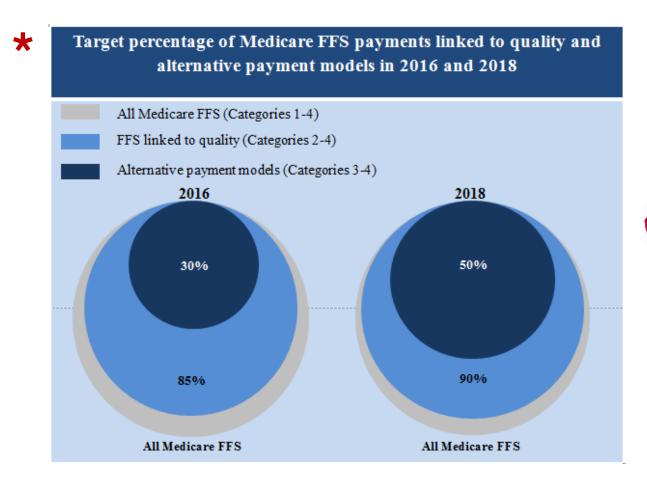


Accountable Care Obstacles

The Holy Grail of Value Based Analytics and Why We Aren't There Yet

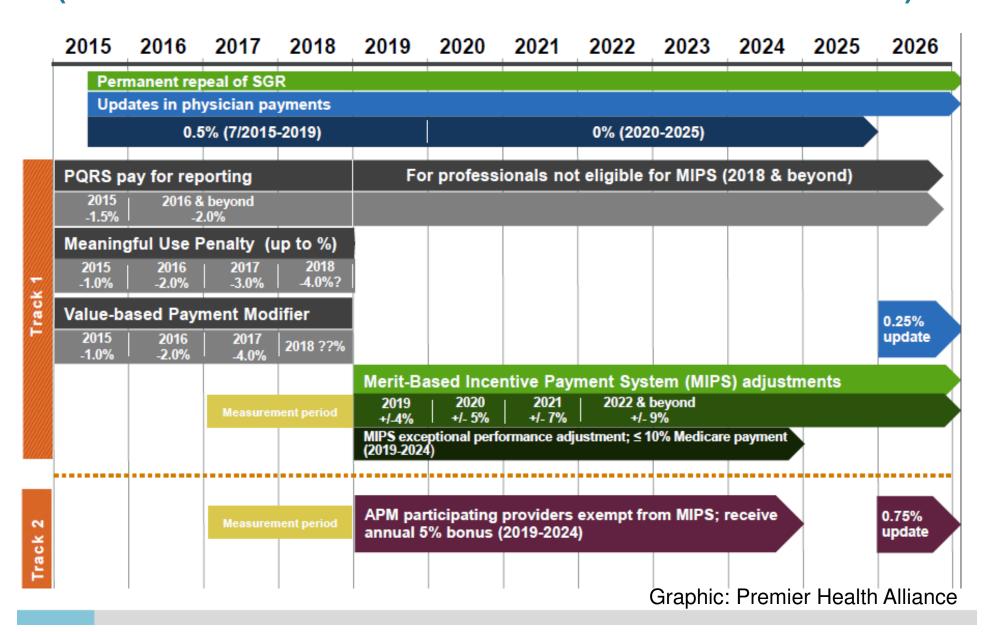


What do we want? Value-Based Care! When do we want it? Now!*





MACRA Reform Timeline (Medicare Access and CHIP Reauthorization Act of 2015)



Holy Grail of Value Based Analytics



Holy Grail of Value Based Analytics

- 1) Centralized EHR with PHM capabilities baked in
- 2) Well integrated clinical + claims + patient reported data to deliver holistic view of patient with advanced risk modeling, registries, care gaps, advanced clinical decision support (leveraging patient-specific clinical data)
- 3) Analytics from #2 delivered to care team within clinical workflow
 - ✓ Ideally, supporting data is crunched outside EHR and imported back into EHR
 - ✓ At worst, analytics are one click away with patient context sensitive single sign on
- 4) Patient Portal with appointment scheduling including virtual/video visits; integration of clinical & health plan experience; gamified wellness platform integrated with social media; easy integration with home monitoring & fitness devices

