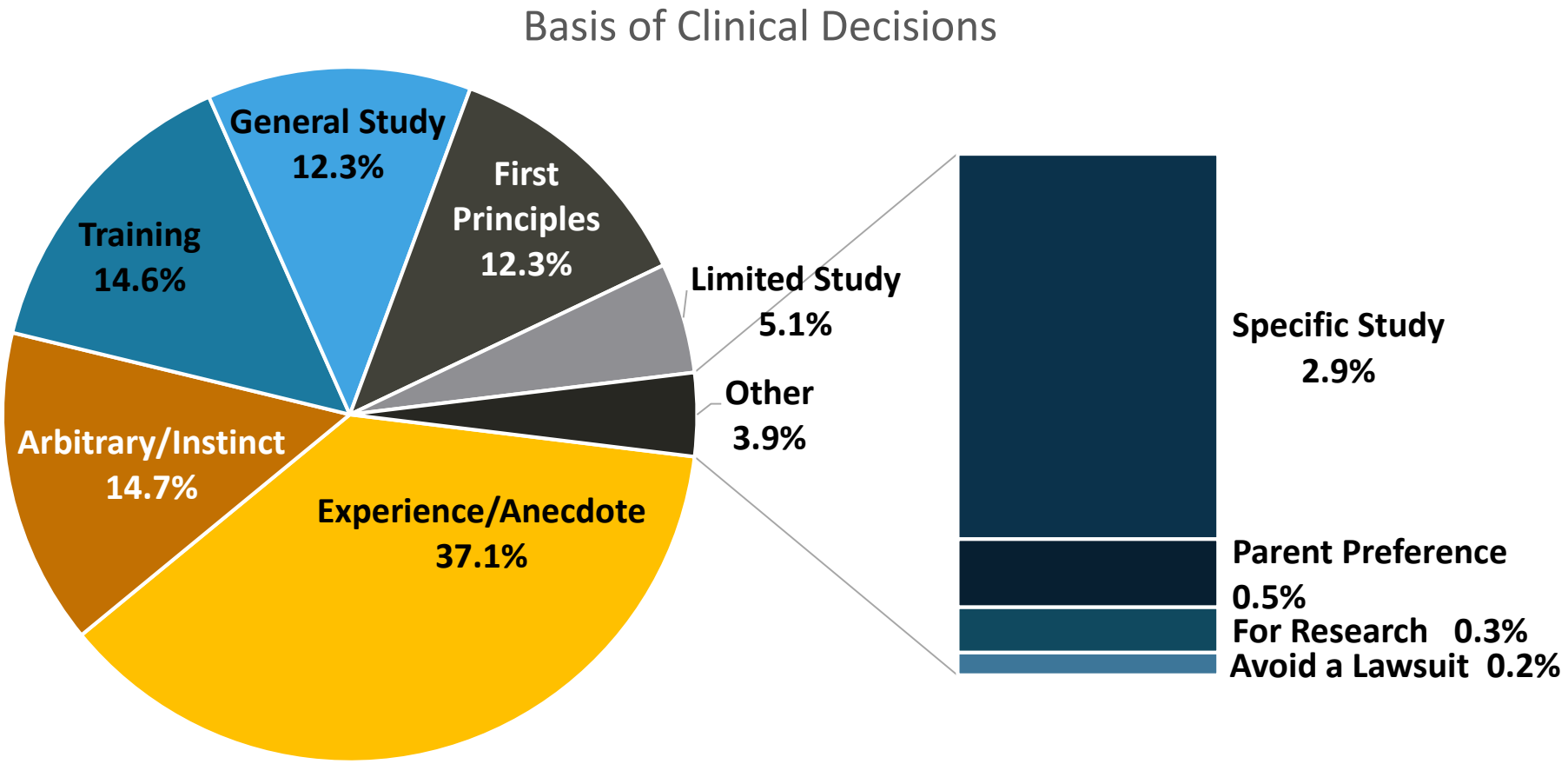
Application

Approach 2:
Practice Pattern Variations Analysis (PPVA)

- **Understand - Where are there opportunities to improve care patterns?**
  Working collaboratively with practitioners, identify areas of unwarranted variations in care, to improve the quality and affordability of the care your medical group provides to patients
- **Manage - What can we do about them?**
  Achieve savings by reducing low value care that can fund other improvements in care (e.g. better chronic disease management)

Note – this is a great way to engage specialists in population health as it identifies an area of interest they can take ownership of and that contributes to the overall success of the organization

