

YOU CAN'T EAT AN ELEPHANT IN ONE BITE – BENDING THE COST CURVE IN A MULTISPECIALTY PRACTICE

Jonathan Nasser, MD

Scott Hines, MD

Clinical Transformation Officers

Crystal Run Healthcare

October 4, 2012



About Crystal Run Healthcare

- Physician owned MSGP in NY State, founded 1996
- 300 providers, 15 locations
- JV ASC, Urgent Care, Diagnostic Imaging, Sleep Center, High Complexity Lab
- Early adopter EHR (NextGen®) 1999
- Accredited by Joint Commission 2006
- NCQA-designated Level III PCMH 2009
- Crystal Run-CDPHP Focused EPO 2010



About our Region

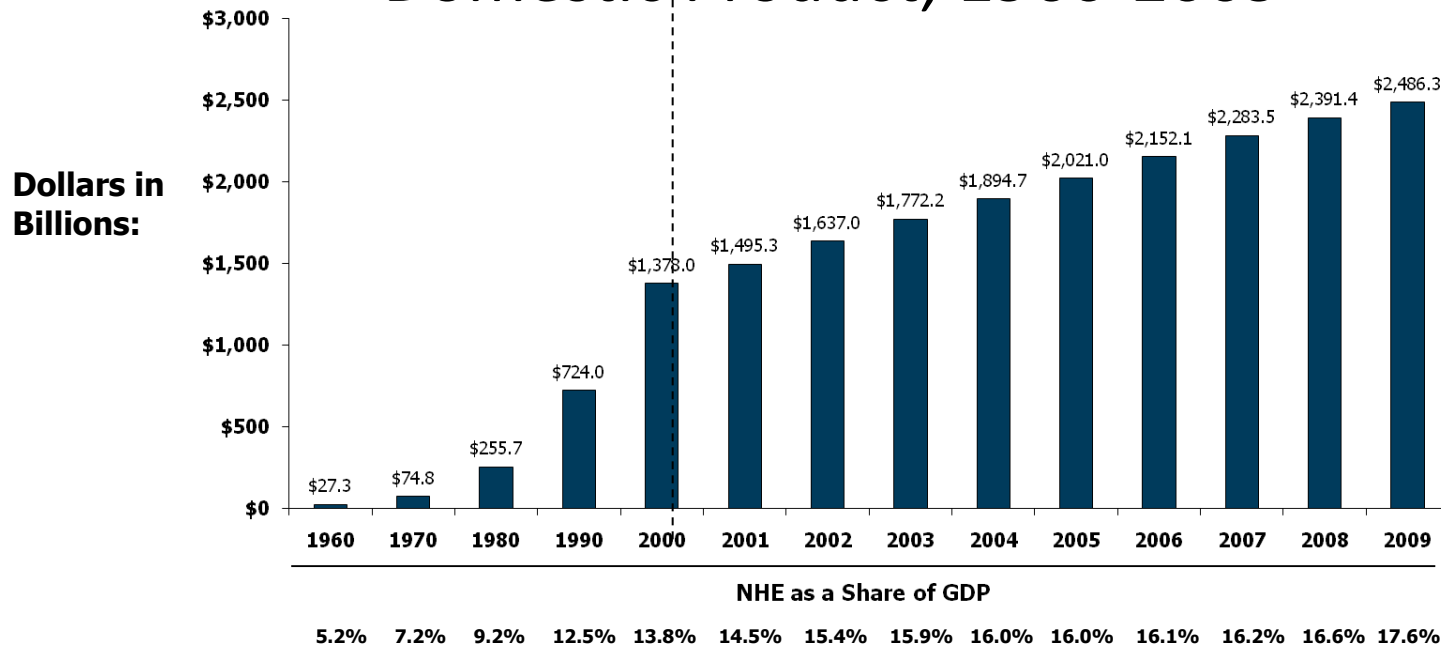
- Small group practices
- Predominantly Fee for Service
- Multiple Payors
- Improved local quality of care, less outmigration to NYC
- Dartmouth atlas designation as high expenditure

About Crystal Run Healthcare ACO

- Single entity ACO
- Pioneer ACO finalist
- Pursuing NCQA ACO accreditation
- April 2012: MSSP participant
 - 9762 attributed beneficiaries
 - 82% primary care services within ACO

MANDATE FOR CHANGE: COST/ACCESS

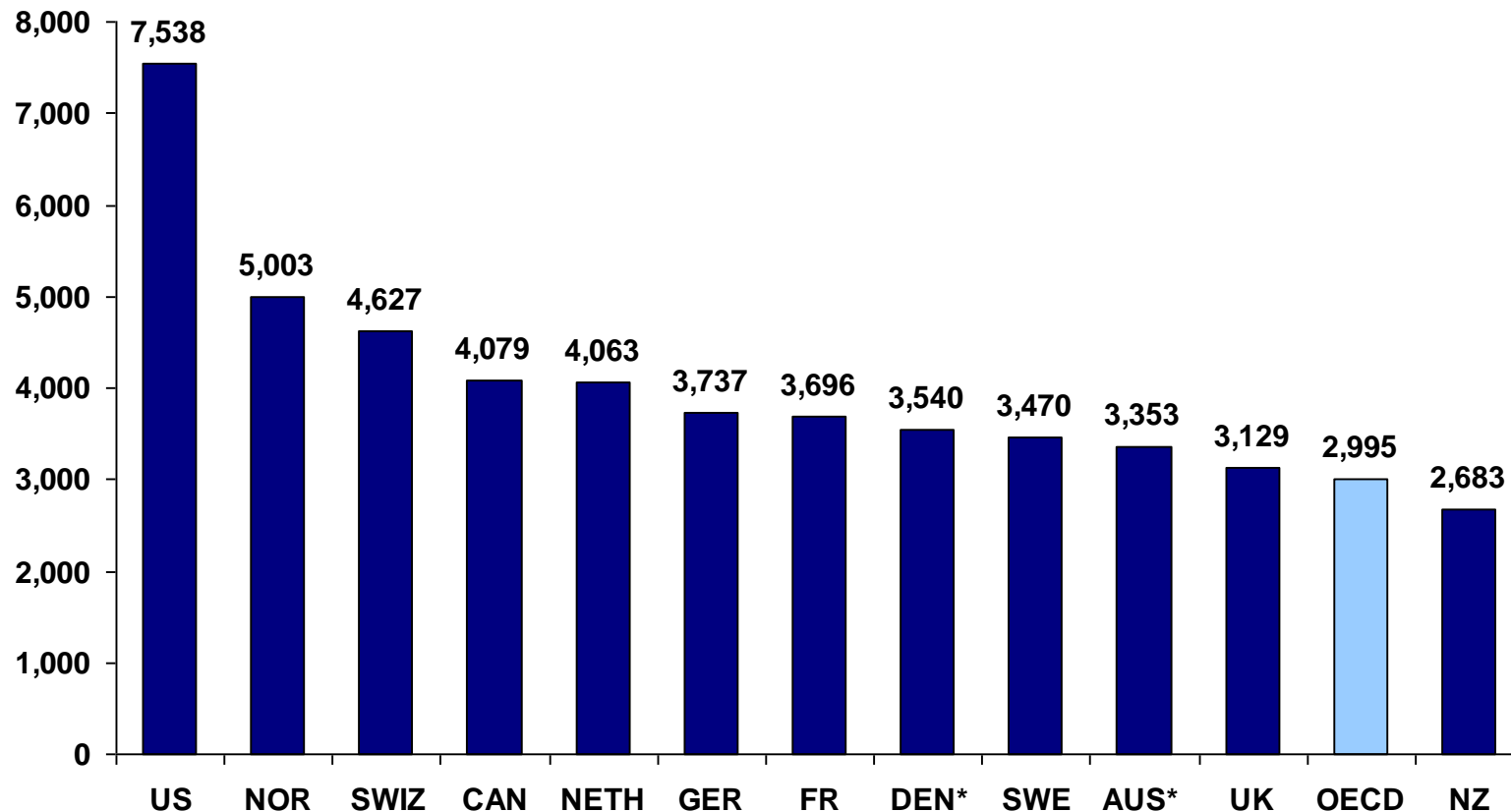
National Health Expenditures and Their Share of Gross Domestic Product, 1960-2009



Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, at <http://www.cms.hhs.gov/NationalHealthExpendData/> (see Historical; NHE summary including share of GDP, CY 1960-2009; file nhegdp09.zip).

Health Care Spending per Capita, 2008 Adjusted for Differences in Cost of Living

Dollars

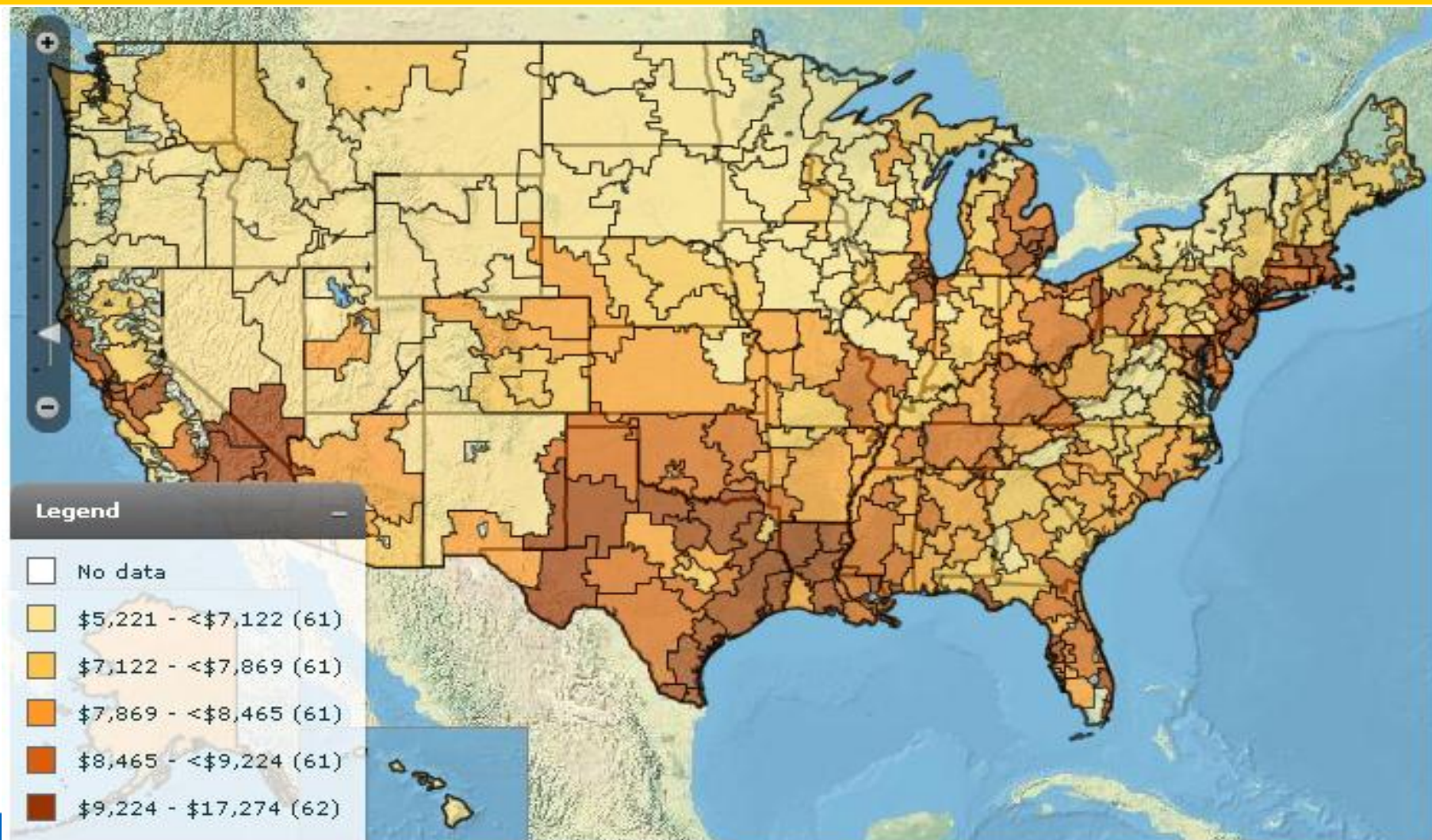


* 2007.

Source: OECD Health Data 2010 (Oct. 2010).