Holy Grail of Value Based Analytics

- 5) Mature EDW, mature BI capabilities, and a robust analyst team with both clinical & claims data skillsets
- 6) Industry-wide concurrence on <50 measures to monitor Triple Aim Quality + Pt Experience for <u>all</u> ACO patient populations
 - ✓ Similar in concept to the MSSP ACO-33 but modified for all patient populations
 - ✓ Automated extraction of CQM data must be reasonably easy for CCHIT certified EHRs
 - √ <50 is NOT counting specialty-specific / acute care / bundled payment (etc.) CQMs
 </p>
- 7) Open source library of core clinical decision support algorithms





Wes Rishel @wrishel · Jul 10

The road to health IT inconsequentiality is paved with the hubris of ginormous tech companies that expected to revolutionize healthcare

2015 Reality of Value Based Analytics



- Most ACOs are BYO-EHR ... and most EHR vendors are just starting their PHM journey
- 2) ACOs have to actually GET claims data first, then hire a team with new skill sets to manage it even WITH a good PHM platform, and THEN the hard part starts with normalization and advanced analytics
- 3) Single Sign On is doable ... but patient context sensitive SSO? And integration into clinical workflow? Multiplied by how many EHRs?
- 4) Advanced Patient Portal tethered to EHR(s) or PHM platform? Major integration challenges and no single vendor does everything
- 5) Mature EDW + mature BI capability is a JOURNEY and is resource intensive
- 6) <50 measures for Triple Aim does not HAVE to be hard, but would require some leadership (or maybe some legislation?)
- 7) We can dream, right?

"State of the Union" for MSSPs



- For the 2014 Performance Year, of 333 MSSPs:
 - ACOs with 2012 starts: 37% generated shared savings
 - ACOs with 2013 starts: 27% generated savings
 - ACOs with 2014 starts: 19% generated savings



Atrius Health

"To be an ACO, you need three things:

- 1. A common EHR
- 2. A robust data warehouse
- 3. A care coordination platform

If you don't have those three elements, you are flying blind."

Dan Moriarty
CIO
Atrius Health





Atrius Health

60% of Atrius Health's revenue is from at risk contracts



New ACOs must become very efficient copycats of Value-Based Care success at organizations like:











• "At the end of the day, if the only successful ACOs are those from Geisinger, Mayo Clinic and Kaiser Permanente, what has society gained?"

--Mark Bard, MD, from "ACOs: The Least Agreed-Upon Concept in Healthcare?" via Becker's Hospital Review (May 2013)

• "With our tongues only partially in cheek, we propose the formation of a new International Institute for Imitation (III, pronounced Ai-Ai-Ai)"

--Anna Roth and Thomas Lee, MD, from "Health Care Needs Less Innovation and More Imitation" Harvard Business Review (Nov 2014)

#1) Centralized EHR Strategy Advantages

Built-in clinical integration:



VS.



- Reduced effort to bring PHM analytics to point of care
- Reduced effort to build & deploy new workflows
- Reduced effort to build a compelling patient portal
- Reduced effort to collect data for analytics

#1) Centralized EHR Strategy Disadvantages

- Success is possible only by subsidizing EHR costs for affiliates – obviously this gets expensive
- Inevitably, some candidate PCP ACO affiliates will desire to remain on their existing EHR
 - If you "just say no" you may limit the viability of the ACO
 - If you say "yes" then you inherit the same integration challenges you were trying to avoid with centralized EHR
- Many specialists, by the nature of their practice, cannot commit to a single ACO

#2) The Interoperability Boogieman

The #1 health IT problem for population health managers

on December 13, 2013

http://www.advisory.com/Research/Care-Transformation-Center/Care-Transformation-Center-Blog/2013/12/Health-IT-interoperability

- "51% of ACOs believed the biggest problem in their first year related to data or IT operations"
- "Interoperability is the leading IT concern for ACOs"

#2) Good Luck With That ...