Reasons for Variation



Darst JR, et al. Deciding without Data. Congenital Heart disease. 2010;5:339

Identify and eliminate low value care:

The Right Questions

Reducing Overuse of Unwarranted Services

- **Identify Variation**
  - What high cost conditions have the most variation?
  - Is it properly adjusted for risk (retrospective)?
  - What is the clinical cost driver (CCD) for that condition?
  - Does that CCD add value?
- **Understand Variation**
  - For the selected low value CCDs, what causes the variation?
  - Is it **clinically appropriate**?
- **Address Variation**
  - How to successfully reduce unwarranted variation of low value services?
  - Engage physicians in meaningful improvement programs based on actual data and local practice patterns

Application

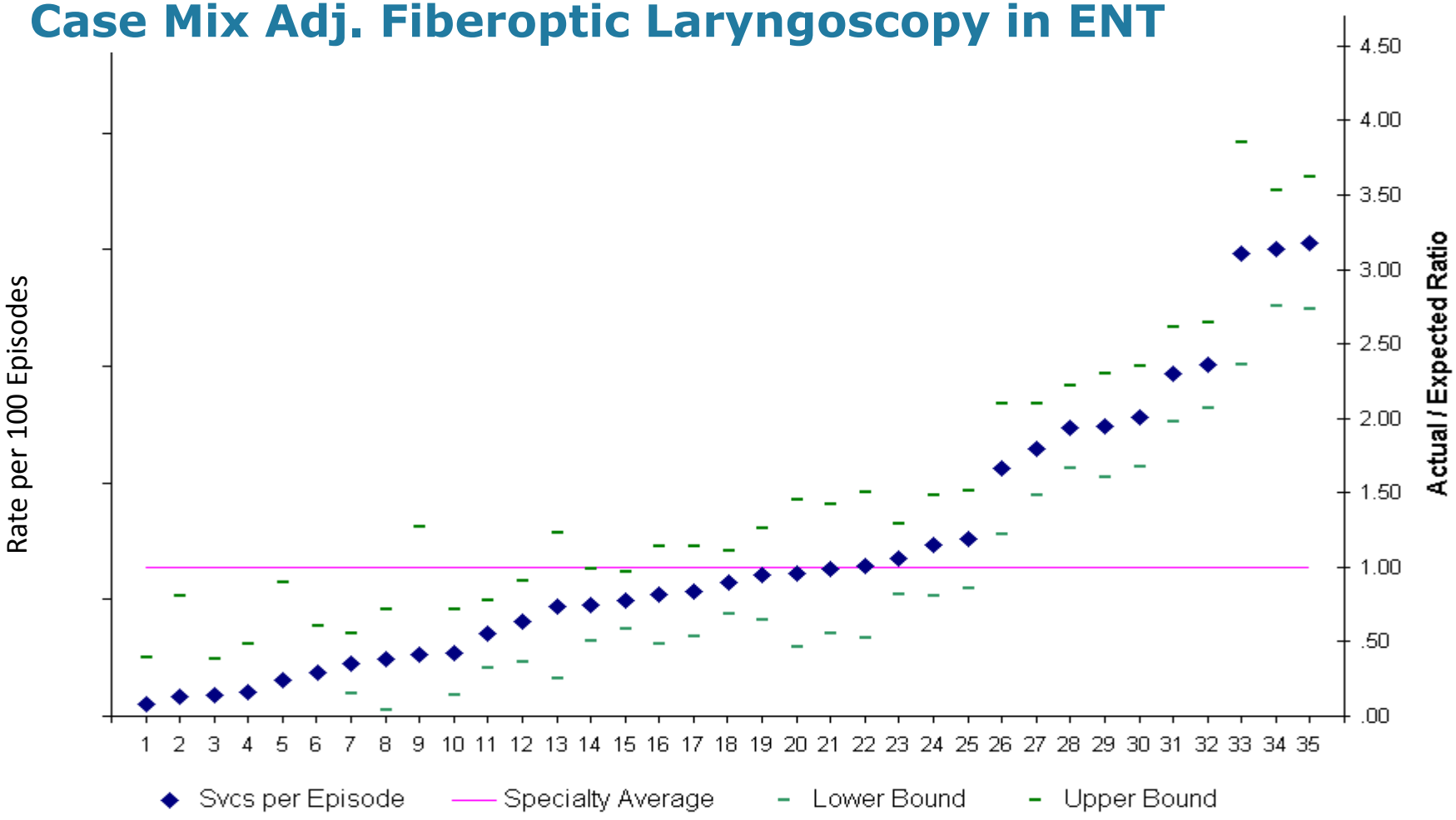
Identify and eliminate low value care:

