

When It Comes To Value, Variety Is NOT the Spice of Life

Using the Process of Variation Reduction To Engage Physicians In The Pursuit of Value

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Learning Objectives

- Understand the process of variation reduction
- Understand that variation reduction can reduce cost and improve access without sacrificing quality
- Understand that variation reduction can successfully engage both primary care providers and specialists in the transition from volume to value

About Crystal Run Healthcare

- Physician owned MSG in NY State, founded 1996
- 300 providers, 15 locations
- Joint Venture ASC, Urgent Care, Diagnostic Imaging, Sleep Center, High Complexity Lab
- Early adopter EHR (NextGen®) 1999
- Accredited by Joint Commission 2006
- Level 3 NCQA PCMH Recognition 2009, 2012



About Crystal Run Healthcare ACO

- Single Entity ACO
- April 2012: One of original 27 MSSP participants
 - Approximately 10,000 attributed beneficiaries
 - 82% primary care services within ACO
- Dec 2012: Level 2 ACO Accreditation by NCQA
- 2013: Aligning commercial payers

What's So Bad About Variation???

- “Variety’s the very spice of life, that gives it all its flavor.” - William Cowper
- “Variety of mere nothings gives more pleasure than uniformity of something” - Jean Paul
- “Occurrences in this domain are beyond the reach of exact prediction because of the variety of factors in operation, not because of any lack of order in nature.”
- Albert Einstein

What's So Bad About Variation???

- Nearly 30% of health care spending is due to unnecessary or wasteful care (Dartmouth)
- Obama administration & Congress have seized on reducing variation as a way to “bend the cost curve”
- AHA convened the Task Force on Variation in Health Care Spending

What's So Bad About Variation???

- Some variation is appropriate (i.e. characteristics of the population being served)
- Most variation is inappropriate and due to failure to adhere to best practice guidelines
- Task force concluded that much of the variation is under the control of providers and hospitals

What Are We Doing About It?

- Variation Reduction Program
 - Maintains or improves quality
 - Reduces cost
 - Improves access

Variation Reduction

Outline

- Pilot – Diabetes (2010)
- Version 1.0 – Spread (2011-2012)
- Version 2.0 – Automated tool/Quarterly meetings (2012-2013)
- Version 3.0 – To infinity and beyond! (2014-??)

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

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 utilization between physicians
- Step 3: Analyze the variation

Variation Reduction Pilot

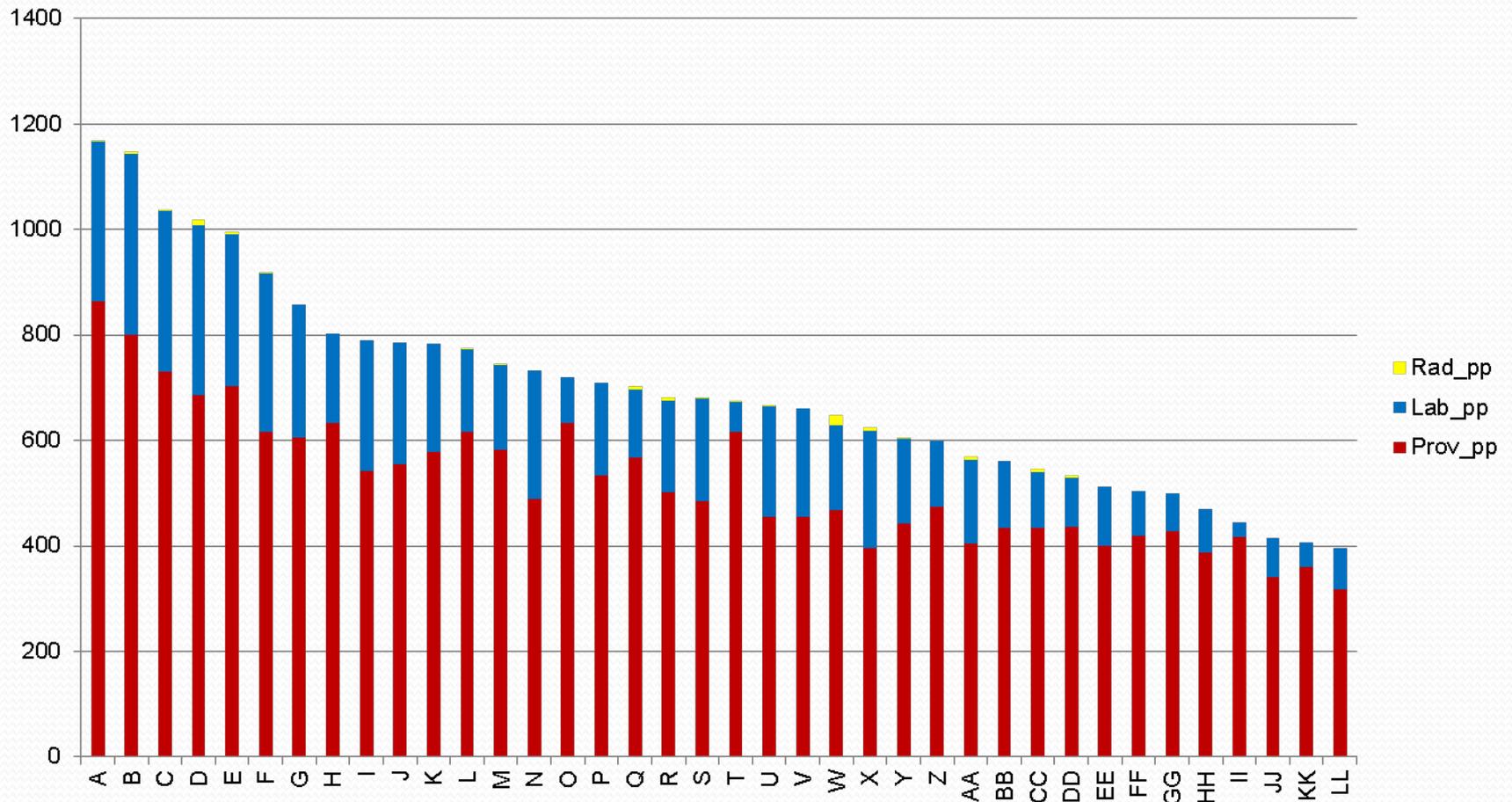
- Step 1: Analyze Utilization
 - Determine total cost per diabetic per physician
 - Cost includes professional, lab, imaging and procedure charges

Variation Reduction Pilot

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

Variation Reduction

Pilot: Comparing Utilization Between Providers



Variation Reduction

Pilot

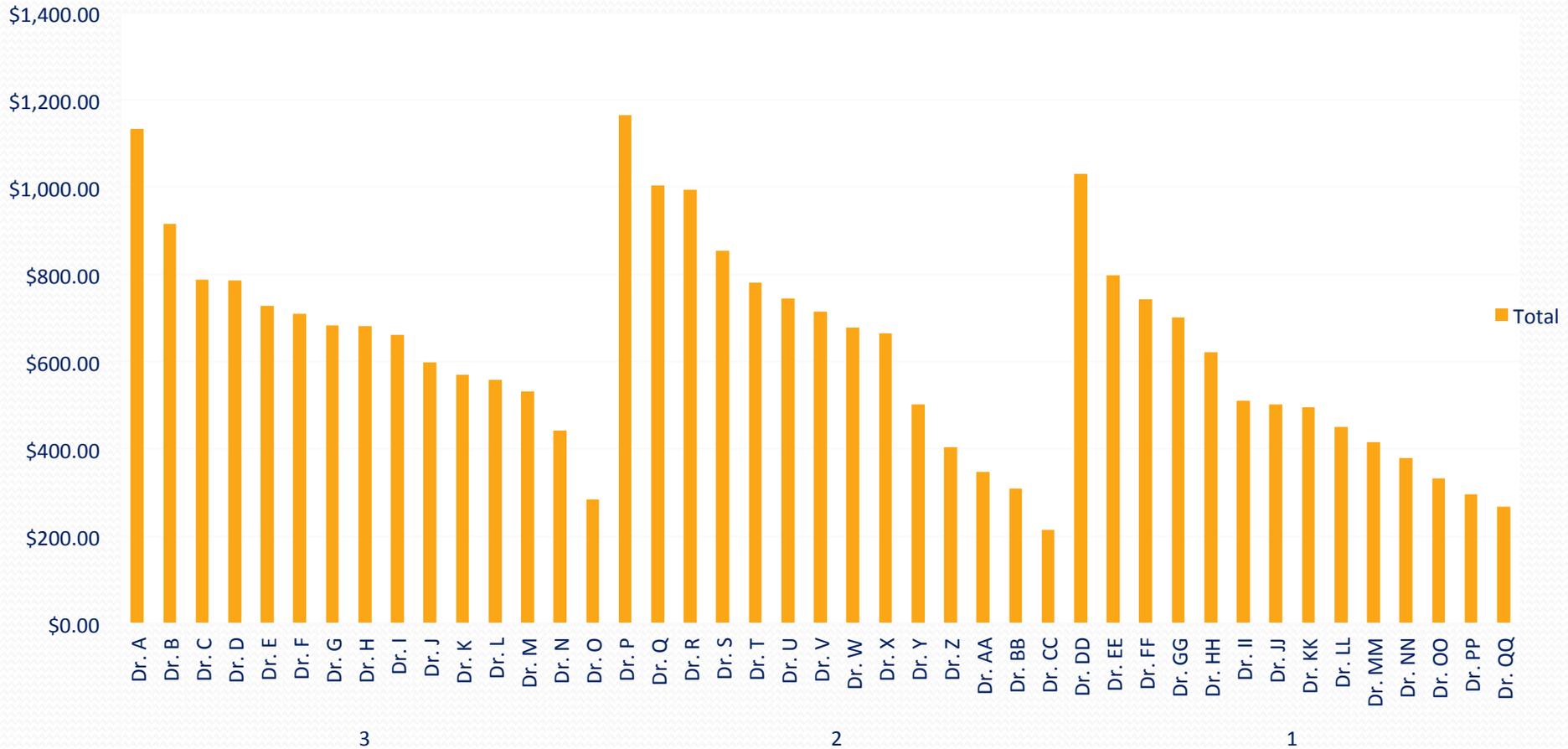
- Step 1: Analyze Utilization
- Step 2: Compare utilization between physicians
- Step 3: Analyze the variation
 - What is the source of variation?

Variation Reduction Pilot

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

Variation Reduction

Pilot: "My Patients Are Sicker"

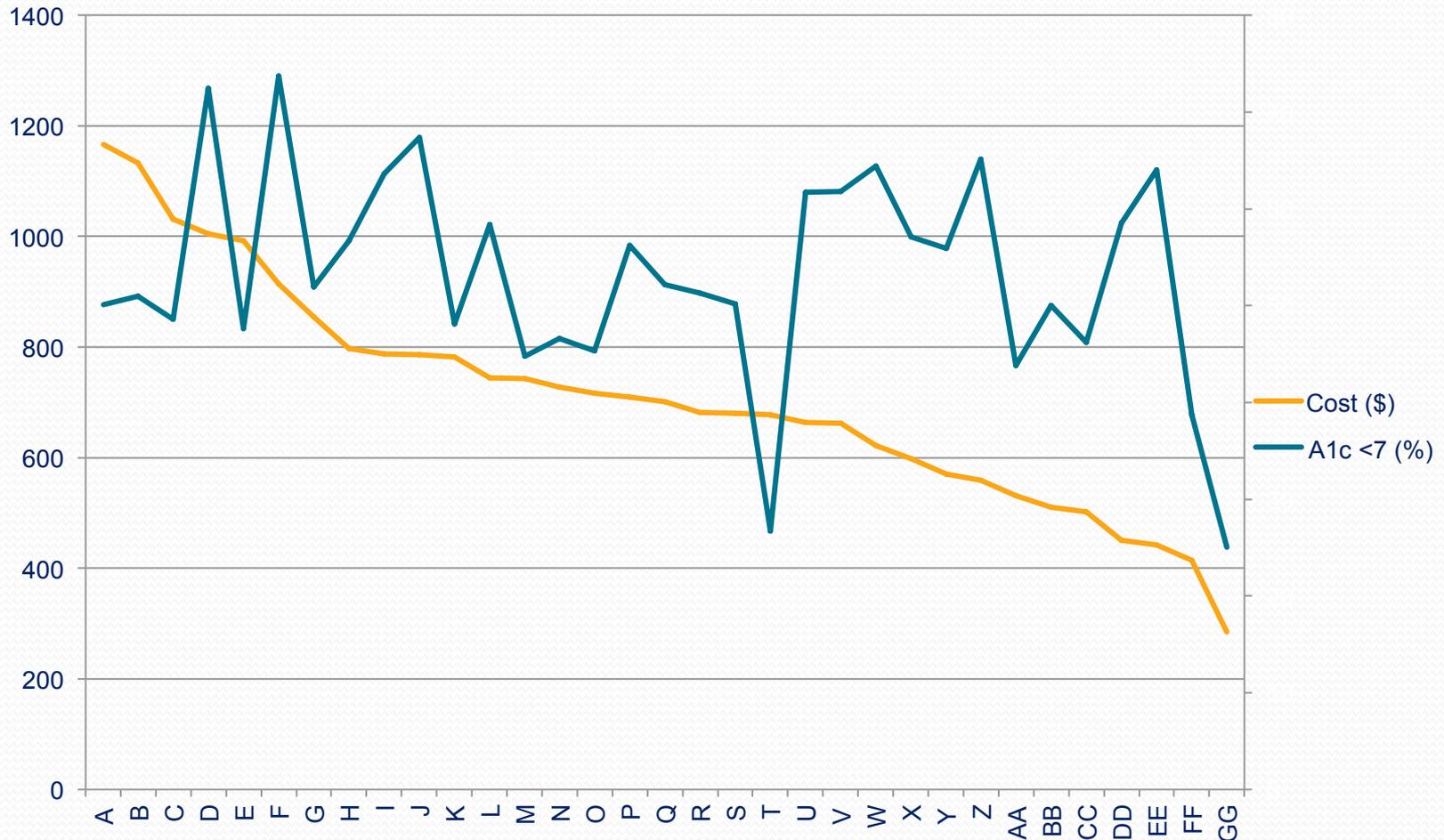


Variation Reduction Pilot

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

Variation Reduction

Pilot: "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
 - Frequency of office visits
 - Accuracy of coding
 - Use of consultants
 - Brief discussion on medications

