CSHP
COLORADO SPRINGS HEALTH PARTNERS, P.C.

Using Health Informatics for Population Management

AMGA – April 2014

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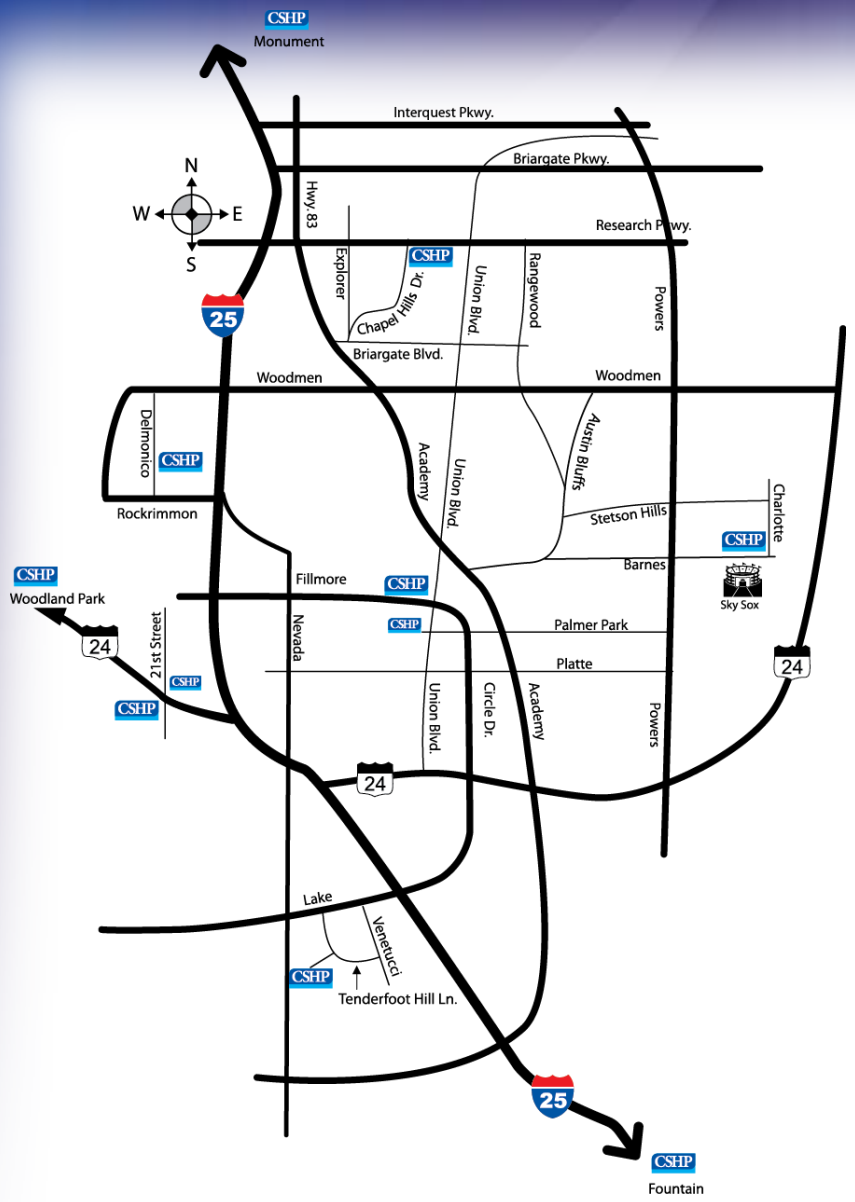
Colorado Springs Health Partners, PC

Discussion Agenda

- CSHP Overview
- Population Health – Our Strategy
- CSHP structure and workflow
- Show Me the Data
- Other Initiatives
- Questions

CSHP At A Glance



- Physician owned
- 108 Physicians
- 157 Total Providers
- 2/3 Primary Care, 1/3 Specialty
- 11 Sites in Colorado Springs & Vicinity
- 108,000 Patients
- 558,773 Encounters in 2013
- 287,243 Office Visits in 2013
- Single, practice-wide EHR: Allscripts Enterprise V11.2
- Analytics: Humedica – MinedShare®

CSHP Centralized Specialty Campus

- Services/Programs
  - 20+ Medical/Surgical Specialties
  - Hospitalist/Sub-acute care
  - Ambulatory Surgery Center
  - Urgent Care
  - Lab
  - Radiology – Advanced Imaging
  - Pharmacy
  - Sleep Center
  - Health/Wellness Management
  - Infusion Center

CSHP – Building the Integrated Delivery Network

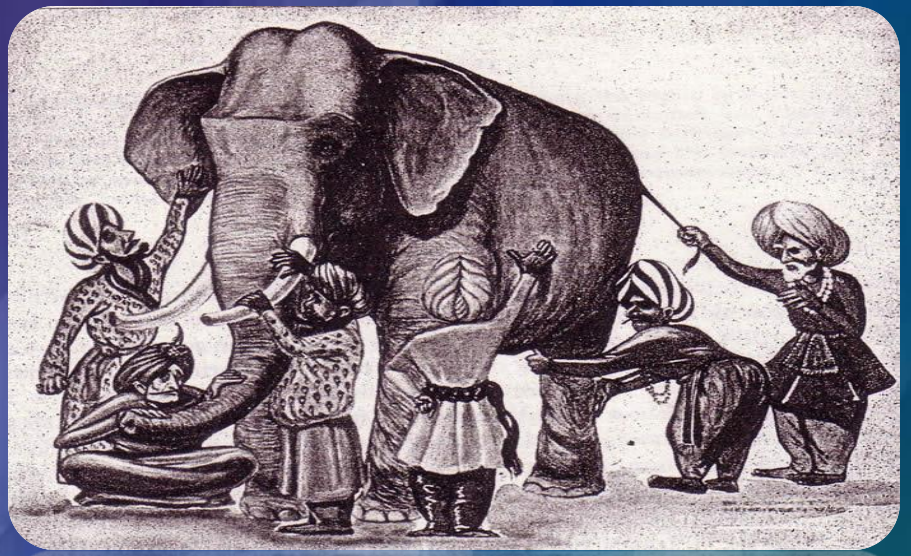
Services that support the **PCMH** ambulatory delivery system

- Urgent Care
- Extended Hours Clinic (Primary Care)
- Ambulatory Surgery Center
- RNs on Call
- Hospitalist Department
- Health Management
- On Site Sleep Center
- Outpatient Infusion Clinic
- SNF & LTAC coverage

Closing the loop!

Population Management is a Journey not a Destination

Population Health Management Definition



"Managing the complete health needs of not only the patients you see but also the ones that you don't see."

Population Health Management

4 Basic Steps:

1. Define
2. Assign
3. Analyze
4. Focused outreach

How Do You DO Population Management?

Define

- Define population you are trying to manage
- Use analytics(registry, claims data, PM software) to sort by:
  - PCP/specialty
  - Disease state
  - Payer
  - Cost
  - Risk (HCC, Charlson, comorbidities, risk factors, etc)
- Start global then refine down to manageable size

Assign

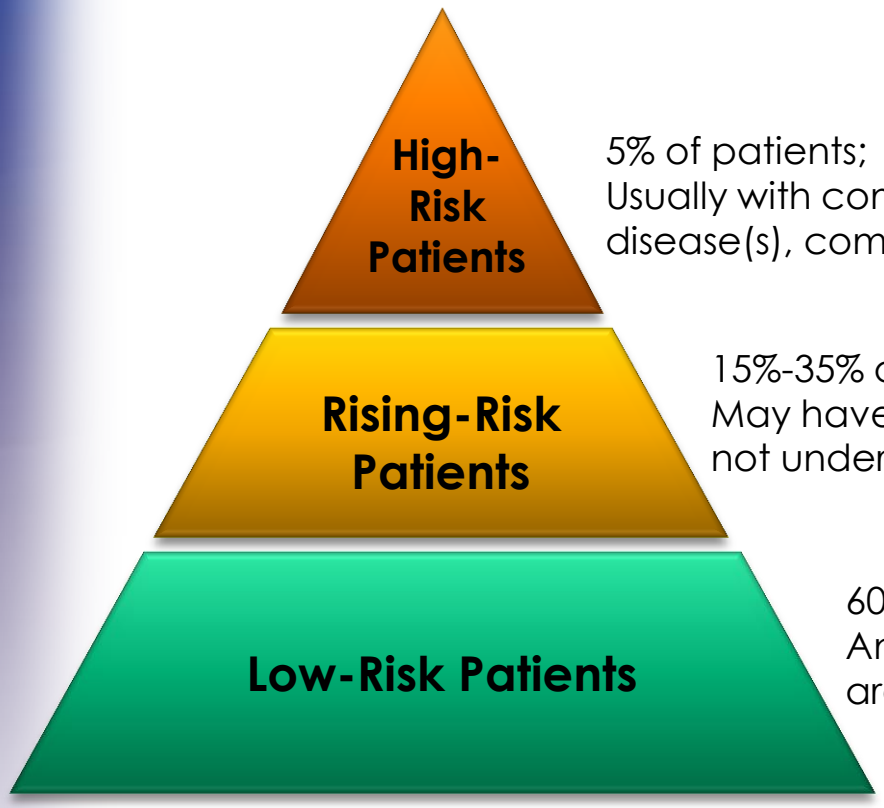
- Assign the defined population to responsible provider
- "Attribution" – inexact science, many methods
- CMS definition- 4 cut method

Cut	Report Description	PCP Assignment
1st Cut	Patients who have seen only one provider in the past year	Assigned to that sole provider
2nd Cut	Patients who have seen multiple providers, but one provider the majority of the time in the past year	Assigned to majority provider
3rd Cut	Patients who have seen two or more providers equally in the past year (no majority provider can be determined)	Assigned to the provider who performed the last physical exam
4th Cut	Patients who have seen multiple providers	Assigned to last provider seen

Analyze

- Keep focus on improving Value for that specific population
- Value= quality/costs
- 3 levels of analysis
  - Basic
  - Intermediate
  - Advanced
- Compiled by Clinical Innovation Team and Physician Champion Committee (you'll hear more about this later…)

