Quality of Diabetes Care for Adults with Developmental Disabilities

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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

HbA1c TESTING
TRENDS, 2003–2008

YEAR	COMMERCIAL	MEDICARE	MEDICAID
2008	89.0	88.3	80.5
2007	88.1	88.1	77.3
2006	87.5	87.2	78.0
2005	87.5	88.9	76.2
2004	86.6	89.1	76.0
2003	84.6	87.9	74.8

LDL-C SCREENING
TRENDS, 2003–2008

YEAR	COMMERCIAL	MEDICARE	MEDICAID
2008	84.8	86.3	74.1
2007	83.9	85.7	70.8
2006	83.4	84.8	71.1
2005	92.3	93.3	80.5
2004	91.0	93.5	79.6
2003	88.4	91.1	75.9

EYE EXAMS
TRENDS, 2003–2008

YEAR	COMMERCIAL	MEDICARE	MEDICAID
2008	56.5	60.8	52.8
2007	55.1	62.7	49.9
2006	54.7	62.3	51.4
2005	54.8	66.5	48.6
2004	51.0	67.1	44.9
2003	48.8	64.9	45.0

THE STATE OF HEALTH CARE QUALITY 2009

NATIONAL COMMITTEE FOR QUALITY ASSURANCE
WASHINGTON, D.C.

MONITORING DIABETIC NEPHROPATHY
TRENDS, 2003–2008

YEAR	COMMERCIAL	MEDICARE	MEDICAID
2008	82.4	87.9	76.6
2007	80.6	85.7	74.4
2006	79.7	85.4	74.6
2005	55.1	60.2	48.8
2004	52.0	58.5	46.7
2003	48.2	53.6	43.7

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

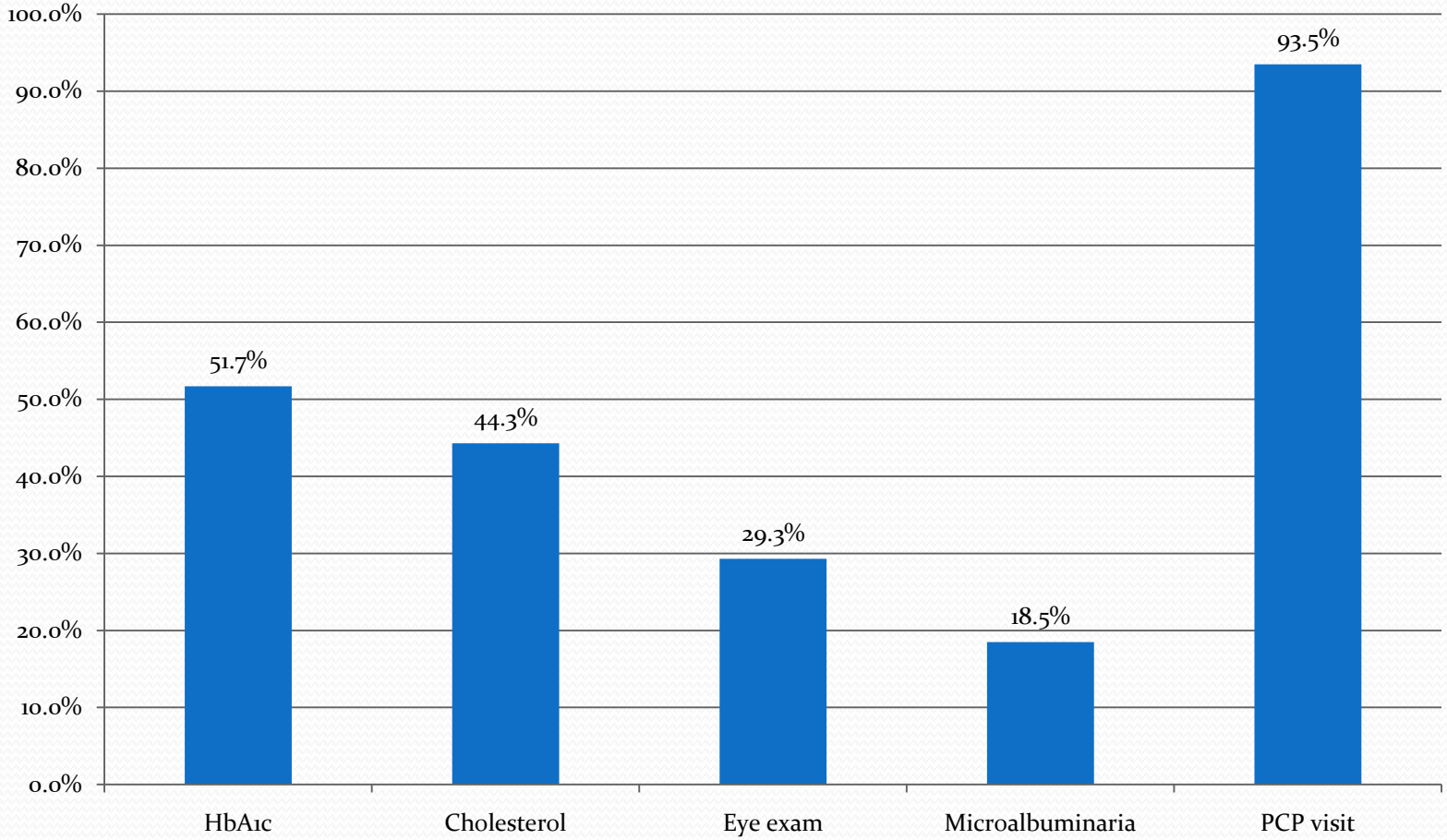
- Medicaid eligibility files
  - Age: 18-30, 31-50, 50+ yrs
  - Sex
  - Race: Caucasian vs. non-caucasian
  - Urban/rural: county population > 50,000 = urban
  - Dual-eligibility (Medicare): any vs none
- Hypertension
  - ICD9 code (401-405): 2 or more outpatient visits

