Geriatrics, Clinical Redesign and Healthcare Reform

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Affiliations and Disclosures

• No disclosures
• Until 9/1/2012: University of Michigan
  – Assistant Dean for Clinical Affairs
  – Associate Director of Faculty Group Practice
  – Medical Director Pioneer ACO
  – Medical Director, PGP Medicare Demonstration (2005-2010)

• Since 9/1/2012: New York University Langone Medical Center
  – Diane and Arthur Belfer Professor of Geriatrics
  – Director, Division of Geriatric Medicine
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Presentation Goals

• General overview: delivery system reform and geriatric care principles
• Case Study: UM’s experience with clinical redesign
• Geriatrics and Academic Healthcare Systems
• Quality
Affordable Care Act

• Insurance Reform
  – Expand insurance coverage
  – Reform insurance practices
  – Controversial, success unclear

• Delivery System Reform
  – Bi-partisan
  – Not going away

• Cost control, entitlement cuts?
Delivery System Reform
(all payers, both parties)

Payment Reforms
“Outcomes-based payment”

- Value-based PBPM
- Shared savings

Degrees of:
- Performance risk
- Insurance risk
- Capitation

Delivery System Redesign:
Clinical Integration

- PCMH primary care
- specialty care

Care coordination structures
- Post acute and home based models
- Bundles
- ACOs

Patient centered care
Population management Efficiency

- Triple Aim IOM quality
- “Bend the curve”
- Downsize
Changing care delivery to improve Value

<table>
<thead>
<tr>
<th>Concepts/Names</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Managed Care</td>
<td>• Financial Model</td>
</tr>
<tr>
<td>• Bundles</td>
<td>• Redesign Structure</td>
</tr>
<tr>
<td>• Medical Home</td>
<td>• Provider Group Structure</td>
</tr>
<tr>
<td>• Organized System of Care</td>
<td>• Quality Evaluation</td>
</tr>
<tr>
<td>• Clinical Integration</td>
<td>• Clinical Model</td>
</tr>
<tr>
<td>• Accountable Care Organization</td>
<td></td>
</tr>
</tbody>
</table>
Complex patients experience fragmented care

Hospital

Disease Management

Physicians

Family Caregiver

Home Care

Nursing Home

Pharmacy
Geriatric Care Models and Concepts Inform Delivery System Redesign

• Clinical leadership – governance and champions
• Models of care
  – Transitional care
  – BOOST
  – Acute care of the elderly (ACE) units
  – Geriatrics patient safety principles
  – Comprehensive assessment
  – Care coordination
  – Multidisciplinary teams
  – Medical home/Intensive primary care
  – GRACE
Geriatric Care Models and Concepts Inform Delivery System Redesign

- Post-acute care
- PACE
- Home and community based services
- Palliative Care

• Quality
  - Complex patients
  - Extrapolation of evidence
  - Geriatric conditions
  - Function
  - Patient reported outcomes
Geriatric Care Models and Concepts Inform Delivery System Redesign

• Efficiency
  – Readmissions
  – Appropriate care
  – Medication Reconciliation
  – Patient preferences
  – High cost and complex patients
    • Frail elders
    • Multiple chronic conditions
    • Dual eligibles
    • Advanced Disease
Example: Building an Accountable Care Organization with Geriatric Models of Care

The Physician Group Practice Medicare Demonstration at the University of Michigan
Physician Group Practice (PGP) Medicare Demonstration

• Prototype for ACO; Aimed at finding out whether care coordinating interventions can generate overall Medicare savings for a population of Medicare patients.

• The University of Michigan participated in the PGP Demonstration along with 9 other large physician groups from 2005-2010, and was successful

• Shared savings model; If a group practice saved money, it got some money back.