3 General Patient Types



5% of patients;
Usually with complex disease(s), comorbidities

→ Trade high-cost services for low-cost management

15%-35% of patients;
May have conditions not under control

→ Avoid unnecessary higher-acuity, higher-cost spending

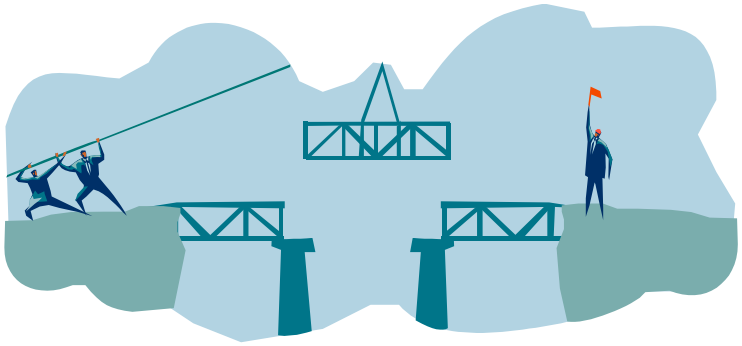
60%-80% of patients;
Any minor conditions are easily managed

→ Keep patient healthy, loyal to the system

- Source: Health Care Advisory Board interviews and analysis

Analysis - Basic

- "Gaps in care"
- Includes preventative measures (screenings, immunizations, etc.)
- Disease specific metrics (A1c ,BP, LDL , etc.)
- Coding/documentation gaps (RAF scores, accurate dx for analytics year to year)

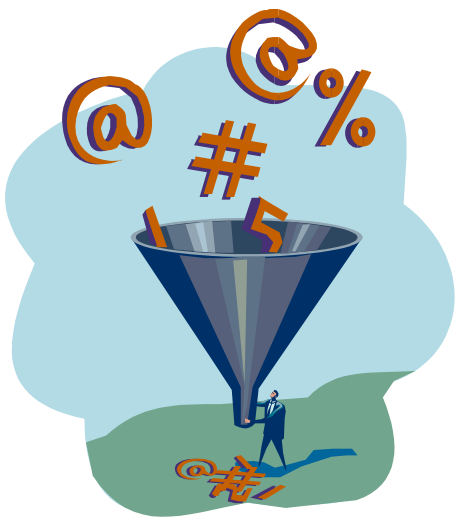


Analysis - Intermediate

- Cost/claims data
- High-utilizers
- Disease Specific cohorts(CHF,DM,COPD)
- Comorbidities
- Risk profiles (HCC codes, Charlson scores)

Analysis - Advanced

- Disease specific predictive analytics (CHF, COPD,DM)
- Risk Factor Based Population Stratification(BMI, Smoking, etc.)
- Value matrix-integrating quality and cost into analysis simultaneously; “quality at what cost”



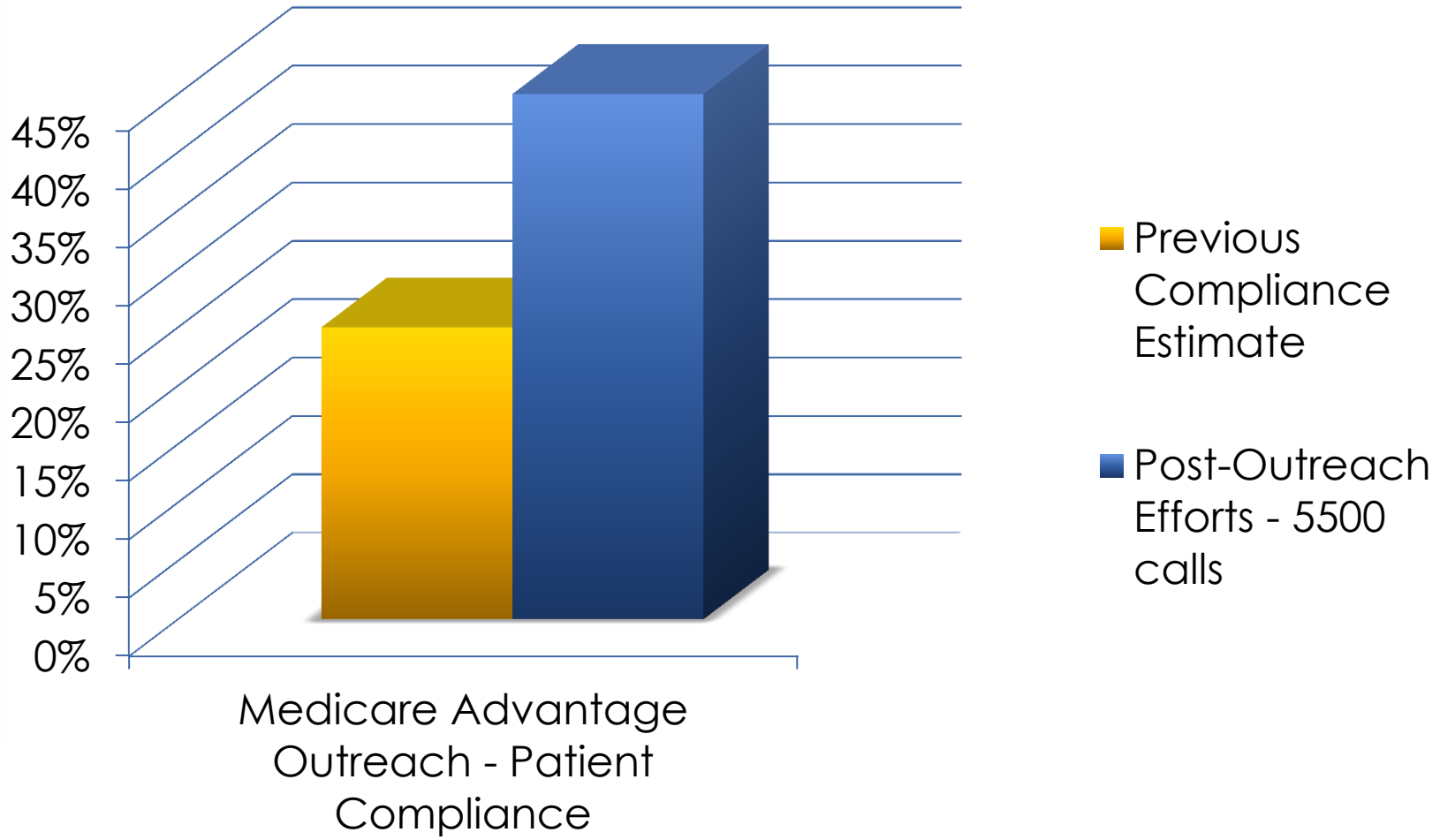
Focused Outreach

- Customized campaigns - Critical elements
- Specific populations-manageable sizes
- Specific clinical targets/goals-keep simple
- Reasonable timeframes for completion
- Measure Patient/Provider response rate
- Measure/Report impact of campaign

Focused Outreach Examples

- **Medicare Advantage (MA)**
  Annual exam project 2013 (in progress)
  - Population- approx. 6000 patients
  - Goal- ensure that every MA patient has annual exam
  - Goals- increase HEDIS measures, increase RAF score, improve quality metrics on chronic diseases, develop year care plan
  - Process- call every patient who has not already had or scheduled for an annual exam (phone scripts written)

Focused Outreach Examples



Transitions of Care

- Process: RN Navigators gather daily patient information from many sources-hospitals, Hospitalists, payer claims databases, PCPs referrals

Transitions of Care

CHALLENGE:

Unnecessary ER utilization

Enhance system wide care coordination

SOLUTION:

RN Navigators called every post-ER pt. w/in 48hrs (M-F daily calls)

Patient Care Compass (PCMH)

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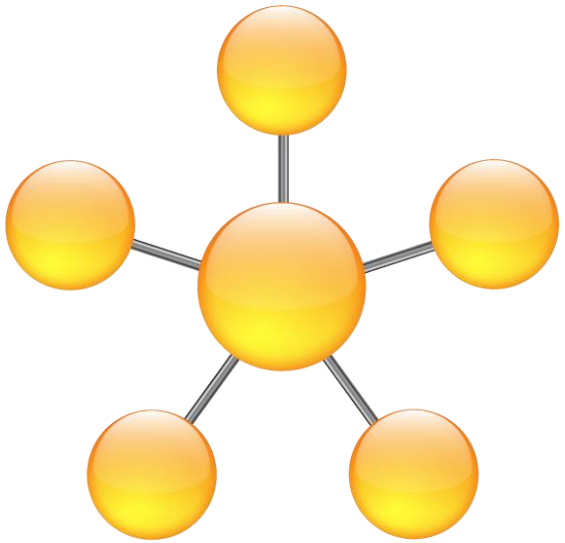
Patient Care Compass

Transitions of Care

- Call includes
  - Med reconciliation
  - Care plan implementation
  - Case management
  - Disease education
  - Follow up appointments (PCP, specialists and ancillaries) within 7-10 days

Putting Clinical Information Into Action

- Which comes first?
  - Population management infrastructure vs. clinical analytic tools
- We chose infrastructure
- Followed PCMH concepts