Required Elements

- Large (>50,000 lives) Aggregated Data (Sufficient volume-best if All Payer)
- Access to a Diagnostic Grouper (Risk stratify)
- **Early** involvement of the practice community
- Asking the right questions (Getting to action)
  - **What** do you want me to do differently?
  - Is it the **right** thing to do?
- Focus on **Quality** Improvement –not determining who are the best (or worst) practitioners

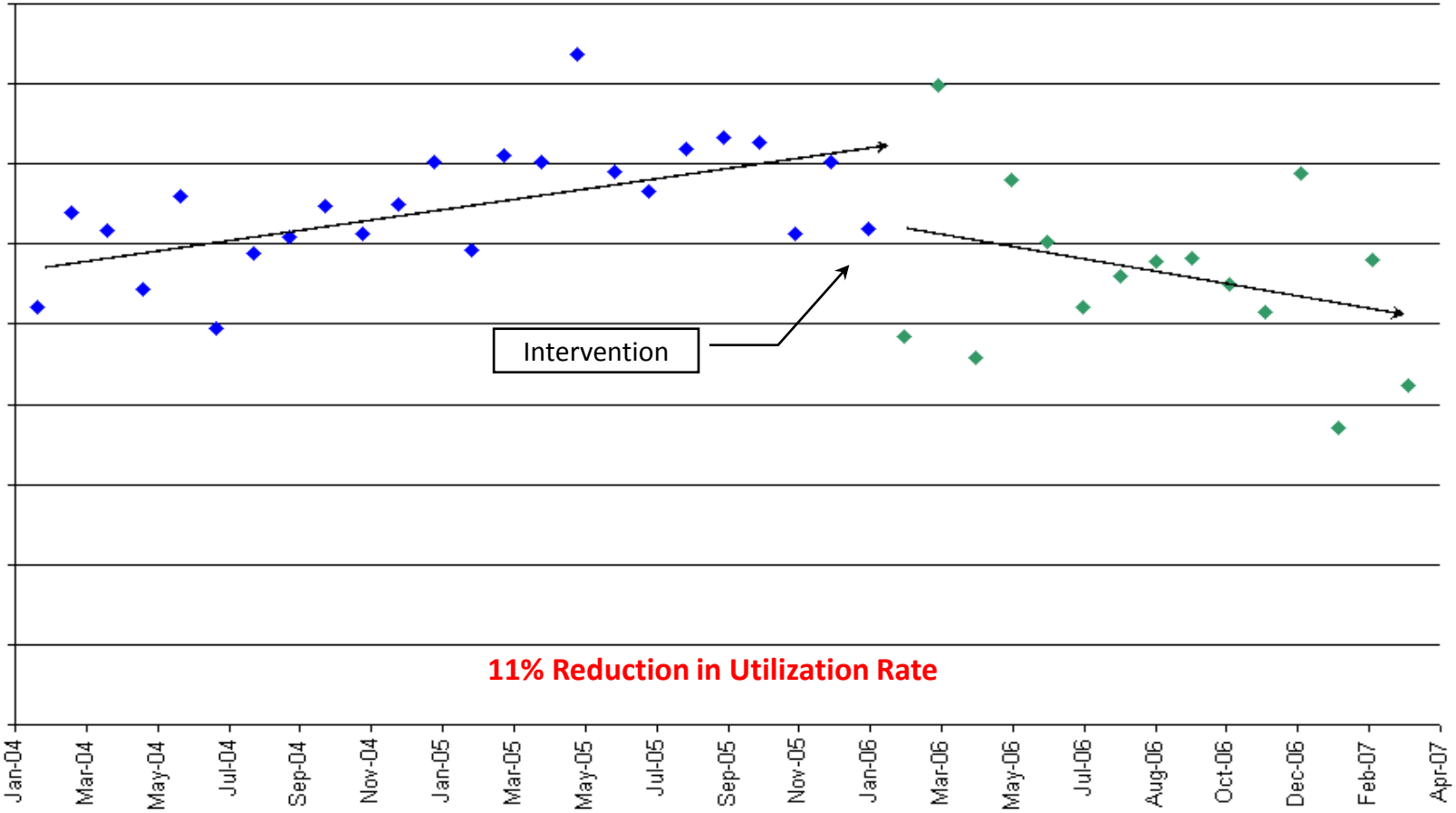
Application

Example:
Case Mix Adj. Fiberoptic Laryngoscopy in ENT



Greene RA, Beckman HB, Mahoney T. Beyond the Efficiency Index: Finding a better way to reduce overuse and increase efficiency in physician care. Health Affairs. 2008;27:w250-w259. (Published online May 20, 2008:10.1377/hlthaff.27.4.w250.