• Besides saving money, group practices had to achieve quality metrics
The ten participating physician had:
- 5,000 physicians and
- 224,000 Medicare fee-for-service beneficiaries.
UM’s Results from Participation

- Successful each performance year in earning shared savings and achieving quality metrics
  - One of 2 groups that achieved savings all 5 years
- Saved the Medicare Program over $22 ($46) million
- Earned shared savings of over $17.6 million
- Received an additional~$3 million for PQRI participation
- Received national recognition as a leader in health care value and a pioneer in developing ACOs
Accountable Care Organizations (ACOs): One of the Key Ideas in Healthcare Reform

• ACA includes provisions for creating “Accountable Care Organizations” for Medicare beneficiaries

• ACOs are organized provider groups, including physicians, hospitals, and post-acute providers, responsible for health care of a population

• Goal: Deliver care in a less costly and more coordinated, efficient and patient-centered manner

• Centers for Medicare & Medicaid Services (CMS) is leading this but commercial insurance is very involved
Important components of an ACO

- **Financial model** – growth vs. cost, upside/downside risk, shared savings, capitation, risk corridor and size

- **ACO Design** – comparison group, patient attribution, case mix adjustment

- **Provider group structure** – Governance, integration, infrastructure (especially EMR, registries, data analytic capability)

- **Quality/Efficiency evaluation methodology** – how good are they, what is the burden
Components needed for success

- Clinical models of care
- Physician engagement
Key Clinical Interventions

Overall strategy: Decrease preventable admissions/readmissions, manage chronic conditions, and coordinate care of complex and costly patients

– Transitional care interventions
  • Call-Back Program for patients discharged from hospital and ED
  • Geriatric acute care consults, delirium prevention program, BOOST
  • Transitional care clinics in Geriatrics and Cardiology
  • Sub-acute nursing home program
  • Home care, home visits

– Care coordination interventions for high risk/high cost patients
  • Complex care coordination for frail elders, dual eligible Medicare
  • Disease management program for heart failure and diabetes
  • Palliative care consult service and hospice program for end of life care

– Year 5 – Patient centered Medical Home (PCMH) implemented
Geriatrics and Academic Healthcare Systems
Clinical Redesign Issues for an Academic Medical Center

CON’s
- AMC’s experience adverse patient selection
- AMC’s may have unstable population for management
- AMC’s may have an insufficient primary care foundation
- AMC’s have other missions (research, teaching)
- Referral business may be different from ACO business

PRO’s
- AMC’s may be best suited to care for high cost/high risk patients (UMHS was most successful this group)
- Academic systems have Geriatrics and other specialties used to complex patients
- Academic physicians may be more attuned to “appropriate” care
- In FFS world, AMC’s may be relatively integrated
### Target Minus Assigned Beneficiaries Expenditures Per Person Year by Subgroup, Performance Year 2

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Assigned Beneficiary Prevalence (%)</th>
<th>Average of 10 Group Practices</th>
<th>Average of 4 Groups Sharing PY2 Savings</th>
<th>Average of 6 Groups Not Sharing PY2 Savings</th>
<th>University of Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Difference ($)</td>
<td>P-Value</td>
<td>Difference ($)</td>
<td>P-Value</td>
<td>Difference ($)</td>
</tr>
<tr>
<td>All Assigned Beneficiaries</td>
<td>100.0%</td>
<td>120 0.00</td>
<td>334 0.00</td>
<td>-23 0.65</td>
<td>335 0.06</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>13.9%</td>
<td>103 0.60</td>
<td>378 0.27</td>
<td>-81 0.71</td>
<td>755 0.28</td>
</tr>
<tr>
<td>Any of the 70 Risk Adjusted Diagnoses</td>
<td>72.3%</td>
<td>161 0.01</td>
<td>459 0.00</td>
<td>-38 0.62</td>
<td>452 0.05</td>
</tr>
<tr>
<td>Decedents</td>
<td>4.3%</td>
<td>938 0.14</td>
<td>1698 0.13</td>
<td>431 0.58</td>
<td>4,082 0.04</td>
</tr>
<tr>
<td>Risk Score in upper 10%</td>
<td>16.0%</td>
<td>413 0.17</td>
<td>1459 0.00</td>
<td>-285 0.45</td>
<td>1,654 0.04</td>
</tr>
<tr>
<td>Risk Score in upper 25</td>
<td>33.5%</td>
<td>231 0.13</td>
<td>777 0.00</td>
<td>-133 0.44</td>
<td>923 0.04</td>
</tr>
</tbody>
</table>
Growth rate in Medicare spending from Base Year (2004) to Year 5 (2010)