CSHP's Patient Care Compass

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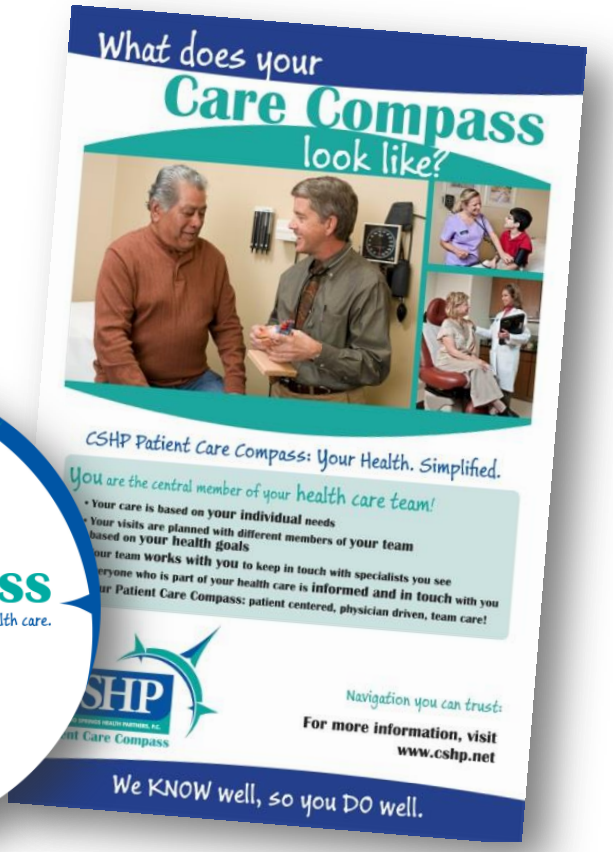
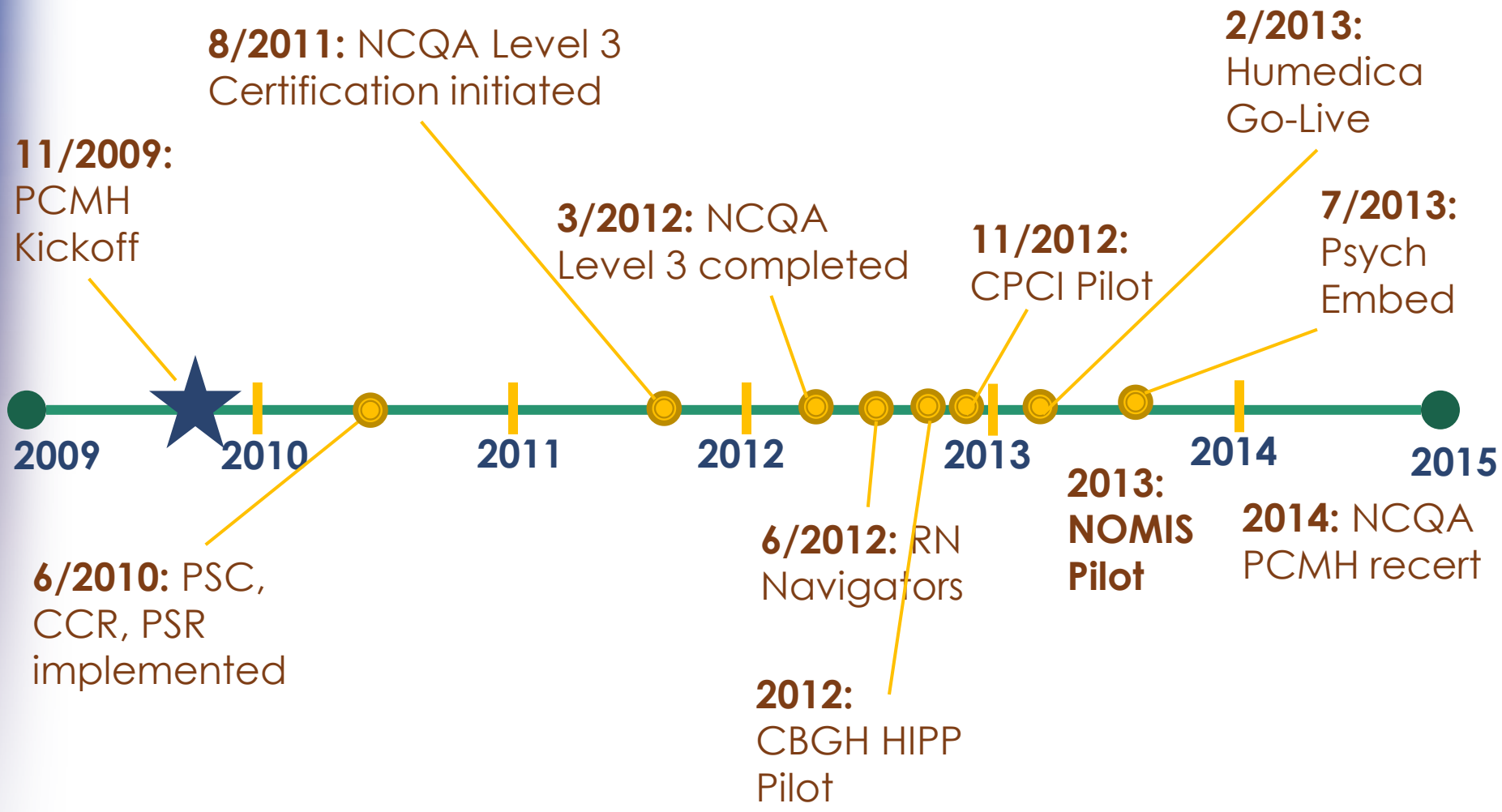
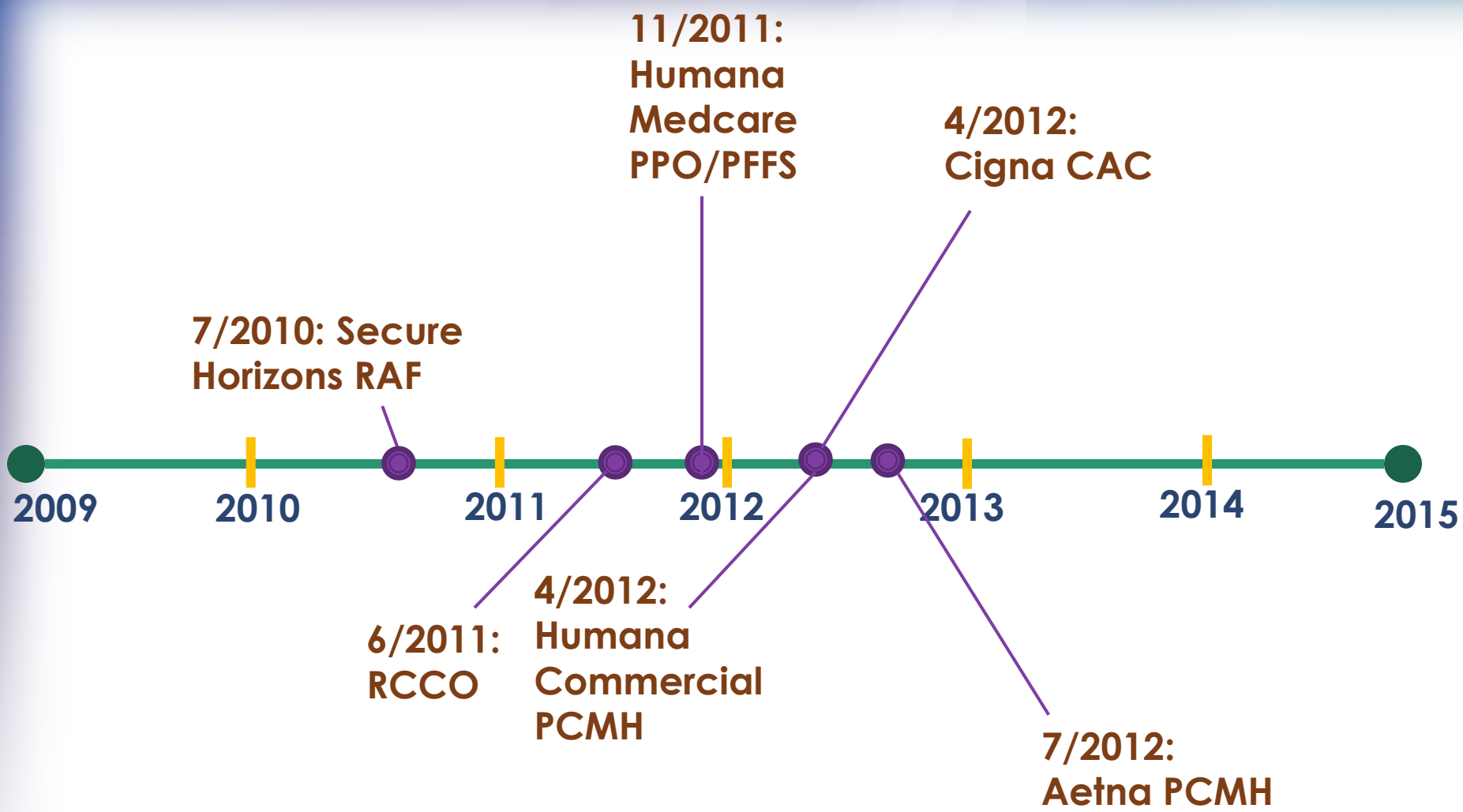
Patient Care Compass