Variation Reduction

Pilot

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

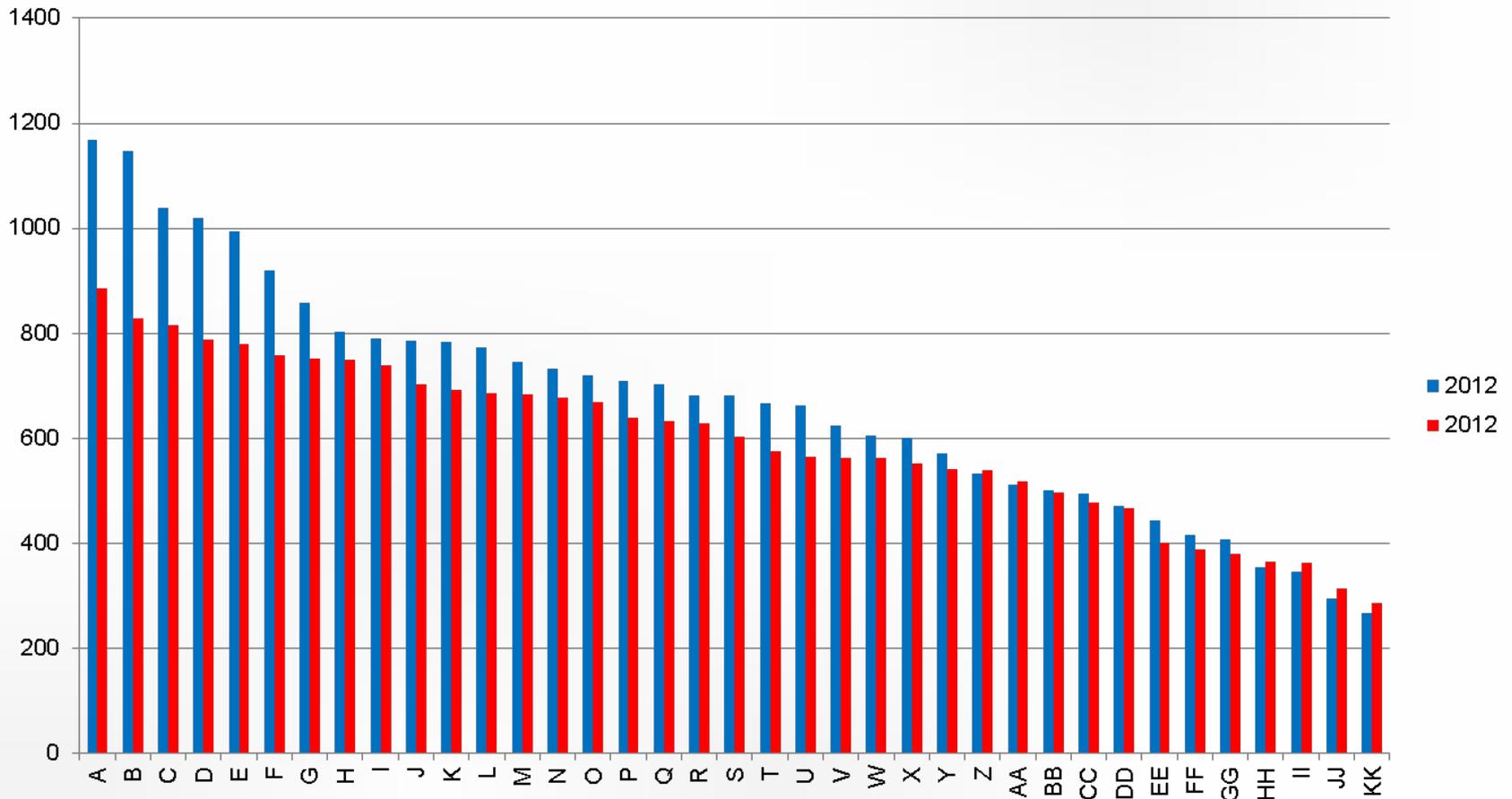
Variation Reduction

Pilot

- Fast forward 6 months
- Compare Q3-Q4 2010 vs. Q3-Q4 2011
 - Provider charges per patient reduced by 7%
 - Lab charges per patient reduced by 15%
 - Radiology charges per patient reduced by 53%
 - **Total charges per patient reduced by 9%**

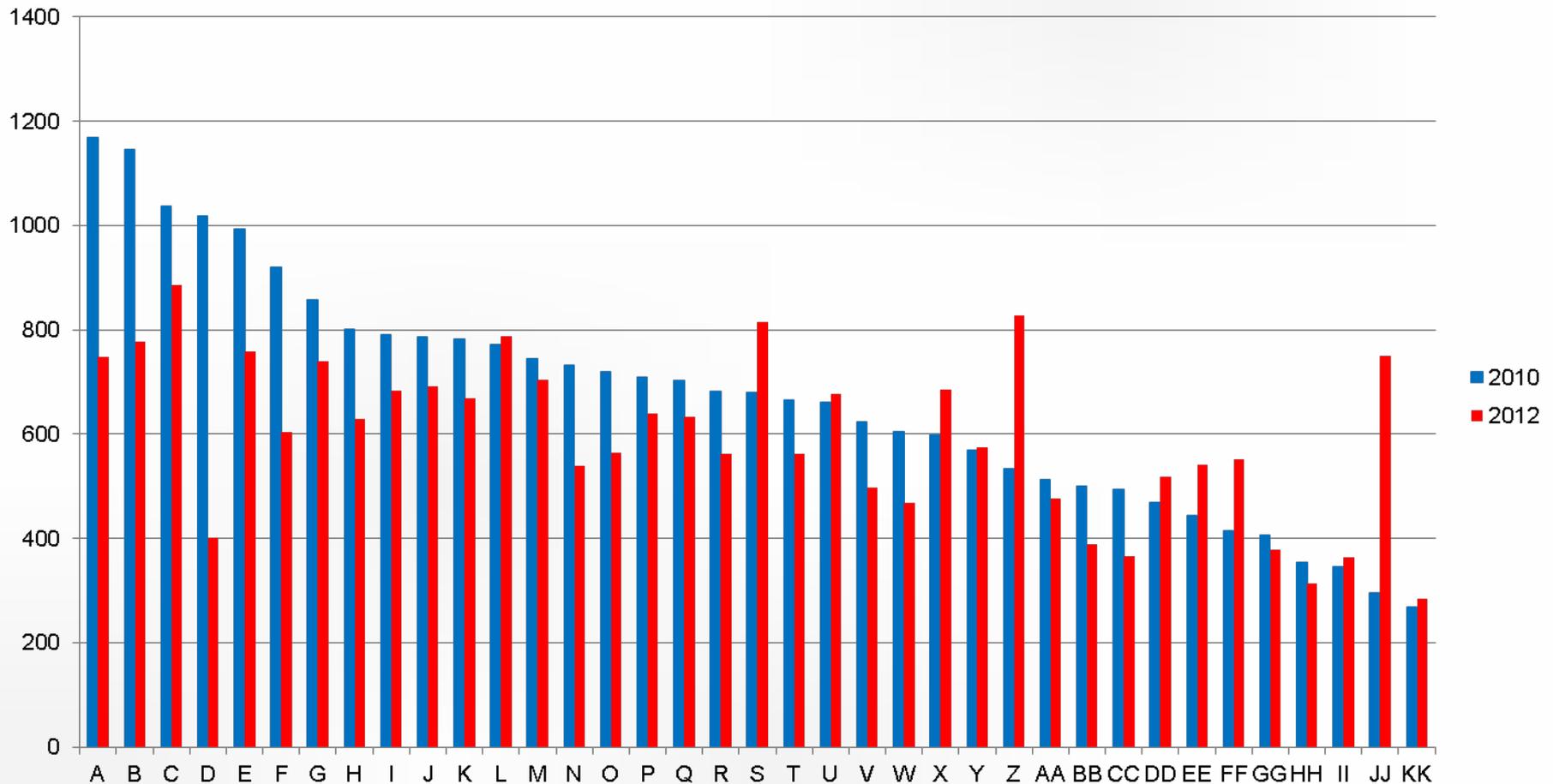
Variation Reduction

Pilot: Diabetes Charges/Patient 2010 vs. 2012



Variation Reduction

Pilot: Diabetes Charges/Patient 2010 vs. 2012



Variation Reduction

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



*"I agree—it's a good idea, but you still
have to run it through our legal department."*

Variation Reduction

Version 1.0: Spread

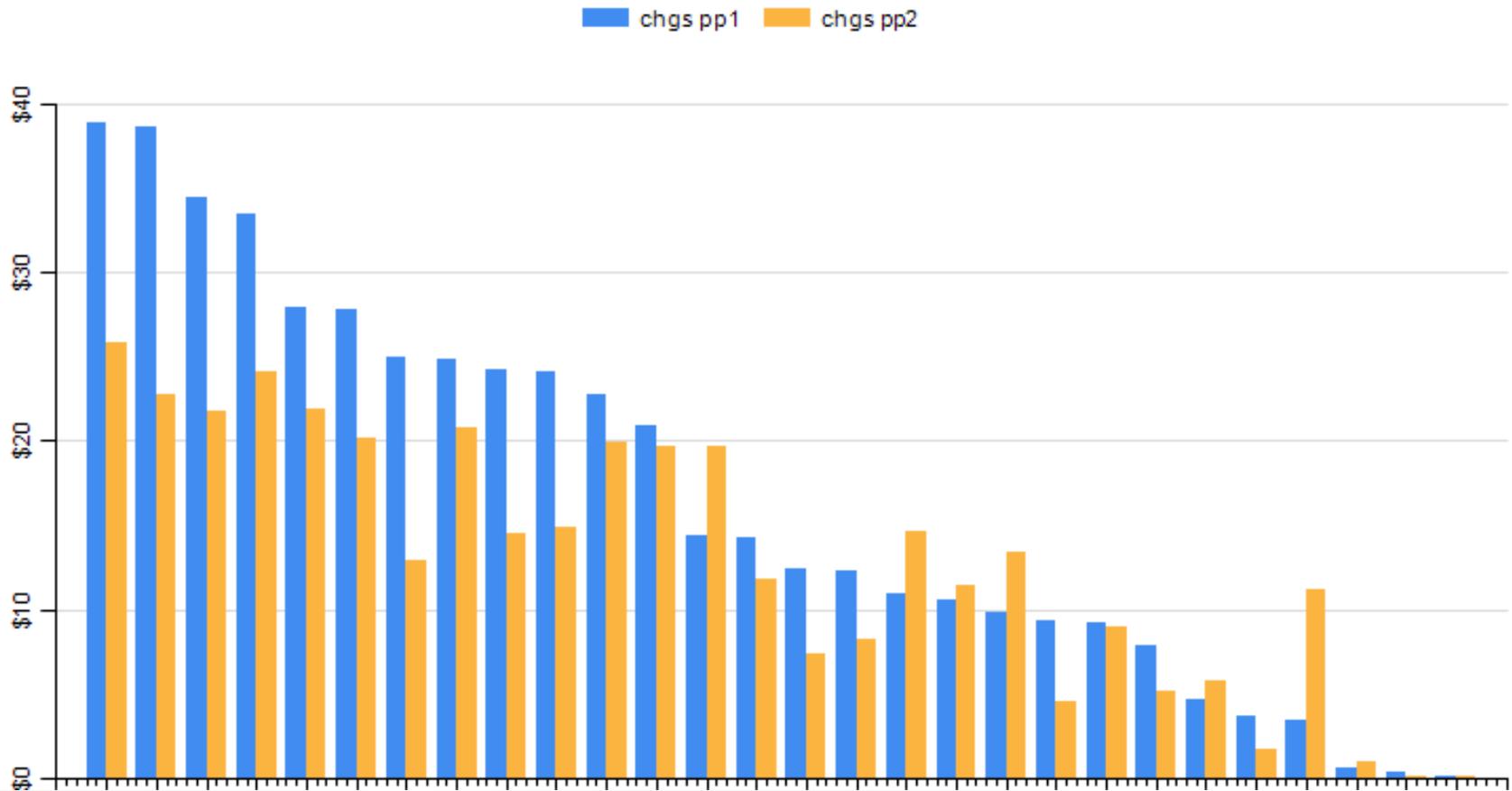
- Division leader project
 - Provided with top 10 diagnoses
 - Choose a diagnosis that lends itself to best practice guidelines
 - Provided with graphs
 - Present to division
 - Develop best practice standards
 - Develop actionable items to standardize utilization