<table>
<thead>
<tr>
<th></th>
<th>All patients</th>
<th>HF</th>
<th>DM</th>
<th>CAD</th>
<th>High risk score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UM unadjusted</strong></td>
<td>21.42</td>
<td>17.3</td>
<td>11.1</td>
<td>17.3</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>CG unadjusted</strong></td>
<td>25.63</td>
<td>22.3</td>
<td>18.5</td>
<td>13.6</td>
<td>24.8</td>
</tr>
<tr>
<td><strong>UM risk adjusted</strong></td>
<td>6.5</td>
<td>5.8</td>
<td>6.7</td>
<td>0.4</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>CG risk adjusted</strong></td>
<td>11.5</td>
<td>10.7</td>
<td>10.4</td>
<td>4.1</td>
<td>10.3</td>
</tr>
</tbody>
</table>

UM - University of Michigan
CG – Comparison Group
Managing Populations: Stratified Approach to Patient Care

I. Healthy Population

II. Mild-moderate illness
- Well-compensated multiple diseases
- Single disease

III. Complex
- Complex illness
- Multiple Chronic Disease
- Other issues (cognitive, frail elderly, social, financial)

IV. Most complex
- (e.g., Homeless, Schizophrenia)
Theory of ACO Development

Home Care Services
  Sub-acute Care

Public Health Safety Net Clinics

Hospital Care

Specialty Care

Patient Centered Medical Home

Primary Care
Why Would an Academic Healthcare System Decide to Participate in Clinical Redesign?

- Prepare for a new business model, “Outcomes Based Payment” and provider risk
- Enhance health system capability for population management (cost and quality)
- Enhance provider-based care coordination and quality interventions
- Collaborate with leading physician groups & CMS
- Be leaders in healthcare delivery system redesign
- (Sometimes they have no choice)
A word about quality
## 32 Quality Measures in PGP Demonstration

<table>
<thead>
<tr>
<th>Diabetes Mellitus</th>
<th>Congestive Heart Failure</th>
<th>Coronary Artery Disease</th>
<th>Preventive Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HbA1c Test</strong></td>
<td>4</td>
<td>1</td>
<td>1 Blood Pressure Measured</td>
</tr>
<tr>
<td><strong>HbA1c &lt; 9%</strong></td>
<td>1</td>
<td>4</td>
<td>1 Blood Pressure &lt; 140/90</td>
</tr>
<tr>
<td><strong>Blood Pressure &lt; 140/90</strong></td>
<td>1</td>
<td>1</td>
<td>1 Care Plan if elevated BP</td>
</tr>
<tr>
<td><strong>LDL Test</strong></td>
<td>4</td>
<td>1</td>
<td>1 Blood Pressure Measured</td>
</tr>
<tr>
<td><strong>LDL &lt; 130</strong></td>
<td>1</td>
<td>1</td>
<td>1 Lipid Profile</td>
</tr>
<tr>
<td><strong>Urine Protein Testing</strong></td>
<td>4</td>
<td>1</td>
<td>1 LDL &lt; 130</td>
</tr>
<tr>
<td><strong>Eye Exam</strong></td>
<td>4</td>
<td>1</td>
<td>1 ACE-I if diabetes or LV systolic dysfunction</td>
</tr>
<tr>
<td><strong>Foot Exam</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Influenza Vaccination</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Pneumonia Vaccine</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL Points</strong></td>
<td>22</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>
# Quality Initiatives: Physician Diabetes Feedback Report

## Patients with no A1C Test in Prior 6 Months

<table>
<thead>
<tr>
<th>CPI</th>
<th>Name</th>
<th>Age</th>
<th>A1C at Close of</th>
<th>Most Recent Lab, Medication and Visit Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jul-Dec 04</td>
<td>Jan-Jun 05 On Insulin LDLC Date/Result Statin BP Proteinuria Date/Result ACE or ARB Foot Exam Eye Exam PC or Endo. Visit Endocrinology Physician Resident or Nurse Practitioner</td>
</tr>
<tr>
<td>55</td>
<td>6.7</td>
<td>9.0</td>
<td>Y 10/05 100</td>
<td>Y 12/03 10/05 pos Y</td>
</tr>
</tbody>
</table>