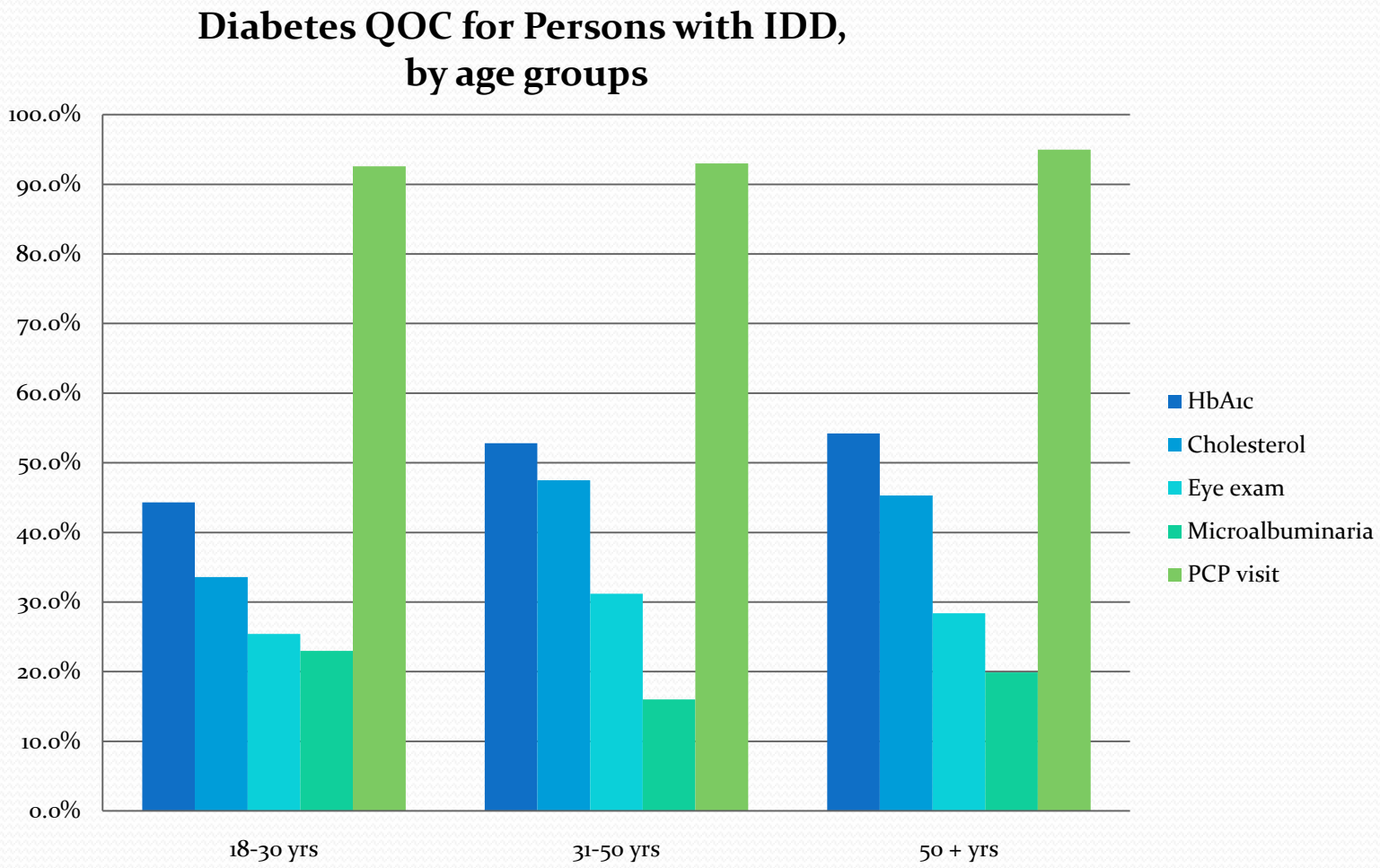
Results

- 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%