Variation Reduction

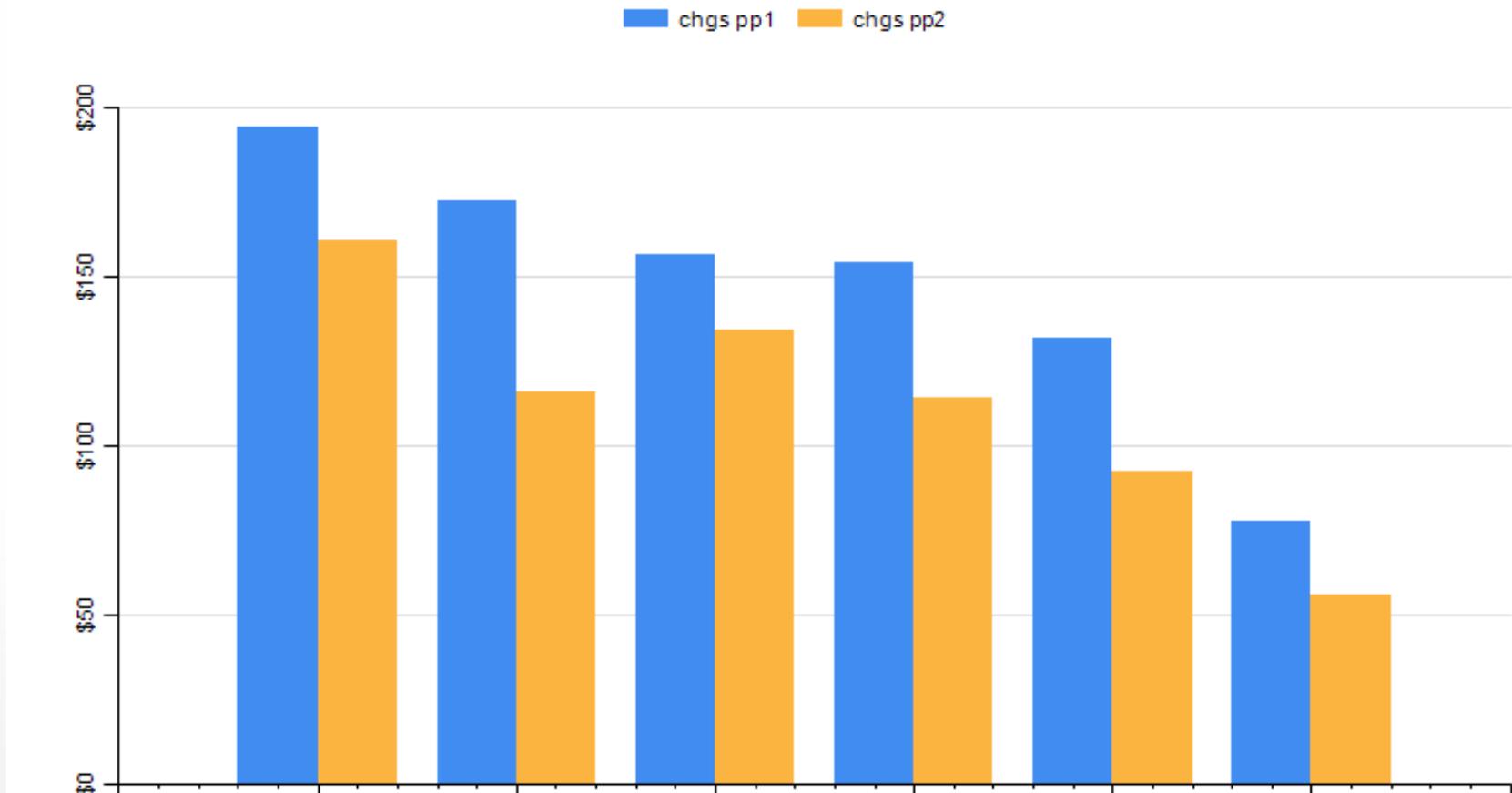
Version 1.0: Spread

- 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

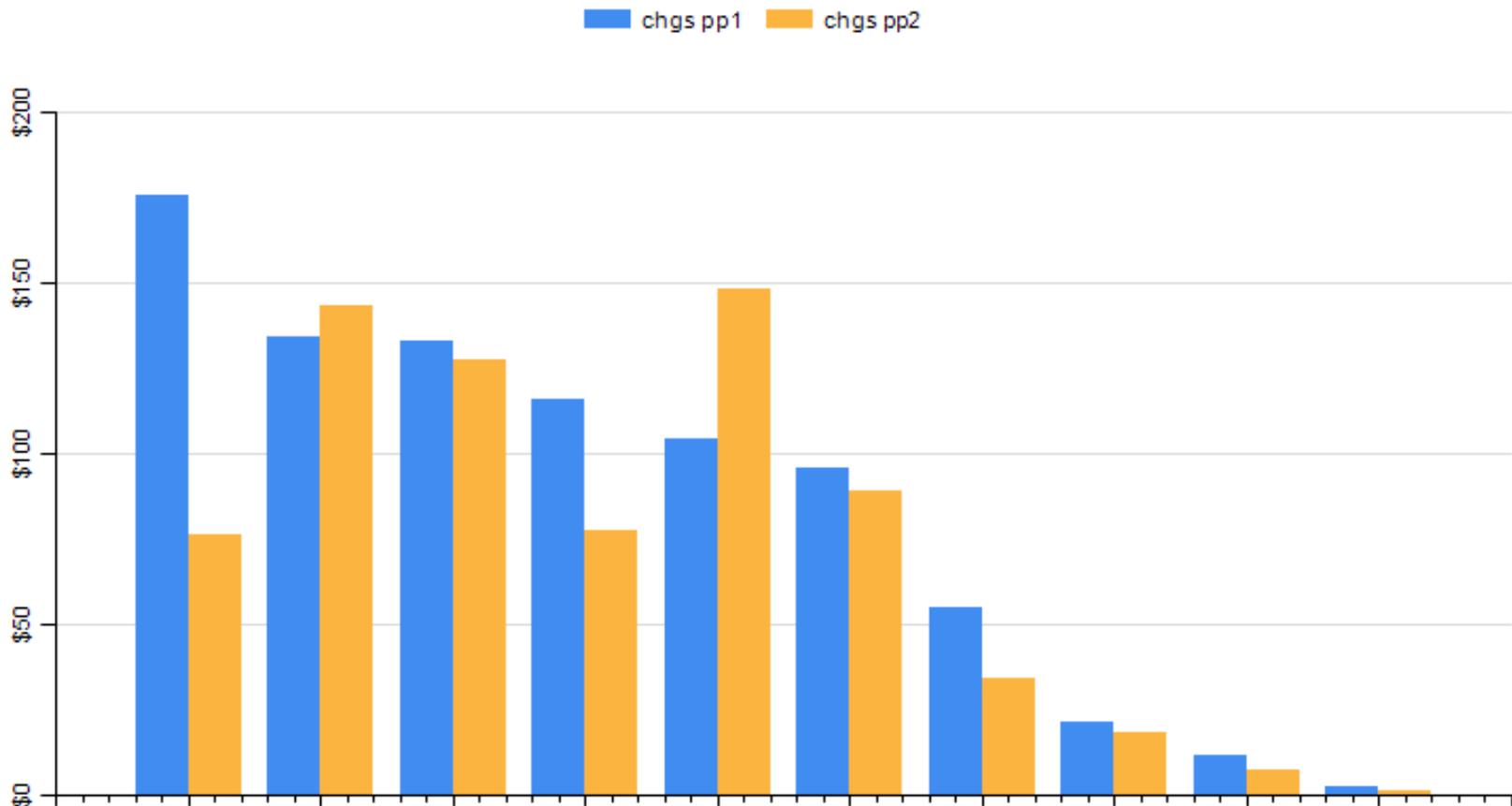
Variation Reduction 1.0: Spread Hypertension for PCPs 2010 vs. 2012



Variation Reduction 1.0: Spread Migraines/Headache for Neurology 2012 vs. 2010



Variation Reduction 1.0: Spread Lateral Epicondylitis for Ortho 2010 vs. 2012



Variation Reduction: Version 1.0

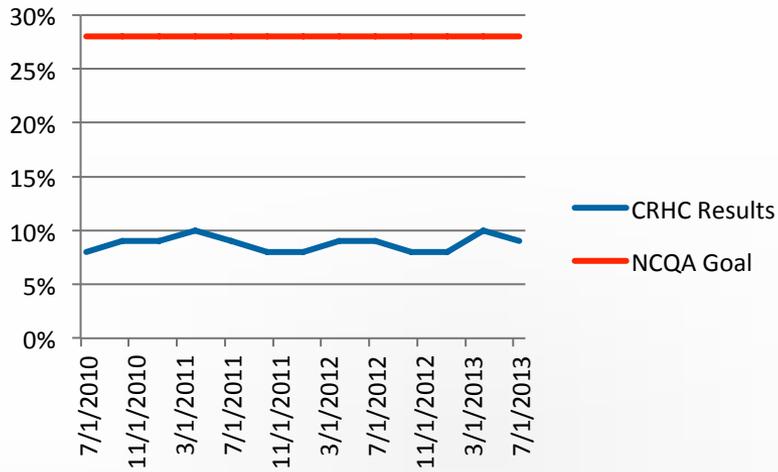
Charges/Patient 2010 vs. 2012

DIAGNOSIS	DEPARTMENT	% CHANGE PP	TOTAL \$\$ CHANGE
CHF	Cardiology	-6%	-\$53,457
Diabetes	PCP/Endocrine	-17%	-\$844,755
Thyroid Nodule	Endocrinology	-26%	-\$304,224
Otitis Externa	ENT	-2%	-\$2,373
GERD	GI	-20%	-\$178,381
Cholelithiasis	General Surgery	-7%	-\$11,408
COPD	Hospitalists	-20%	-\$9,215
HTN	Primary Care	-16%	-\$943,002
Hyperlipidemia	FP/IM	-19%	-\$1,150,376
HA/Migraine	Neurology	-10%	-\$208,054
Breast Cancer	Oncology	-7%	-\$393,622
Lateral Epicondylitis	Orthopedics	-8%	-\$27,647
Asthma	Pediatrics	-10%	-\$24,570
Asthma	Pulmonology	+3%	+\$26,238
Renal Mass	Urology	-4%	-\$62,812
TOTAL			-\$4,187,658

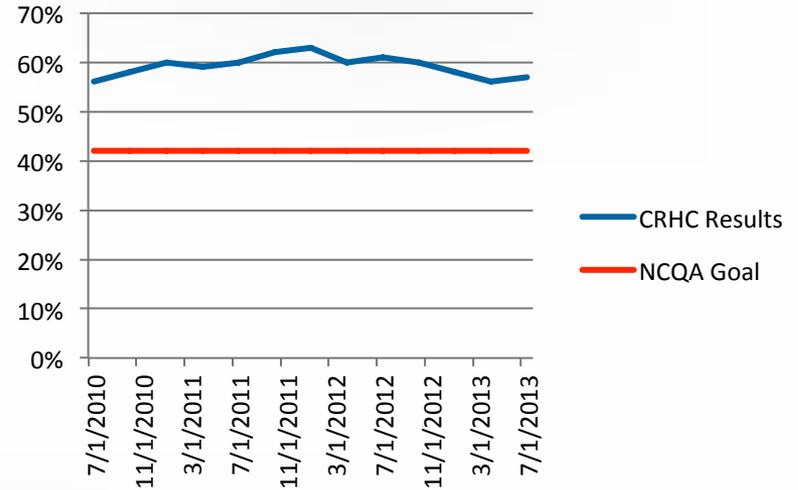
But Do We Sacrifice Quality?

Diabetes Control

Hgb A1c > 9



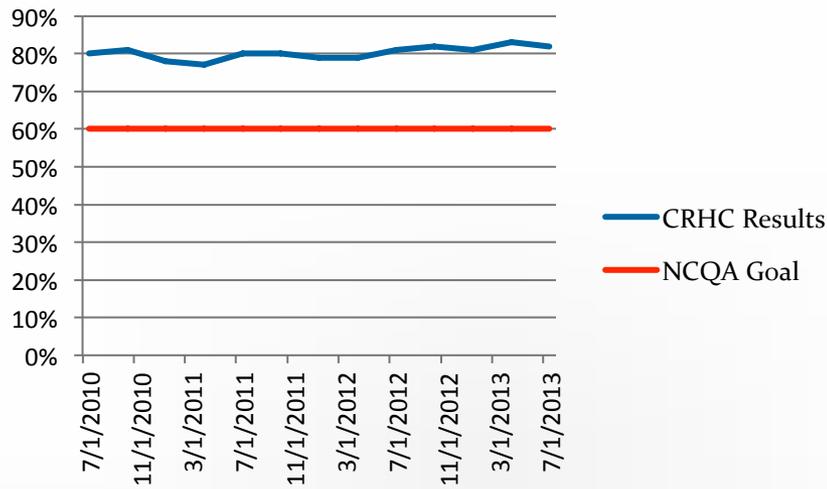
Hgb A1c < 7



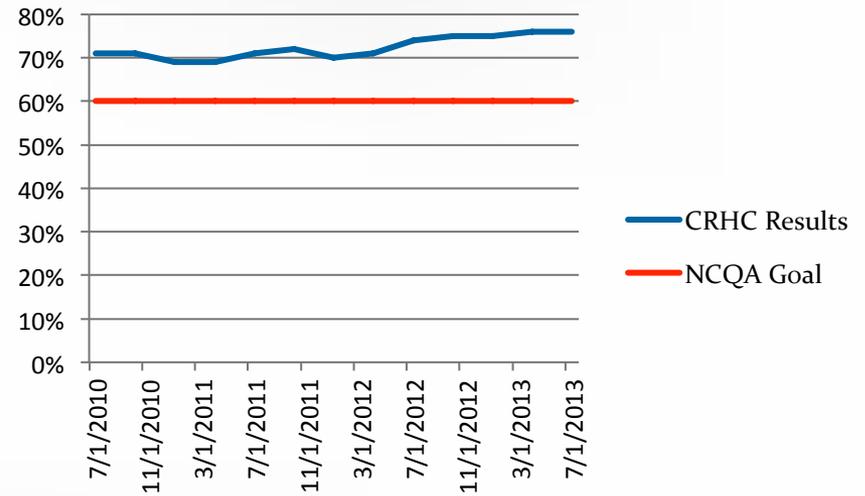
But Do We Sacrifice Quality?