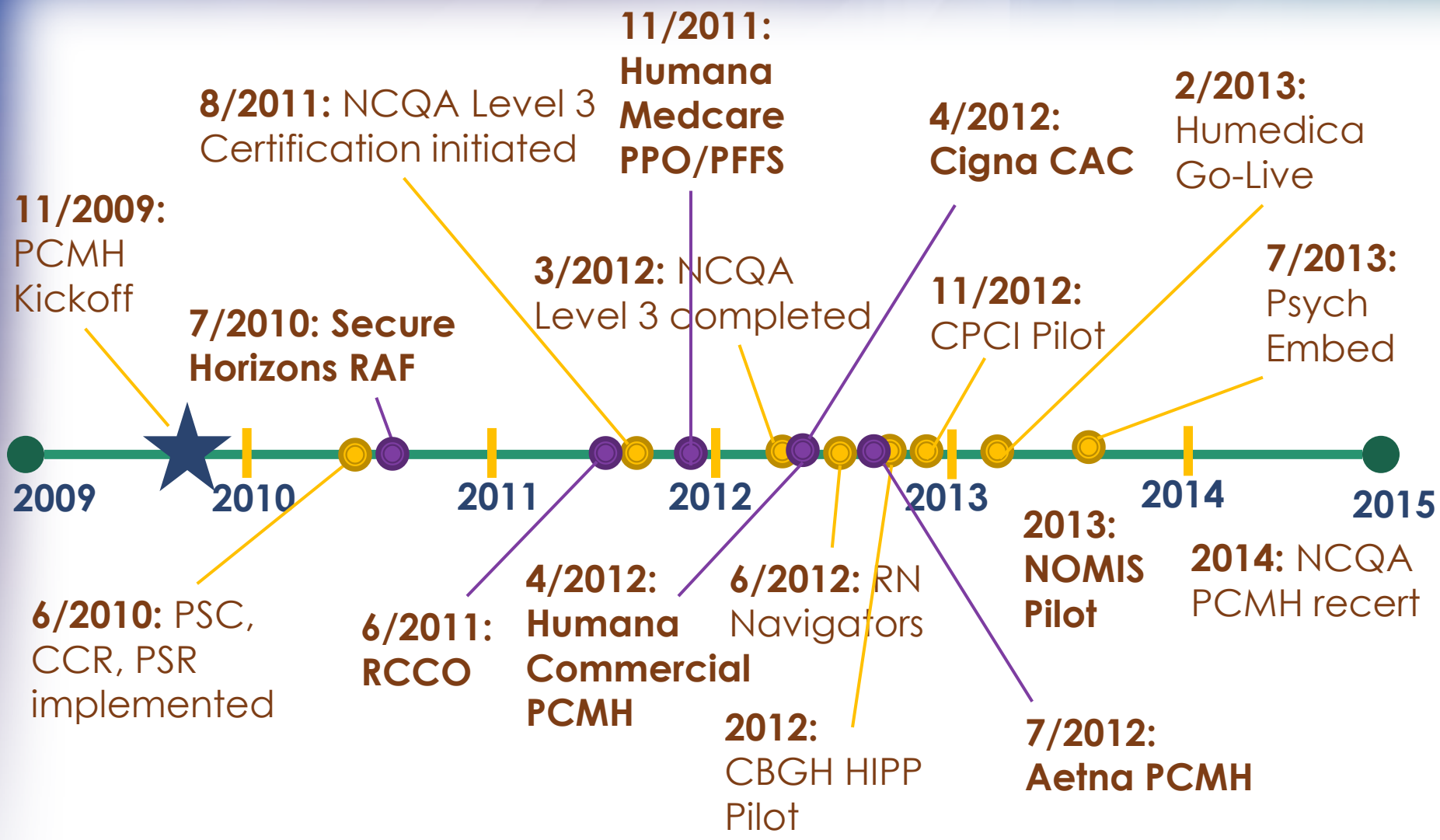
PCMH Timeline



Payer Timeline

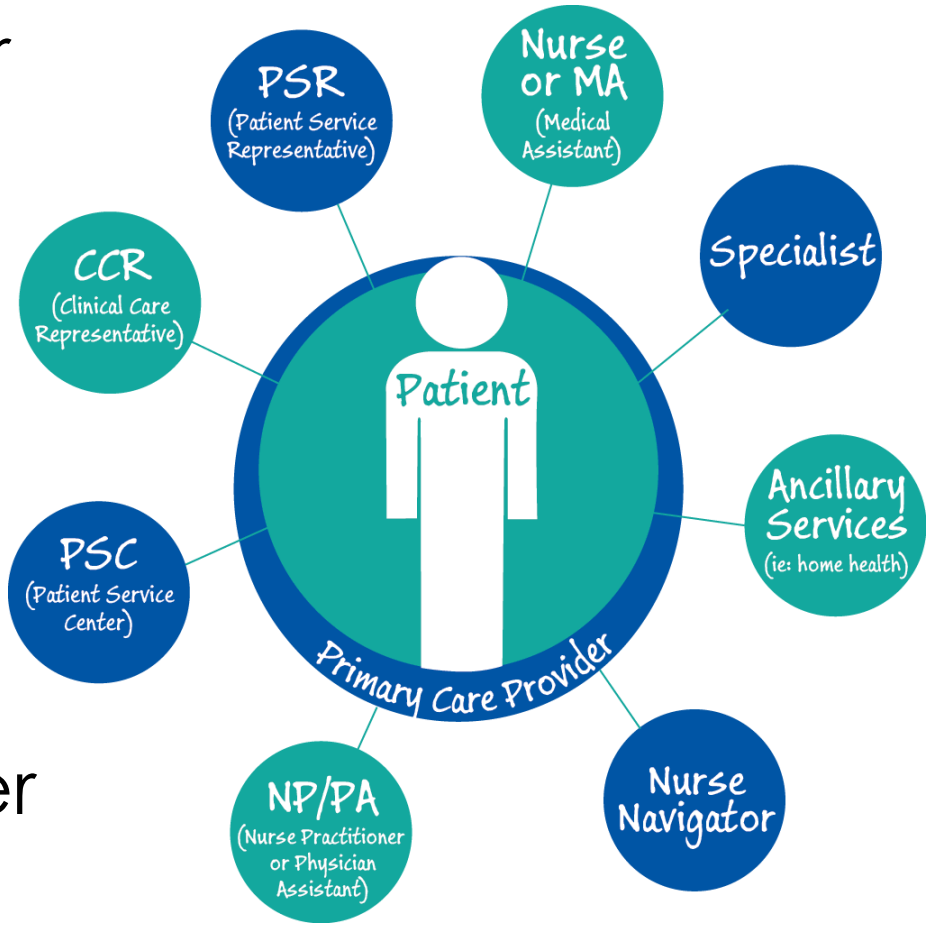


PCMH overlay with Payer



Patient Care Compass Team

- Primary Care Provider
- RN Navigator
- Nurse Practitioner/ Physician Assistant
- Medical Assistants
- Clinical Care Rep
- Patient Service Rep
- Patient Service Center



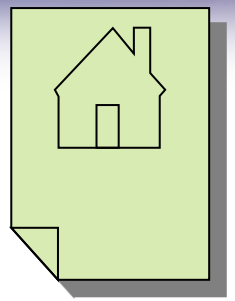
Care Teams Focus

- MA (Medical Assistant) / CCR (Clinical Care Representative)
  - Pre-visit preparation
  - Clinical checkout/follow up
  - Patient Education
  - Working the list & gaps in care

Clinical Innovation Department (CID)

- New department – Headed by CMO
- Staff- Director,1 clinical data analyst, 2 report writers
- Primary role -Population Data Analytics/ Data reports
- Secondary role –assist COO in redesign of workflows for efficient use of resources to do population management

Clinical Innovation Dept. (CID)



CMO

Director

Care Coordination Team

Analytics Team

RNN | RNN | RNN | RNN | RNN | RNN

Clinical Admin Asst.

Manager Clinical Data Analyst

Clinical Data Analyst

Clinical Data Analyst

Population Health Specialist | Population Health Specialist | Population Health Specialist | Population Health Specialist | Population Health Specialist | Population Health Specialist

EHR Training Team

IT Dept Analyst

RN Navigators

- Located at each office (Primary)
  - Care transition and coordination
    - Past-hospital & ER visits
    - Care management of high-risk patients
    - Gaps in care

RN Navigator Impact

- December 2013 - 4.8 FTE RN Navigators
  - 1198 outreach calls to post-hospital/ ER patients:
    - 490 appointments with PCP/Specialist/Ancillary
    - 41% capture rate

VALUE = QUALITY/**COST**

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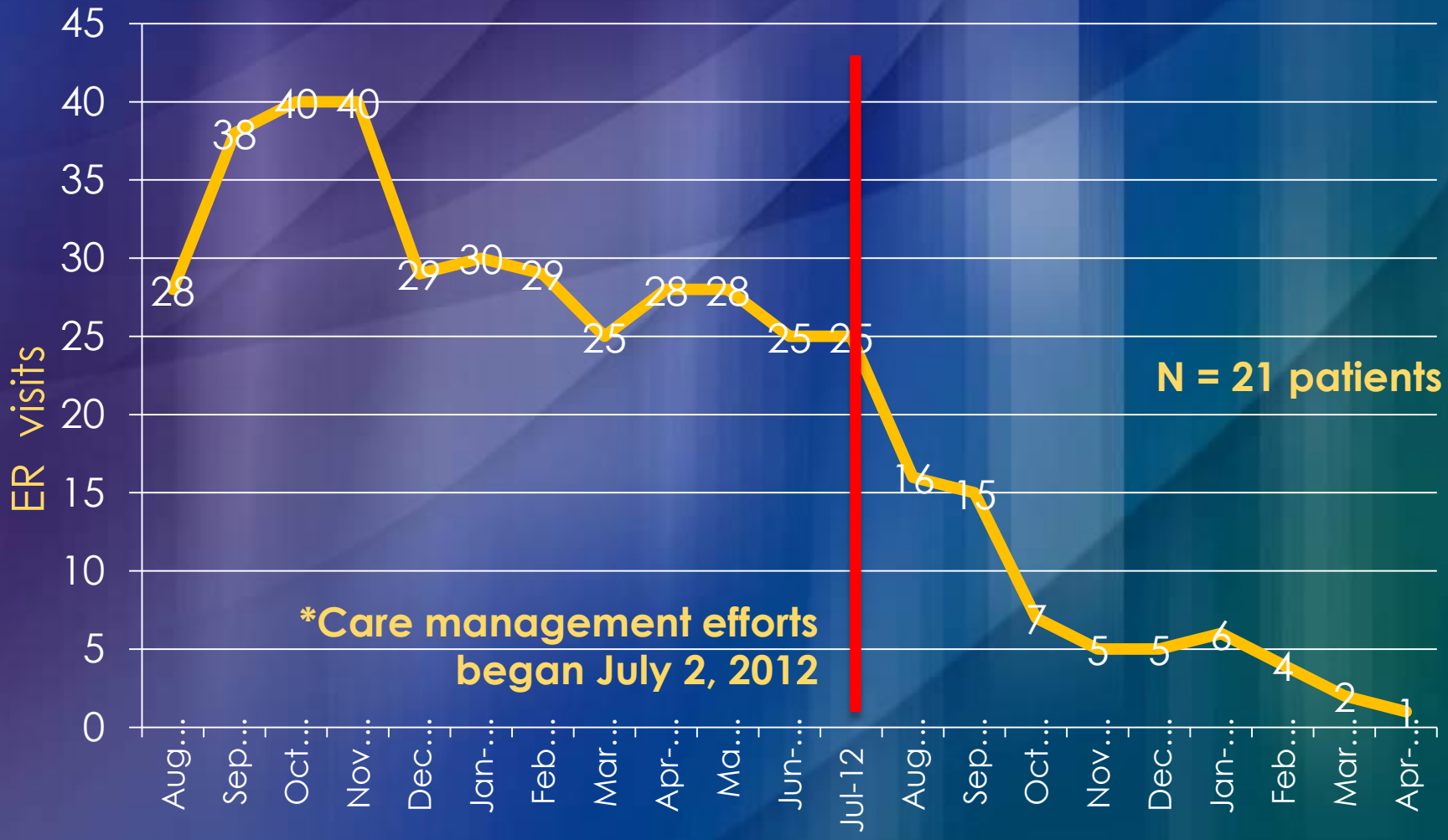
Performance Chart: Top ED Visit Trend