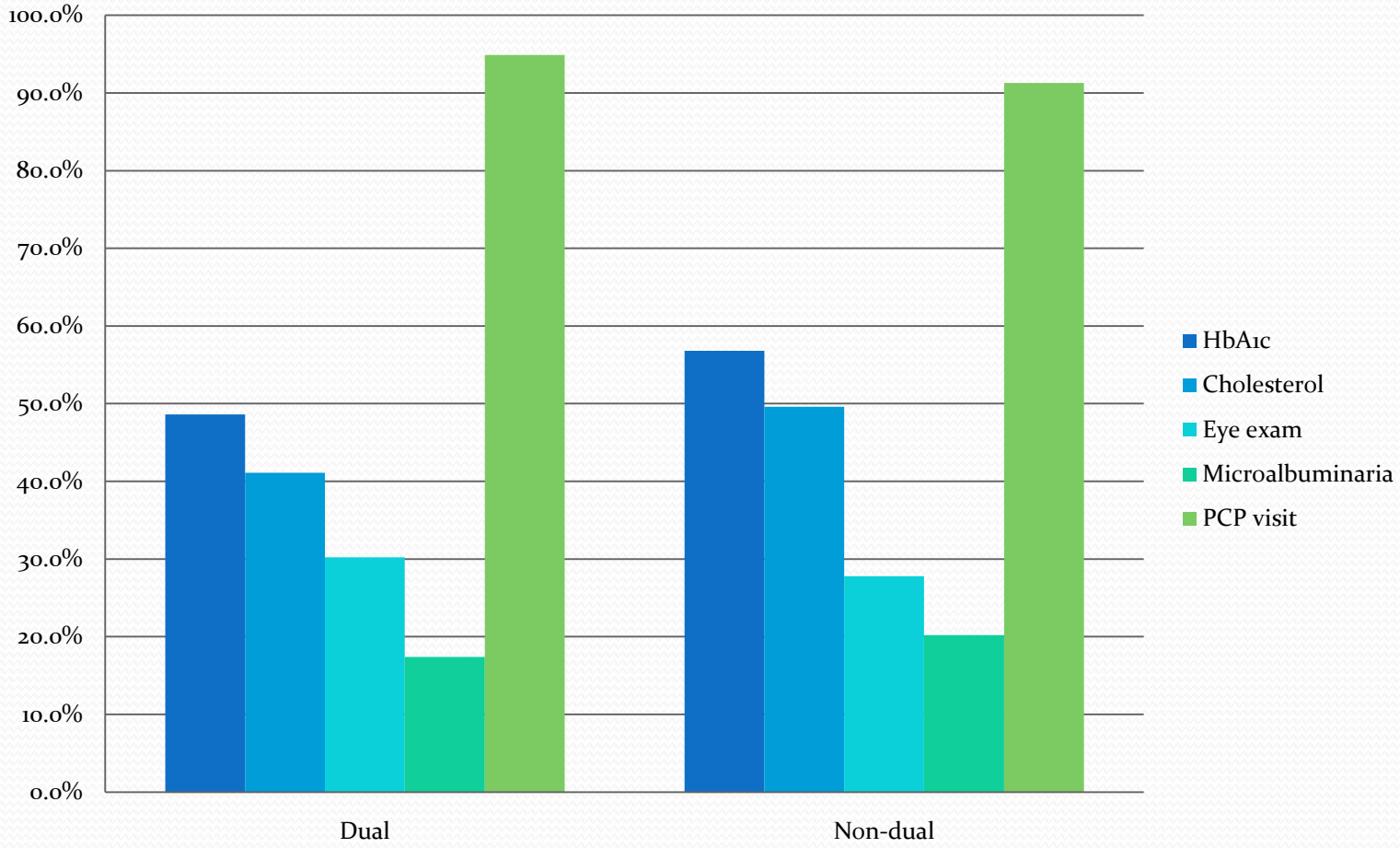
Comparison to overall IDD population shown in Table 2 (article)