Example:
Intervention – Sharing Variation Data



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Approach 3:
Risk-Adjustment for Payment

- **Understand – Where are there gaps in documentation of relevant diagnoses?**
  When providers are at risk for the costs of care for a population of patients, it is best if the budget is risk-adjusted based on the disease burden.
- **Manage – What diagnoses do I need to capture going forward?**
  Achieve savings by reducing low value care that can fund other improvements in care (e.g. better chronic disease management)

Note – As diagnoses describe existing conditions from the past, in order for the risk adjustment to be relevant to the current contract year, it needs to be prospective (predictive) in nature

Example:
Medicare Advantage Risk-Adjusted Premiums

- Capitation rates to Medicare Advantage plans are set for each member based on county, age, sex and clinical risk
- Clinical risk is established based on known conditions as evidenced by diagnosis (ICD-9/10) codes
- There are approximately 3,000 risk-adjusted ICD-9 codes organized into 70 Hierarchical Condition Categories (HCCs). Expanding to 79 HCCs.
- Each HCC has an assigned risk score
- Because they are hierarchical, some HCCs over-ride others and some combinations of HCCs also carry interaction factors
- For an individual member, all applicable risk scores are added up and applied to a base capitation rate to yield the payment to the health plan.

Example:
Medicare Advantage Risk-Adjusted Premiums

- The HCCs are calculated by CMS based on the ICD-9/10 codes submitted on claims throughout the year.
- HCCs from prior year determine current year's premium.
- HCCs do not "stick" meaning if a dx from last year does not show up on any claim this year, it will not impact premiums next year.
- Data can be received through claims, the Encounter Data System (EDS) or via supplemental files using the Risk Adjustment Processing System (RAPS).
- RAPS submissions offer the biggest opportunity because they can be achieved through targeted chart audits and do not rely on providers altering diagnosis coding on claims. They can yield hundreds of $ pmpm.
- Separate models & calculations for Med (Part C), Rx (Part D), PACE & ESRD

Example:
Medicare Advantage Risk-Adjusted Premiums

Risk Adjustment Schedule (e.g. for premiums for 2017):

- Data received by 1st Friday in September 2016 will affect the premium rates paid beginning in January 2017
- Data received by 1st Friday in March 2017 will affect payment rates beginning July 2017 and will include a retroactive adjustment back to January 2017
- Data received by January 31st 2018 will be paid in August 2018 and will be a retroactive adjustment for entire 2017 calendar premium

Dates of Services of Associated Claims	Data Submitted by	Adjusts Payment Beginning	Plus Lump Sum Retroactive to
July 2015 – June 2016	Sept 2016	Jan 2017	N/A
Jan 2016 – Dec 2016	March 2017	July 2017	Jan 2017
Jan 2016 – Dec 2016	Jan 2018	N/A	Jan 2017