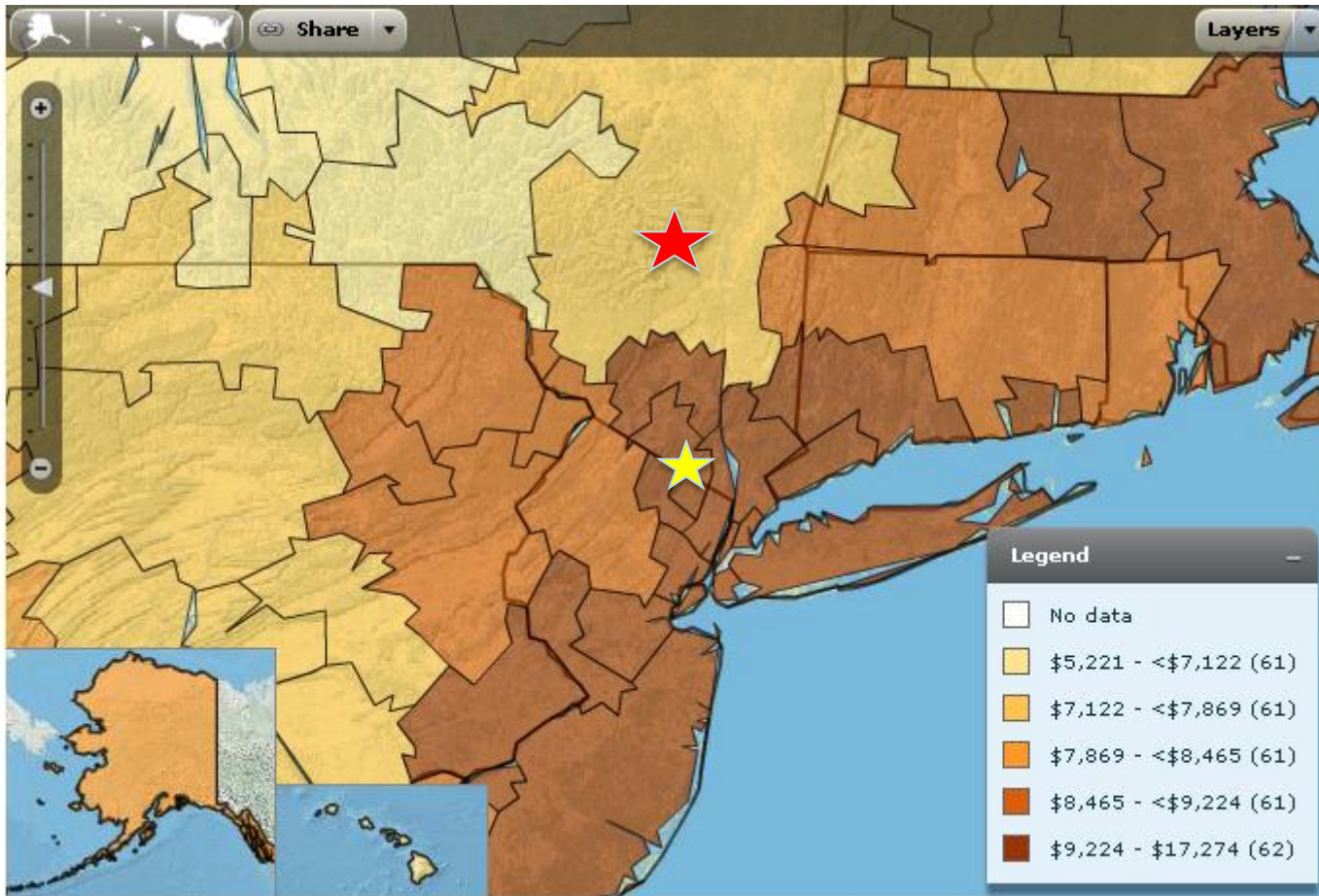
Median

Dartmouth Atlas



Crystal Run Healthcare ACO

Regional Data



Albany
\$7,459

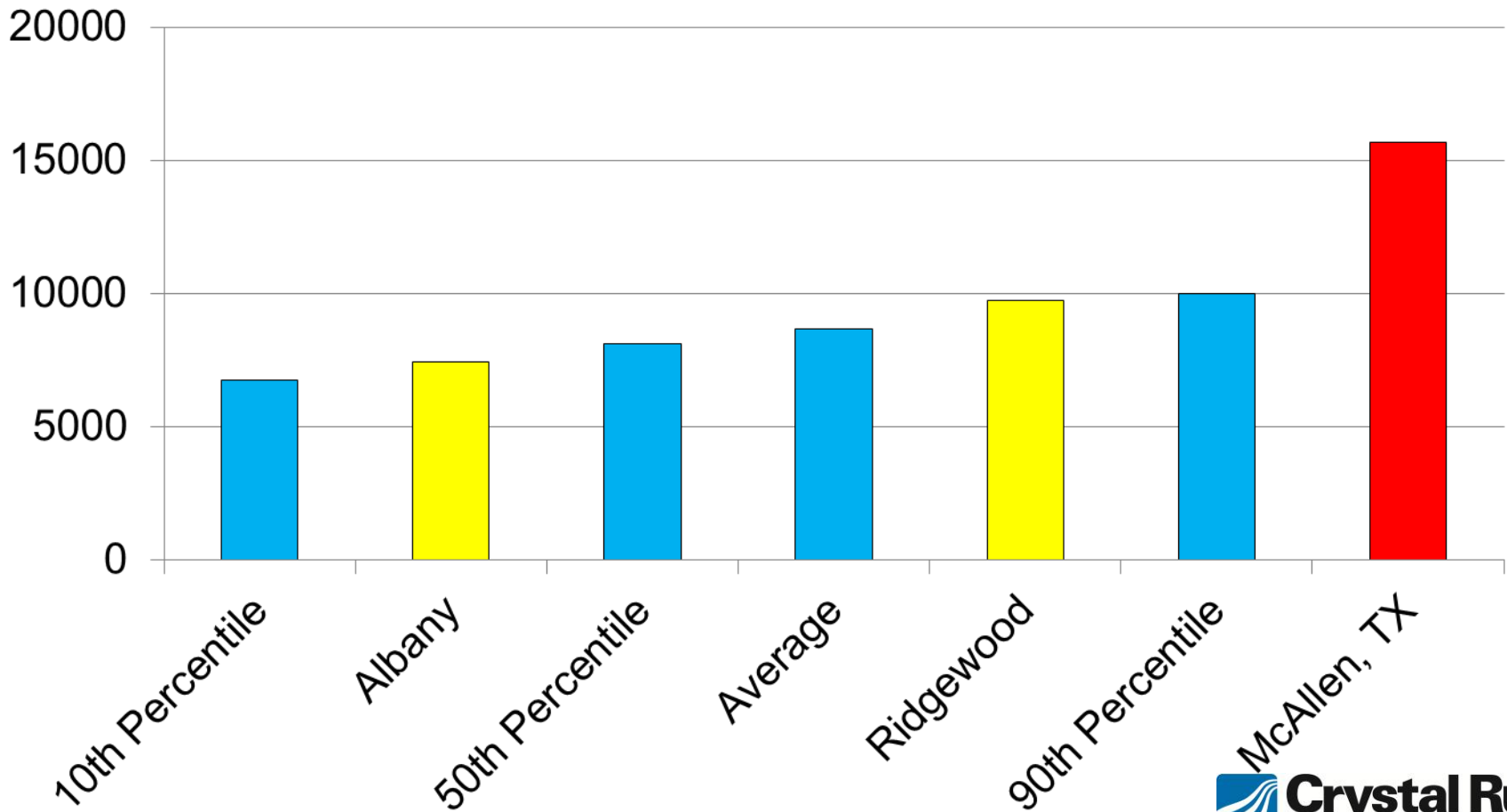


Ridgewood
\$9,784

Crystal Run
Healthcare

Regional Medicare Cost Comparison

Source: Dartmouth Atlas, Year 2007



Crystal Run Healthcare ACO

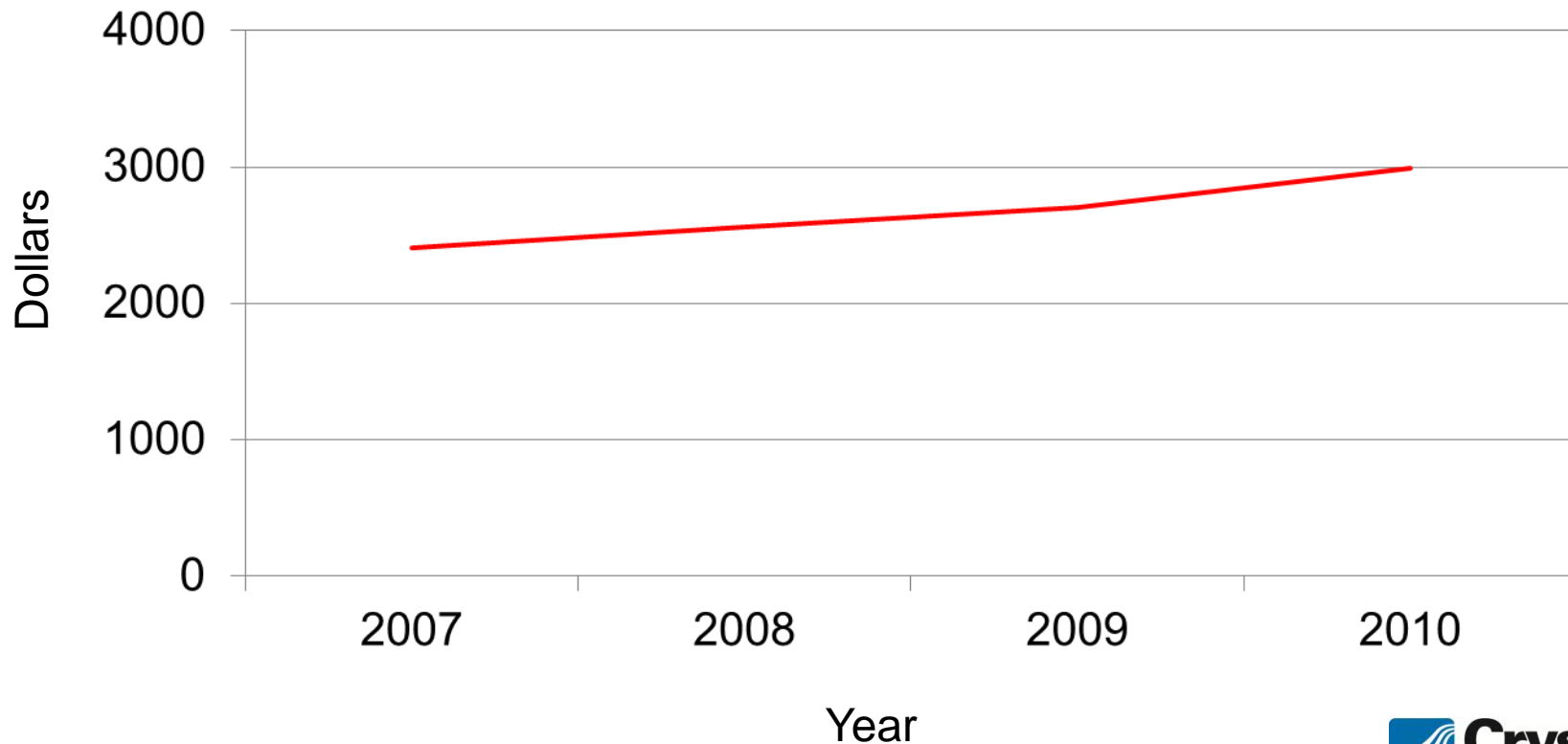
Internal Measures of Cost

- Cost per specialty (department level)
- Cost per patient (provider level)
- Variation reduction (diagnosis level)