## Patients with A1C > 7.0% in Prior 6 Months

<table>
<thead>
<tr>
<th>CPI</th>
<th>Name</th>
<th>Age</th>
<th>A1C at Close of</th>
<th>Most Recent Lab, Medication and Visit Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jul-Dec 04</td>
<td>Jan-Jun 05 On Insulin LDLC Date/Result Statin BP Proteinuria Date/Result ACE or ARB Foot Exam Eye Exam PC or Endo. Visit Endocrinology Physician Resident or Nurse Practitioner</td>
</tr>
<tr>
<td>59</td>
<td>9.9</td>
<td>8.7</td>
<td>06/05 85</td>
<td>Y 12/05 09/05 neg Y 07/05 06/05 07/05</td>
</tr>
<tr>
<td>55</td>
<td>7.5</td>
<td>7.3</td>
<td>06/05 82</td>
<td>Y 14/03 09/05 neg Y 09/05 07/05 09/05</td>
</tr>
</tbody>
</table>

## Patients with A1C <= 7.0% in Prior 6 Months

<table>
<thead>
<tr>
<th>CPI</th>
<th>Name</th>
<th>Age</th>
<th>A1C at Close of</th>
<th>Most Recent Lab, Medication and Visit Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jul-Dec 04</td>
<td>Jan-Jun 05 On Insulin LDLC Date/Result Statin BP Proteinuria Date/Result ACE or ARB Foot Exam Eye Exam PC or Endo. Visit Endocrinology Physician Resident or Nurse Practitioner</td>
</tr>
<tr>
<td>65</td>
<td>6.4</td>
<td>6.0</td>
<td>06/05 94</td>
<td>Y 13/05 02/05 neg Y 06/05 06/05 06/05</td>
</tr>
<tr>
<td>64</td>
<td>6.8</td>
<td>6.2</td>
<td>08/05 19</td>
<td>Y 12/05 09/05 neg Y 08/05 01/05 06/05</td>
</tr>
<tr>
<td>55</td>
<td>5.5</td>
<td>5.5</td>
<td>10/05 120</td>
<td>11/05 09/05 neg 10/05 04/05 05/05</td>
</tr>
<tr>
<td>39</td>
<td>5.5</td>
<td>6.0</td>
<td>01/05 56</td>
<td>Y 11/72 10/05 12/04 06/05</td>
</tr>
<tr>
<td>53</td>
<td>6.0</td>
<td>6.7</td>
<td>08/05 49</td>
<td>Y 11/78 09/05 neg Y 05/05 07/05 09/05</td>
</tr>
</tbody>
</table>
# Clinical Initiatives – Quality

*Site Diabetes Feedback Report*

<table>
<thead>
<tr>
<th>Site Name</th>
<th>N</th>
<th>A1C Test</th>
<th>A1C &lt; 9%</th>
<th>LDL Test</th>
<th>LDL &lt; 130 mg/dL</th>
<th>LDL &lt; 100 mg/dL</th>
<th>On Statin</th>
<th>Monitor for Nephropathy</th>
<th>Urine Protein &amp; on an ACE-I/ARB</th>
<th>Foot Exam</th>
<th>Eye Exam</th>
<th>B.P. &lt; 135/80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brianwood GM</td>
<td>760</td>
<td>93%</td>
<td>83%</td>
<td>96%</td>
<td>86%</td>
<td>66%</td>
<td>68%</td>
<td>74%</td>
<td>79%</td>
<td>47%</td>
<td>72%</td>
<td>49%</td>
</tr>
<tr>
<td>Canton GM</td>
<td>789</td>
<td>93%</td>
<td>81%</td>
<td>95%</td>
<td>83%</td>
<td>60%</td>
<td>65%</td>
<td>76%</td>
<td>80%</td>
<td>56%</td>
<td>64%</td>
<td>50%</td>
</tr>
<tr>
<td>Canton Med/Peds</td>
<td>161</td>
<td>90%</td>
<td>76%</td>
<td>83%</td>
<td>78%</td>
<td>56%</td>
<td>65%</td>
<td>88%</td>
<td>85%</td>
<td>62%</td>
<td>71%</td>
<td>52%</td>
</tr>
<tr>
<td>Chelsea GM</td>
<td>194</td>
<td>78%</td>
<td>75%</td>
<td>82%</td>
<td>72%</td>
<td>52%</td>
<td>59%</td>
<td>57%</td>
<td>61%</td>
<td>44%</td>
<td>40%</td>
<td>52%</td>
</tr>
<tr>
<td>Livonia GM</td>
<td>168</td>
<td>93%</td>
<td>82%</td>
<td>96%</td>
<td>85%</td>
<td>65%</td>
<td>67%</td>
<td>85%</td>
<td>84%</td>
<td>68%</td>
<td>68%</td>
<td>53%</td>
</tr>
<tr>
<td>Saline GM</td>
<td>180</td>
<td>91%</td>
<td>84%</td>
<td>96%</td>
<td>86%</td>
<td>71%</td>
<td>75%</td>
<td>80%</td>
<td>91%</td>
<td>70%</td>
<td>66%</td>
<td>44%</td>
</tr>
<tr>
<td>Turner Geriatric</td>
<td>376</td>
<td>89%</td>
<td>84%</td>
<td>87%</td>
<td>79%</td>
<td>61%</td>
<td>61%</td>
<td>72%</td>
<td>77%</td>
<td>37%</td>
<td>63%</td>
<td>52%</td>
</tr>
<tr>
<td>W. Ann Arbor GM</td>
<td>202</td>
<td>92%</td>
<td>85%</td>
<td>91%</td>
<td>84%</td>
<td>66%</td>
<td>71%</td>
<td>67%</td>
<td>96%</td>
<td>75%</td>
<td>80%</td>
<td>64%</td>
</tr>
</tbody>
</table>
Activate Patients