Clinical Innovations Department – Population Health Specialists

- Pre-visit assessments
- Confirms all pertinent info needed for appt. is charted, ordered or communicated
- Outreach call to patients who need ordered labs, testing (include a request for missing items info)

Clinical Innovations Department – Data Specialists

- Collect data & generate reports on quality metrics for providers, payers, & regulatory entities
- Collaborate with Population Health Specialists
- Provide site/provider metrics data on D3, Hypertension projects
- Pull queries for clinical research studies
- Support of PCMH, Payer Initiatives

PCMH Site Care Teams

Position	Function	Staff Ratio
Physician	Manage Panel	1
NP/PA	Co-manage Panel	0.5-1 / doc
RN Navigator	Highest Risk Care Management (ER/Post-hospital / TOC)	1:9 docs
Population Health Specialists	Routine outreach – pre-visit, population management outreach	1:8 docs
MA's	Enhanced intake, med. Reconciliation	1:1 provider
Clinical Care Representative (CCR)	Post-visit coordination/scheduling tests, f/u visits, education materials	1:3 providers

Specialty Impact

- Specialty providers & programs
  - Heart Failure Clinic
  - COPD Rehab Clinic
  - Urgent Care follow up/outreach
  - Specialty referral protocols
  - Ancillary Services-Advanced imaging appropriateness

Specialty Referral Protocols

- Cardiology
- Gastroenterology
- Neurology
- Orthopedics
- Rheumatology

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Cardiology Referral Recommendations

Diagnosis	Information Needed Prior to Consult	Tests Needed Prior to Consult
Shortness of Breath, CHF	Current Medication List Office Notes Related to Diagnosis Labs pertinent to diagnosis Risk Factors – BP, Smoking, With exertion? Awakening patient at night	Chest X Ray CBC, BMP, BTNP If BTNP is elevated or CXR is abnormal – Echocardiogram
Chest Pain	Current Medication List Office Notes Related to Diagnosis Labs pertinent to diagnosis EKG Risk Factors – to include BP & Smoking	If episode of chest pain lasting continuously greater than 60 minutes in the last 2 days a troponin level should be drawn. For atypical chest pain coronary artery disease must be excluded. The patient should be referred for a stress test. • Ambulatory patient with a normal EKG should be referred for a routine ETT • Patients with other symptoms of structural heart disease, such as shortness of breath or a heart murmur, should be referred for a stress echo. • In patients unable to exercise adequately, the order should be

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Neurology Referral Recommendations

Diagnosis	Information Needed prior to Consult	Tests Needed Prior to Consult	Treatment Tried	Referral elsewhere if:
Headaches	• Current Medication List • List of as needed medicines tried for headache pain (exp. Initrex) • List of medicines used for headache Prevention (exp. Topomax) • Office Notes Related to Diagnosis • Labs and/or Radiology pertinent to diagnosis	• ESR if patient is > 60 years old • Head CT without contrast if headaches have been present less than 3 months.	• If patient used daily analgesics - at least a one month attempt to reduce usage to <4 days/wk • For Migraine patients – attempt to use one Triptan at least 3 times • For migraine patients with >4 migraines per month at least a 4 week trial with one preventative med (exp. Topamax)	• If patient uses scheduled narcotic for headaches a consult with a pain management specialist would be more appropriate. • Send to ER if the following "red flag(s) are present: ○ Abnormal vital signs with HA ○ ESR > 40 in patient >60 years old ○ Visual loss associated with HA ○ Abnormal neurologic exam ○ Thunder Clap headache (worst headache in life) ○ Altered mental status with headache

Urgent Care Outreach

Date	Diagnosis	DA	ED	Accepting Provider	RN Follow-up
1/8/2014	HTN	1		Dr. Johnson	Saw PCP 1/8/14
1/8/2014	CHEST PAIN		1	ED	Pt not admitted. He was dx'd with epigastric pain and given Pepcid as Rx. 1/22/14: LMTC. 1/22/14: Pt called to advise that he is doing better and is seeing his VA doc for f/u.
1/8/2014	HYPOTENSION/ HEMATURIA	1		Dr. Monticelli	1/10/14: Pt was D/Cd from hospital today. He had a blood transfusion yest and is feeling much stronger.
1/8/2014	PNEUMONIA/ HYPOXIA/ DIABETES	1		Dr. Wyse	1/10/14: Pt still inpt at Penrose. 1/16/14: Pt D/Cd from hospital on 1/10/14 with dx: pneumonia. RNN contacted 1/13/14; Has appt with PCP 2/11/14.
1/9/2014	ACUTE MI		1	ED	1/10/14: Pt still inpt at Memorial. He had cardiac stent placed yest. 1/16/14: Pt D/Cd from hospital 1/11/14. He is set up to go to cardiac rehab on 1/27/14. 1/22/14: Spoke with pt. He is feeling much better. He is seeing Dr. Greenberg, Cardiology, on 1/27/14 and then will begin cardiac rehab.
1/11/2014	PNEUMONIA	1		Dr. Nitcher	D/Cd from hospital 1/14/14 with dx: pneumonia and asthma. He is on antibiotics, steroids, and O2. Saw PCP 1/15/14 and has another appt with PCP 1/27/14.

Show Me The Data…

Analytic Tools: Data, Data Everywhere

- Payer claims data/reports
- Precision BI- basic registry/ inquiry based reports
- Humedica MinedShare®
  - Main analytic tool

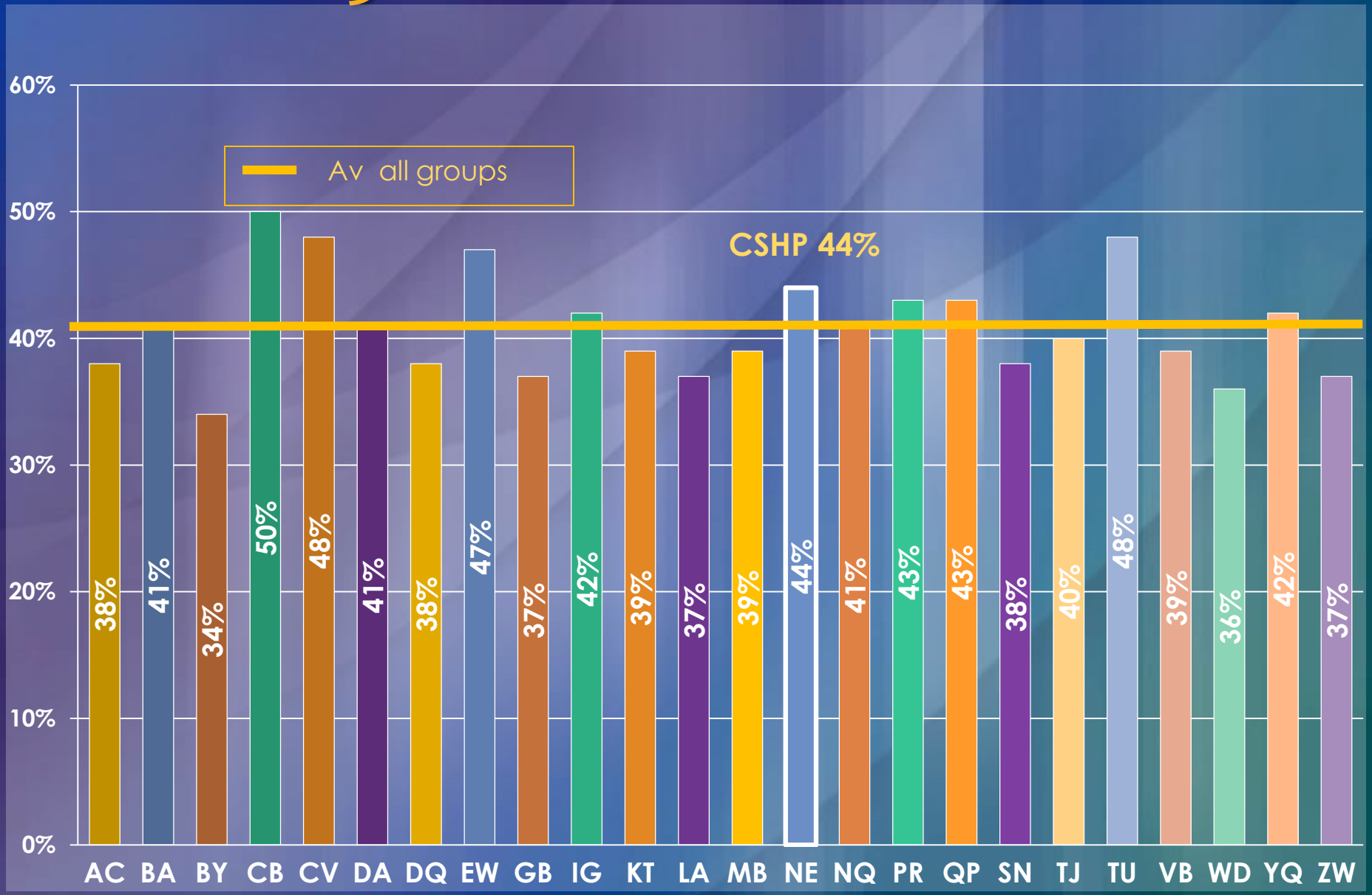
Humedica/Anceta

- Web based
- Extensive data validation process
- Discrete EMR data extraction with natural language processing
- Can be used by trained clinicians not only IT
- Gaps in care
- Generates patient specific “worklists”
- Disease specific predictive modeling
- Anceta collaborative user group and benchmarking