Crystal Run Healthcare ACO

Internal Cost Trend

Charges per Patient



Crystal Run Healthcare ACO: Bending the cost curve

■ Cultural Change

- Specialty Consultations

■ Infrastructural Change

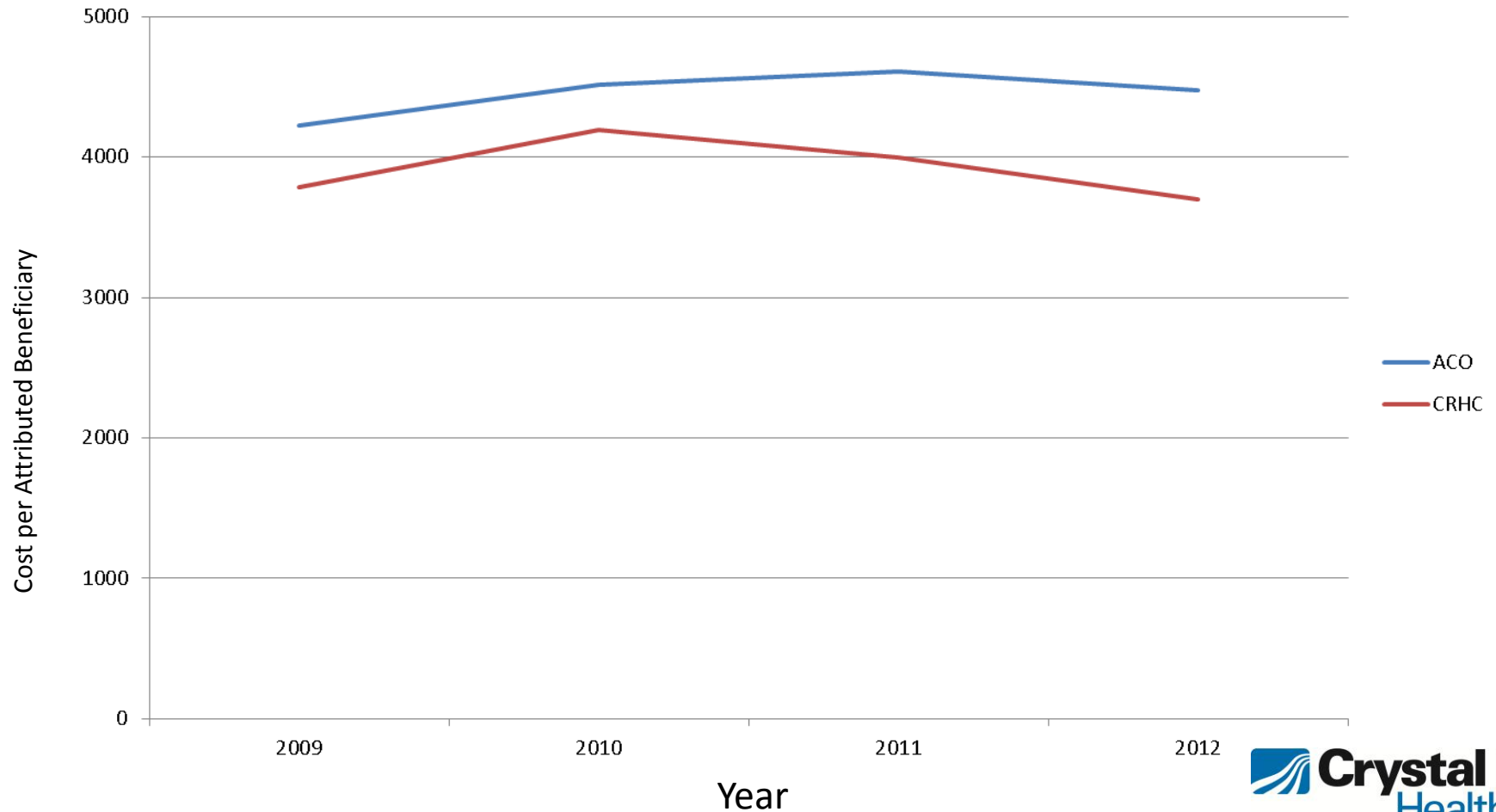
- CARETEAM

■ Behavioral Change

- Variation Reduction

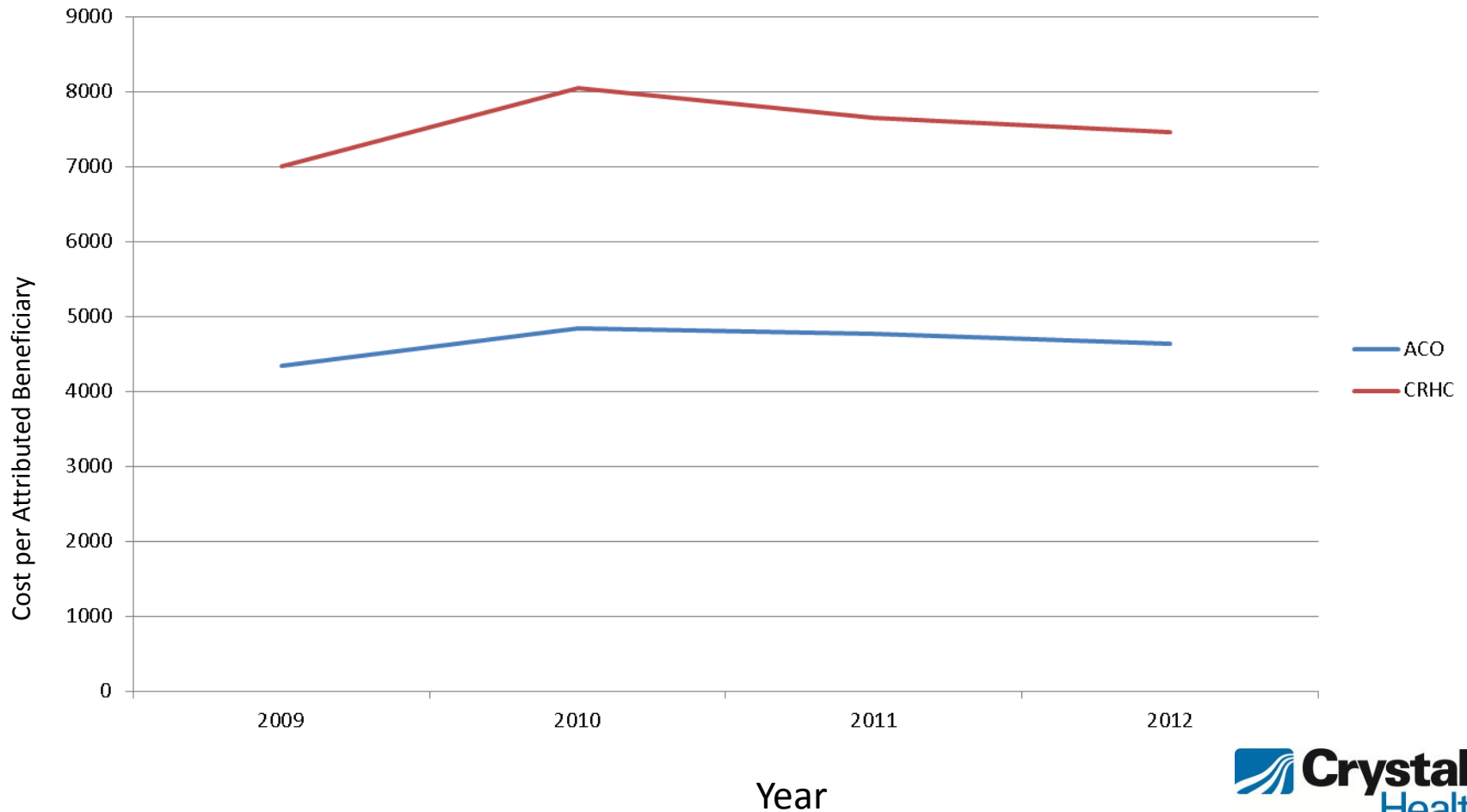
ACO Comparison

PCP Utilization



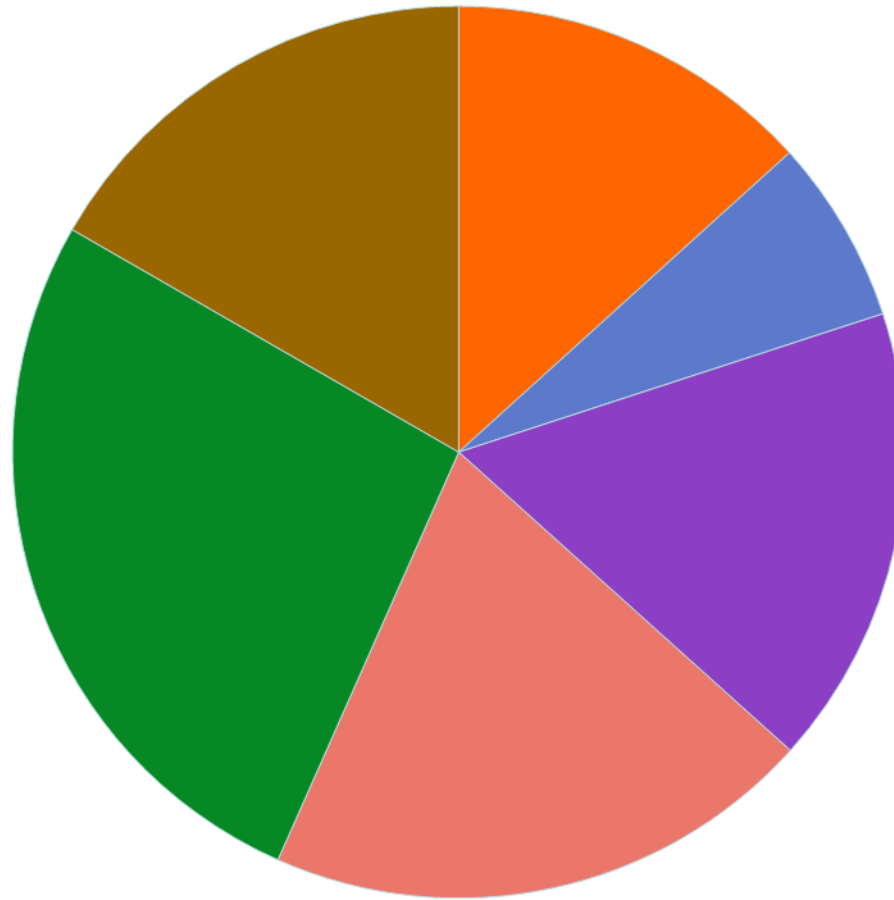
ACO Comparison

Specialist Utilization



Specialist Survey

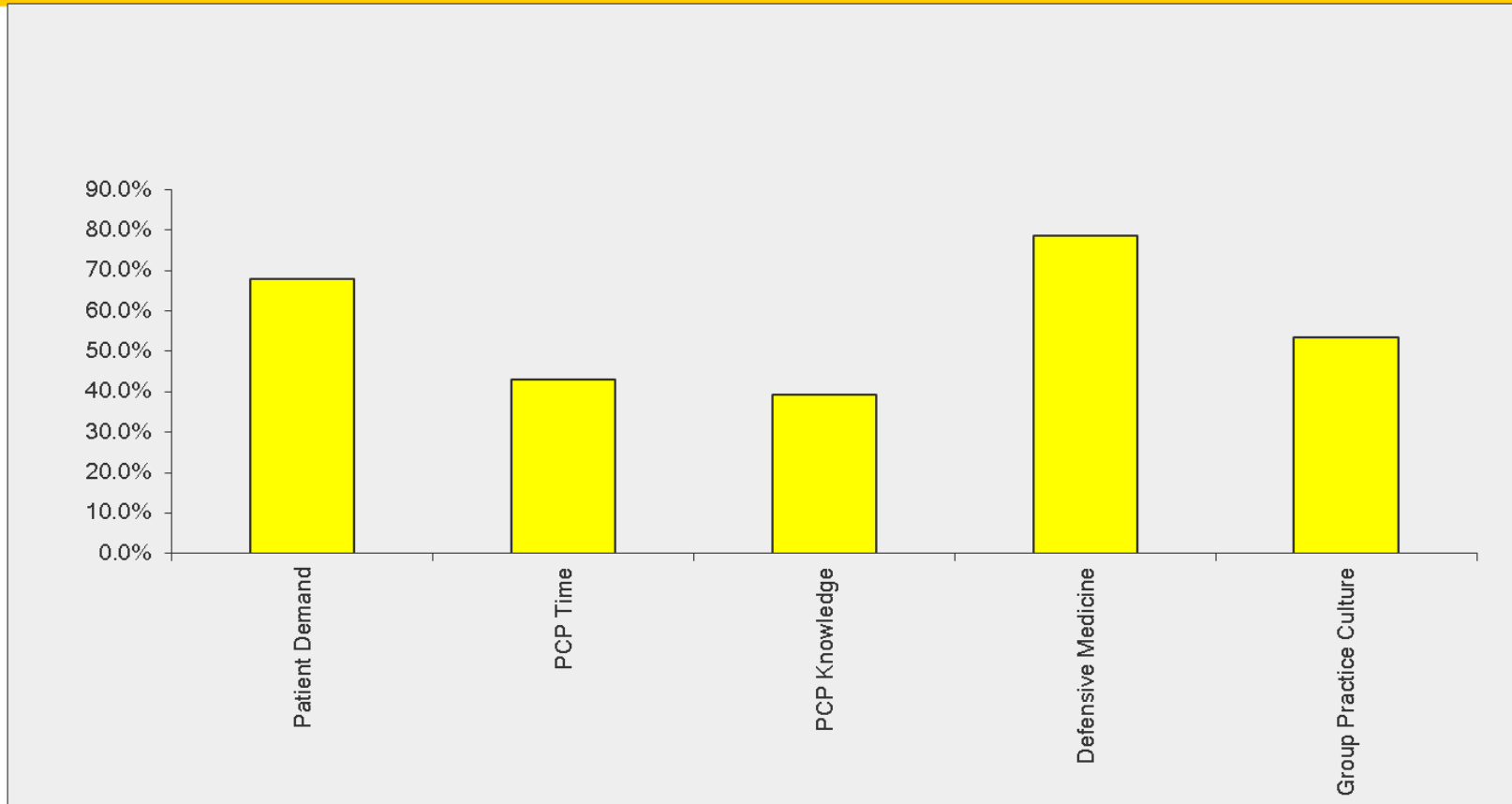
Improving Value of Consults



- Cardiology
- Dermatology
- GI
- Neurology
- Ortho
- Pulmonary

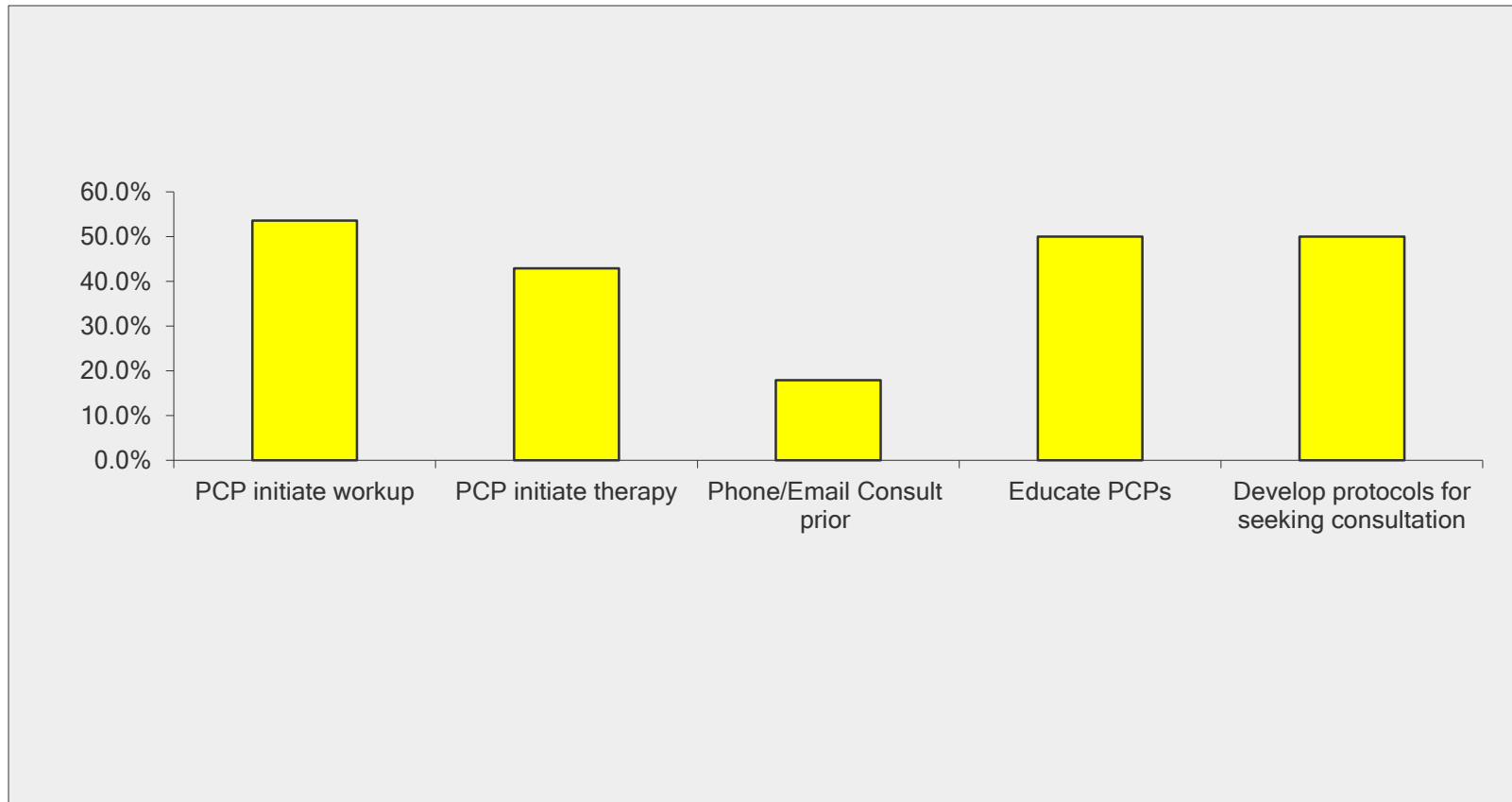
Specialist Survey

Reasons Unnecessary Consults



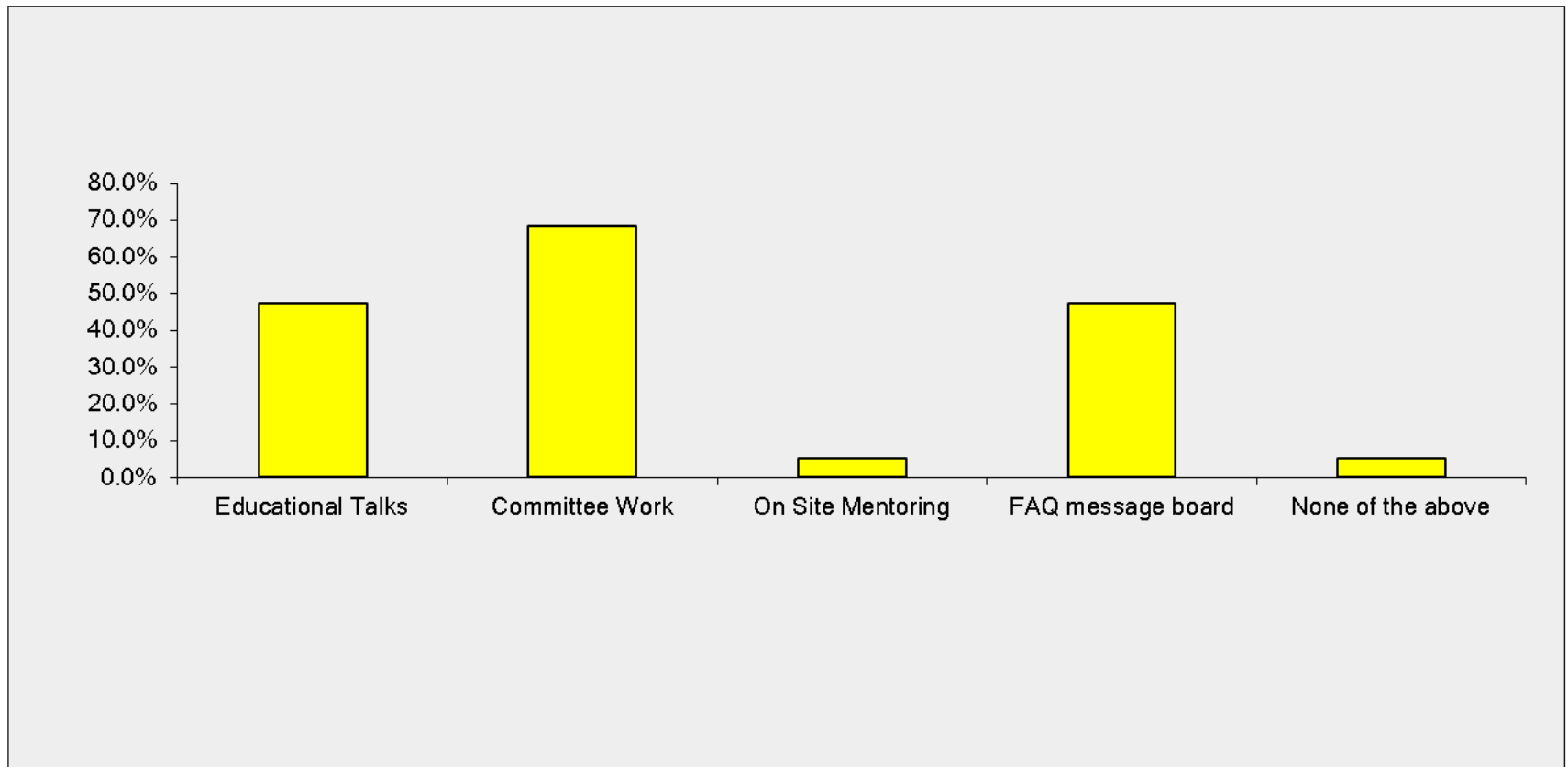
Specialist Survey

Improving Quality of Consults



Specialist Survey

How would you help?



Improving Value of Consultations

FLOG

[Home](#)[The Page](#)[Buzzwords](#)[Clinical Guidelines](#)[Flog](#)

Flog

What is the Flog?

The FLOG is a venue for communication where providers can post a question to a specific specialty. Once a question is posted, the specialist designated to maintain the FLOG for his/her specialty will enter a response in a timely fashion. All providers who are signed up for the service will then receive an e-mail notification that a new post has been created. Obviously, urgent issues need to be discussed by phone in the usual manner.

flog@crystalrunhealthcare.com



CRYSTALRUNimperry

9/12/2012 2:32 PM

secondary erythrocytosis due to cyanotic heart disease

Rather than solely using a target hematocrit, phlebotomy should be performed only in patients with intrusive symptoms of hyperviscosity, and then only with caution in the setting of iron deficiency. Some experts also recommend preoperative phlebotomy to improve hemostasis.

- The 2008 ACC/AHA guidelines recommend therapeutic phlebotomy for hemoglobin greater than 20 g/dL and hematocrit >65 percent, associated with headache, increasing fatigue, or other symptoms of hyperviscosity in the absence of dehydration or anemia.
- Repeated routine phlebotomies are **not** recommended because of the risk of iron depletion, decreased oxygen-carrying capacity, and stroke.

Manage

[My Subscriptions](#)

Archive

September

[secondary erythrocytosis due to cyanotic heart disease](#)

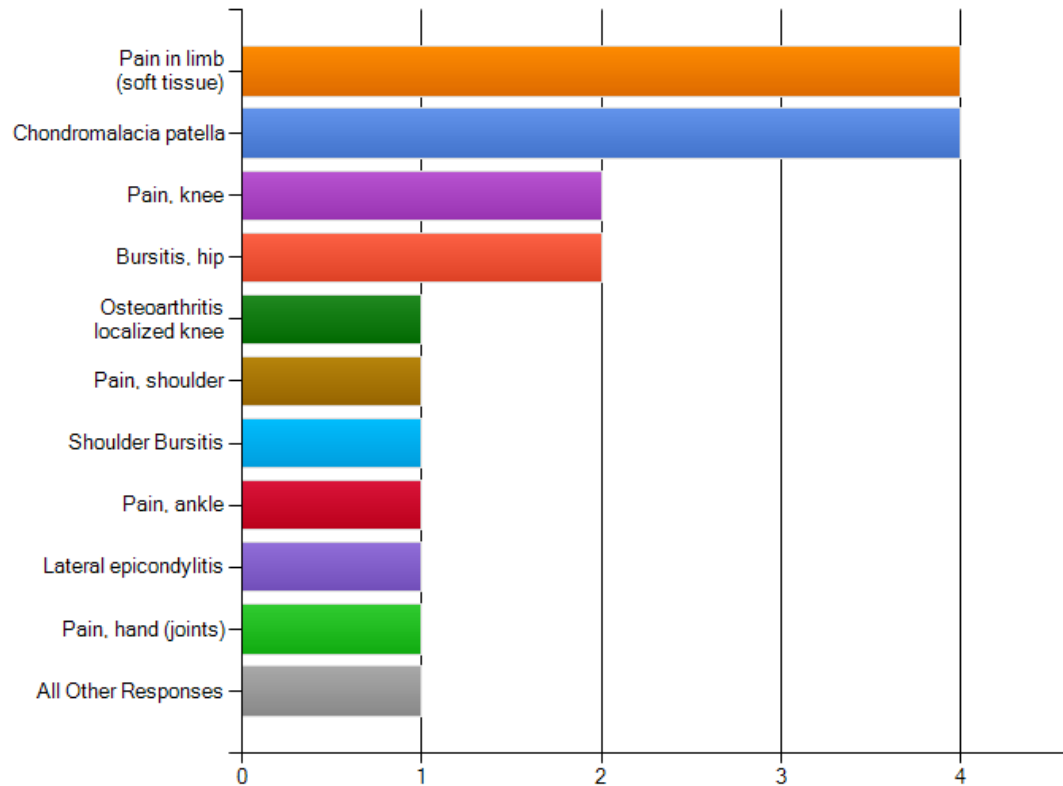
August

[Antibiotic Prophylaxis for patient with joint replacments](#)

[Tick bite](#)

[DM2 or not DM2, that is th question](#)

Unnecessary Consults – Orthopedics



Improving Value of Consultations

PCP90x Series

- Endocrinology, Cardiology, Pulmonology, Orthopedics

- Orthopedics:
 1. Define Indications for Orthopedics Consultation and actions to be taken prior to consultation
 2. Understand the diagnosis and management of common orthopedic conditions and discuss the role of injections in primary care
 3. Understand the physical examination of the knee and the basic initial management of common disorders of the knee

Improving the Value of Consultations

- Advantages of multispecialty practice
 - avoiding duplication of medical services
 - specialty neighborhood
 - managing over-utilization

Cultural Change: Consultations outcomes

- Primary Care / Specialty Care expenditure
- Specialist Measure:
Number of total visits / Number of total pts
- Primary Care Measure:
Number of PCP visits / Number of total visits

Cultural Change: Consultations before and after



Crystal Run Healthcare ACO: Bending the cost curve

■ Cultural Change

- Specialty Consultations

■ **Infrastructural Change**

- **CARETEAM**

■ Behavioral Change

- Variation Reduction

Infrastructural Change: CARETEAM

- **Community and Residential Extenders for Transitions, Evaluation and Management**
- **Goal: 10% reduction in admissions, readmissions and length of stay**
- **Focus: Medicare, High Risk Conditions**

CARETEAM

criteria for initial home visit

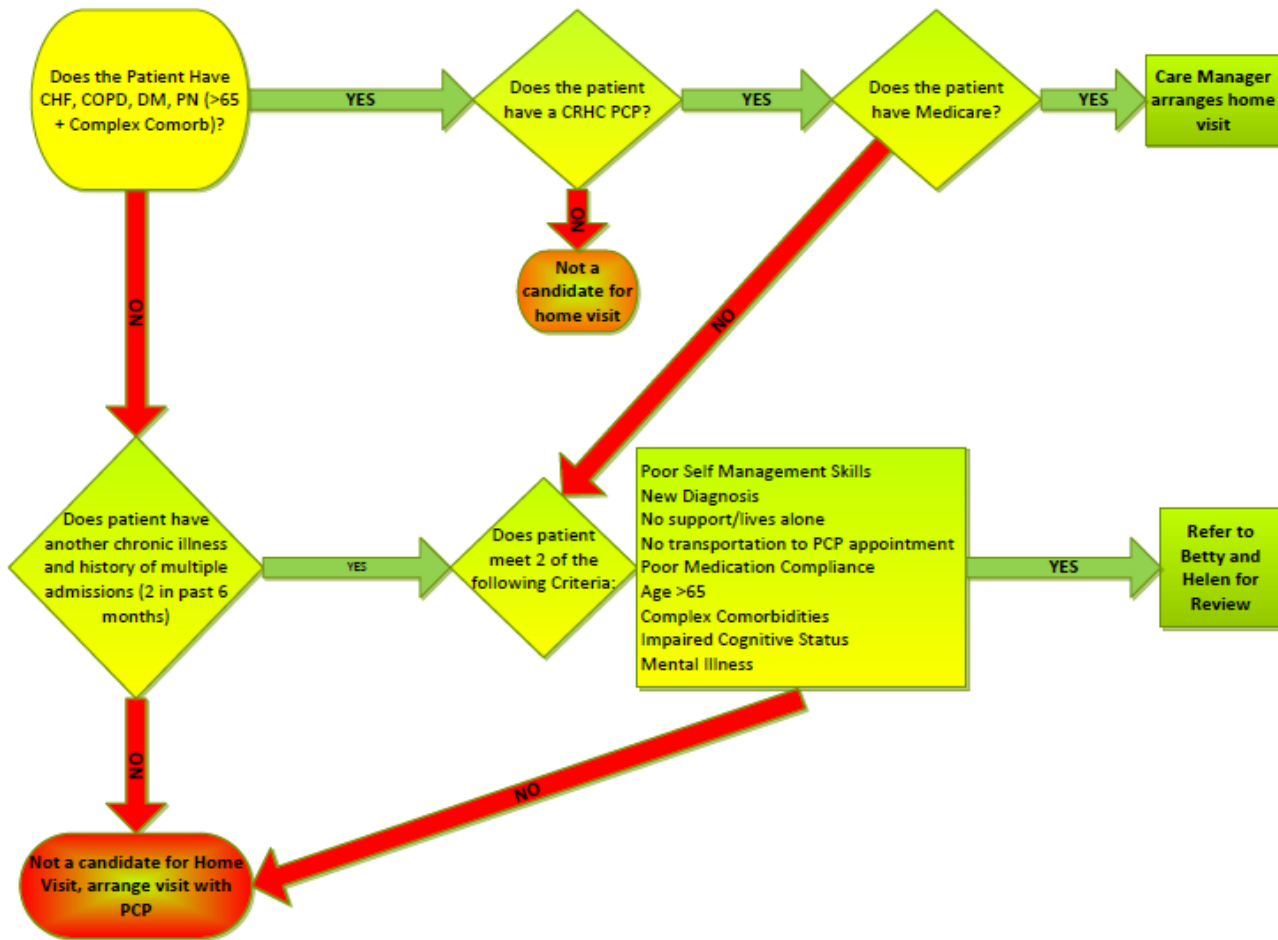
- Medicare, PCP in ACO
- COPD, CHF
 - All hospitalization and urgent care visits
- Pneumonia with co-morbidities
 - All hospitalization and urgent care visits
- Diabetes
 - Hospitalizations for DKA, new onset or multiple admissions
 - Urgent Care visits for hyperglycemia