Hypertension Control

BP <140/90 (Cardiac Care)



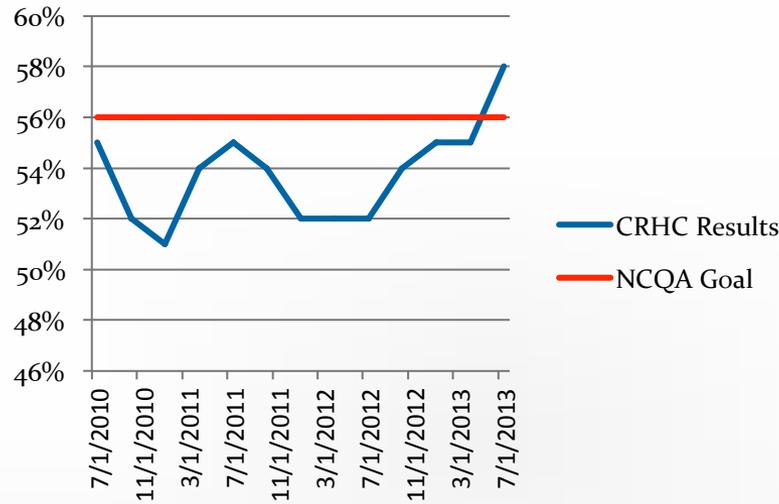
BP <140/90 (Hypertension)



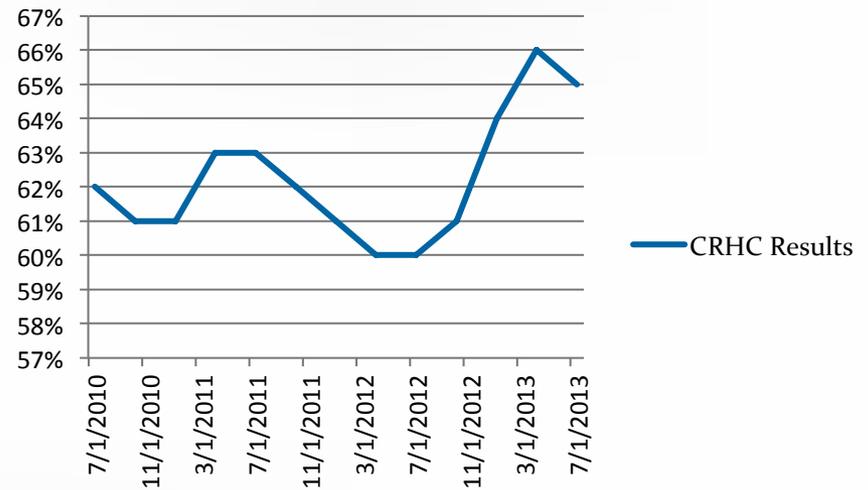
But Do We Sacrifice Quality?

Hyperlipidemia Control

LDL <100 (Cardiac Care)



LDL <130 (HTN)



More Questions Than Answers

- Where does the variation lie?
- How can we get this information in real time?
- How can we leverage this information with our providers?

More Questions Than Answers

Where does the variation lie?

- Professional Charges
 - Number of visits/patient
 - Number of consults/physician
 - Coding patterns
- Laboratory/Diagnostics/Procedures
 - Number of tests/patient
 - Type of test ordered

More Questions Than Answers

How can we leverage this?

- Creation of an automated tool
- Ability to evaluate cause of variation
- 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

Process

- Each department meets with one of the clinical transformation officers quarterly
- Diagnosis chosen the session before
- “Champions” assigned to create BPG
- Meet to review variation graphs
- 2-3 “takeaways” to reduce variation
- Review trend data for previous diagnoses
- Choose a diagnosis for following quarter

Variation Reduction – Version 2.0

Automated Tool

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

Automated Tool

SQL Server Reporting Services
Home > Test Reports >
Cost_PhaseII_Test_c1_rev_qtr

View Properties History Subscriptions

New Subscription

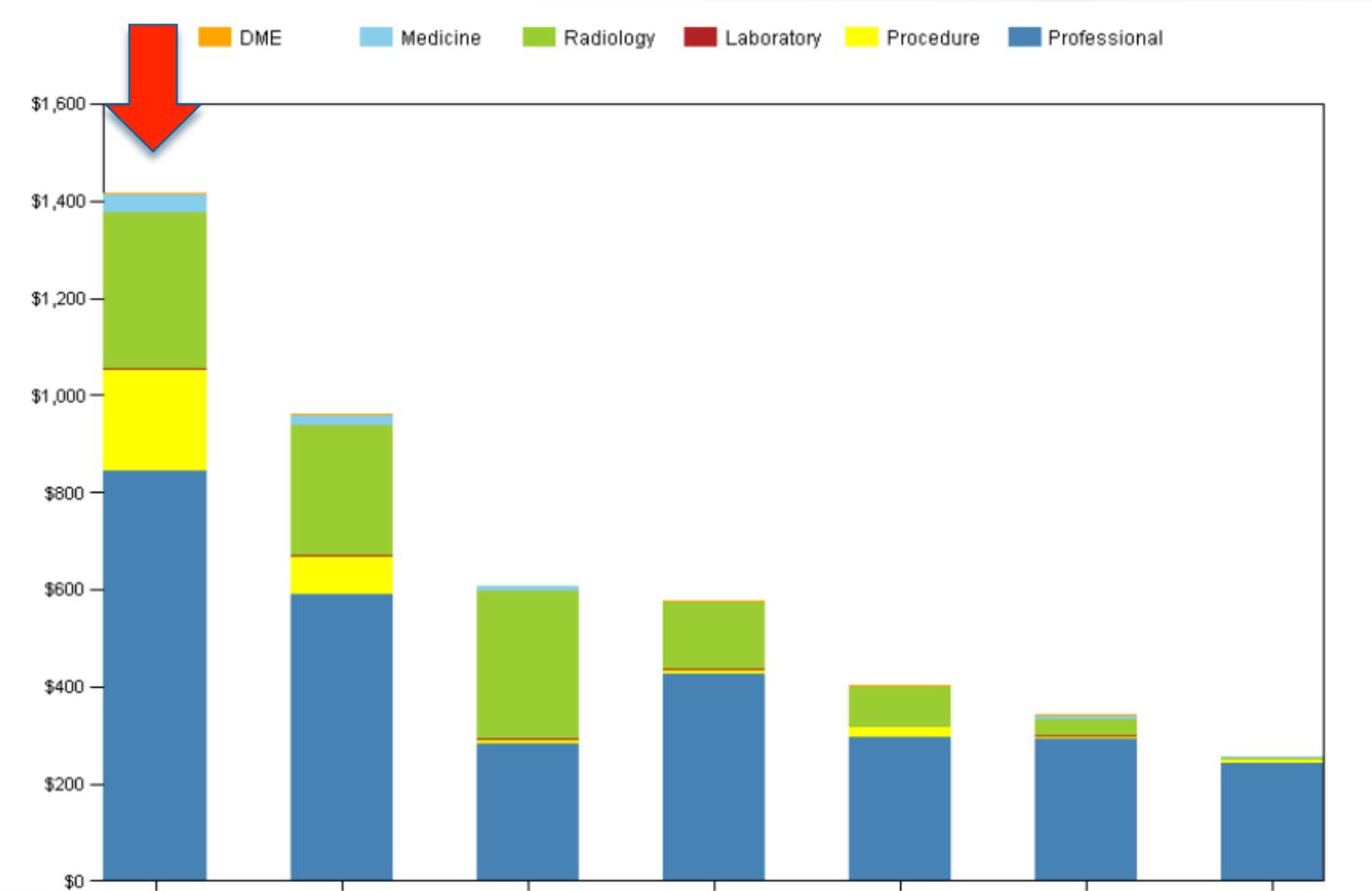
specialty year_end

quarter diagnosis

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

Professional Charges

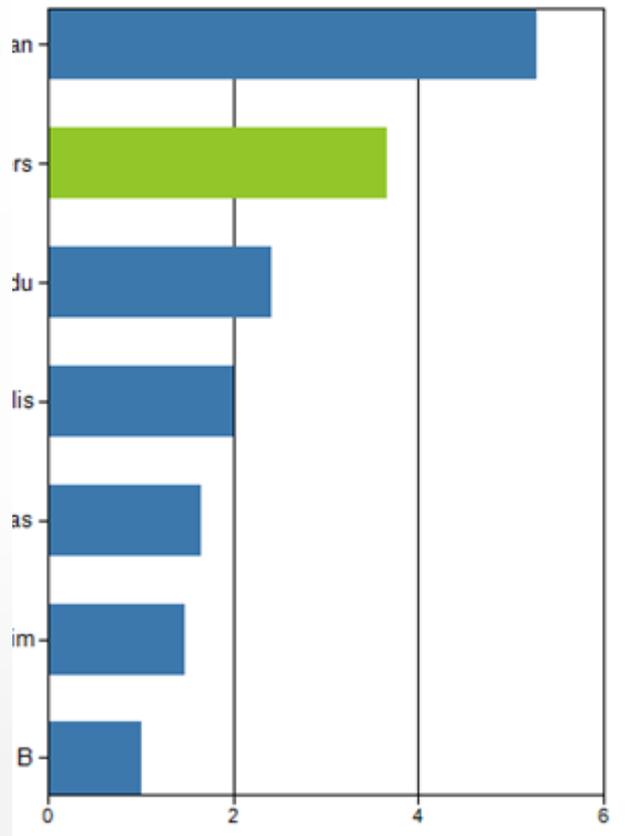
PMR – Back Pain



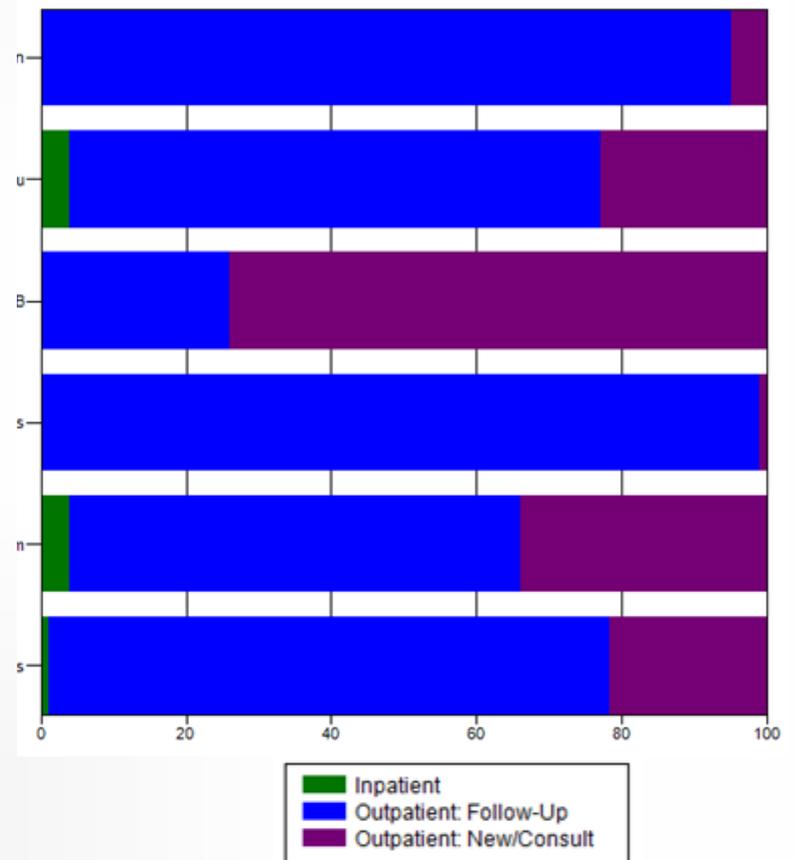
Professional Charges

PMR – Back Pain

Average Visits Per Patient



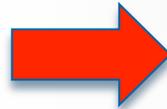
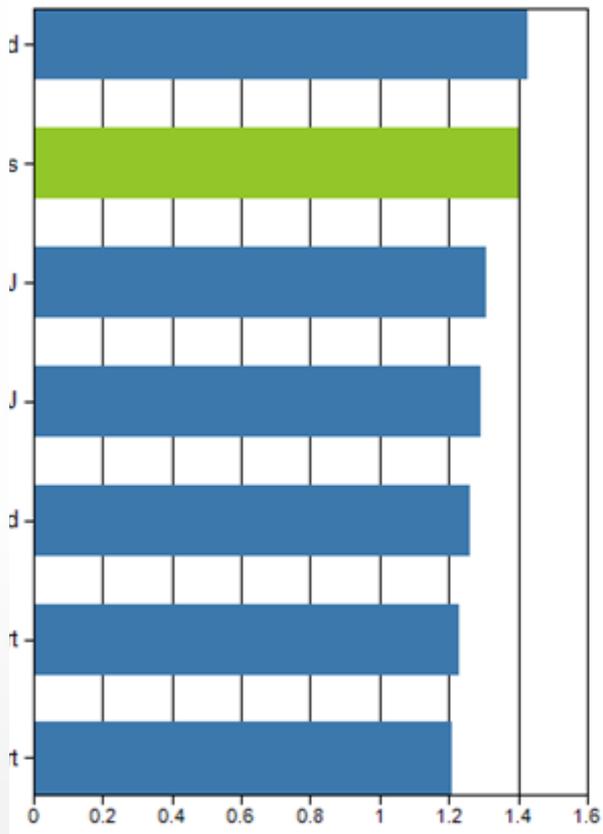
Percent Coding