Starting an ACO with '24 different EMRs'



Linda Shanley, VP and CIO of St. Francis Hospital in Hartford, Conn. One CIO offers perspective on making nearly two-dozen different systems talk with each other

HARTFORD, CT | March 4, 2014



It's fair to say that Linda Shanley has a rather full plate these days.

"We're a 600-bed hospital – we're two hospitals, actually: one's a rehab hospital – and right now we're going through an Epic implementation," said Shanley, vice president and chief information officer at Hartford, Conn.-based Saint Francis Hospital.

"We also have a very large PHO, with probably about 800 physicians," she added.

"Approximately 200-plus are employed, and the rest are all community physicians. There are two larger groups: One is about 60 doctors and the other is 30; all the rest are of varying sizes, from one or two physicians, up to 10."

Across all those care settings, "we have about 24 different EMRs," said Shanley.

http://www.healthcareitnews.com/news/starting-aco-24-different-emrs

#2) Data Normalization



Diagnoses ➤ ICD, SNOMED

Labs & results > LOINC

Drugs ➤ SNOMED / RxNorm

Encounters > E&M

Flow-sheets > Parsed and NLP

Procedures > CPT, SNOMED

Devices > Standardized

Providers > NPI

Locations > Standardized

Claims > 837/835

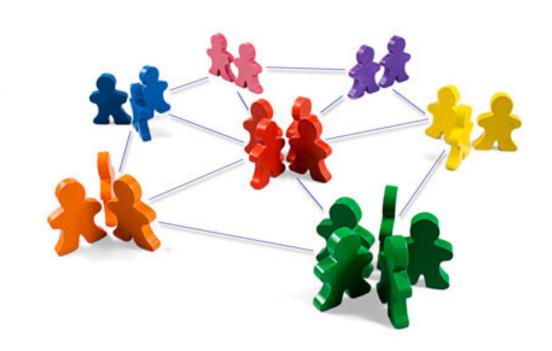
#2) Clinician Network Management (CNM)

- Report from Chilmark Research titled: "The Migration to Clinician Network Management"
- "Our goal is to encourage ACOs of all sizes to reconsider their HIEs as something more than information exchange, namely a platform to support a variety of clinician information needs at the point of care"
- CNM should enable:
 - patient-centric longitudinal data viewing
 - patient risk scoring
 - care-gap analysis
 - clinical care guidance
 - care team coordination and interaction
 - physician performance score-carding and attribution
 - total cost of care determination for the population being served

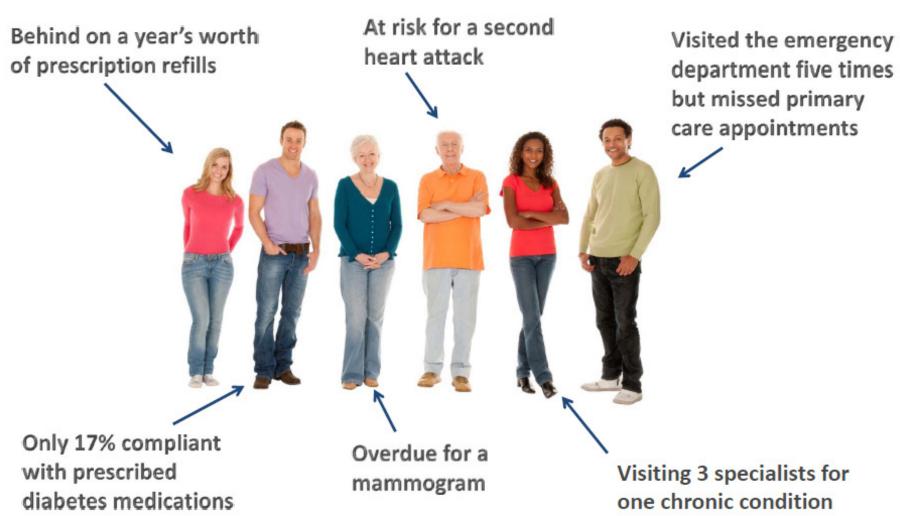
http://www.chilmarkresearch.com/chilmark_report/the-migration-to-clinician-network-management/