CARETEAM

criteria for second home visit

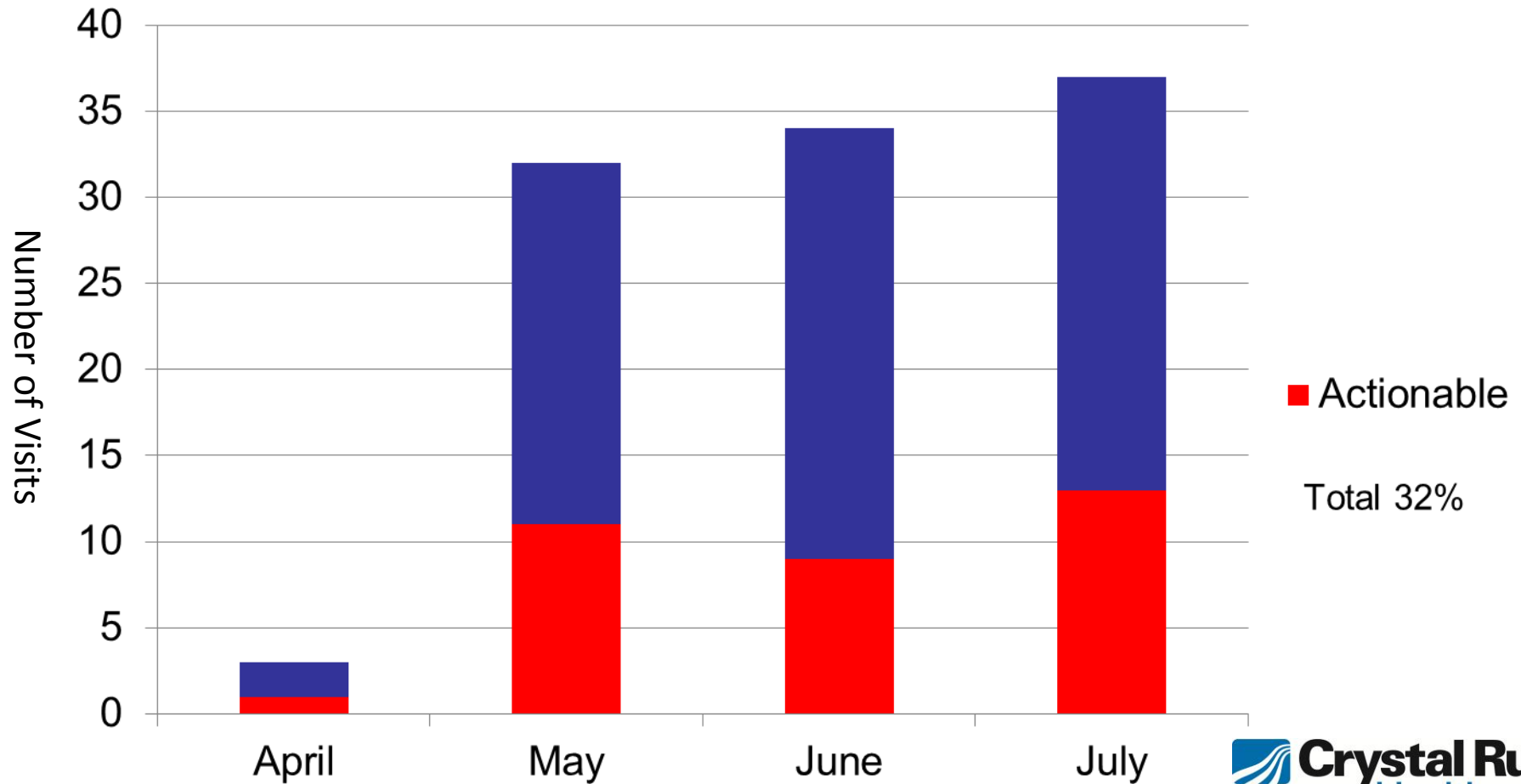
- Two of the following:
 - Poor self management skills
 - New diagnosis
 - Poor support / lives alone
 - Poor medication compliance
 - Age > 65
 - Mental Illness or Poor Cognitive status
 - Clinically unstable during home visit
 - Complex co-morbidities

CARETEAM process map



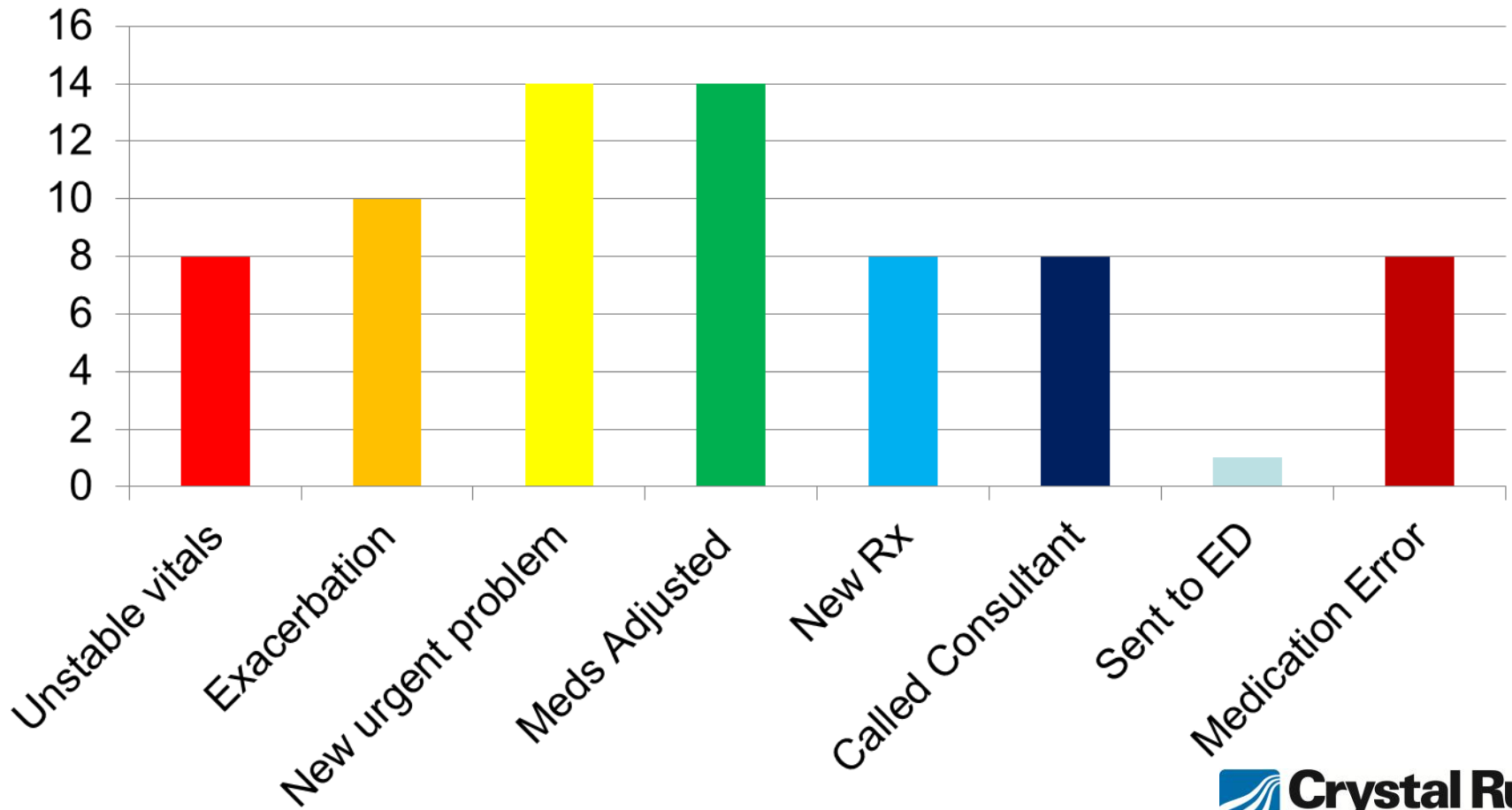
CARETEAM

outcome of visits (n=106)



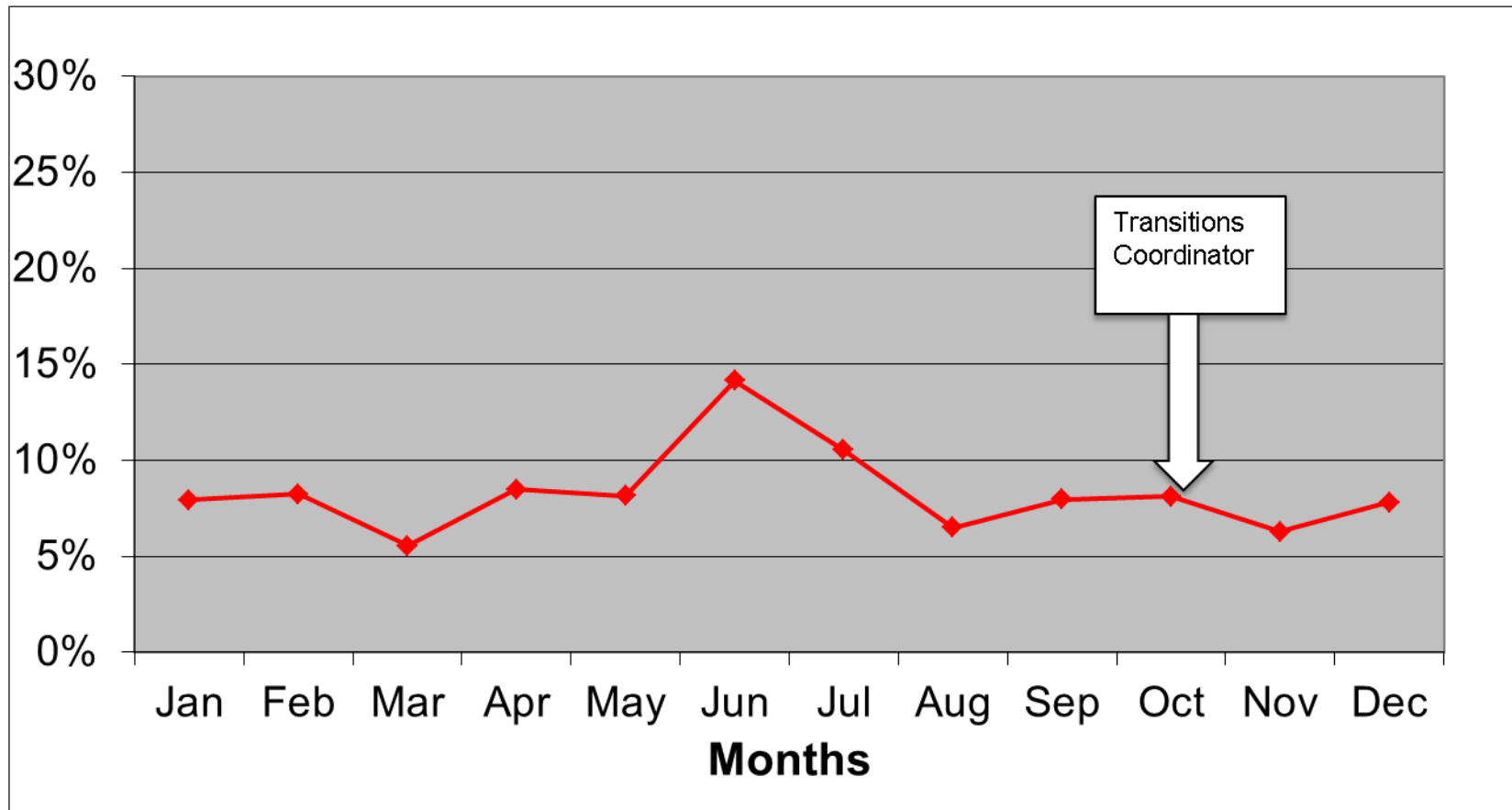
CARETEAM

outcome of actionable visits (n=34)



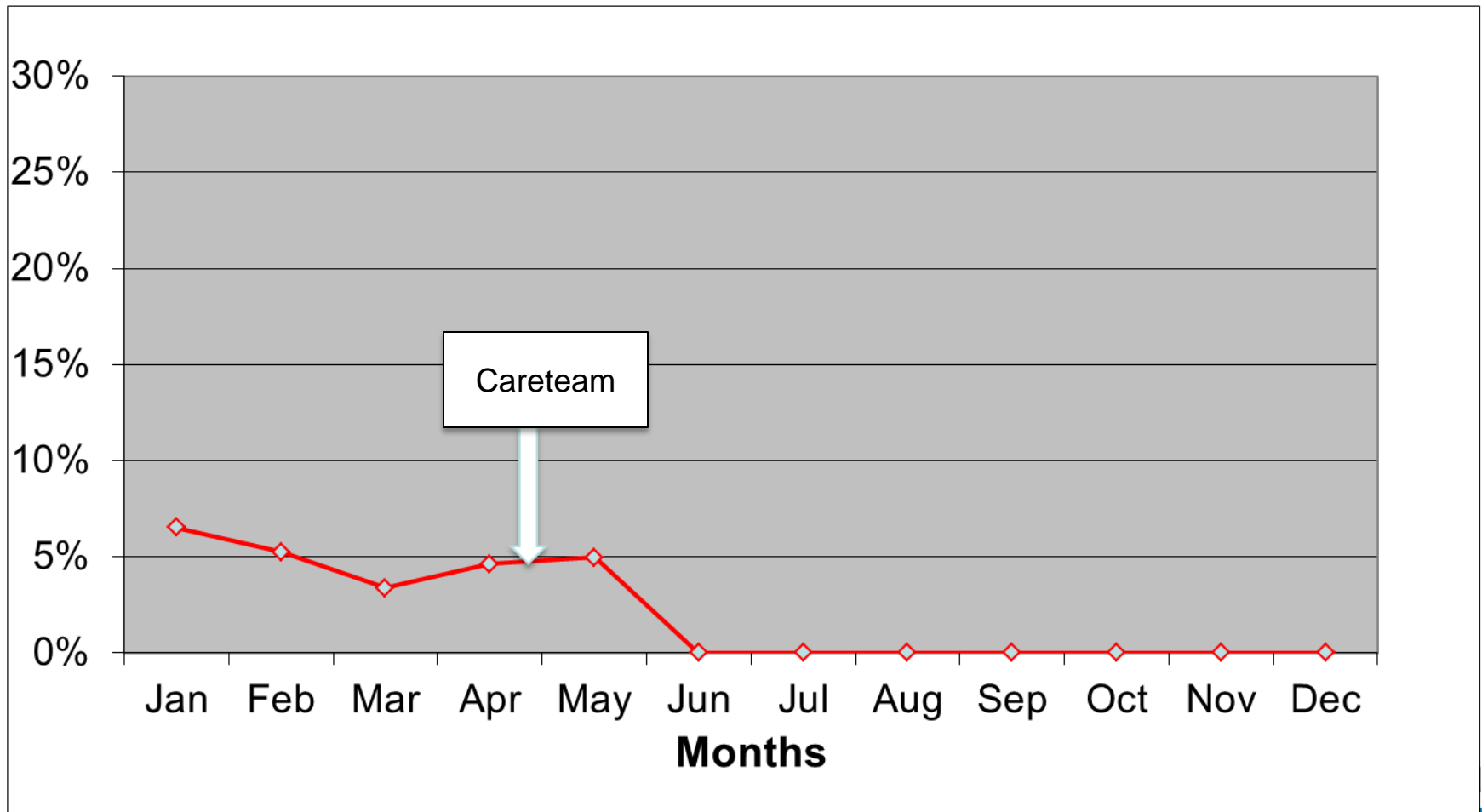
30 Day Readmission Rate 2011

age >65



30 Day Readmission Rate 2012

age > 65



CARETEAM

- Next Steps
 - Transitions Coaching
 - Telehealth
 - Expansion to other payors
 - Focus on admissions and LOS

Crystal Run Healthcare ACO: Bending the cost curve

■ Cultural Change

- Specialty Consultations

■ Infrastructural Change

- CARETEAM

■ Behavioral Change

- Variation Reduction

Variation Reduction

- Pilot – diabetes
- Version 1.0 – division leader projects
- Version 2.0 – automated tool
- Version 3.0 – to infinity and beyond

Variation Reduction Definition

- A cost control measure which seeks to standardize care according to clinical guidelines and eliminate waste amongst those not adhering to national or local practice standards.