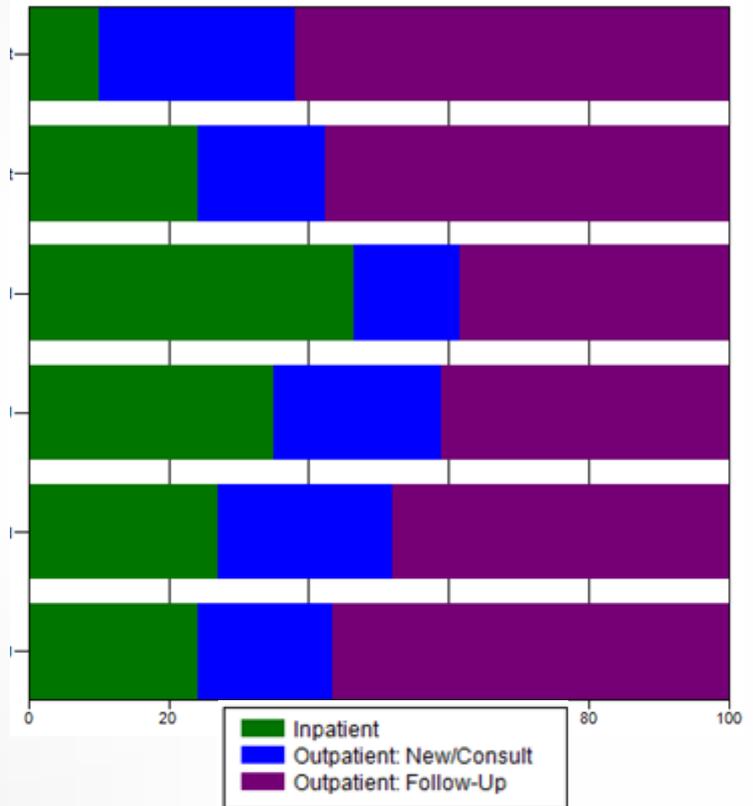
Professional Charges

Diarrhea - GI

Average Visits Per Patient



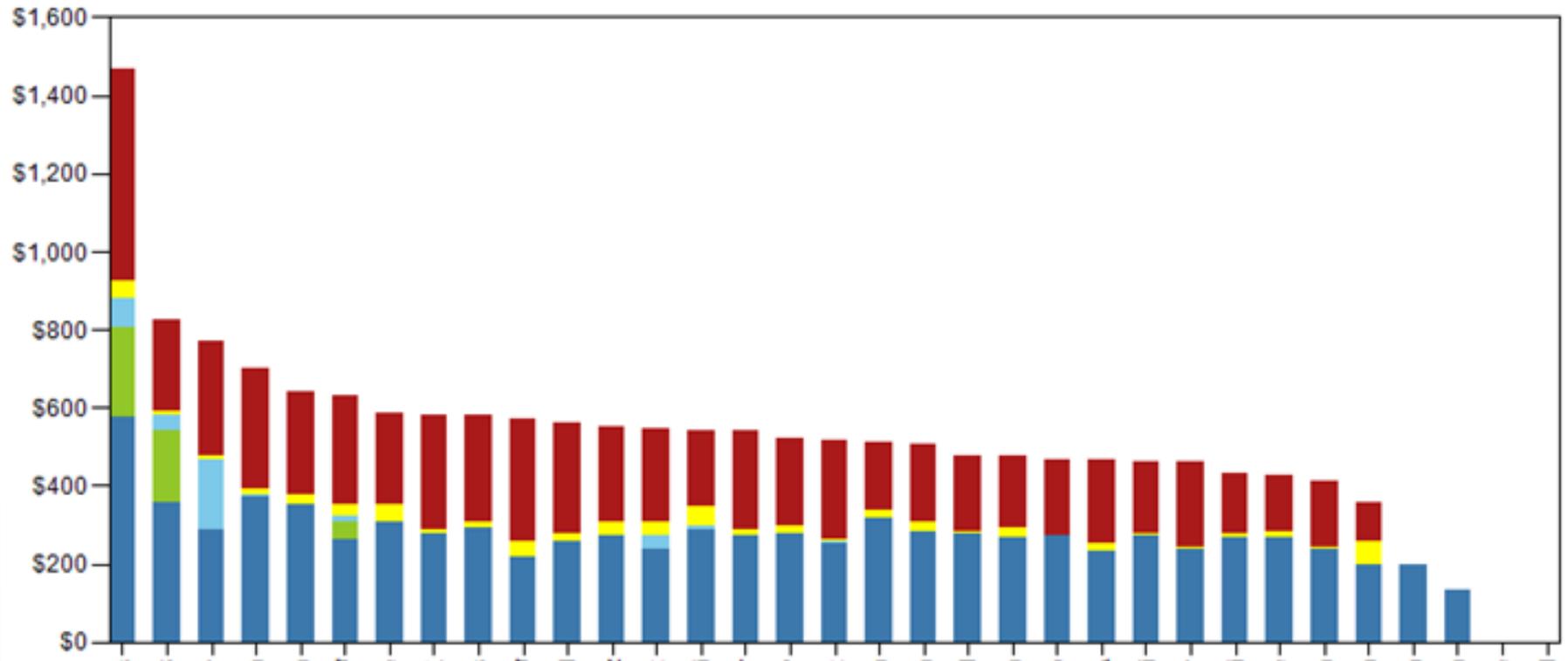
Percent Coding



Laboratory Charges

Hyperlipidemia – IM/FP

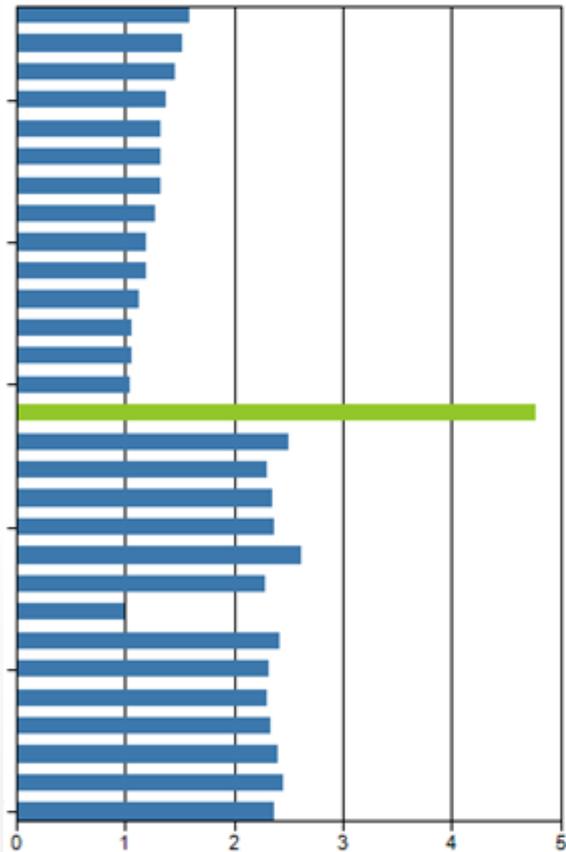
Laboratory Procedure Medicine Radiology Professional