#2) Registry-Palooza

- Large number of registries required
- To what extent is this doable in EHR(s)?
- This is where big data technologies begin to shine

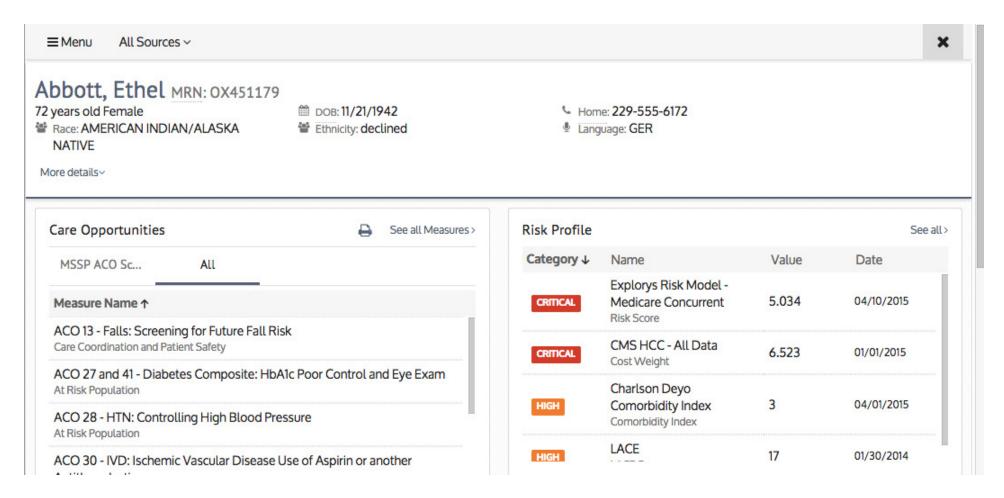


#3) How Will You Deliver This Type of Patient-Level Information to Providers at the Point of Care?



#3) Patient Summary:

Comprehensive view of Risk Profile and Care Gaps using data from claims <u>and</u> EHR(s)



(Synthetic patient data for demo purposes)

#4) Patient Portal & Activated Patients! (?)



#4) Personalized Risk Charts Showing Results of Behavior Modification



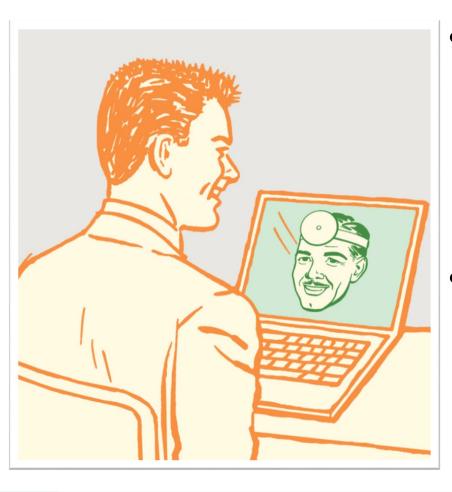


#4) Sara Jane's 80/20 Rule on Patient Activation



#4) "Video is About to Become the Way We All Visit the Doctor"

HTTP://WWW.WIRED.COM/2015/04/UNITED-HEALTHCARE-TELEMEDICINE/



- Starting in 2016
 United Healthcare will charge the same copay for a video visit or office visit
- Combined with "Minute Clinic" model, major potential for disruptive innovation

#4) Patient Portal in Mature Enterprise EHR

In addition to the "basics":

- Virtual visits (asynchronous)
- Video visits (synchronous)
- MyChart Bedside (Inpatient)
- Integration with Fitbit and Withings devices
- Health Plan module of Epic enables integration of clinical + health plan experience for patients in MyChart