Variation Reduction Process

- Step 1: Analyze Utilization
- Step 2: Compare cost between physicians
- Step 3: Analyze the data

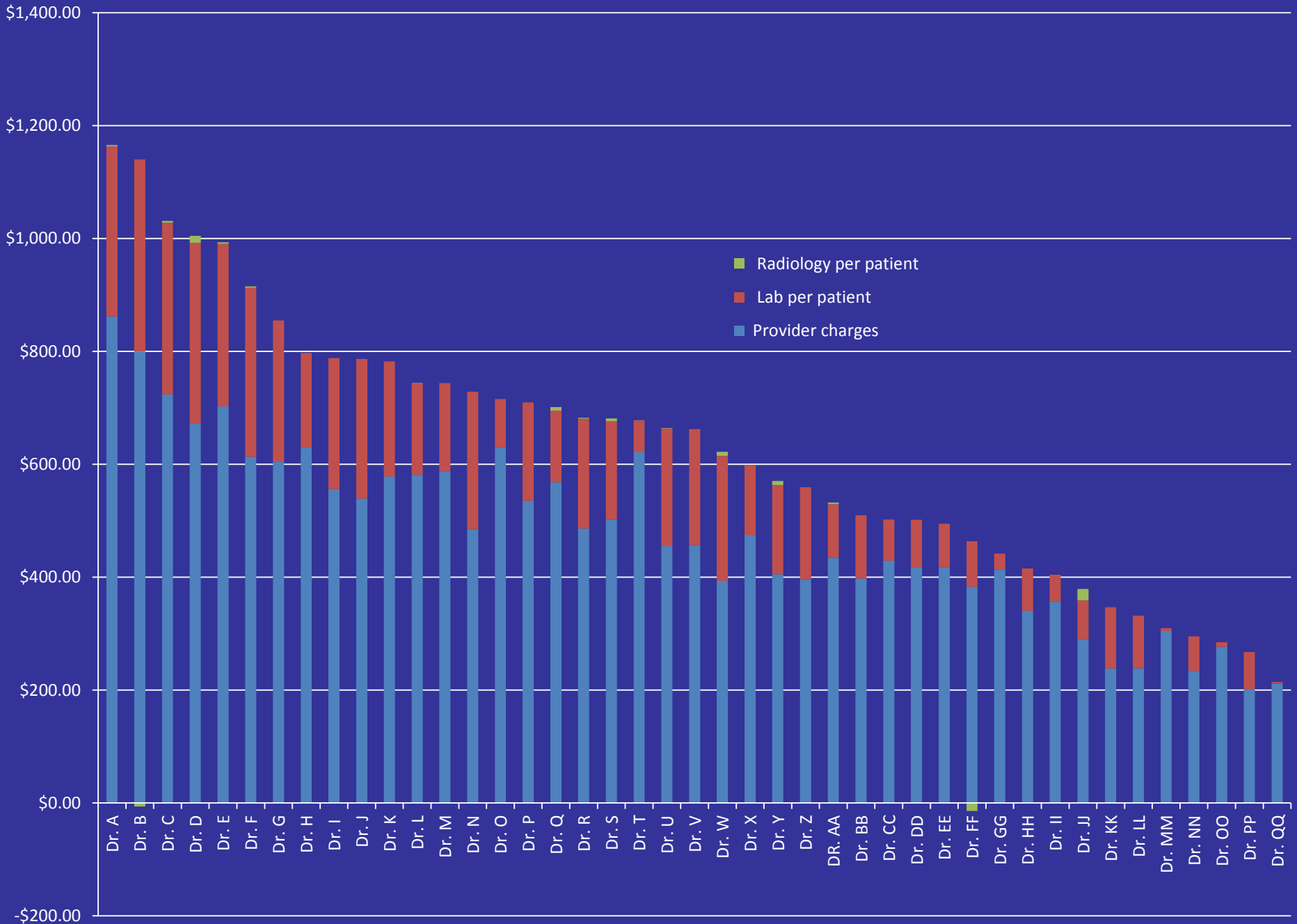
Variation Reduction Pilot

- Step 1: Analyze Utilization
 - Determine total cost per diabetic per physician
 - Cost includes professional, lab, imaging and procedure charges

Variation Reduction Pilot

- Step 1: Analyze Utilization
- Step 2: Compare cost between physicians

Cost for Diabetes Diagnosis per Provider



Variation Reduction Pilot

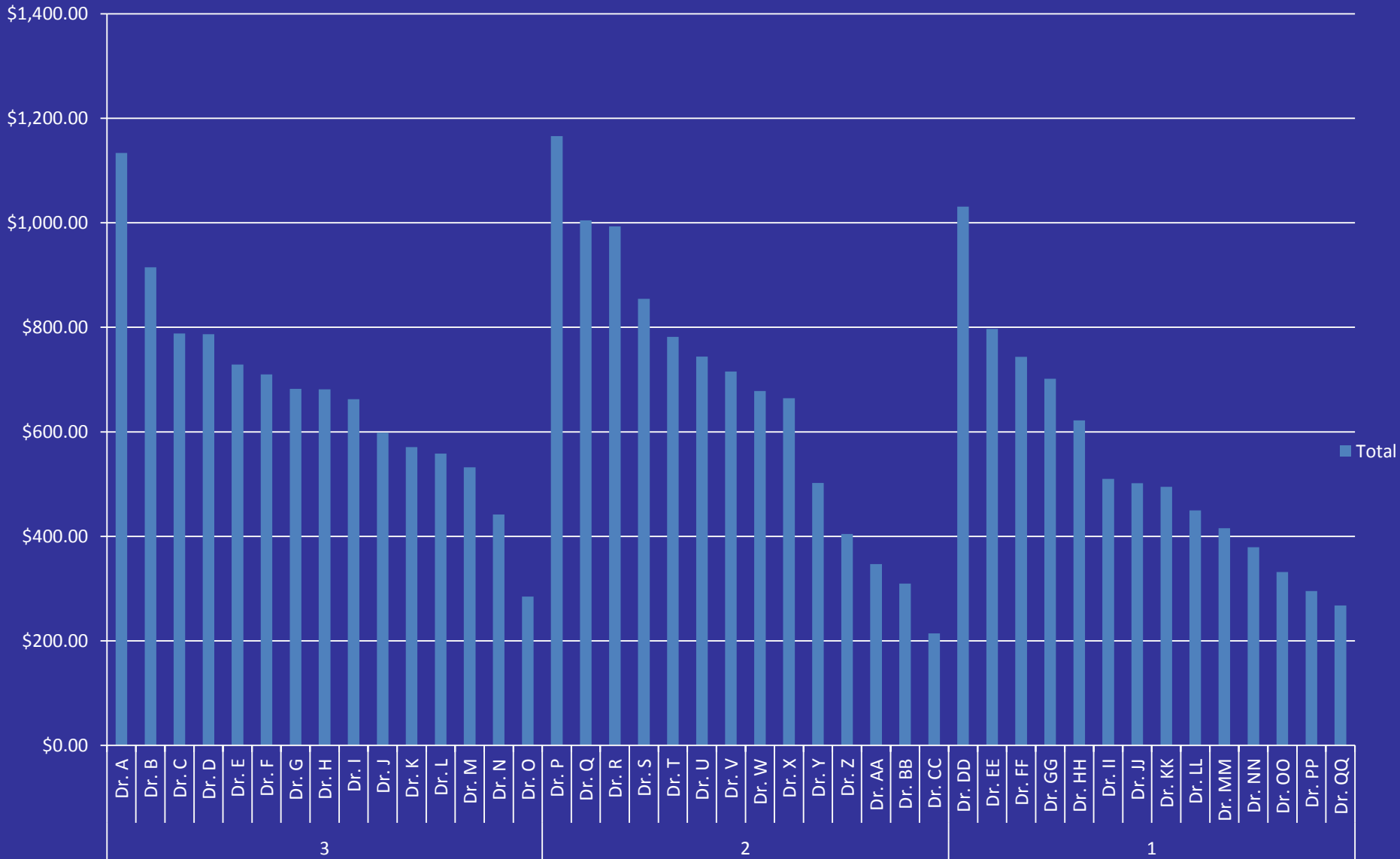
- Step 1: Analyze Utilization
- Step 2: Compare cost between physicians
- Step 3: Analyze the data
 - What is the source of variation?

Variation Reduction Pilot

- What is the source of variation?
 - My patients are sicker

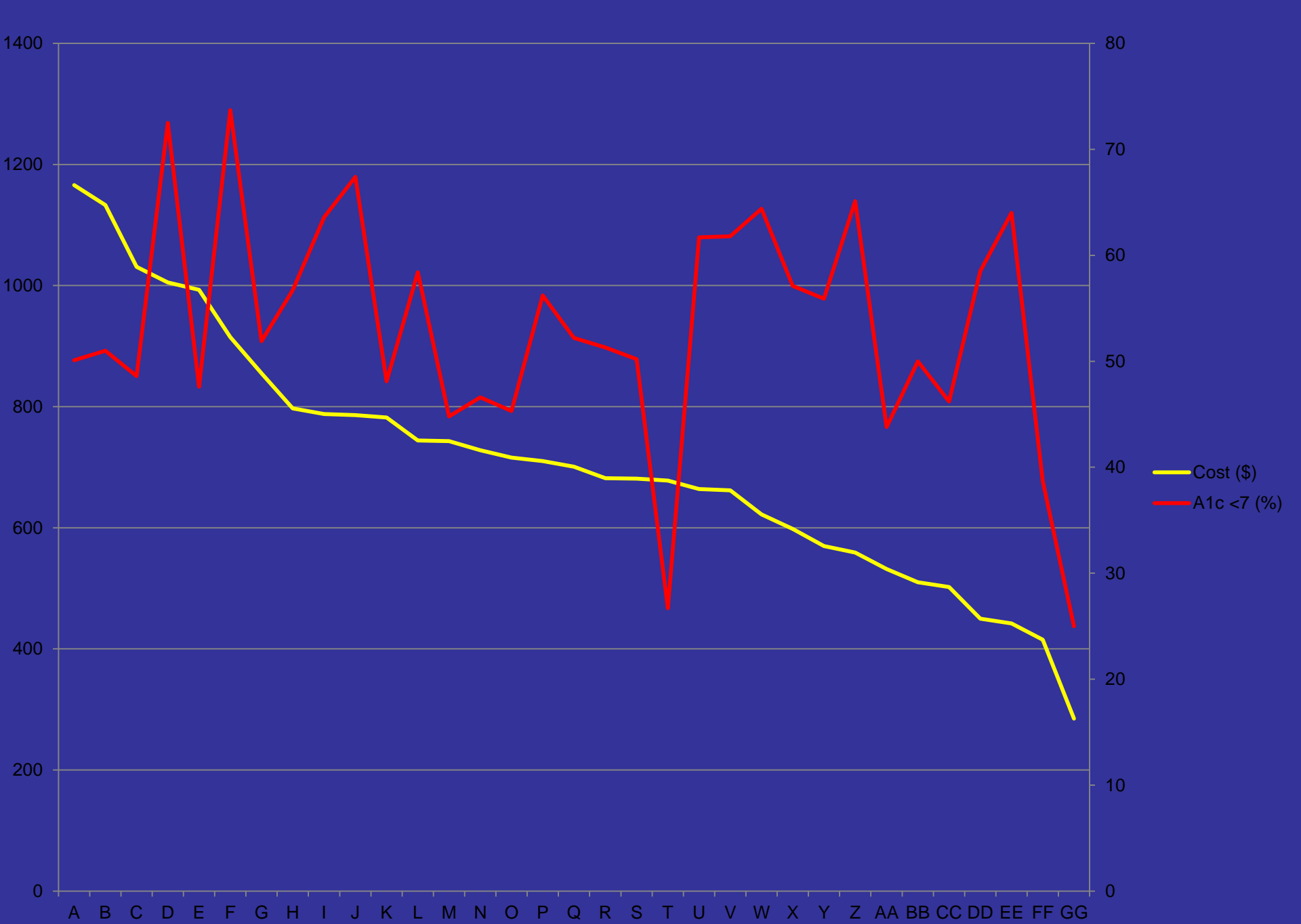
Cost per Patient

Grouped by Number of Assessments per Visit (thirds)



Variation Reduction Pilot

- What is the source of variation?
 - “My patients are sicker”
 - “My quality is better”



Variation Reduction Pilot

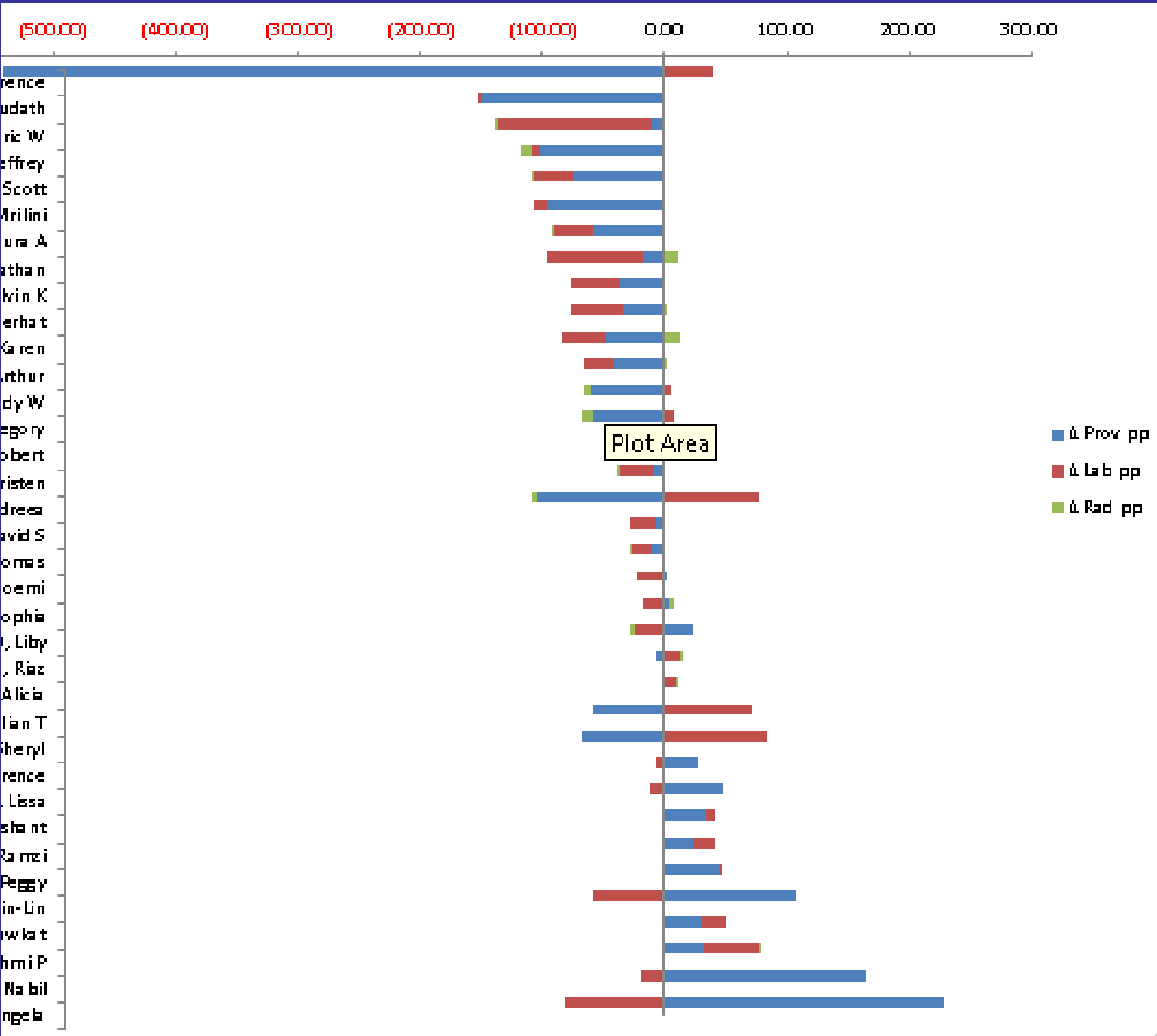
- What is the source of variation?
 - “My patients are sicker”
 - “My quality is better”
 - Are best practice guidelines being followed?

Variation Reduction Pilot

- ADA guidelines for diabetes
- Lessons learned
 - Frequency of lab tests
 - Accuracy of coding for labs
 - Frequency of office visits
 - Accuracy of coding for office visits
 - Use of consultants
 - Brief discussion on medications

Variation Reduction Pilot

- Fast forward 6 months
- Compare Q3-Q4 2010 vs. Q3-Q4 2011



Variation Reduction Pilot

- Compare Q3-Q4 2010 vs. Q3-Q4 2011
 - Provider cost reduction: 7%
 - Lab cost reduction: 15%
 - Radiology cost reduction: 53%
 - **Total cost reduction: 9%**

Variation Reduction

- This really works!!! We should apply to more diagnoses!!!



search ID: mbcn508

"Why can't the rest of you be more like Stanton? He's full of new ideas."