HUMEDICA

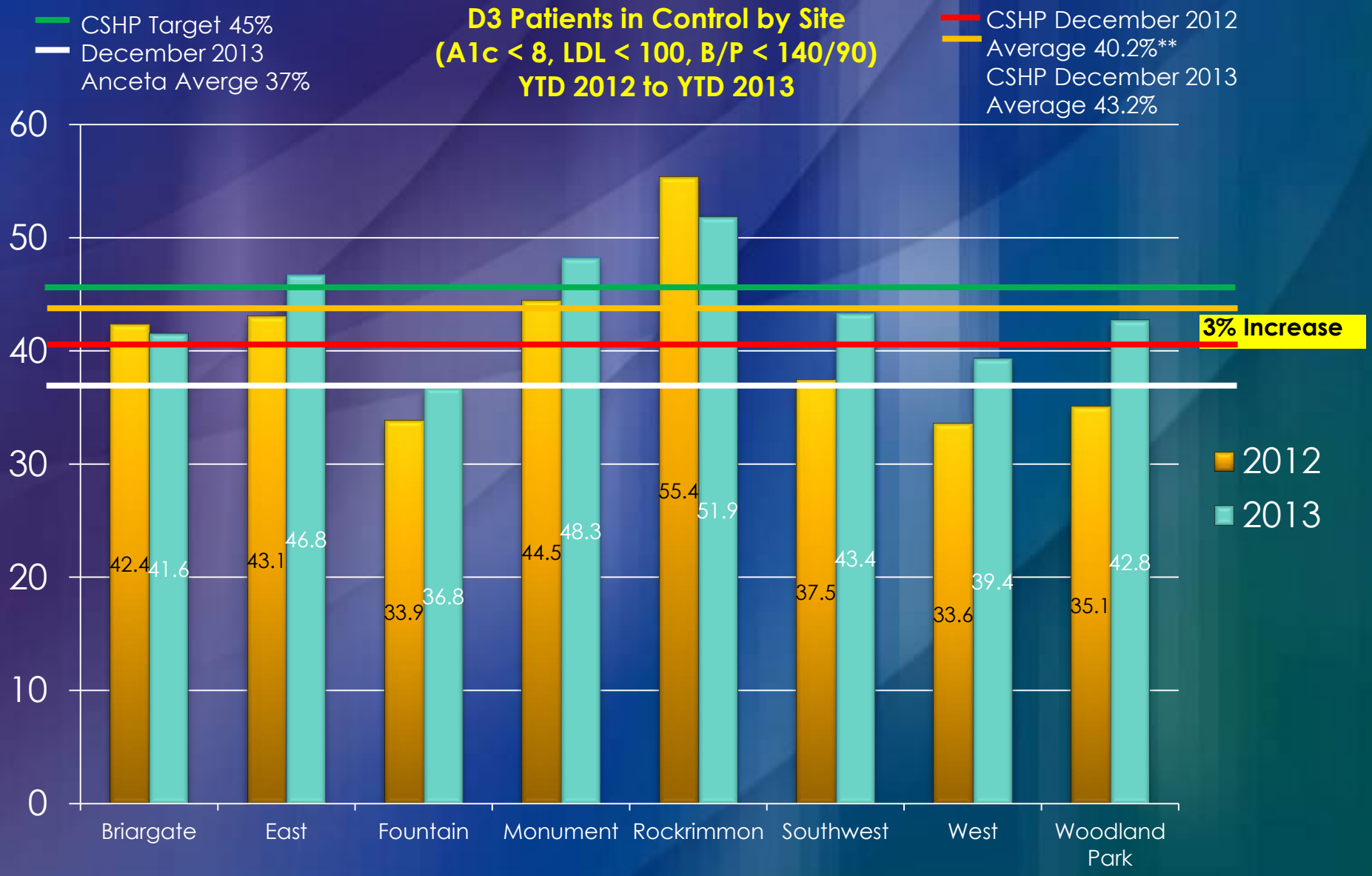
Anceta

Diabetes: "D3" Control in Anceta Collaborative



D3 control = A1c < 8, LDL < 100, and BP <140/90

Diabetes 3 (D3) Control

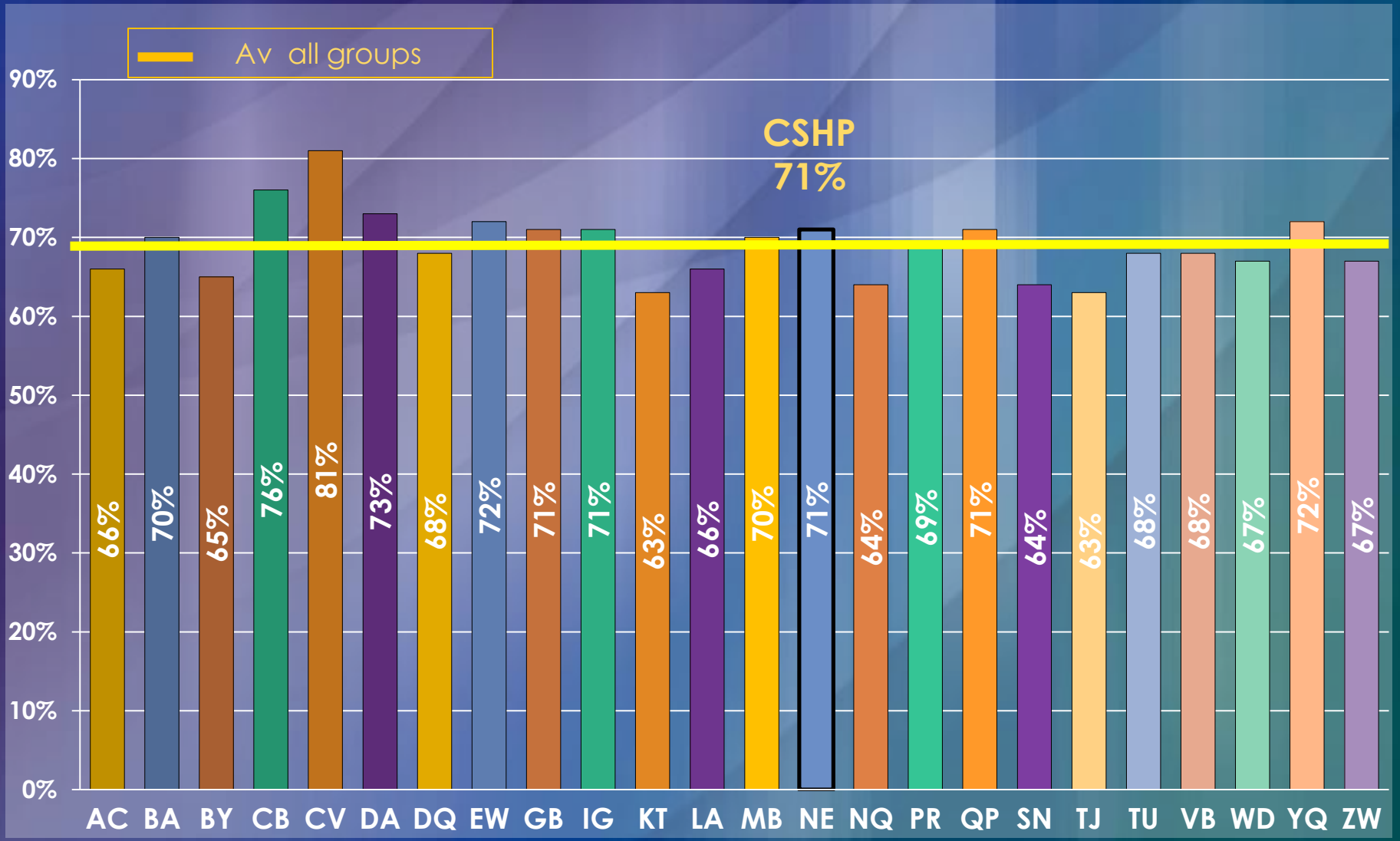


Hypertension: Measure UP/Pressure Down Campaign

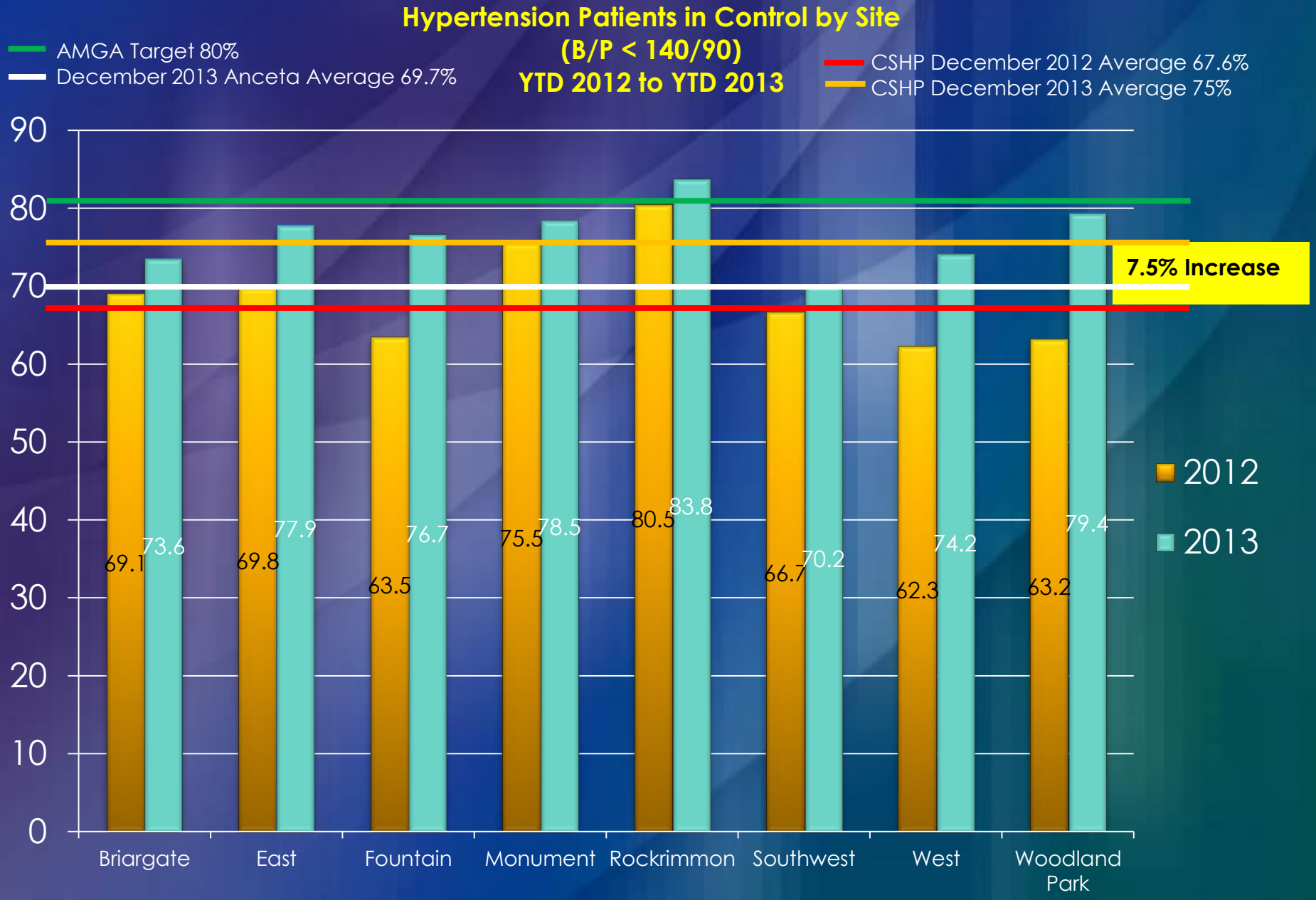
- Individual/Site PCP BP performance report
- Retraining all MAs on proper BP measurement technique
- Adopting BP med algorithm
- Outreach calls to identified patients out of control
- Defined goal of minimum 5% improvement over baseline with some compensation at risk

