Quality of Diabetes Care for Adults with Developmental Disabilities

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Medicaid Medical Care Advisory Committee
March 3, 2011
Background

- Comprehensive diabetes care (HEDIS Measures)
  - Annual/semi-annual measures
    - HbA1c (hemoglobin A1c)
    - Serum lipids (cholesterol testing)
    - Eye exams
    - Microalbumin tests (certain subgroups)
  - Limits long-term adverse outcomes of diabetes
    - Reduce health care resources
    - Improve quality of life
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THE STATE OF HEALTH CARE QUALITY 2009

NATIONAL COMMITTEE FOR QUALITY ASSURANCE
WASHINGTON, D.C.
Diabetes & Persons with IDD

IDD = Intellectual & Developmental Disabilities

- Prevalence
  - NC-Havercamp:
    - IDD, 7.9%
    - No disabilities, 3.9%
  - SC-McDermott:
    - Sensory disabilities, 31.6%
    - Psychiatric disabilities, 24.7%
    - IDD, 10.4%
    - ...despite similar rates of obesity (~67%)
Access to Appropriate Care?

- Persons with IDD
  - History of difficulty accessing appropriate health care
  - Possess numerous risk factors for diabetes
  - Have unique needs within health care setting
  - Increasing life expectancy

- Study purpose:
  - What is the quality of diabetes care for adults with IDD enrolled in Kansas Medicaid?
Methods: Design & Sample

- Retrospective cross-section
  - Study period Sept 2006-Aug 2007
- Adults (ages 18-65) with IDD
  - Presence of Medicaid ID number in BASIS data (SRS)
- Kansas Medicaid FFS enrollees
  - Continuous Medicaid enrollment (study period)
- Diabetes case ascertainment
  - Diabetes diagnosis codes or medications
  - July 2005-August 2006 (prior period)
Methods: Data files

- Medicaid eligibility records
- Paid claims
  - Prescription drugs
  - Outpatient/professional
- BASIS (Basic Assessment and Services Information System)
  - One time data pull (July 2008)
  - Used to select Medicaid IDs for persons with IDD
Quality of care measures

- CPT codes (outpatient/professional claims)
  - HbA1c + glucose
    - Glucose not part of HEDIS
  - Cholesterol
  - Eye Exams
  - Microalbuminaria
  - Primary care visit (PCP)

- Medicare cross-over claims included in data

*Values in Table 1 (article)*
Demographics & Comorbidities

- Medicaid eligibility files
  - Age: 18-30, 31-50, 50+ yrs
  - Sex
  - Race: Caucasian vs. non-caucasian
  - Urban/rural: county population > 50,000 = urban
  - Dual-eligibility (Medicare): any vs none

- Hypertension
  - ICD9 code (401-405): 2 or more outpatient visits
Results

- 666 out of 5,930 persons with IDD with diabetes
  - Prevalence = 11.2%
- Characteristics (N=666)
  - Age, 43.1 yrs
  - Caucasian, 86.6%
  - Male, 50.0%
  - Rural, 56.7%
  - Duals, 62.2%
  - Hypertension, 41.1%

Comparison to overall IDD population shown in Table 2 (article)
Diabetes QOC for Persons with IDD, by age groups

- HbA1c
- Cholesterol
- Eye exam
- Microalbuminaria
- PCP visit
Diabetes QOC for Persons with IDD, by dual eligibility

- HbA1c
- Cholesterol
- Eye exam
- Microalbuminaria
- PCP visit
Diabetes QOC for Persons with IDD, with comorbid hypertension

- HbA1c
- Cholesterol
- Eye exam
- Microalbuminuria
- PCP visit
Multivariable Results

- Probability of testing
  - HbA1c
    - HTN  AOR = 2.32 (1.69-3.20)
    - Dual  AOR = 0.68 (0.50-0.94)
  - Cholesterol
    - Youngest (18-30)  AOR = 0.60 (0.39-0.93)
    - Dual  AOR = 0.63 (0.45-0.87)
    - HTN  AOR = 1.97 (1.43-2.72)
Discussion

- Adults with IDD (KS Medicaid enrollees)
  - Screened less frequently for key diabetes care
    - HbA1c: 51.7% vs. 77.0% national Medicaid
    - Cholesterol: 44.3% vs. 71% national Medicaid
    - Eye exams: 29.3% vs. 51.4% national Medicaid
  - Despite PCP visit during period: 93.5%
- Diabetes prevalence, 11.2% based upon claims
  - Likely under-reported
Value of BASIS data (SRS)

Diabetes QOC measures, Adults with IDD, 9/07-8/08 (n=663)

- HbA1c: 55.8%
- Cholesterol: 50.5%
- Eye exam: 33.3%
- Microalbuminuria: 19.2%
- PCP visit: 93.5%
Diabetes QOC measures, Adults with IDD, by severity of IDD
Diabetes QOC measures, Adults with IDD, by HCBS enrollment
Diabetes QOC measures, Adults with IDD, by living arrangement

- HbA1c
- Cholesterol
- Eye exam
- Microalbuminaria
- PCP visit

Yes, it's 0 for state hospital
And from the DAI...

- Adults with IDD, ages 18-64
- Continuously enrolled in Medicaid FFS
- HCBS-DD (LOC-based)
- Four fiscal years (FY): 06, 07, 08, 09
- Thomson-Reuters Diabetes measures
  - HbA1c
  - Cholesterol
  - Eye exams
  - Microalbuminaria
### Medicaid FFS HCBS_DD (LOC) with Diabetes

<table>
<thead>
<tr>
<th>Diabetes QOC Measure</th>
<th>FY 2006</th>
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<td>60%</td>
<td>68%</td>
<td>68%</td>
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<tr>
<td>Diabetes Lipid Test Rate</td>
<td>41%</td>
<td>51%</td>
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<tr>
<td>Diabetes Eye Exam Rate</td>
<td>34%</td>
<td>41%</td>
<td>39%</td>
<td>44%</td>
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<tr>
<td>Diabetes Microalbumin Rate</td>
<td>55%</td>
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<tr>
<td>Members</td>
<td>814</td>
<td>838</td>
<td>851</td>
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*DAI Run 07/28/2010*
DAI vs. BASIS Analyses

- Different denominators
  - DAI: HCDD enrollees
  - BASIS: members who appeared in BASIS
    - HCBS & non-HCBS enrollees
    - Not all adults with DD had a valid BASIS in data
Implications

- Missed diagnosis?
- Poorer diabetes care $\rightarrow$ amputations, blindness, more frequent hospitalizations, poorer quality of life
  - Need to examine potentially avoidable hospitalizations
- Disease management & quality improvement
  - Team-based approach
    - MTG project: case managers & families want more guidance
  - Peer-review
    - Providers: highlight results & identify barriers, discuss & educate
The Chronic Care Model

Community
- Resources and Policies
- Self-Management Support

Health Systems
- Organization of Health Care
  - Delivery System Design
  - Decision Support
  - Clinical Information Systems

Improved Outcomes
- Informed, Activated Patient
- Productive Interactions
- Prepared, Proactive Practice Team

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