Variation Reduction

Version 1.0

- Division leader project
 - Provided with top 10 diagnoses
 - Choose a diagnosis that lends itself to best practice guidelines
 - Provided with graphs
 - Present to division
 - Develop best practice standards
 - Develop actionable items to standardize utilization

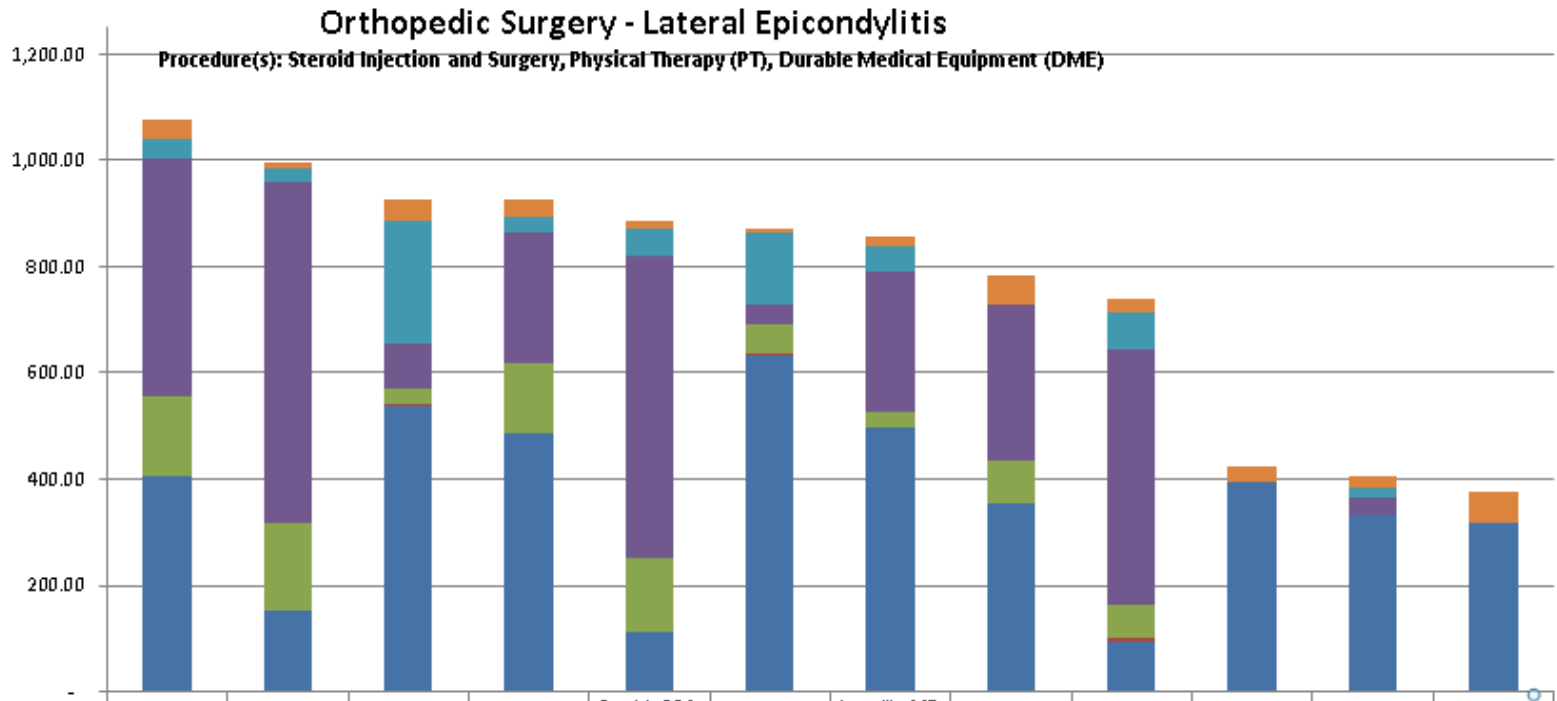
Variation Reduction

Version 1.0

- Cardiology: CHF
- Endocrinology: Thyroid nodules
- ENT: Otitis externa
- Gastroenterology: GERD
- General surgery: Cholelithiasis
- Hospitalists: COPD
- IM/FP: Hypertension, Hyperlipidemia
- Neurology: Migraine/Headache
- Oncology: Breast cancer
- Orthopedics: Lateral epicondylitis
- Pediatrics: Asthma
- Pulmonology: Asthma
- Urology: Renal mass

Variation Reduction

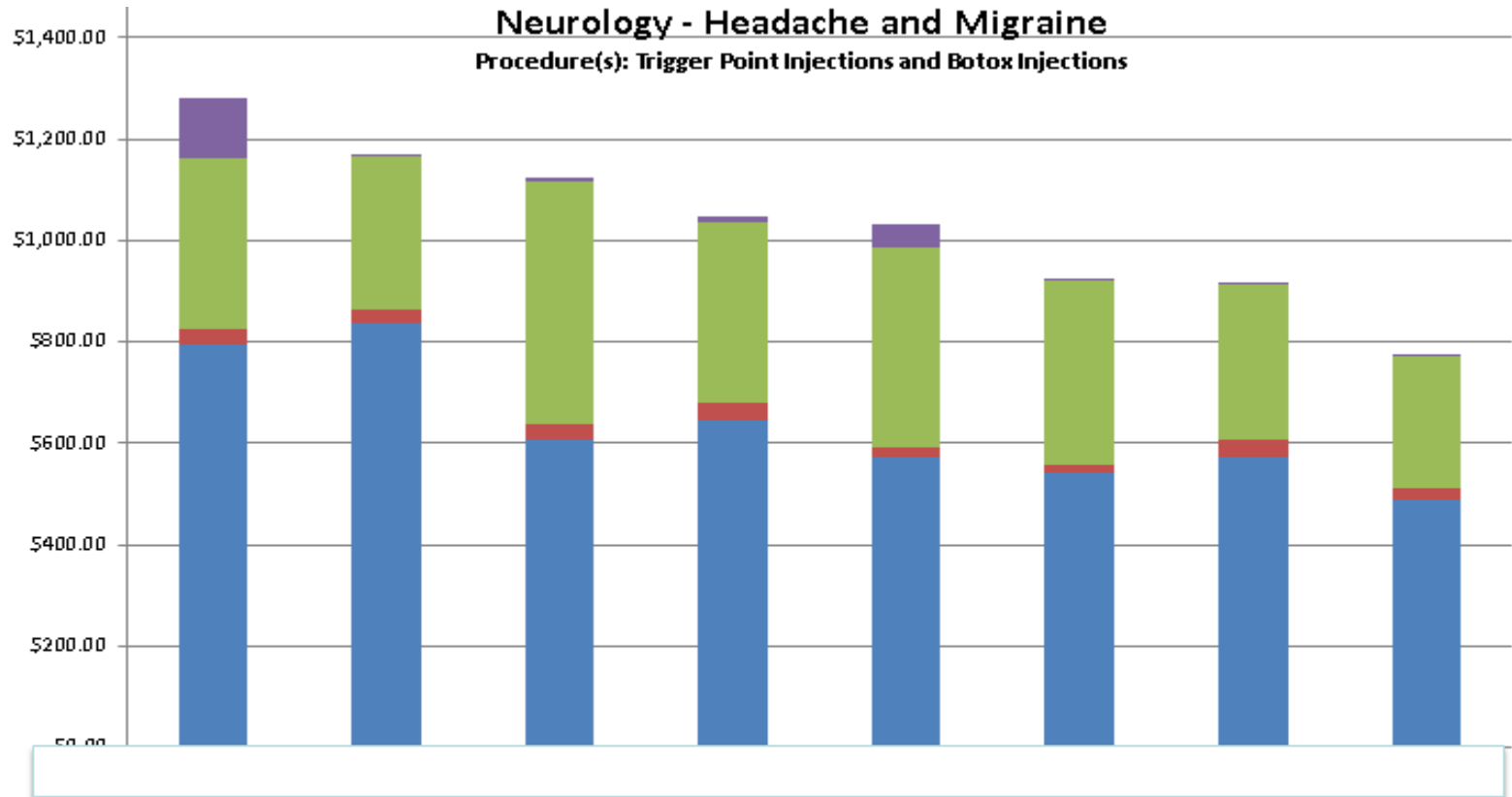
Version 1.0



Total pp (Mean = \$840.73 SD = \$262.25)	\$1,076.04	\$996.03	\$926.36	\$926.10	\$885.25	\$871.70	\$856.94	\$782.44	\$737.68	\$424.00	\$407.12	\$377.33	
DME pp (Mean=\$30.49 SD = \$16.70)	\$35.63	\$12.50	\$39.32	\$32.64	\$13.85	\$8.58	\$19.89	\$53.40	\$22.67	\$30.00	\$24.91	\$60.00	
PT pp (Mean=\$71.24 SD = \$72.88)	\$39.35	\$22.94	\$230.65	\$31.52	\$52.53	\$134.88	\$45.91	\$2.31	\$69.92	\$0.00	\$18.09	\$0.00	
Proc pp (Mean=\$217.02 SD = \$247.81)	\$446.15	\$643.02	\$84.98	\$243.52	\$567.38	\$35.88	\$262.91	\$293.64	\$481.03	\$0.00	\$31.13	\$0.00	
Rad pp (Mean=\$69.97SD = \$91.10)	\$150.27	\$164.79	\$30.74	\$130.89	\$138.56	\$57.32	\$30.16	\$77.27	\$62.78	\$0.00	\$2.64	\$0.00	
Lab pp (Mean=\$1.09 SD = \$2.23)	\$0.09	\$0.00	\$2.84	\$0.00	\$0.00	\$2.83	\$0.56	\$0.78	\$7.01	\$0.00	\$0.00	\$0.00	

Variation Reduction

Version 1.0



Total pp (Mean = \$1035.34 SD = \$131.89)	\$1,278.96	\$1,171.35	\$1,123.71	\$1,047.55	\$1,031.89	\$923.28	\$914.85	\$774.17
Proc pp (Mean=\$22.69 SD = \$18.41)	\$115.36	\$7.28	\$7.36	\$11.61	\$45.53	\$2.01	\$2.21	\$2.46
Rad pp (Mean=\$352.73 SD = \$66.18)	\$338.28	\$301.54	\$477.35	\$354.46	\$396.37	\$363.01	\$305.47	\$261.84
Lab pp (Mean=\$27.35 SD = \$7.86)	\$30.74	\$24.13	\$31.63	\$37.98	\$16.00	\$17.94	\$34.88	\$23.27
Prov pp (Mean=\$632.56 SD = \$106.90)	\$794.58	\$838.40	\$607.37	\$643.51	\$573.99	\$540.32	\$572.29	\$486.60

Variation Reduction

Version 1.0

DIAGNOSIS	DEPARTMENT	TOTAL % CHANGE IN COST
CHF	Cardiology	1%
Thyroid Nodule	Endocrinology	-14%
Otitis Externa	ENT	-7%
GERD	GI	0%
Cholelithiasis	General Surgery	-9%
COPD	Hospitalists	-3%
HTN	FP/IM	4%
Hyperlipidemia	FP/IM	-6%
HA/Migraine	Neurology	-3%
Breast Cancer	Oncology	15%
Lateral Epicondylitis	Orthopedics	2%
Asthma	Pediatrics	-1%
Asthma	Pulmonology	-3%
Renal Mass	Urology	-10%

Variation Reduction

Version 2.0

- Automated tool
- Quarterly variation reduction meetings with each department
- Used for physician engagement
- Creation of best practice guideline library
- Reduction in cost/utilization is a nice “side effect”

Variation Reduction

Version 2.0

SQL Server Reporting Services
Home > Test Reports >
Cost_PhaseII_Test_c1_rev_qtr

View | Properties | History | Subscriptions

New Subscription

specialty	<Select a Value>	year_end	<Select a Value>
quarter	<ul style="list-style-type: none"><Select a Value>Allergy/ImmunologyCardiologyDermatologyEndocrinologyENTGastroenterologyGeneral SurgeryHospitalistInfectious DiseasesInternal Medicine/Family PracticeNephrologyNeurologyOBGYNOncology/HematologyOrthopedic SurgeryPain Medicine/RehabPediatricsPlastic/Reconstructive SurgeryPulmonary/Critical CareRheumatologyUrgent CareUrologyVascular Surgery	diagnosis	

Variation Reduction

Version 2.0



SQL Server Reporting Services
Home > Test Reports >
Cost_PhaseII_Test_c1_rev_qtr

View Properties History Subscriptions

New Subscription

specialty

year_end

quarter

diagnosis

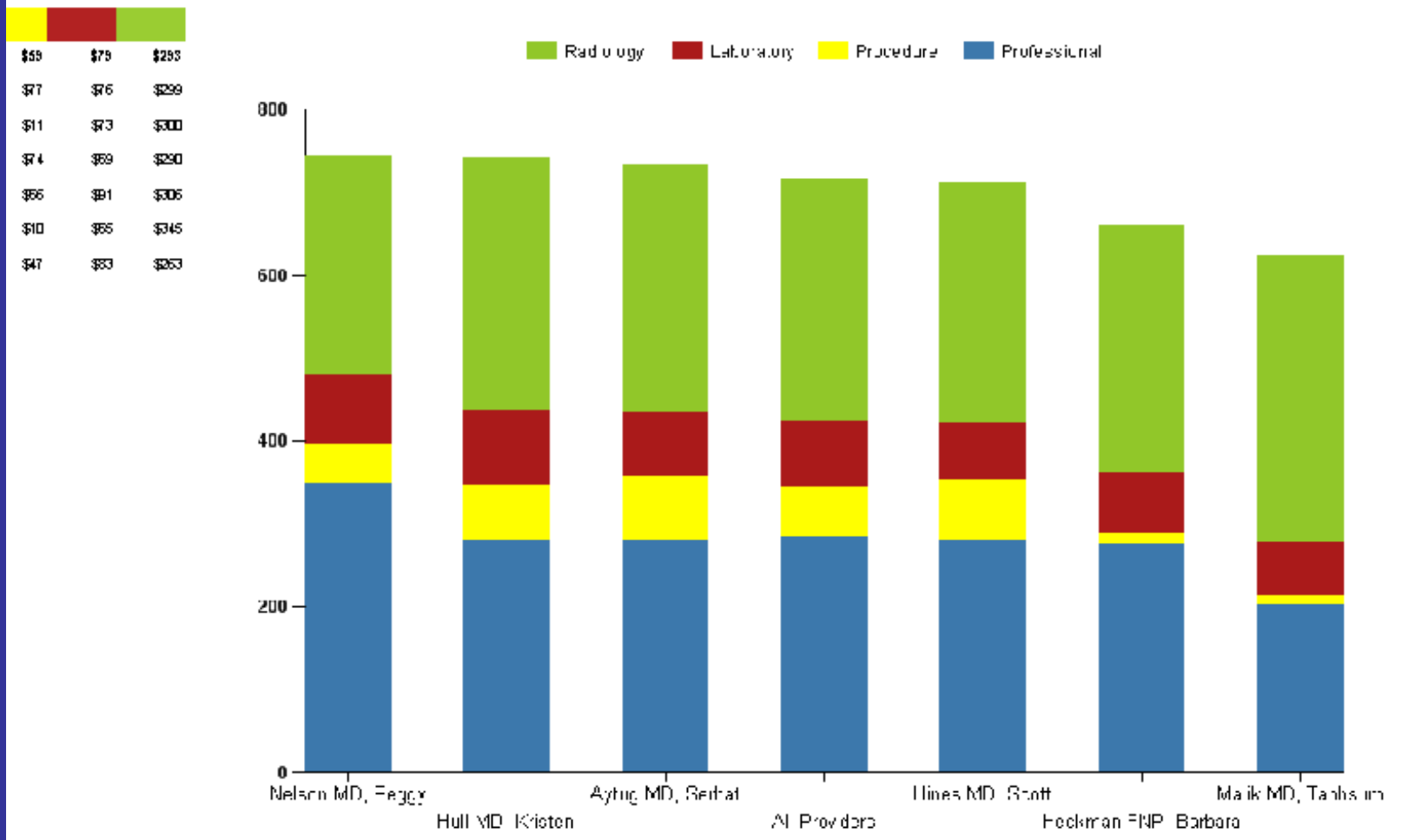
- <Select a Value>
- Hyperlipidemia/Hypercholesterolemia
- Hypertension
- Hyperthyroidism
- Hypothyroidism
- Osteoporosis
- Testicular Dysfunction
- Thyroid Cancer
- Thyroid Nodules
- Vitamin D Deficiency