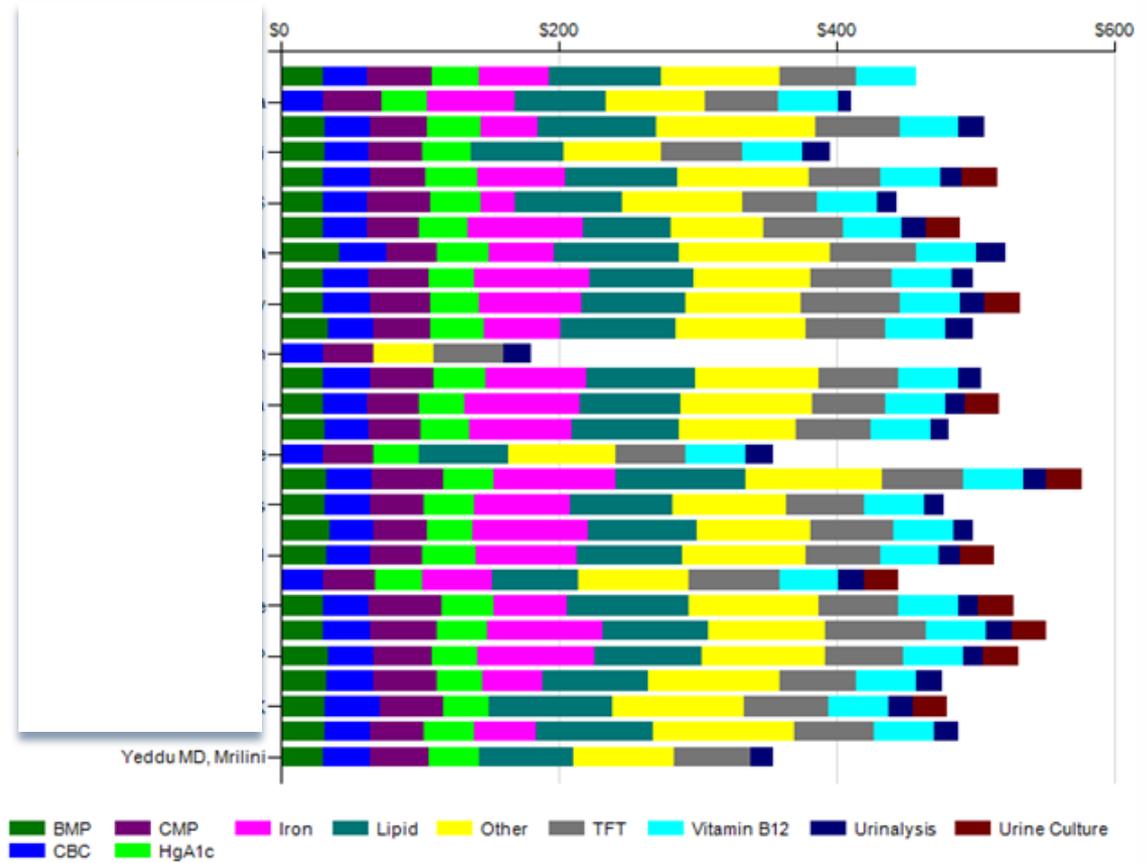
Laboratory Charges

Hyperlipidemia – IM/FP

Average Visits Per Patient



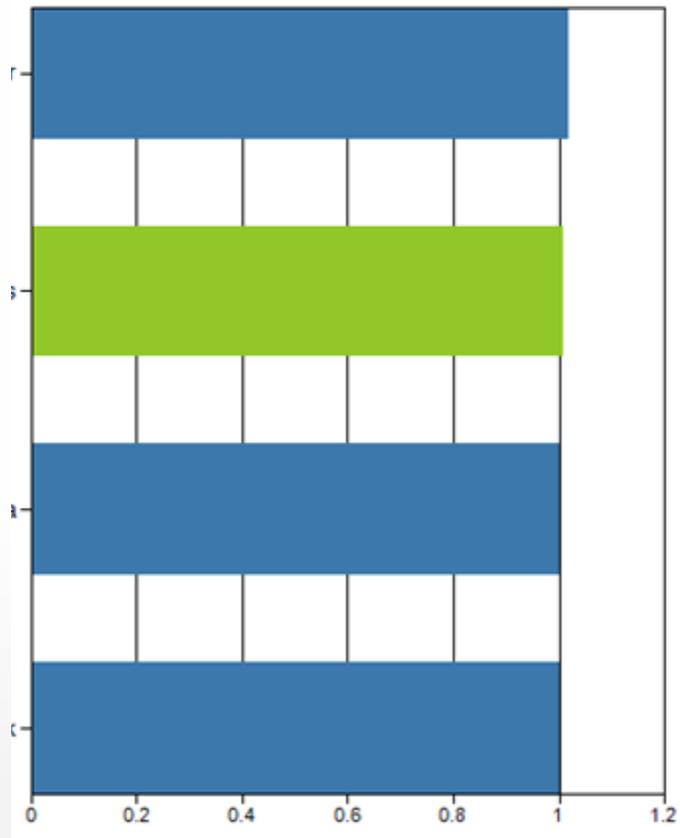
Charges Per Patient



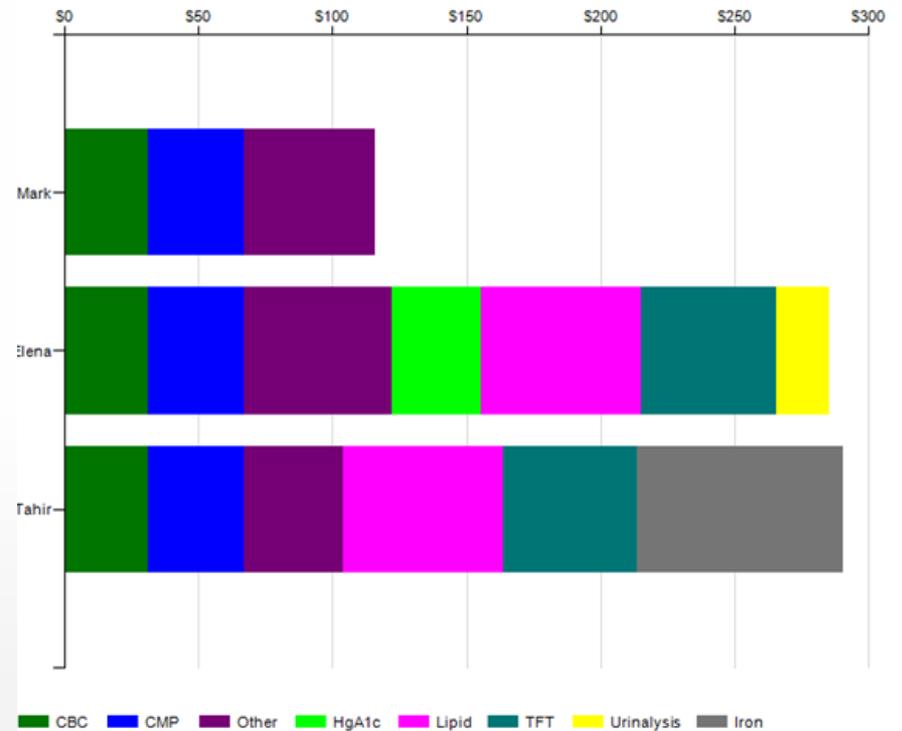
Laboratory Charges

Joint Pain - Rheumatology

Average Visits Per Patient



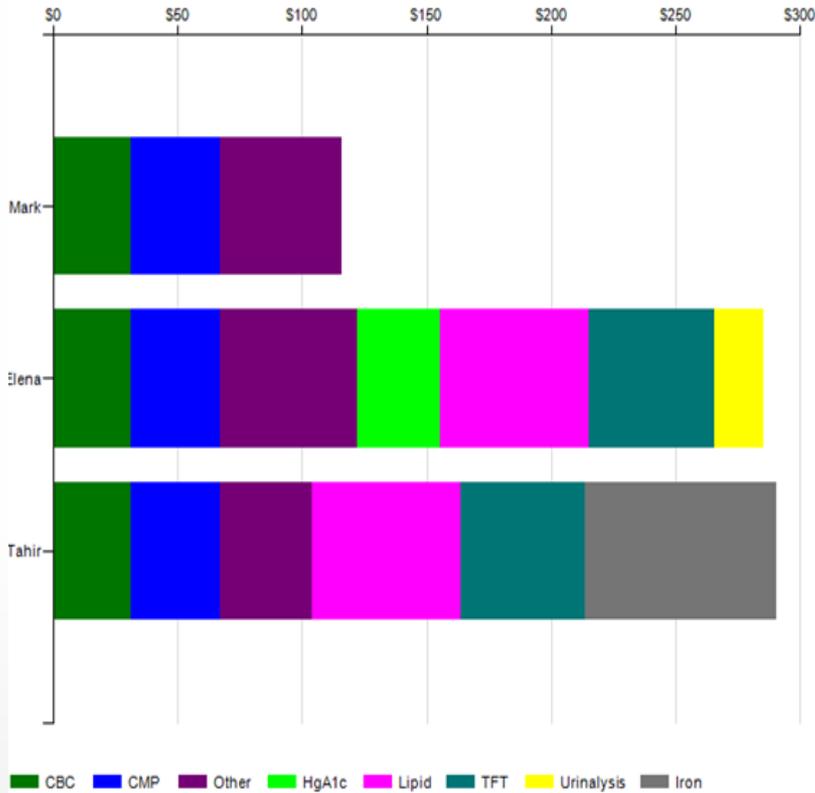
Charges Per Patient



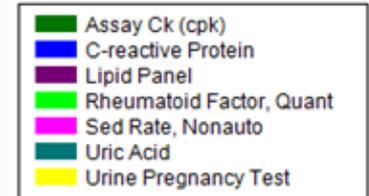
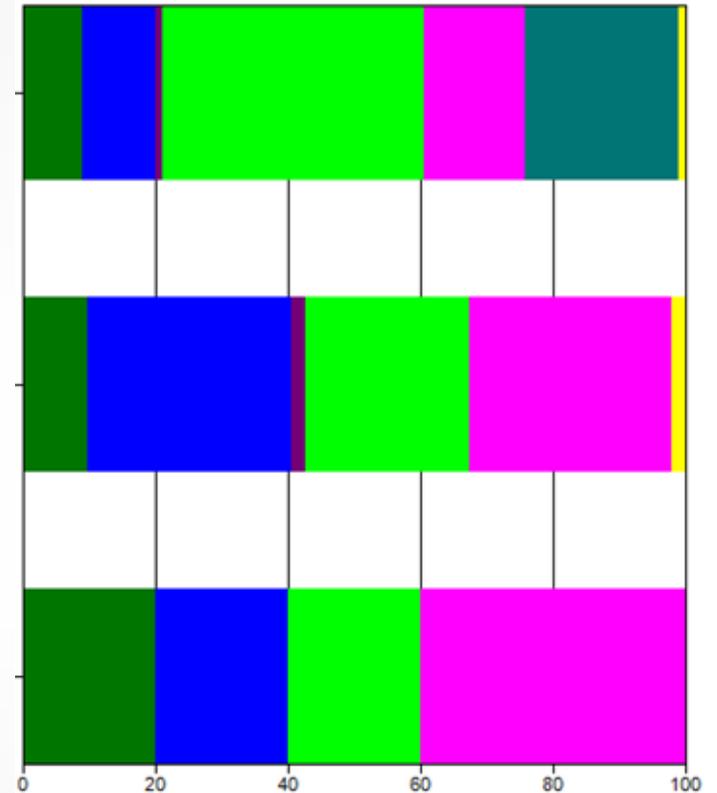
Laboratory Charges