- Activate and educate patients by providing them with information on how they are doing at the time of their visit

- Insert patient data onto a take-home educational sheet
Quality (and efficiency)

1. Many measures for ACO Demonstrations and Programs are new and untested with incomplete specifications.
2. 33 measures – publically reported but pay for reporting in the first year
3. Multiple domains:
   1. Patient experience – CAHPS
   2. Ambulatory clinical quality but includes composite measures and some new measures (falls, COPD, osteoporosis)
   3. Coordination measures – medication reconciliation, readmissions
   4. Utilization measures – ambulatory care sensitive admissions
Quality measurement is evolving

• Some favorable trends:
  – Geriatricians involved
  – Awareness of complex patients and frail elders
  – Evidence for overtreatment and competing risks
  – Aware of limitations with current measures
  – Desire for measures of function, patient-reported outcomes

• Concerning trends remain:
  – Forcing outcome measures when make no sense
  – Composite measures
  – Use of admission/readmission measures prematurely
  – Interest in episodes, one disease at a time approach
  – Interest in registries, one disease at a time
Model of multiple comorbidities
(Boyd, C. et al., *Public Health Reviews* 2010)
Quality Framework for People with MCC’s

- Social and Environmental Context
- National Priorities for Improving Health Care
- Types of Care
- Sites & Providers of Care
- Effective Communication and Care Coordination
- Affordable Care and Care Coordination
- Patient Safety
- Time
- Person-and-Family-Centered Care
- Effective Prevention and Treatment
- Health and Well-Being

- Screening
- Prevention
- Diagnosis
- Primary Care
- Specialty Care
- Home-Based Care
- Condition
- Condition
- Condition
- Pharmacy
- Nursing Home
- Hospital & Post-Acute
- Community & Schools
- Community Services
- Acute Exacerbation
- Rehab
- End-of-life care
- Palliation
- Effective Communication and Care Coordination
- Affordable Care and Care Coordination
- Patient Safety
- Time
- Person-and-Family-Centered Care
- Effective Prevention and Treatment
- Health and Well-Being

- Social and Environmental Context
- National Priorities for Improving Health Care
- Types of Care
- Sites & Providers of Care
- Effective Communication and Care Coordination
- Affordable Care and Care Coordination
- Patient Safety
- Time
- Person-and-Family-Centered Care
- Effective Prevention and Treatment
- Health and Well-Being
Summary

• Geriatric models of care and key principles inform delivery system redesign and healthcare reform
• Academic Healthcare Systems look to Geriatrics when they begin clinical redesign
• Geriatricians must:
  – understand key features of delivery system redesign
  – adapt models of care to their unique system
• Beware of poorly designed “organized systems of care”
• Get involved with Quality – shifting paradigm important for patients, families and Geriatricians
Summary – What about the Patients?

• Redesign must be patient-centered
• What do patients and families want?
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