Variation Reduction

Variation in Professional Charges

Per Patient Cost by Endocrinology Providers for treatment of Osteoporosis

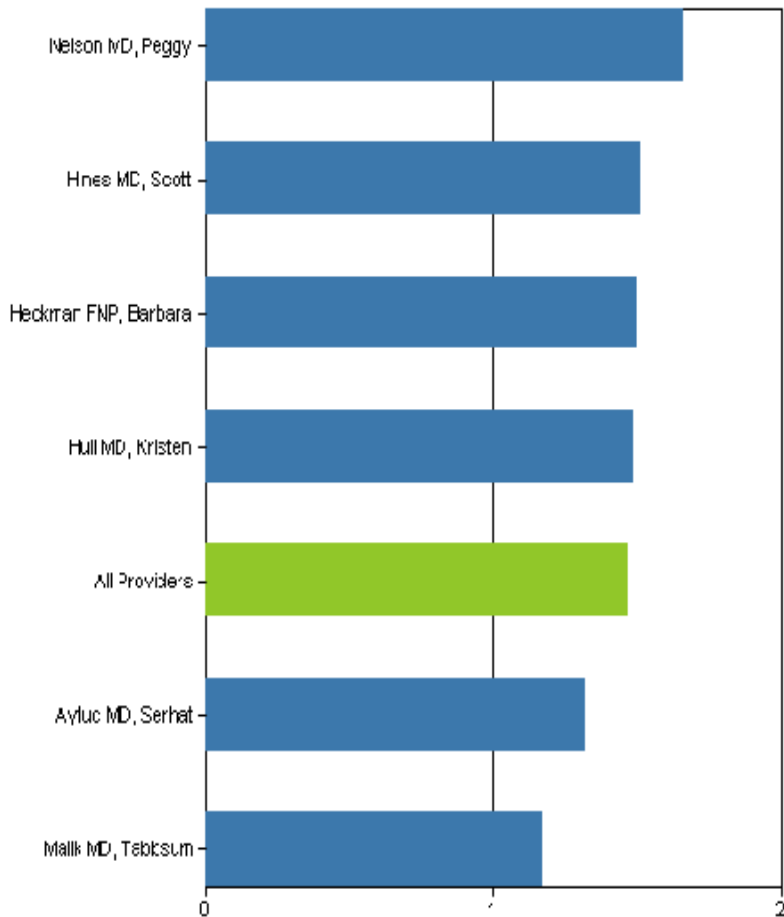
Year Ending Q1 2012



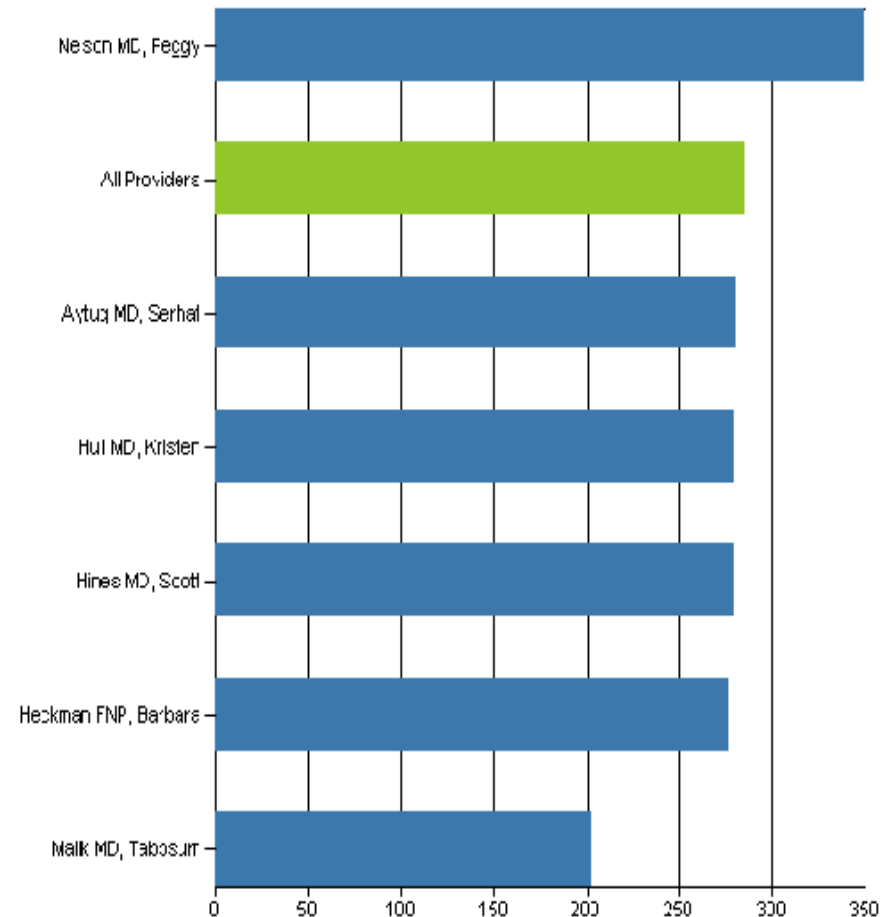
Variation Reduction

Variation in Professional Charges

Average Visits Per Patient

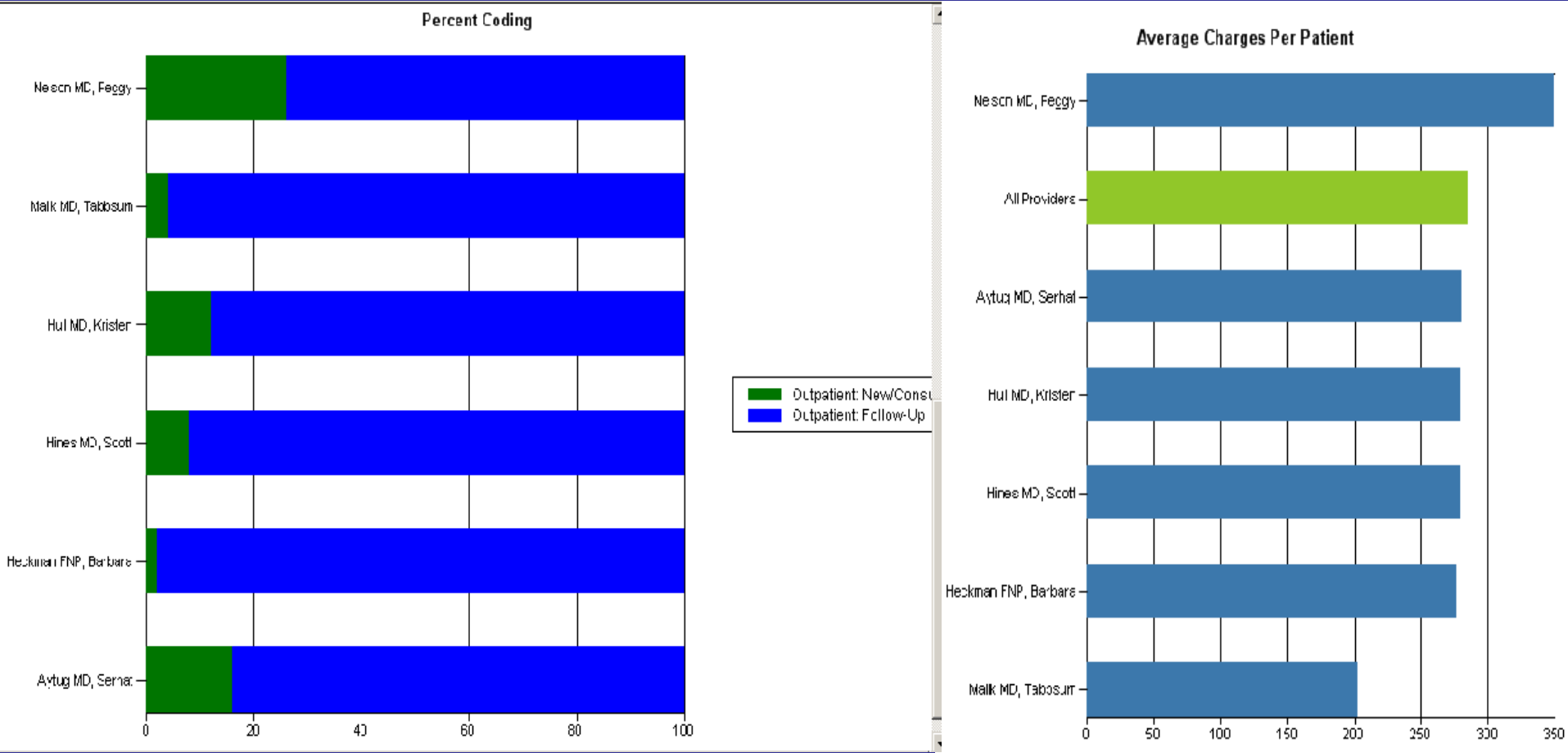


Average Charges Per Patient



Variation Reduction

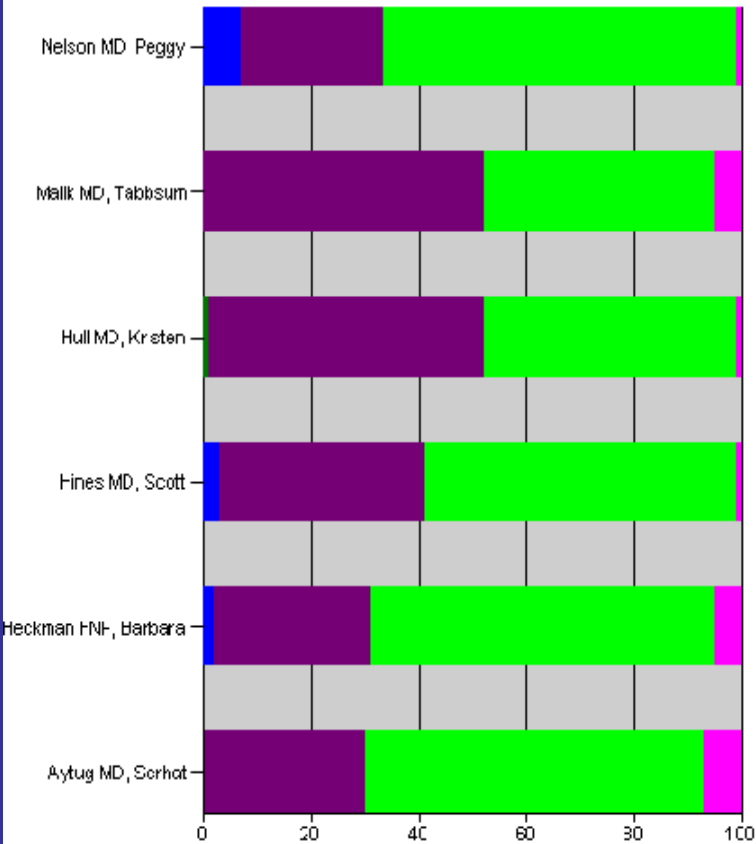
Variation in Professional Charges



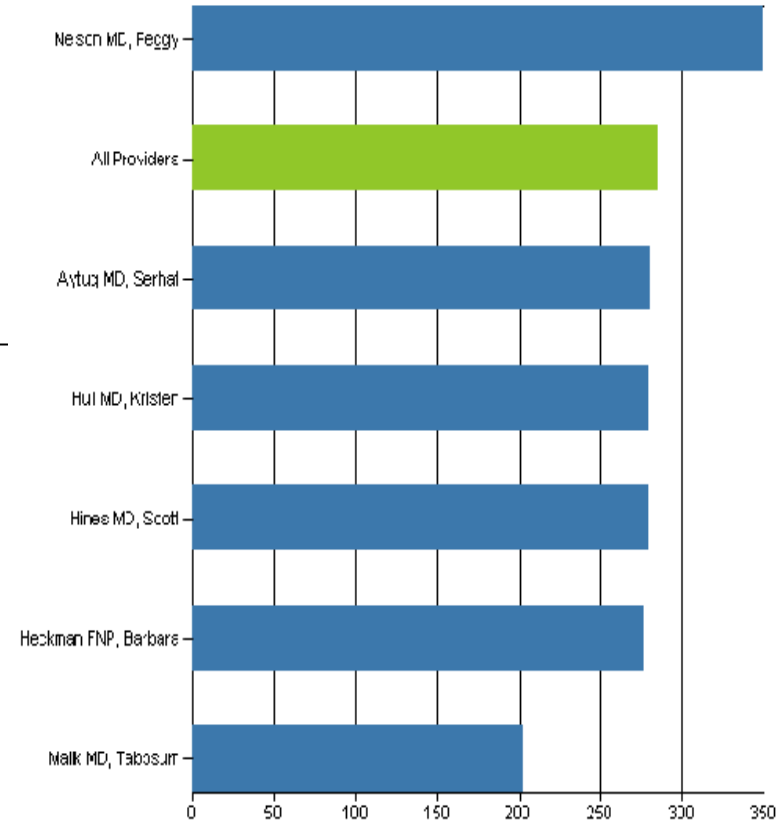
Variation Reduction

Variation in Professional Charges

Provider Coding Pattern

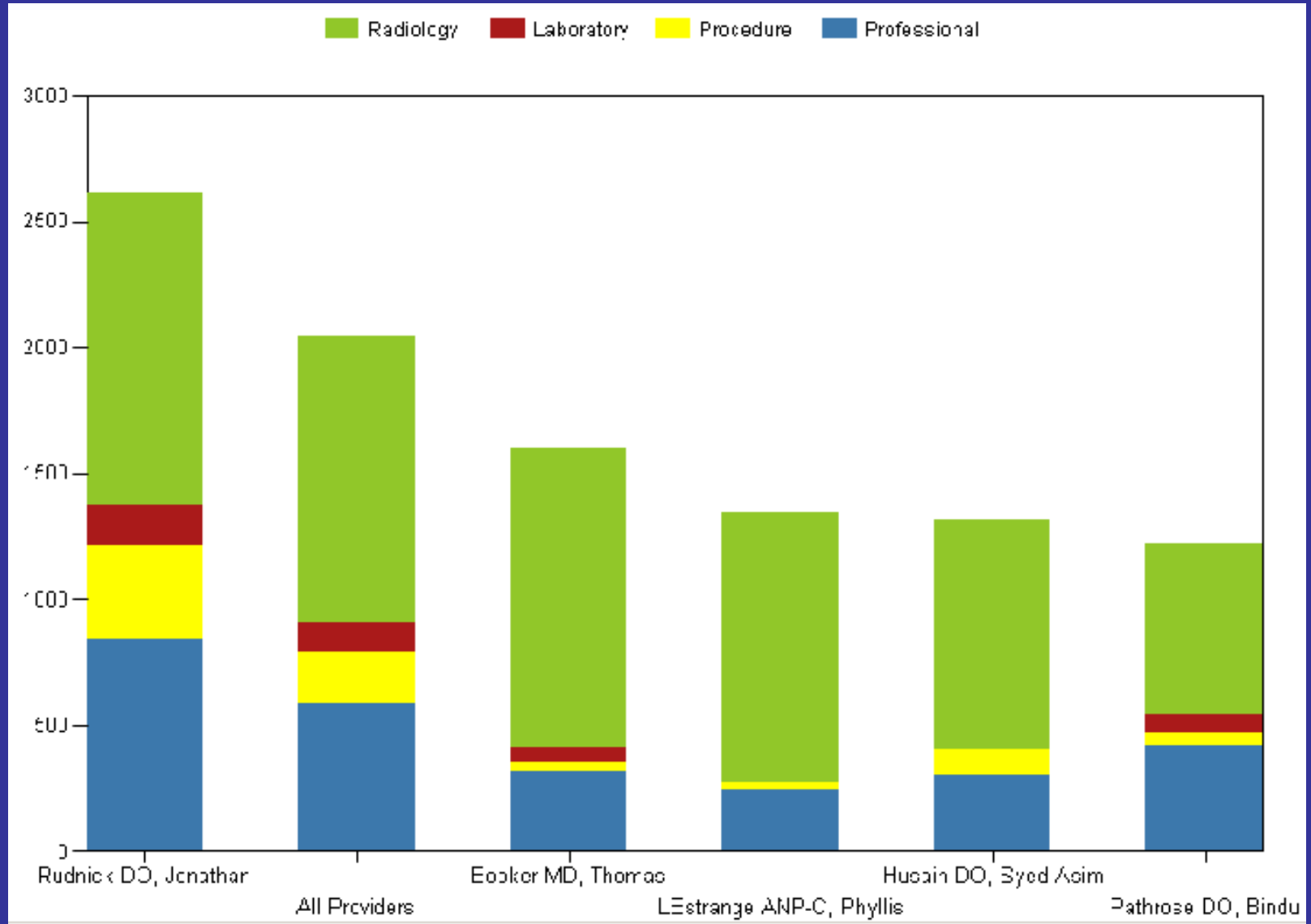


Average Charges Per Patient



Variation Reduction

Variation in Radiology Charges

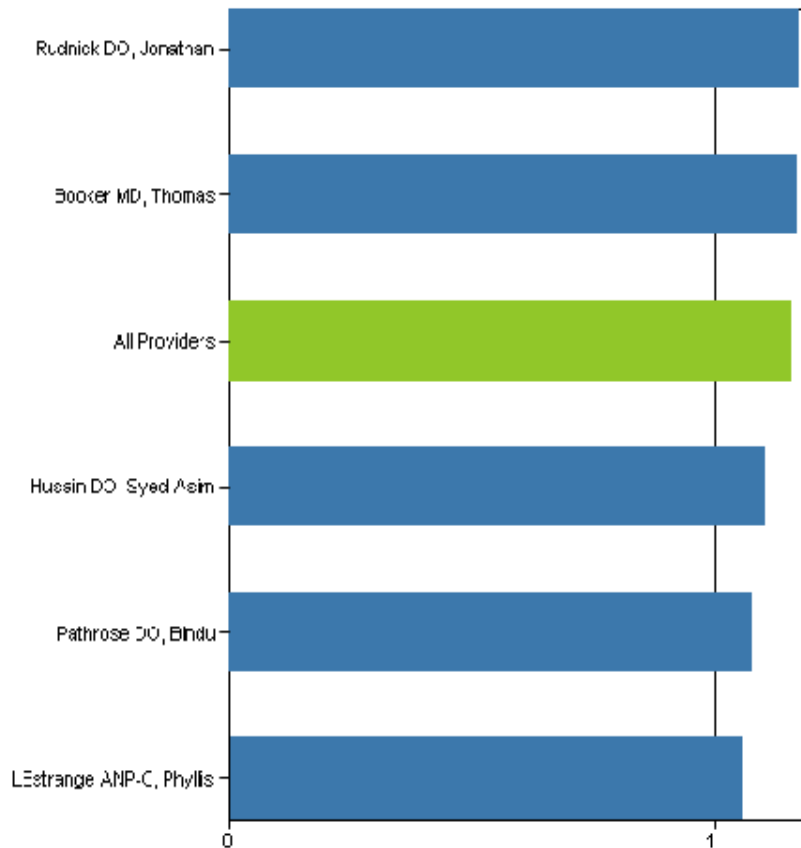


Variation Reduction

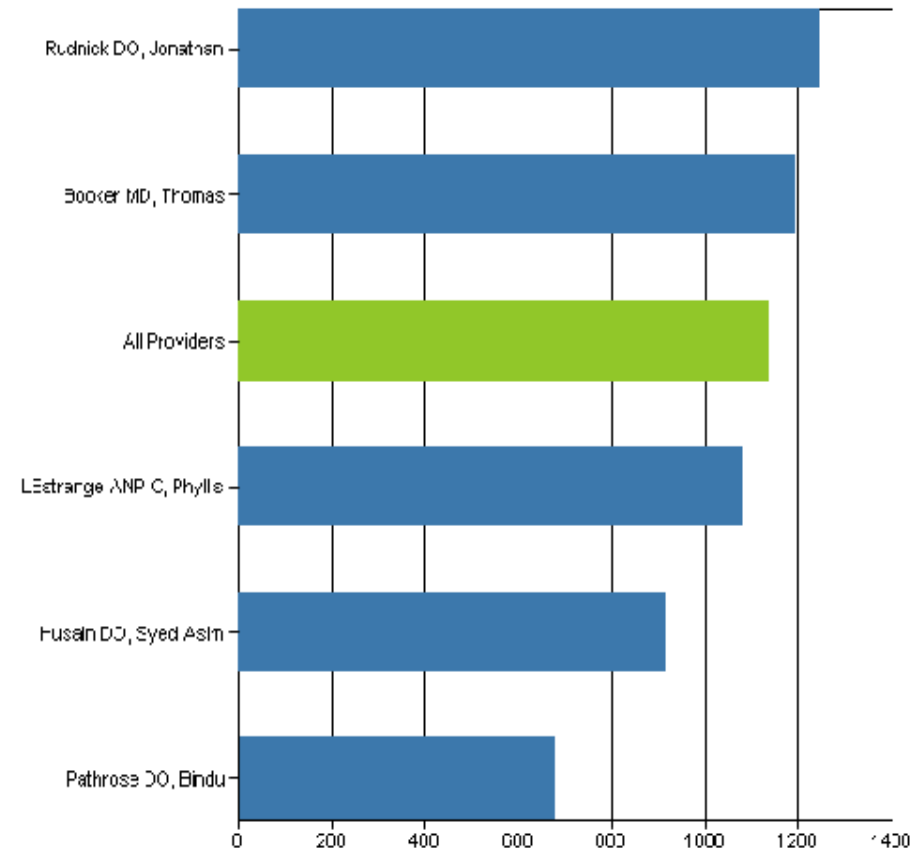
Variation in Radiology Charges

Radiology Per Patient Cost by Pain Medicine/Rehab Providers for treatment of Pain, back - Year Ending Q1 2012