Joint Pain - Rheumatology

Charges Per Patient



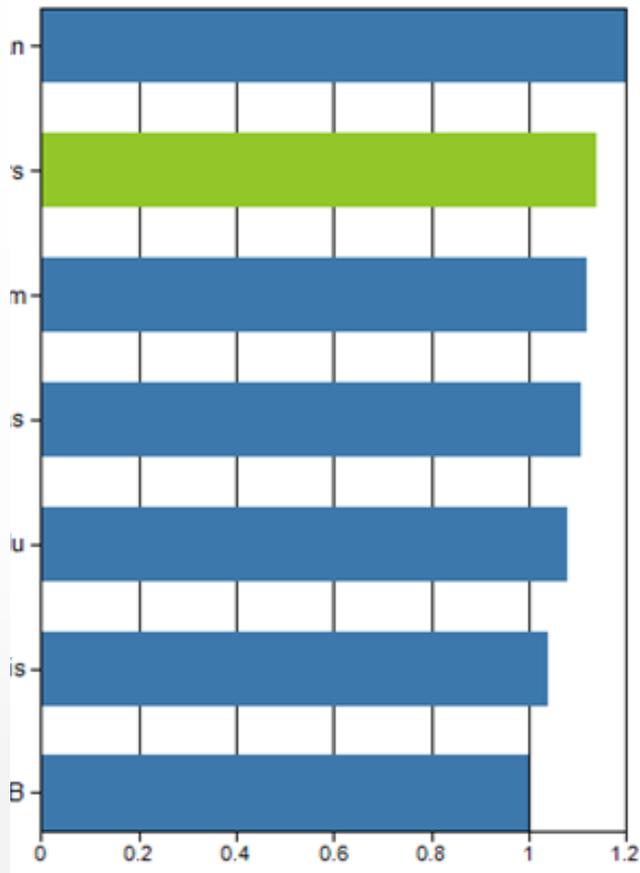
Provider Coding Pattern



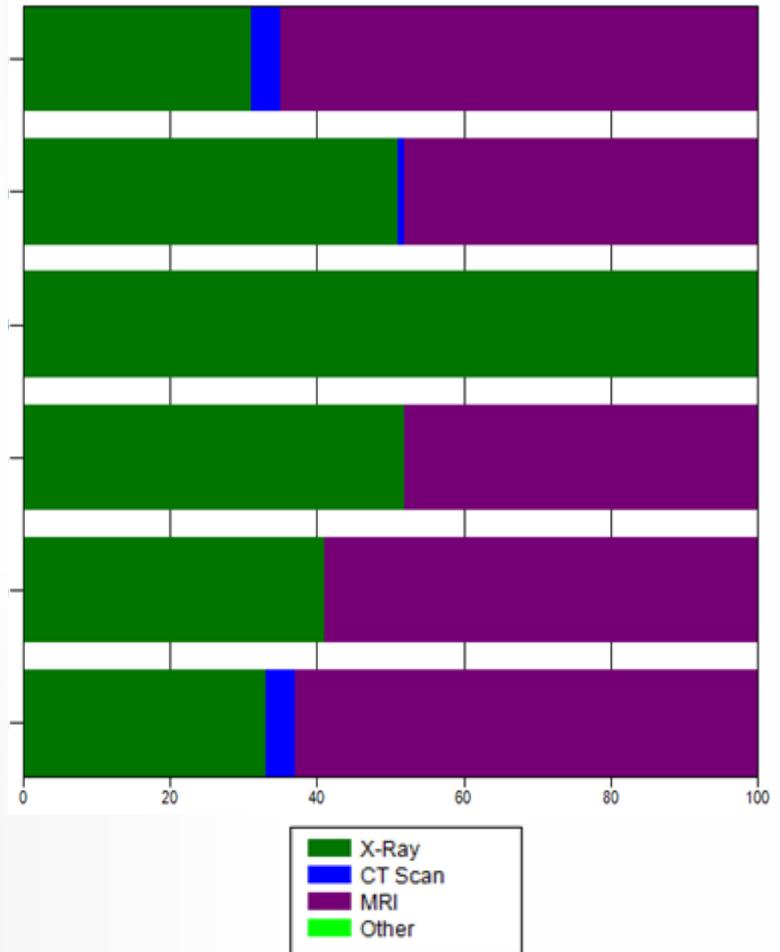
Radiology Charges

Back Pain - PMR

Average Visits Per Patient



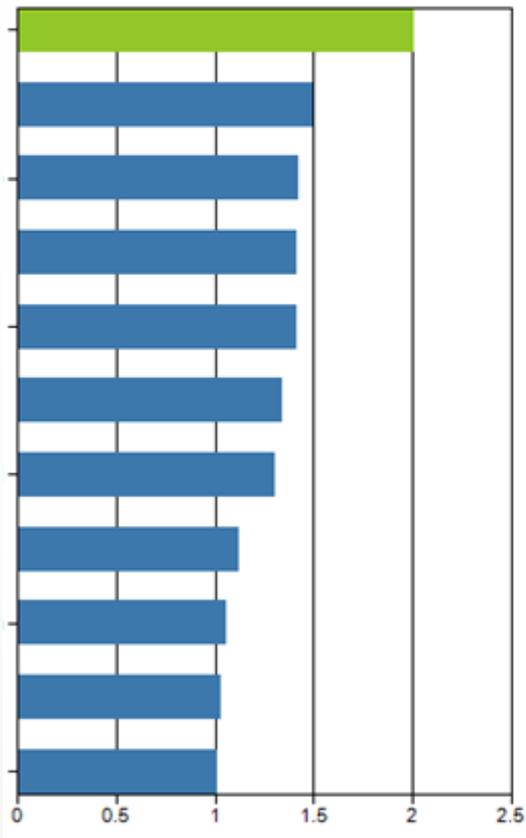
Percent Coding



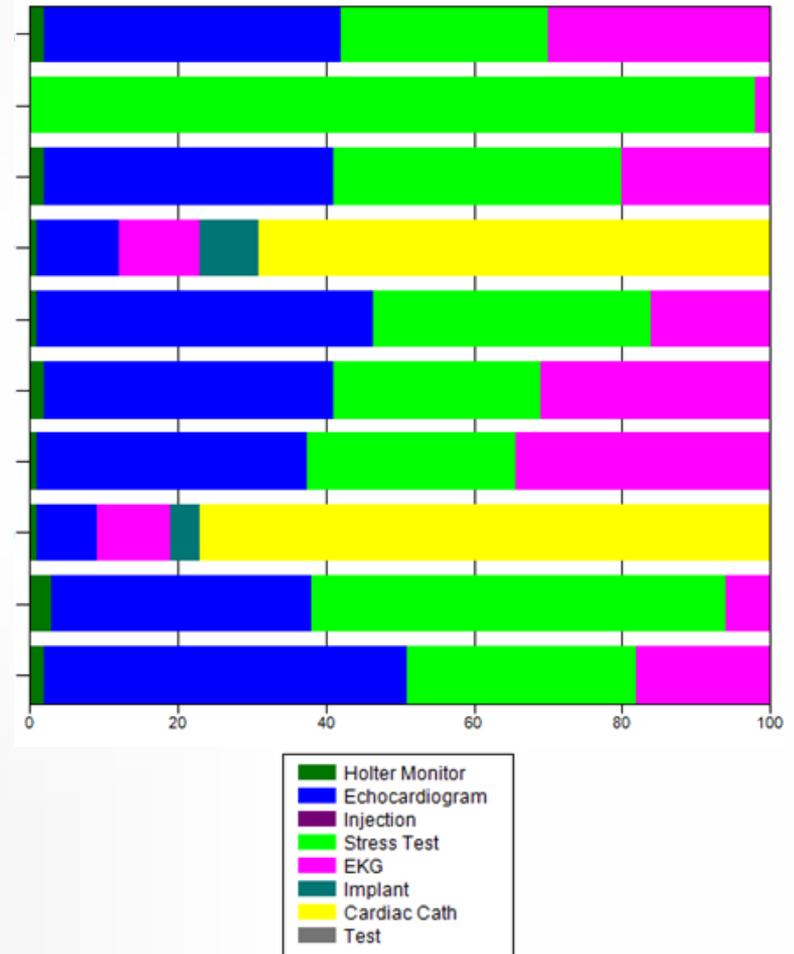
Procedural Charges

Chest Pain – Cardiology

ge Visits Per Patient



Percent Coding



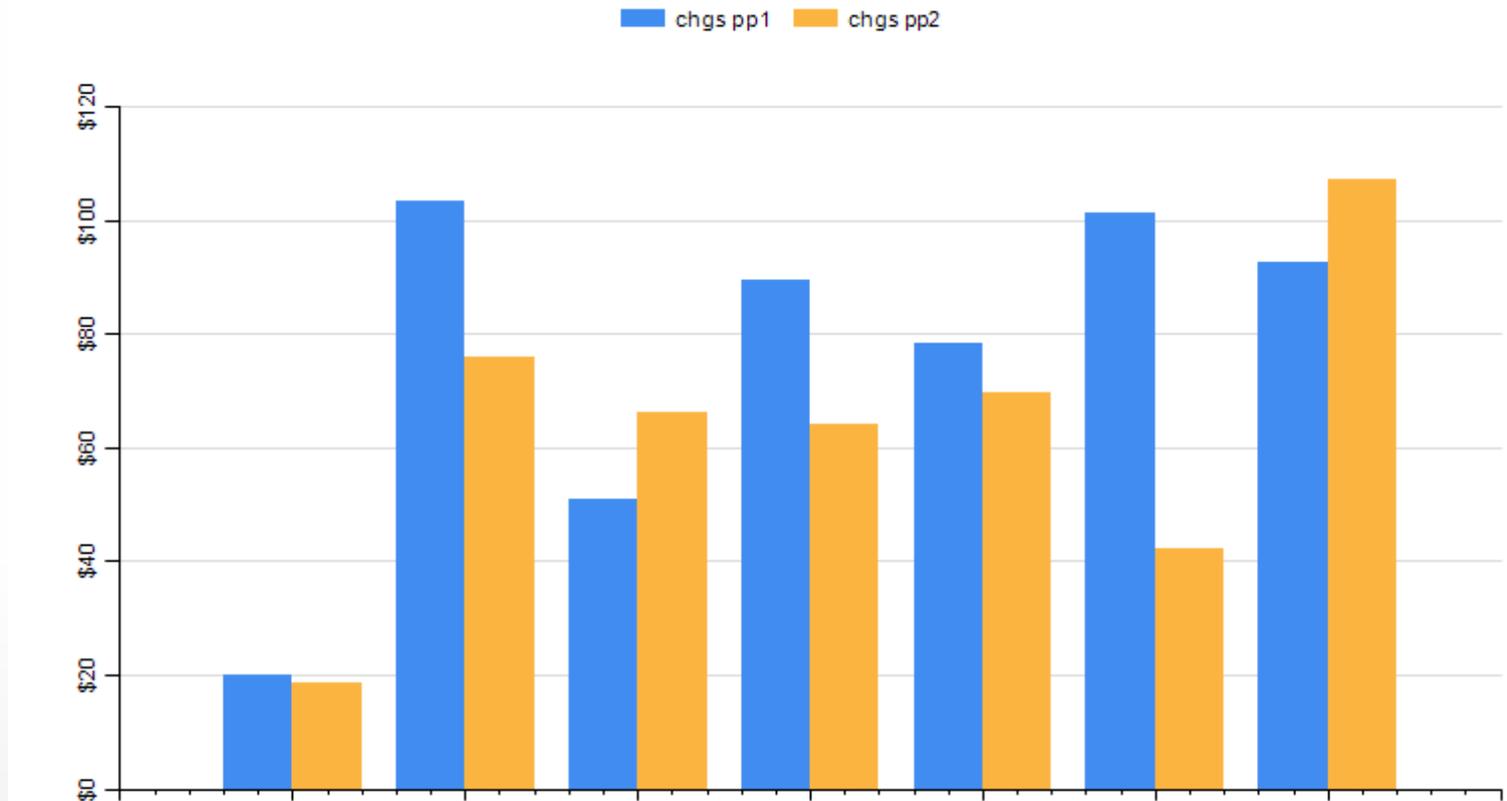
Variation Reduction – Version 2.0

Lessons Learned 2013...Thus Far

Diagnosis	Lesson Learned
UTI protocol for Urgent Care	Eliminate unnecessary urine cultures
Menorrhagia for OBGYN	Eliminate infusion hysterosonography as first line test
Iron deficiency anemia for hematology/ oncology	Standard protocol for IV iron infusions (Infed over Ferrlecit)
Thyroid cancer for endocrinology	Standardize surveillance testing
Multiple sclerosis for neurology	Standardize surveillance testing
Hypercoaguable state	BPG spanning primary care & hematology
Prostate biopsy for urology	Standardize number of samples
Abnormal LFTs for GI	Standardize lab and imaging workup
Back pain for pain management	Standardize imaging & referrals

Lessons Learned 2013...Thus Far

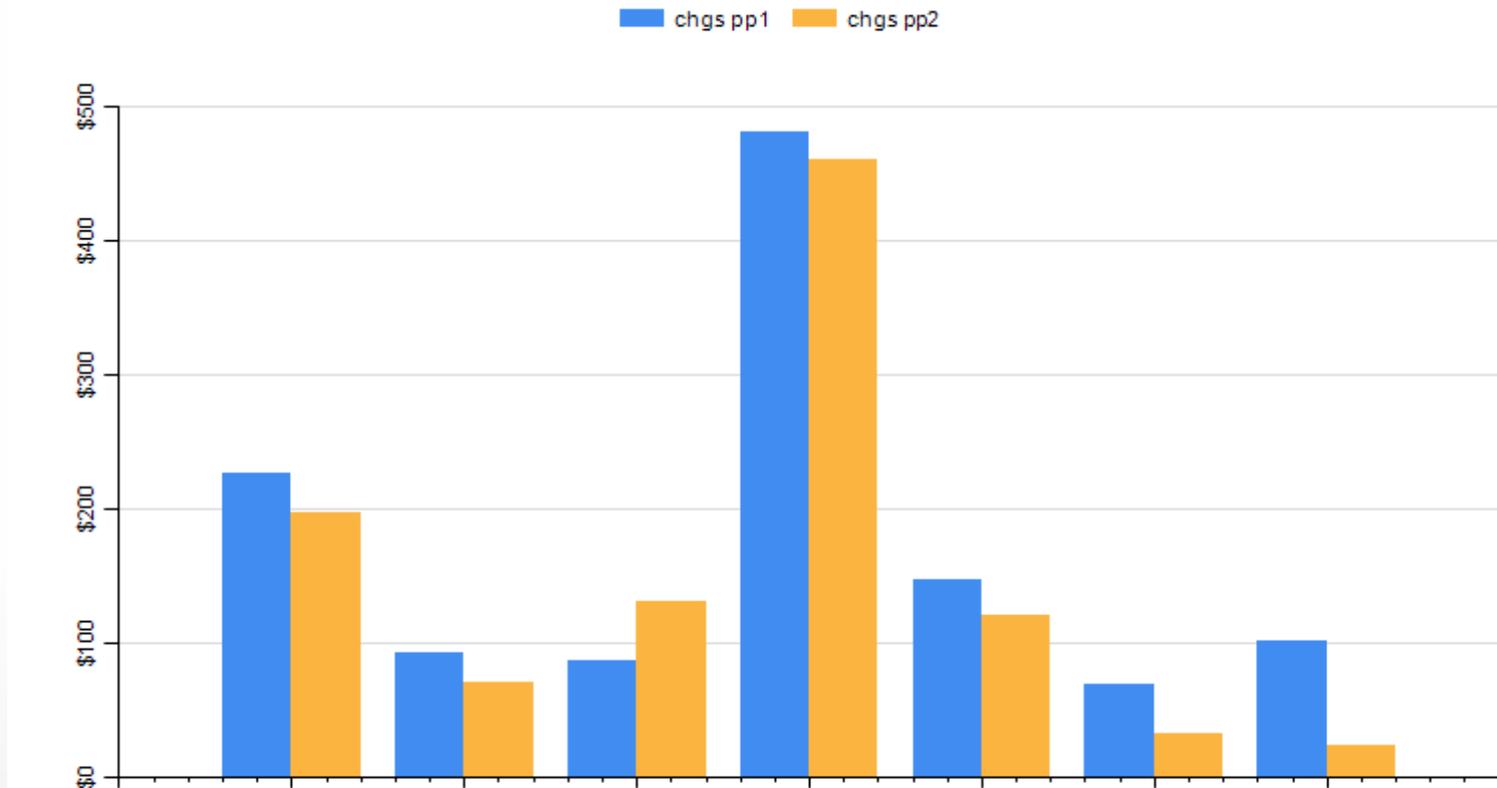
GI: Abnormal LFTs



- Charges/Patient reduced 17%

Lessons Learned 2013...Thus Far

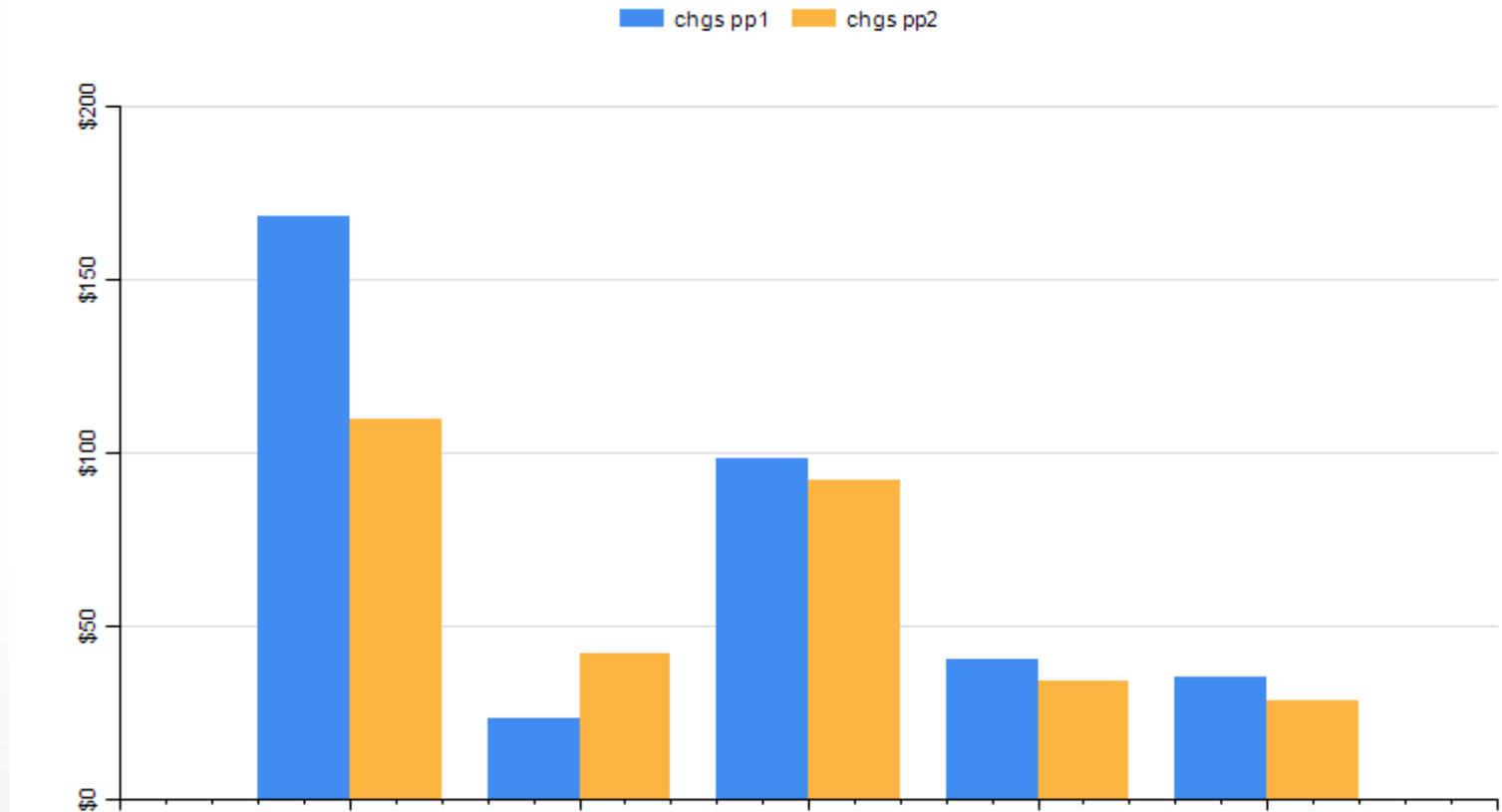
Neurology: Multiple Sclerosis



- Charges/Patient reduced 14%

Lessons Learned 2013...Thus Far

Endocrinology: Thyroid Cancer



- Charges/Patient reduced 4%

Lessons Learned 2013...Thus Far

Other Examples

- Urgent care saw 1% increase in charges/patient for UTI, but lab charges were reduced by 76%
- Hematology saw a 1% increase in charges/patient for anemia, but procedure (infusion) charges were reduced by 24%

Variation On A Theme

What About Access?

- Access is more “tangible” to providers than cost
- A few assumptions:
 - Following BPGs should eliminate unnecessary visits
 - Can help fix the access problem in some specialties
 - Average physician has 25 visits/day
 - Average physician sees patients 210 days/year
 - Average physician has 5,250 visits/year

What About Access?

