Reducing Practice Variation To Increase Value

Scott Hines, MD
Chief Quality Officer
Crystal Run Healthcare
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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
Crystal Run Healthcare

- Physician owned MSG in NY State, founded 1996
- 400+ providers, 40+ specialties, 20+ locations
- Joint Venture ASC, Urgent Care, Diagnostic Imaging, Sleep Center, High Complexity Lab, Pathology
- Early adopter EHR (NextGen®) 1999
- Accredited by The Joint Commission since 2006
- Level 2 NCQA ACO Accreditation 2012, 2015
Crystal Run Healthcare ACO

• Single entity ACO
• MSSP participant (since April 2012)
• NCQA ACO Accreditation (December 2012)
• 30,000 commercial lives at risk
• Medicare Shared Savings Program (MSSP)
  – 15,000 attributed beneficiaries
## Percentages of Attributed Patients

<table>
<thead>
<tr>
<th>Payment Type</th>
<th>Percentage of Attributed Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee For Service</td>
<td>44.5%</td>
</tr>
<tr>
<td>Commercial Shared Savings</td>
<td>35%</td>
</tr>
<tr>
<td>Medicare Shared Savings</td>
<td>16%</td>
</tr>
<tr>
<td>Crystal Run Health Plan</td>
<td>4.5%</td>
</tr>
</tbody>
</table>
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
  • Engages Providers in value
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
Version 1.0: Expand Pilot

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

• Creation of an automated tool with flexibility regarding providers, diagnoses
• Ability to evaluate cause of variation
• Quarterly variation reduction meetings with each department
• Creation of best practice guideline library
• Reduction in cost/utilization is a nice “side effect”
Variation Reduction – Spread 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
Professional Charges
PMR – Back Pain
Professional Charges
PMR – Back Pain

Average Visits Per Patient

Percent Coding

Cry

Inpatient
Outpatient: Follow-Up
Outpatient: New/Consult
Professional Charges
Diarrhea - GI
Laboratory Charges
Hyperlipidemia – IM/FP
Laboratory Charges
Hyperlipidemia – IM/FP
Laboratory Charges
Joint Pain - Rheumatology

Average Visits Per Patient

Charges Per Patient

- Mark
- Jena
- Fahir

Legend:
- CBC
- CMP
- Other
- HgbHct
- Lipid
- TFT
- Urinalysis
- Iron
Laboratory Charges
Joint Pain - Rheumatology

Charges Per Patient

Provider Coding Pattern

- Assay Ck (cpk)
- C-reactive Protein
- Lipid Panel
- Rheumatoid Factor, Quant
- Sed Rate, Nonauto
- Uric Acid
- Urine Pregnancy Test

Crystal Run Healthcare
We want you healthy.
Radiology Charges
Back Pain - PMR
Procedural Charges
Chest Pain – Cardiology
Variation Reduction – Spread
Results: Abnormal LFTs (GI)

- Charges/Patient reduced 17%
Variation Reduction – Spread

Results: Multiple Sclerosis (Neurology)

- Charges/Patient reduced 14%
Variation Reduction – Spread
Results: Thyroid Cancer (Endocrinology)

- Charges/Patient reduced 4%
## Variation Reduction – Spread

### Other Lessons Learned

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

- Reduced charges/patient by 10.1%
Variation Reduction
How to Remain Profitable

DistinctPatient

Receipts per patient as % baseline
Impact on Quality
Diabetes Control

Hgb A1c > 9

Hgb A1c < 7
Impact on Quality
Other Diabetes Measures

Eye Exam

Nephropathy Screen
Impact on Quality
Other

NCQA Percentile

- Appropriate Treatment for Children...
- BMI Assessment
- Breast Cancer Screening
- CAD - Aspirin Use
- CAD - LDL Control
- Colon Cancer Screening
- Diabetes Control
- Diabetes - LDL Control
- Diabetes - Nephropathy Screen
- Diabetes Screen
- Lead Testing in Children
- Pneumonia Vaccination

NCQA Percentile
Variation Reduction

Impact on Access

• Improving access is major practice initiative

• 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
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<tr>
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<th>CHANGE IN VISITS</th>
<th>CHANGE IN PATIENTS</th>
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</thead>
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<tr>
<td>CHF</td>
<td>Cardiology</td>
<td>-722</td>
<td>+213</td>
</tr>
<tr>
<td>Diabetes</td>
<td>PCP/Endocrine</td>
<td>-3,051</td>
<td>+41</td>
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<tr>
<td>Thyroid Nodule</td>
<td>Endocrinology</td>
<td>-1,971</td>
<td>+132</td>
</tr>
<tr>
<td>Otitis Externa</td>
<td>ENT</td>
<td>+70</td>
<td>+65</td>
</tr>
<tr>
<td>GERD</td>
<td>GI</td>
<td>-143</td>
<td>+266</td>
</tr>
<tr>
<td>Cholelithiasis</td>
<td>General Surgery</td>
<td>-12</td>
<td>+59</td>
</tr>
<tr>
<td>HTN</td>
<td>Primary Care</td>
<td>-3,013</td>
<td>+339</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>FP/IM</td>
<td>-2,966</td>
<td>-561</td>
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<tr>
<td>HA/Migraine</td>
<td>Neurology</td>
<td>-550</td>
<td>+225</td>
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<td>-278</td>
<td>+16</td>
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<td>Orthopedics</td>
<td>-84</td>
<td>-4</td>
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<td>-92</td>
<td>-134</td>
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<td>Pulmonology</td>
<td>-66</td>
<td>+1,132</td>
</tr>
<tr>
<td>Renal Mass</td>
<td>Urology</td>
<td>-11</td>
<td>-6</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>-12,889</strong></td>
<td><strong>+1,783</strong></td>
</tr>
</tbody>
</table>
Variation Reduction
Impact on 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
Variation Reduction
Impact on Access

- 66,394 fewer visits (per patient calculation)
- 59,904 additional patients
- “Created” 18 physicians
Variation Reduction

Next Steps

• Incorporate claims level data (inpatient/ER)
• Analyze prescribing pattern
• Metric for variation for each diagnosis
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

shines@crystalrunhealthcare.com