Average Visits Per Patient



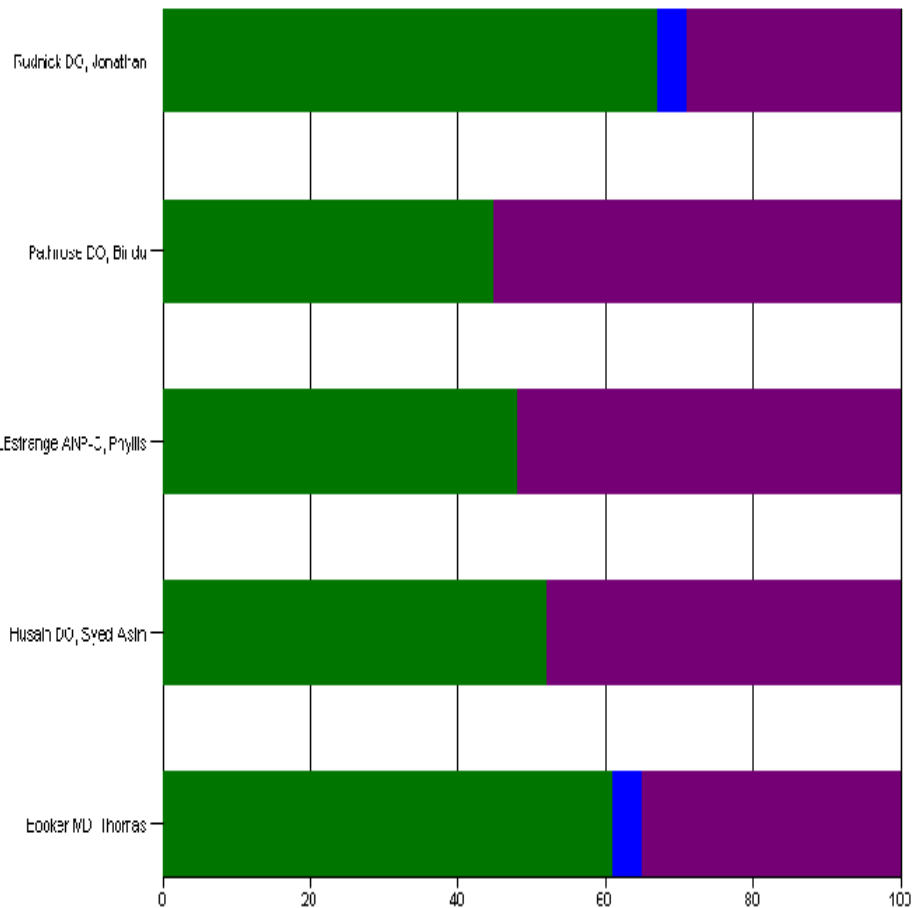
Average Charges Per Patient



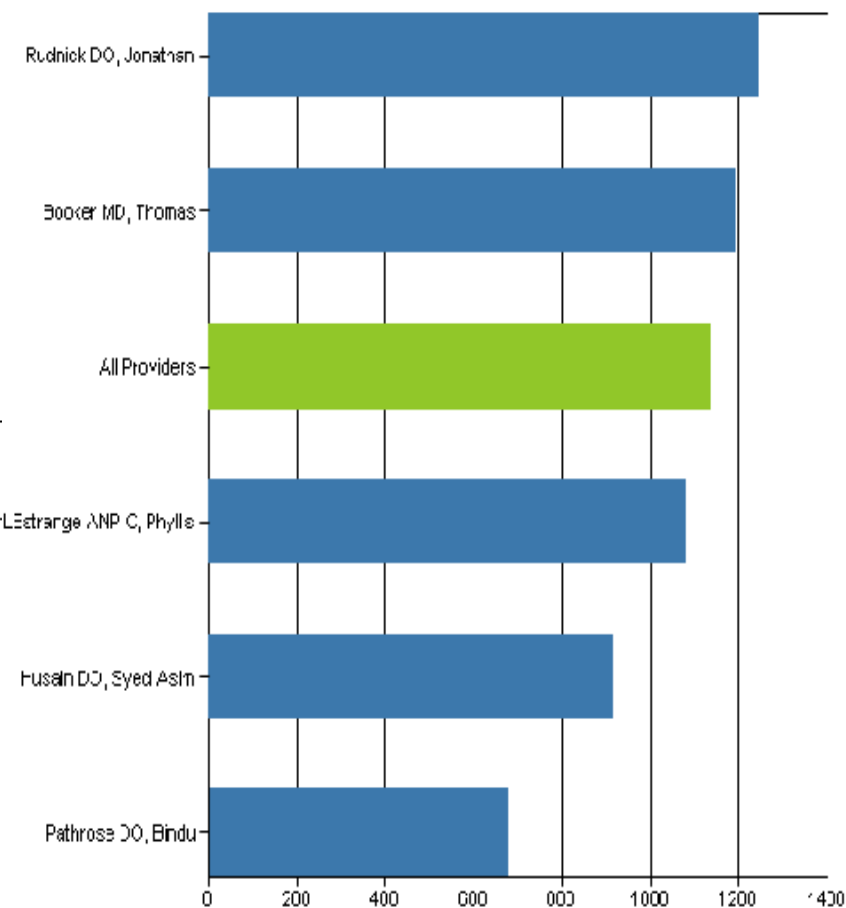
Variation Reduction

Variation in Radiology Charges

Percent Coding



Average Charges Per Patient

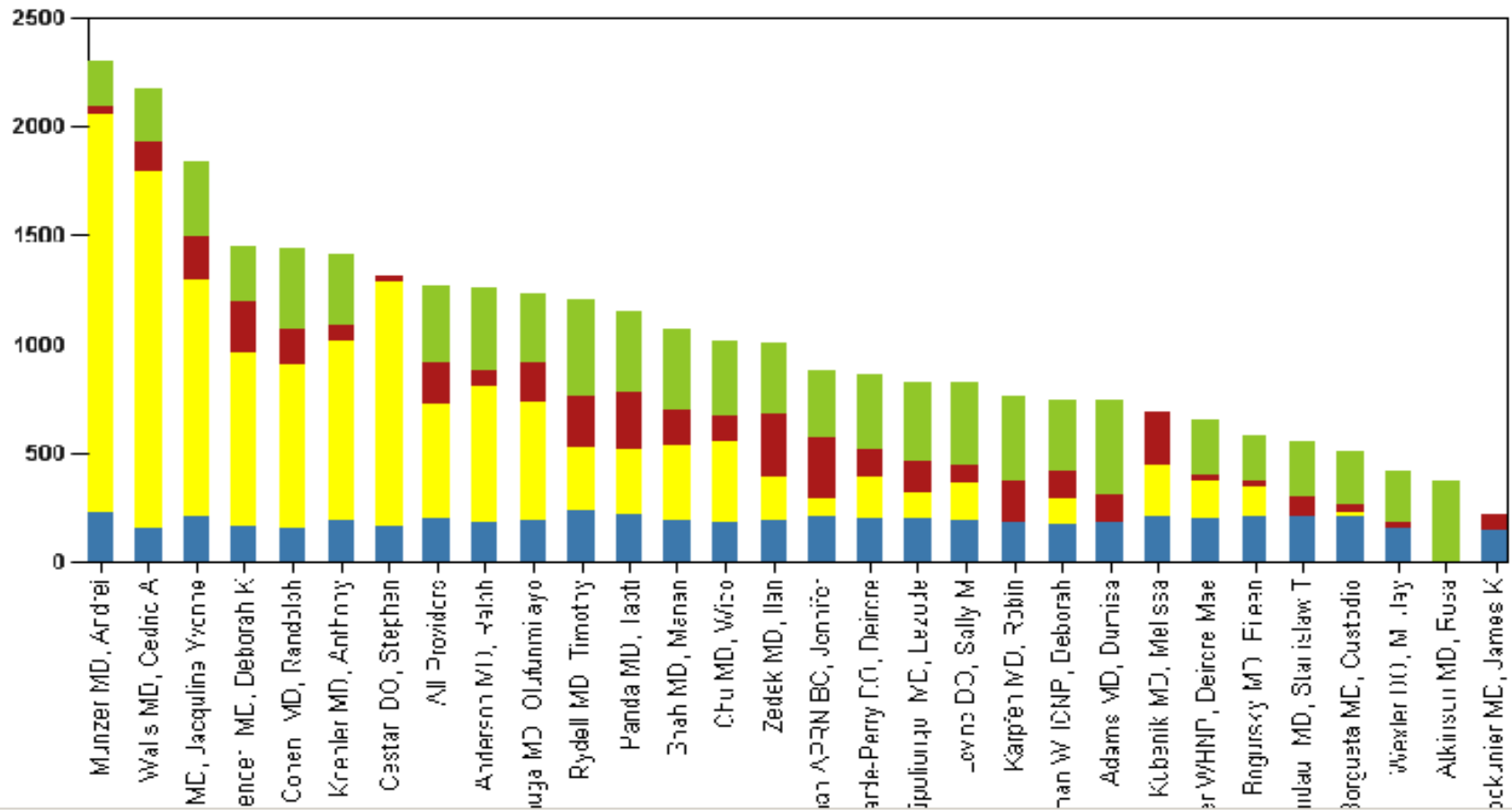


Variation Reduction Variation in Lab Charges

OBGYN Providers for treatment of Irregular menstrual cycle

Year Ending Q1 2012

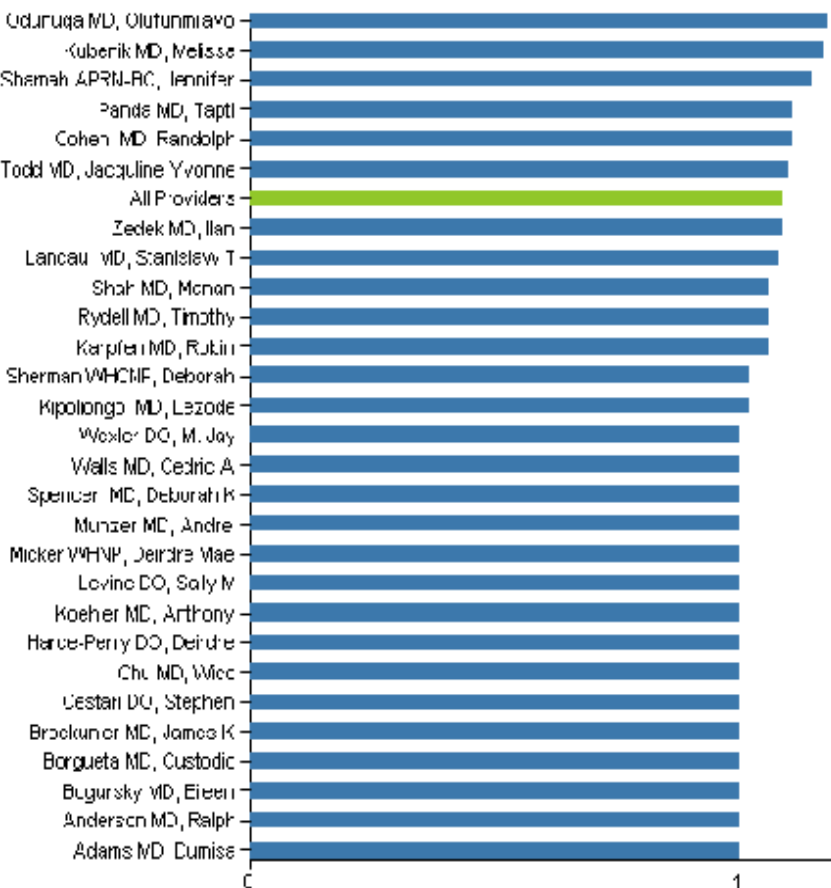
■ Radiology
 ■ Laboratory
 ■ Procedure
 ■ Professional



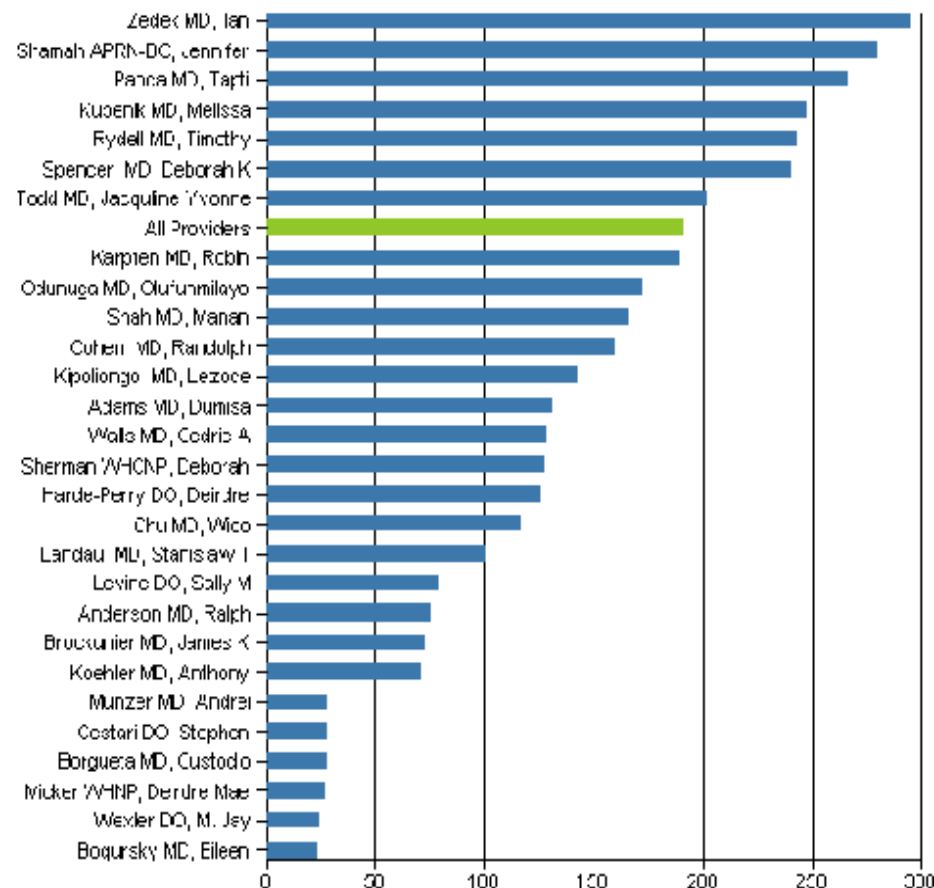
Variation Reduction

Variation in Radiology Charges

Average Visits Per Patient

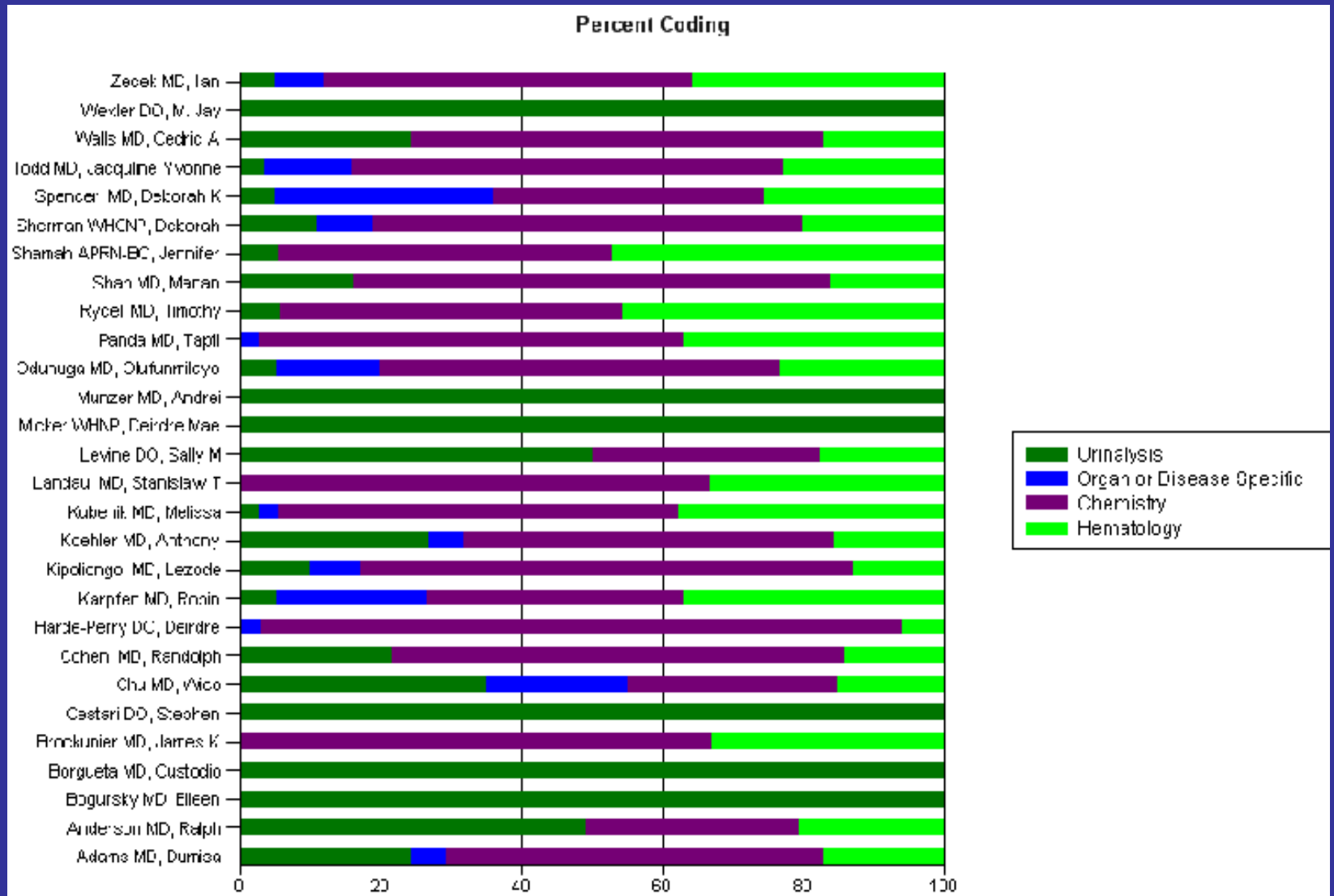


Average Charges Per Patient



Variation Reduction

Variation in Radiology Charges



Variation Reduction

Version 3.0

- Use claims level data
- Will allow for inpatient charges, leakage and medications
- Empower division leaders to run VR meetings

How Are We Doing?

- Cost per patient (provider level)
 - Cost per patient reduced by 5.4%
 - 123/250 providers reduced cost
- Cost per specialty (specialty level)
 - 20/34 specialties reduced cost
- Variation reduction (diagnosis level)
 - 9/13 variation reduction diagnoses reduced cost

How To Make VBC Sustainable

- Success through expansion

Cost/patient	-5.4%
# patients	+18.3%
Total charges	+11.9%

Summary

- In order to effect change it requires cultural change, infrastructure change and behavioral change
- Any cost reduction strategy must address inpatient services
- Closing the gap between primary care and specialty visits is necessary to be a successful ACO
- Variation reduction is an important tool for engaging physicians, developing best practice standards and addressing cost