Example:
Medicare Advantage Risk-Adjusted Premiums

Strategic Approach

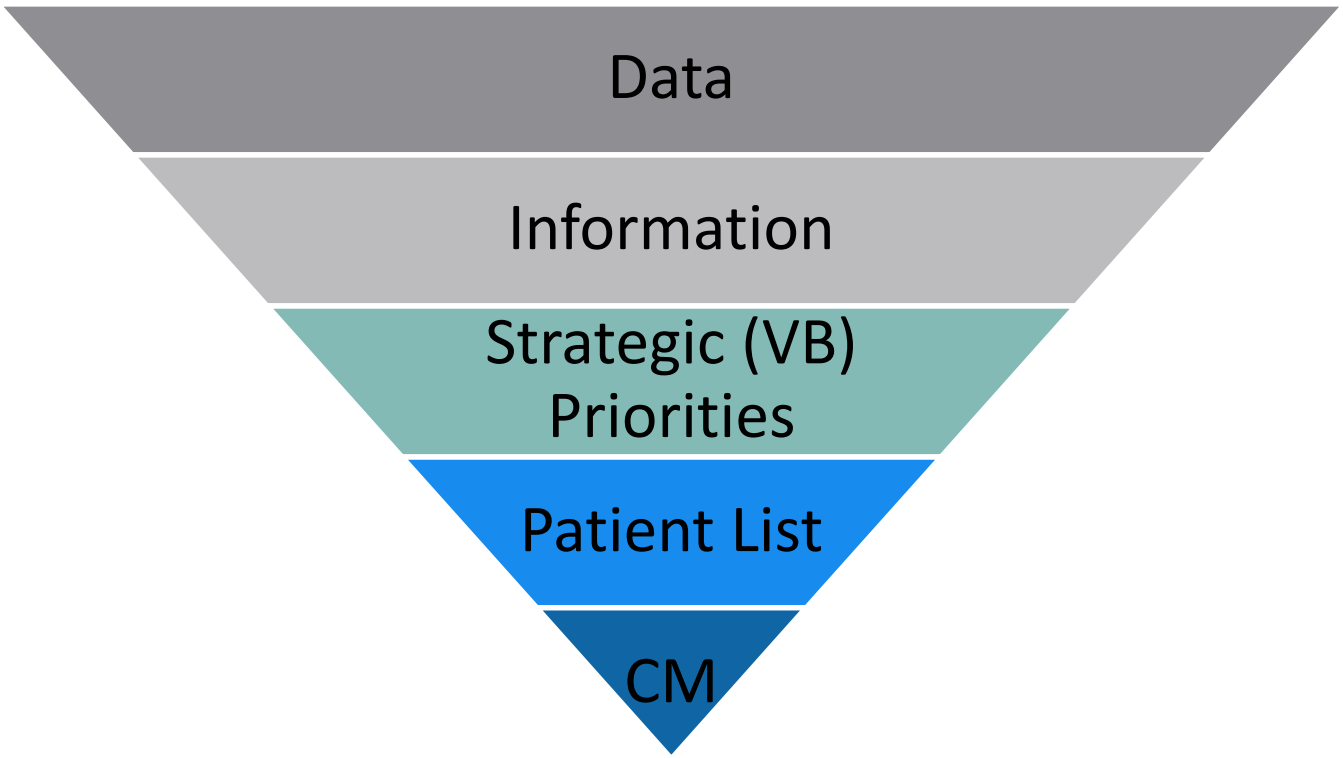
- Calculate current HCCs and their weights
- Mine historical claims data for diagnoses claimed in prior years for potentially missing/dropped diagnoses
- Look at dates for when current diagnoses were submitted on claims to see if they will drop off (relevant early in year when initial HCCs based on July-June)
- Mine clinical data for relevant diagnoses (and appropriate severity) addressed clinically but never put on claims
- Develop strategies to address
  - Update diagnoses when patients come in
  - Work with payer/consultant to submit supplemental diagnoses
  - Change documentation patterns going forward

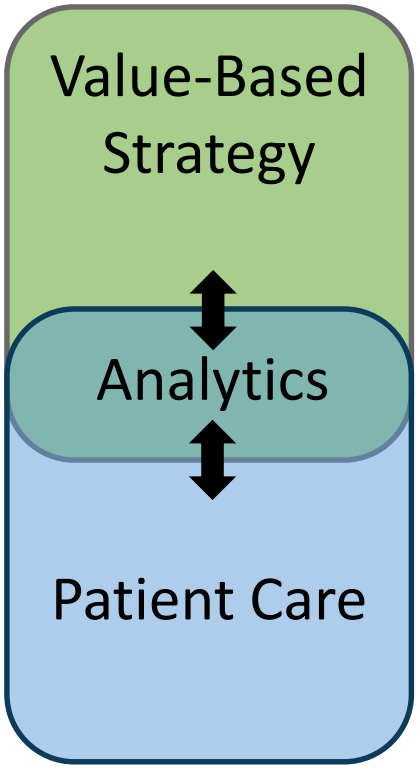
Final Thoughts

Types of Risk Adjustment

1. Descriptive
   - Retrospective
   - Explains prior cost and/or quality outcomes
2. Predictive
   - Prospective
   - Identifies where to focus based on existing conditions
3. Preventive
   - Prescriptive
   - Anticipates future conditions and provides opportunity for prevention

Summary: Data Analytics ➔ Patient-Centered Care





Questions?

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