Best in KLAS Awards @

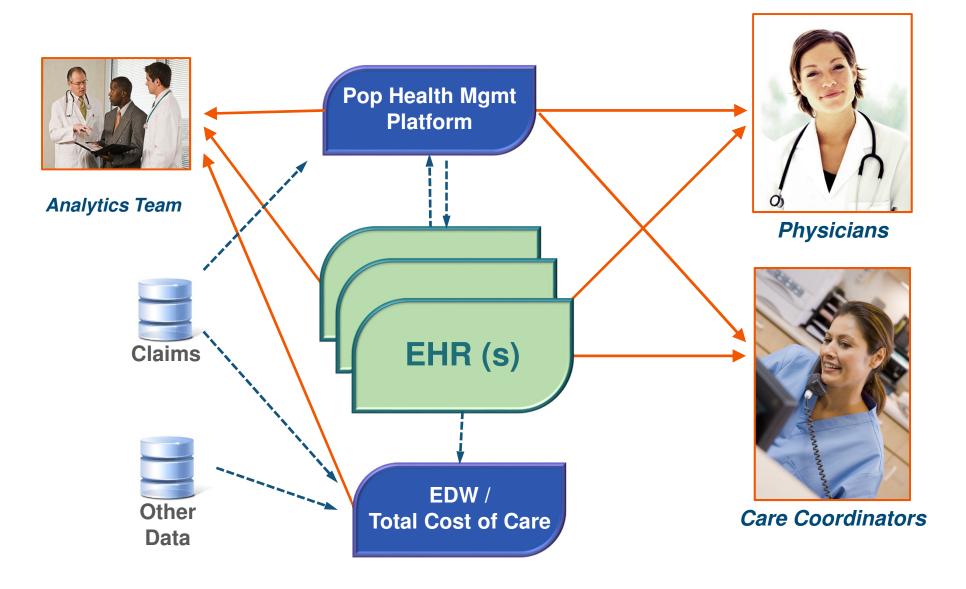
2014 Best in KLAS Awards: Software and Services

1	g Epic MyChart	89.6	
2	athenahealth athenaCommunicator	83.9	
3	Greenway PrimePATIENT	79.9	
4	Medfusion Medfusion Patient Portal	78.4	
5	NextGen Healthcare NextMD	78.0	
6	Allscripts FollowMyHealth	77.6	
7	eClinicalWorks Patient Portal	77.2	
8	Cerner Cerner HealtheLife	74.7	
9	RelayHealth RelayHealth Patient Portal	62.0	

^{*} Rankings were calculated in January 2015

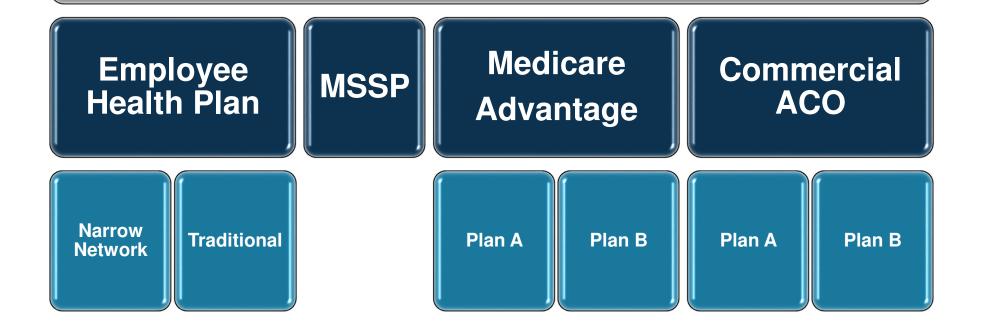


#5) ACO Analytics Architecture



#5) Increasing Population-Specific Reporting Requirements

All Shared Savings or At Risk Patients



#5) ACO Patient Reporting Examples

Practice Risk Report

 Identify higher risk ACO patients with risk profiling tools so they can be added to Care Coordination rosters