Measure Up
Pressure Down

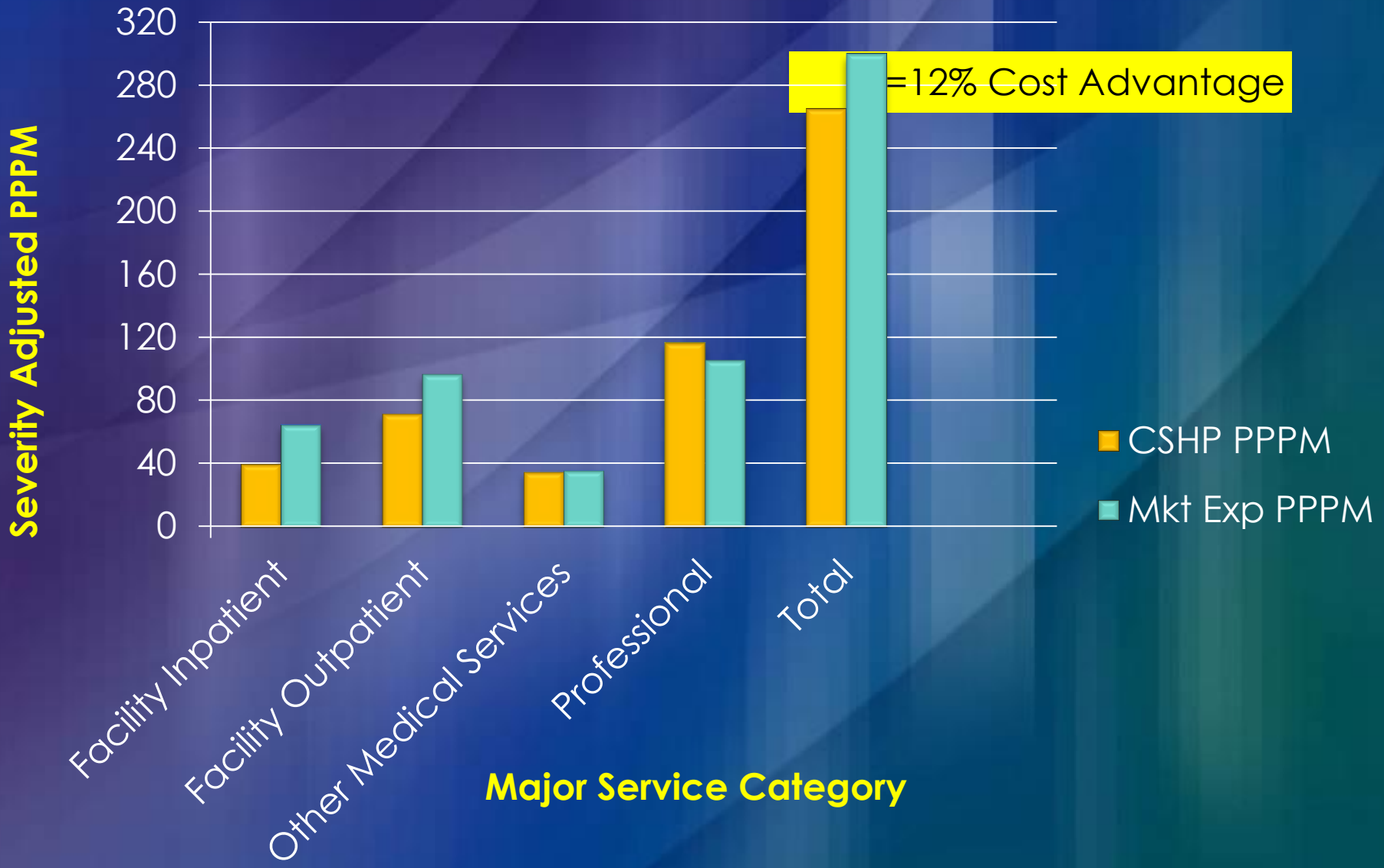
Hypertension: BP <140/90 in Anceta Collaborative



Results (so far)



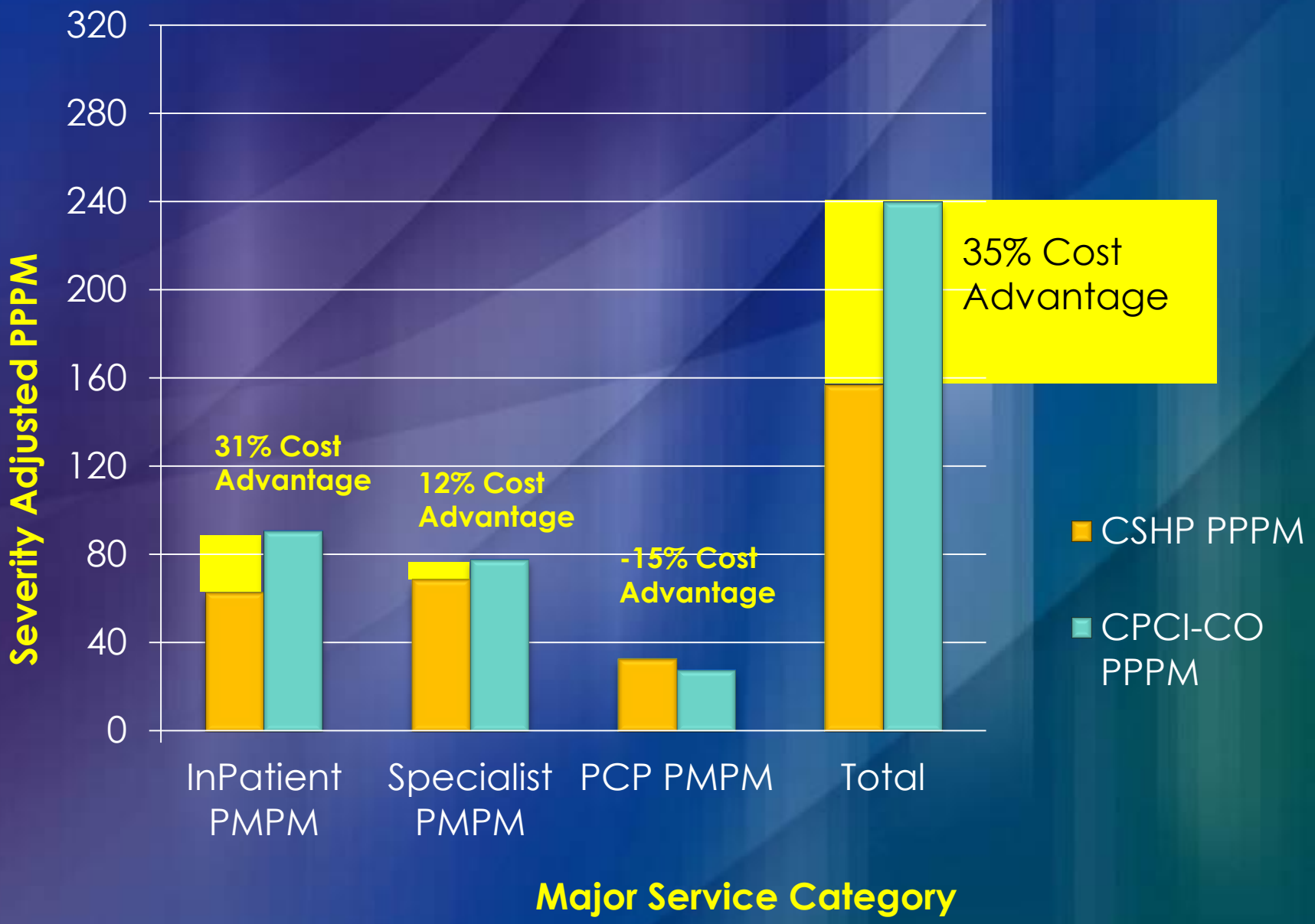
Cost Data


320
280
240
200
160
120
80
40
0
Severity Adjusted PPPM
=12% Cost Advantage
CSHP PPPM
Mkt Exp PPPM
Facility Inpatient
Facility Outpatient
Other Medical Services
Professional
Total
Major Service Category

CPCI - A Unique Project

- The Comprehensive Primary Care Initiative
  - A multi-payer initiative fostering collaboration between public and private health care payers to strengthen primary care. Medicare works with commercial/state health insurance plans offering care coordination payments to primary care doctors.
  - CSHP accounts for 8 of 74 practices (or 11%) in the state selected through a competitive process!
- CPCI allows us to provide care coordination for 28,000 patients
- Start with our highest risk patients, then additional outreach
- Insurance Plans participating:
  - Anthem Blue Cross Blue Shield of Colorado/Cigna/Colorado Medicaid/ Humana/Rocky Mountain Health Plans/United Healthcare

Cost Data


320
280
240
200
160
120
80
40
0
Severity Adjusted PPPM
31% Cost Advantage
12% Cost Advantage
-15% Cost Advantage
35% Cost Advantage
InPatient PMPM
Specialist PMPM
PCP PMPM
Total
Major Service Category
CSHP PPPM
CPCI-CO PPPM