Visits 2010 vs. Visits 2012

DIAGNOSIS	DEPARTMENT	CHANGE IN VISITS	CHANGE IN PATIENTS
CHF	Cardiology	-722	+213
Diabetes	PCP/Endocrine	-3,051	+41
Thyroid Nodule	Endocrinology	-1,971	+132
Otitis Externa	ENT	+70	+65
GERD	GI	-143	+266
Cholelithiasis	General Surgery	-12	+59
HTN	Primary Care	-3,013	+339
Hyperlipidemia	FP/IM	-2,966	-561
HA/Migraine	Neurology	-550	+225
Breast Cancer	Oncology	-278	+16
Lateral Epicondylitis	Orthopedics	-84	-4
Asthma	Pediatrics	-92	-134
Asthma	Pulmonology	-66	+1,132
Renal Mass	Urology	-11	-6
TOTAL		-12,889	+1,783

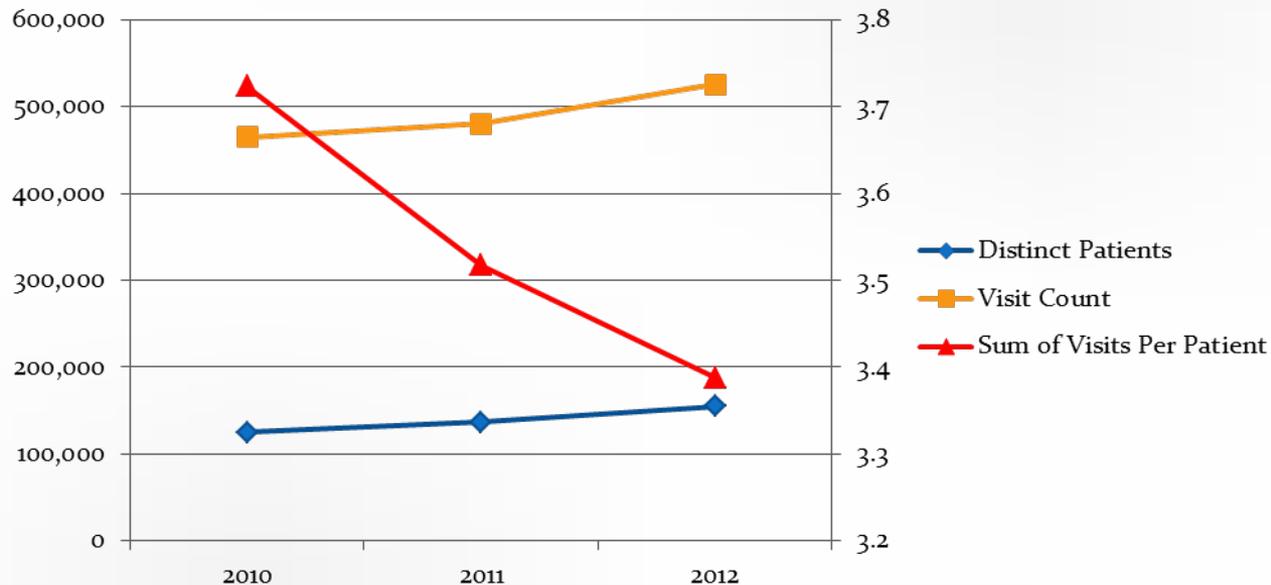
Variation On A Theme

What About Access?

- Conclusions
 - Reduction in visits 13/14 pilot diagnoses
 - Increase in patients 10/14 pilot diagnoses
 - Total reduction of 12,889 visits
 - Patients increase by 1,783
 - “Created” 2.5 physicians

What About Access?

Extrapolation of Data



- 30,206 more patients
- 41,823 fewer visits (calculated as visits/patient)
- “Created” 8 physicians

Variation Reduction

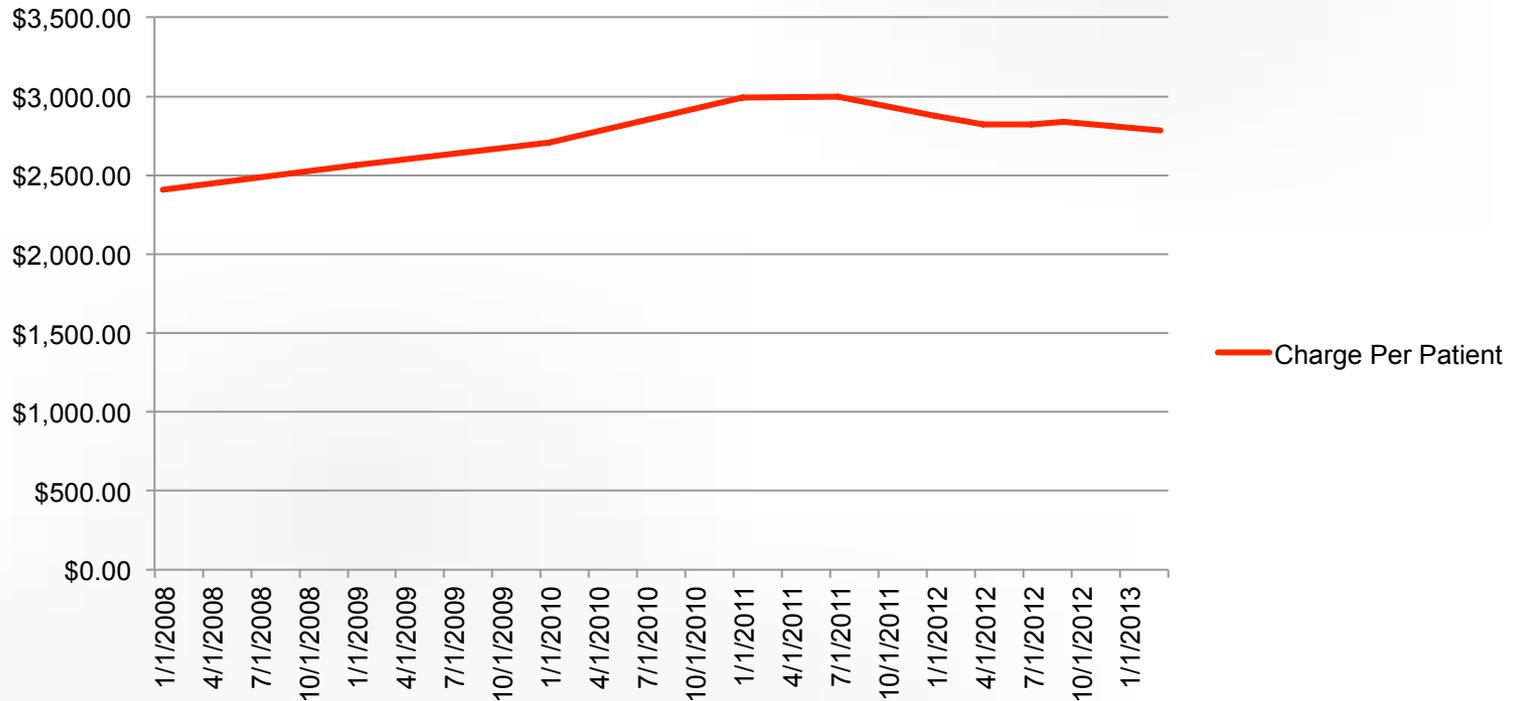
Version 3.0

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

How Are We Doing?

Charges/Patient

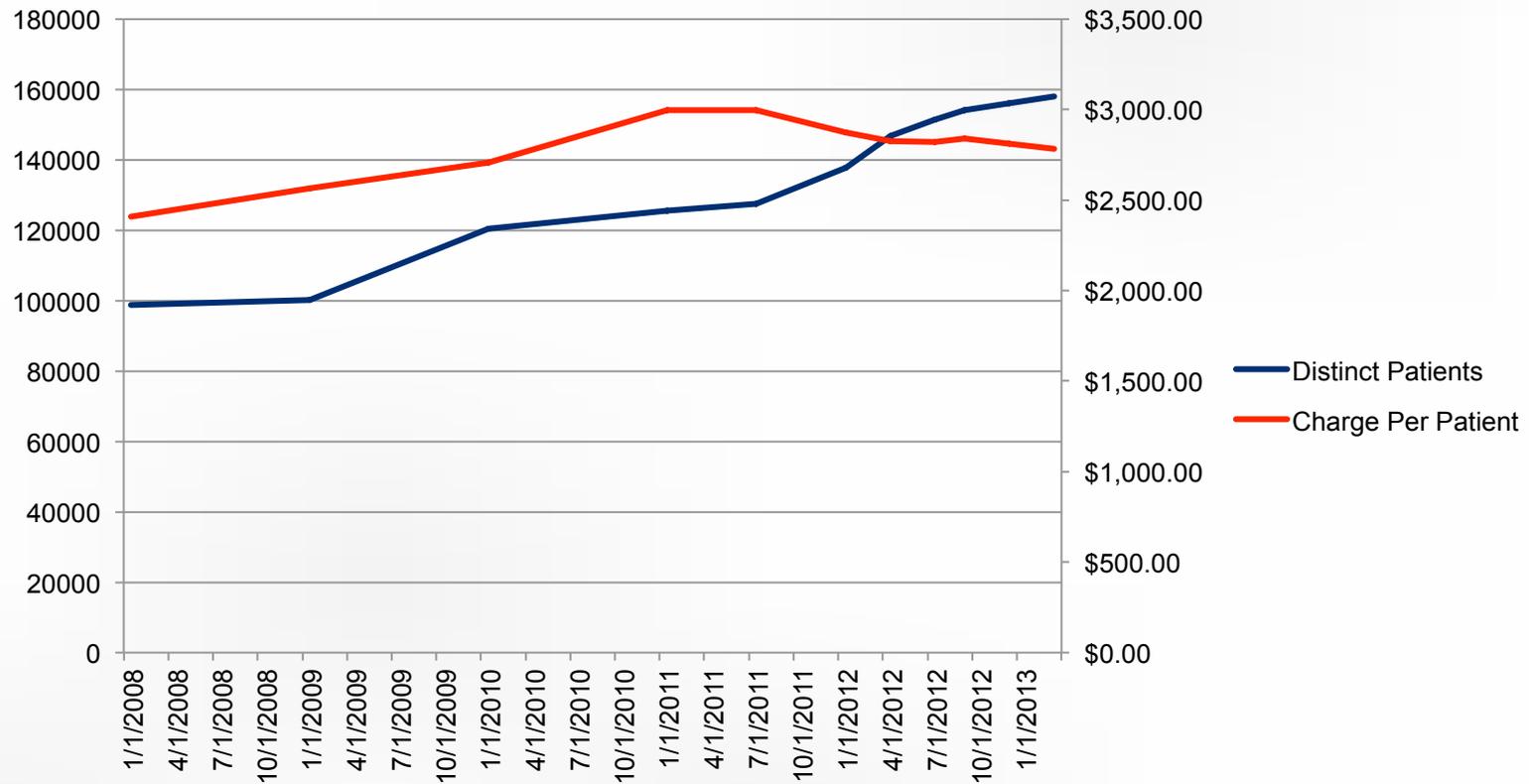
Charge Per Patient



- Reduced charges/patient by 7.6%

How Are We Doing?

Charges/Patient vs. Distinct Patients



- Total charges +17.4%

How Are We Doing?

Medicare Beneficiaries

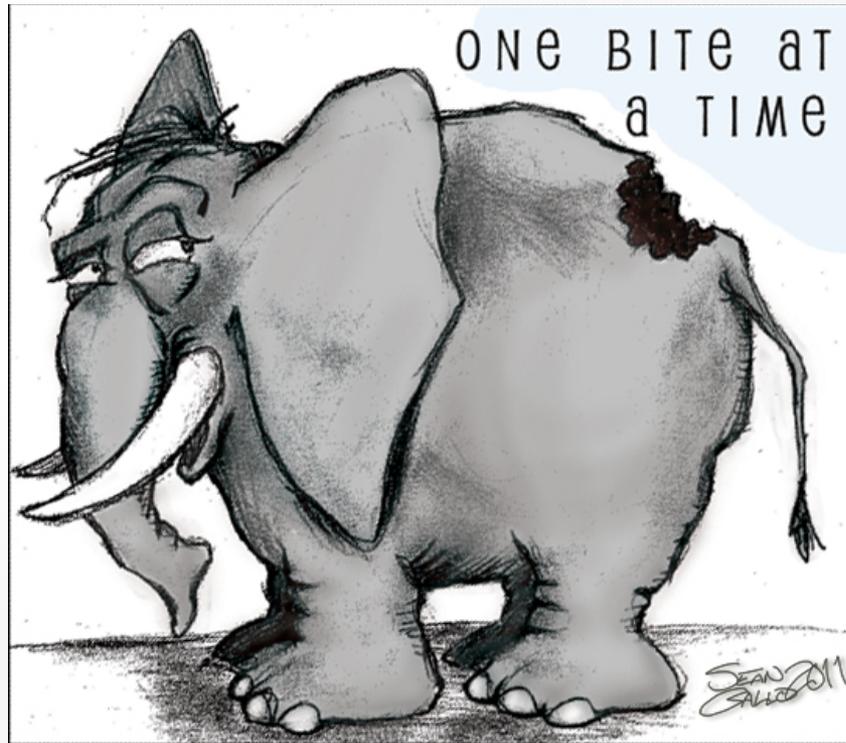


● PMPM -13%

SUMMARY

- Variation reduction is a powerful tool to maintain/improve quality, reduce cost, and improve access
- Providing physicians with real time, diagnosis specific data can lead to a rapid change in practicing patterns
- Any initiative to address quality/cost needs to move from the provider's subconscious to consciousness

Questions



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