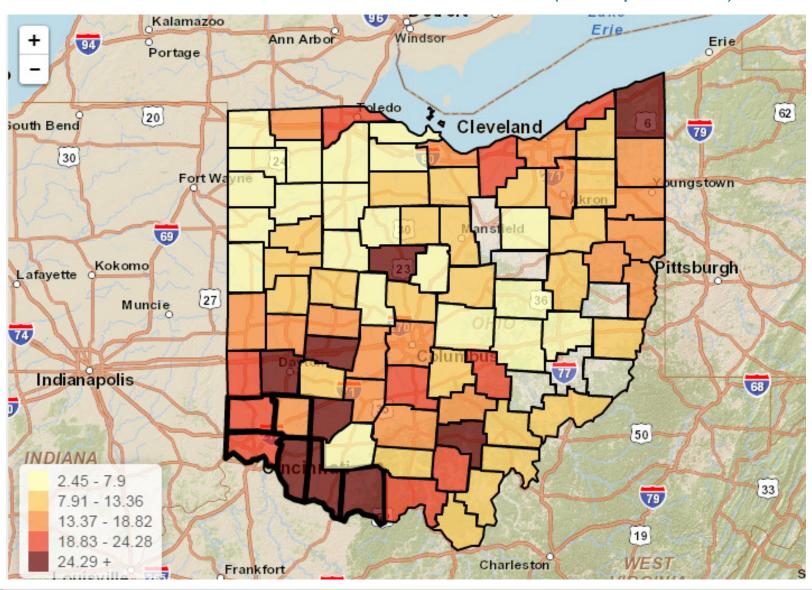
Daily Census

Daily report to Care Coordinators, lists all ACO patients (by PCP practice) who have been admitted, are in observation, or who visited the ED within the previous 24 hours

Contract-Specific Measures

 Different cost and quality measures percontract drive need to tag multiple tiers of ACO patient populations and produce separate ACO dashboards for each contract

#5) Understanding Our Communities: Mortalities Due to Overdose (Rate per 100k)

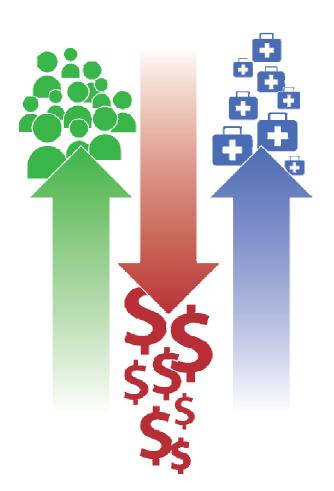


#5) Robust Analyst Team

There seems to be a growing trend that analytics is a 'thing' or a tool (bright shiny object) that someone can purchase. I personally believe that analytics is about 80% smart people, 15 % good organization and operation and only 5% or less about the tools. Too many people are chasing a magic solution, but have not focused enough on developing a culture of analytics and the 'smart people' who can make them work.

Mark Probst, CIO, Intermountain Healthcare Posted on http://nextwaveconnect.com/

#6) <50 Triple Aim Measures



- "Vital Signs: Core Metrics for Health and Health Care Progress"
- "Standardized Triple Aim Proxy"
- Who can / will Get-R-Done?

#6) This Does Not Work

PHM Platform / Care Coord / At Risk Set of CQMs **Contracts** Payer A Payer A Payer B Payer B - Plan B1 - Plan B1 - Plan B2 - Plan B2 Payer C Payer C Payer D Payer D Payer E Payer E - Plan E1 - Plan E1 - Plan E2 - Plan E2 - Plan E3 - Plan E3



#6) This <u>Can</u> Work(And is the differentiator for ACOs)

At Risk Single: **Contracts** PHM Payer A Platform / Payer B Care Coord - Plan B1 - Plan B2 / Set of Payer C **CQMs** Payer D Payer E – Plan E1 → - Plan E2 -- Plan E3

#7) Open Source CDS



- CDS algorithms as extension of medical science
- Good use case for open source project
- Clinical Quality Framework
 - Develop eCQMs and associated CDS in lockstep and make it easy to implement
 - http://wiki.siframework.org/Clinical+Quality+Framework+Charter+and+Members

And now for the good news ...

"In the country of the blind, the oneeyed man is king"

Erasmus

"People talk about technology, and we need to have it. Data science, analytics? Absolutely. Business practices? Definitely. But still the major focus is people - who are going to make decisions or not, make interventions or not. The whole focus of what we do is to help people make better, data-driven decisions."

> Eugene Kolker Chief Data Officer Seattle Children's Hospital



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