Other Initiatives

Patient Engagement Pilot

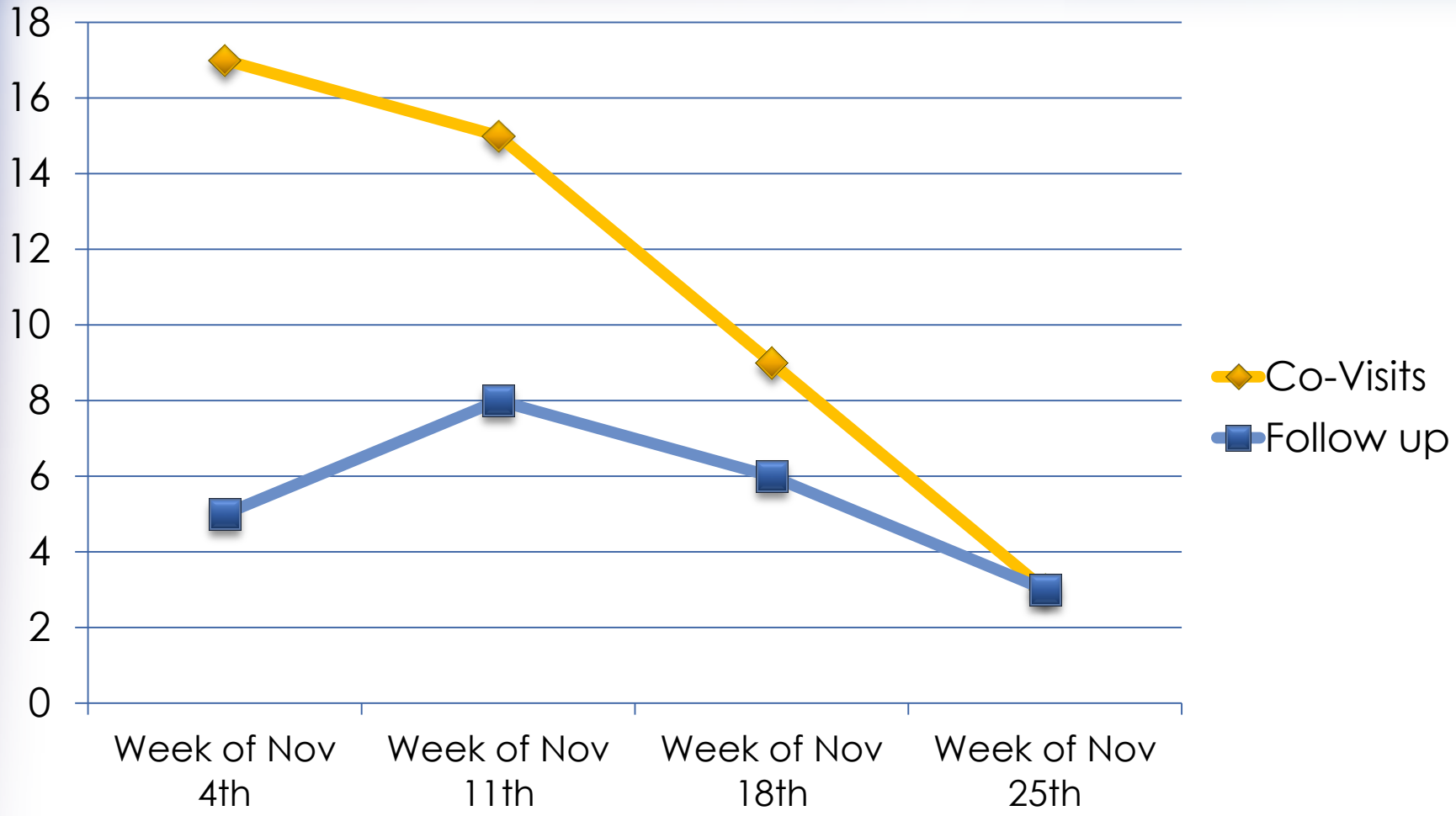
- Automated reminder for compliance
  - Hypertension
  - Diabetes
- 90 Day Trial
- 42 Distinct Patients
  - Average age of 52
- Control Rate Goal = 80%
  - Pilot achieved 93%
- Patient Response Rate Goal = 75%
  - Pilot achieved 77%

Mental Health/PCP Pilot

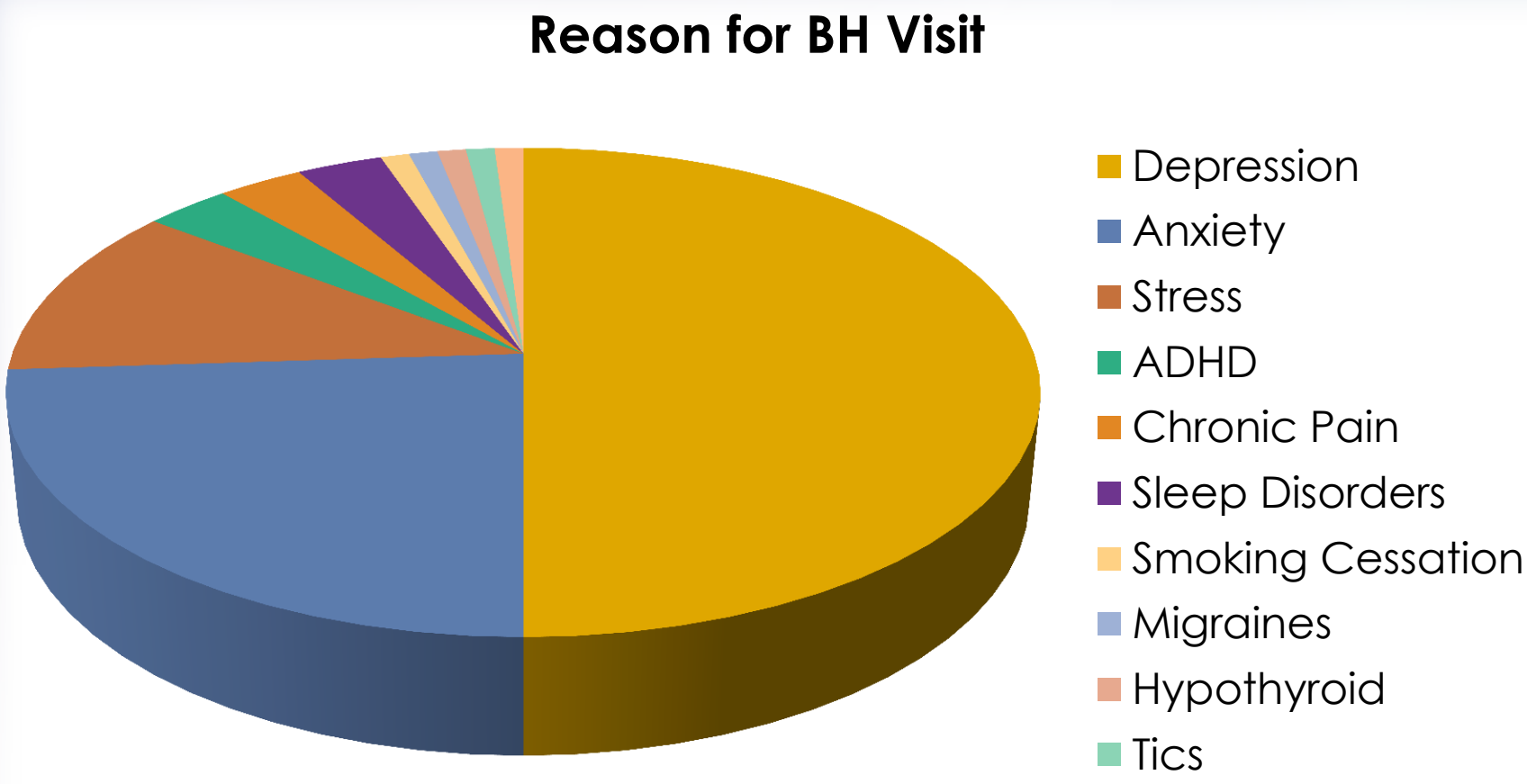
- Psychologist co-located in primary care setting
- June 2013 launch
- Coordinated with local behavioral health provider
- Shared salary/cost
- Present results to payers

ASPEN POINTE

Follow Up Psych Visit & Co-Visit: PCP/Psych

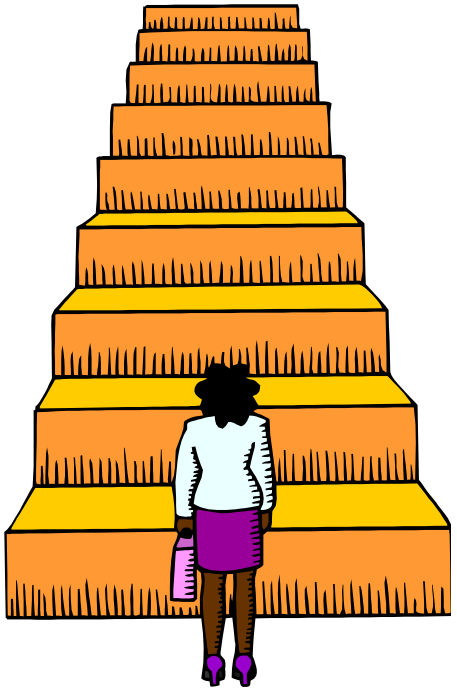


Mental Health/PCP Pilot



Next Steps

- AMGA Measure Up/ Pressure Down Hypertension campaign (underway)
- Use Disease Specific Predictive Modeling (CHF,COPD)
- Integrate Claims/cost data into clinical analytic tools to complete the data
- Expand clinical analytics to specialists metrics



Top 10 Lessons Learned

10. Engage Providers – "Show Me the DATA"
9. Centralize data analytic function- give out data in measured amounts to avoid overload.
8. Build clinical teams/infrastructure first
7. Engage Patients- explain why we are reaching out
6. Clearly identify goal of each clinical metric (benchmark - internal and external)

Top 10 Lessons Learned

5. Financial incentive alignment helps but should not be only motivator
4. Create Transparency of Data culture with a small dose of "friendly" competition between providers/sites
3. Start with small focused outreach campaigns
2. Data is never "perfect":
   "The enemy of good is perfect"
1. This is hard work - Celebrate Success!

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QUESTIONS?

THANK YOU!