Diabetes Quality of Care Measures for Persons with IDD, 9/06-8/07

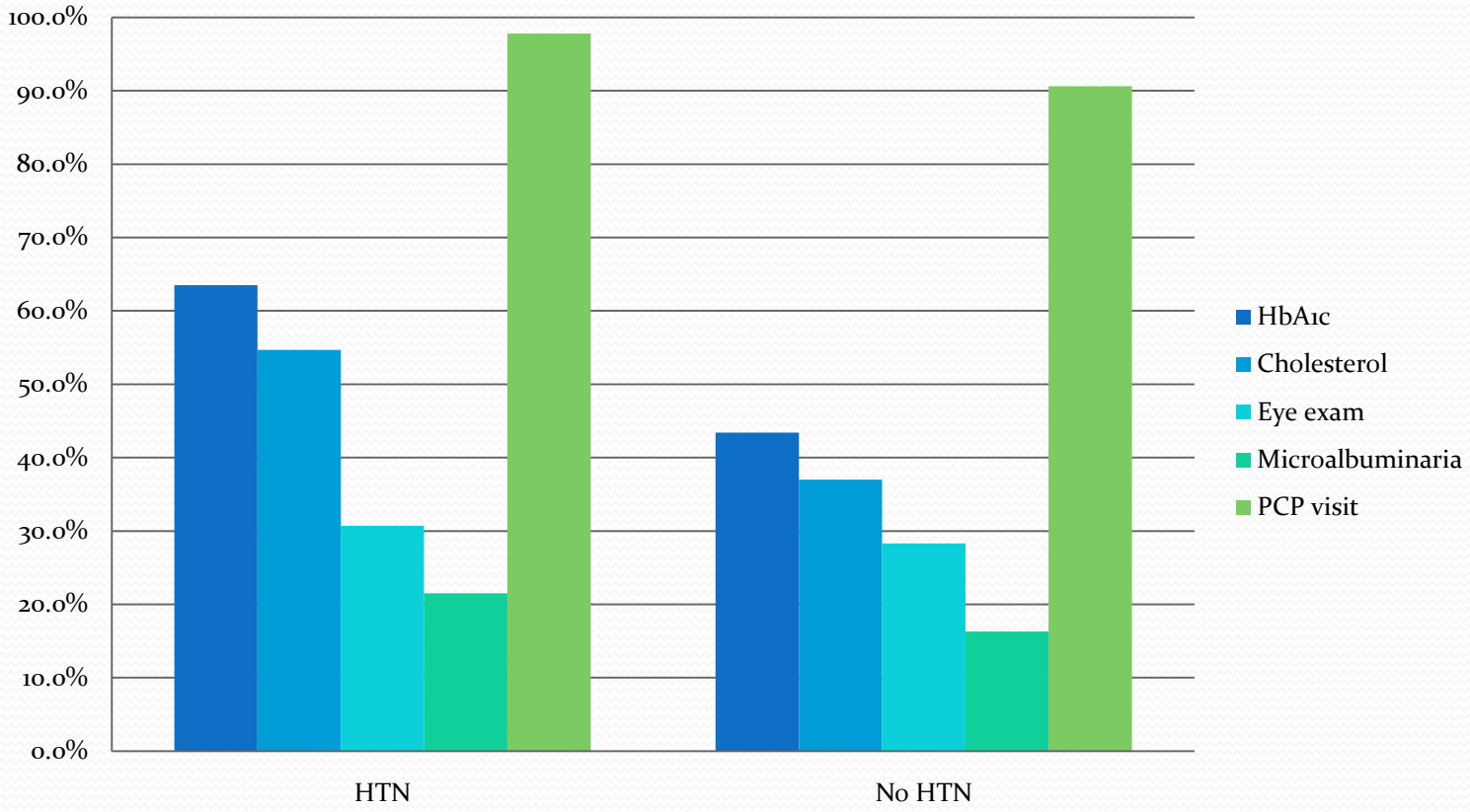



Diabetes QOC for Persons with IDD, by age groups
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
18-30 yrs
31-50 yrs
50 + yrs
HbA1c
Cholesterol
Eye exam
Microalbuminaria
PCP visit

Diabetes QOC for Persons with IDD, by dual eligibility



Diabetes QOC for Persons with IDD, with comorbid hypertension



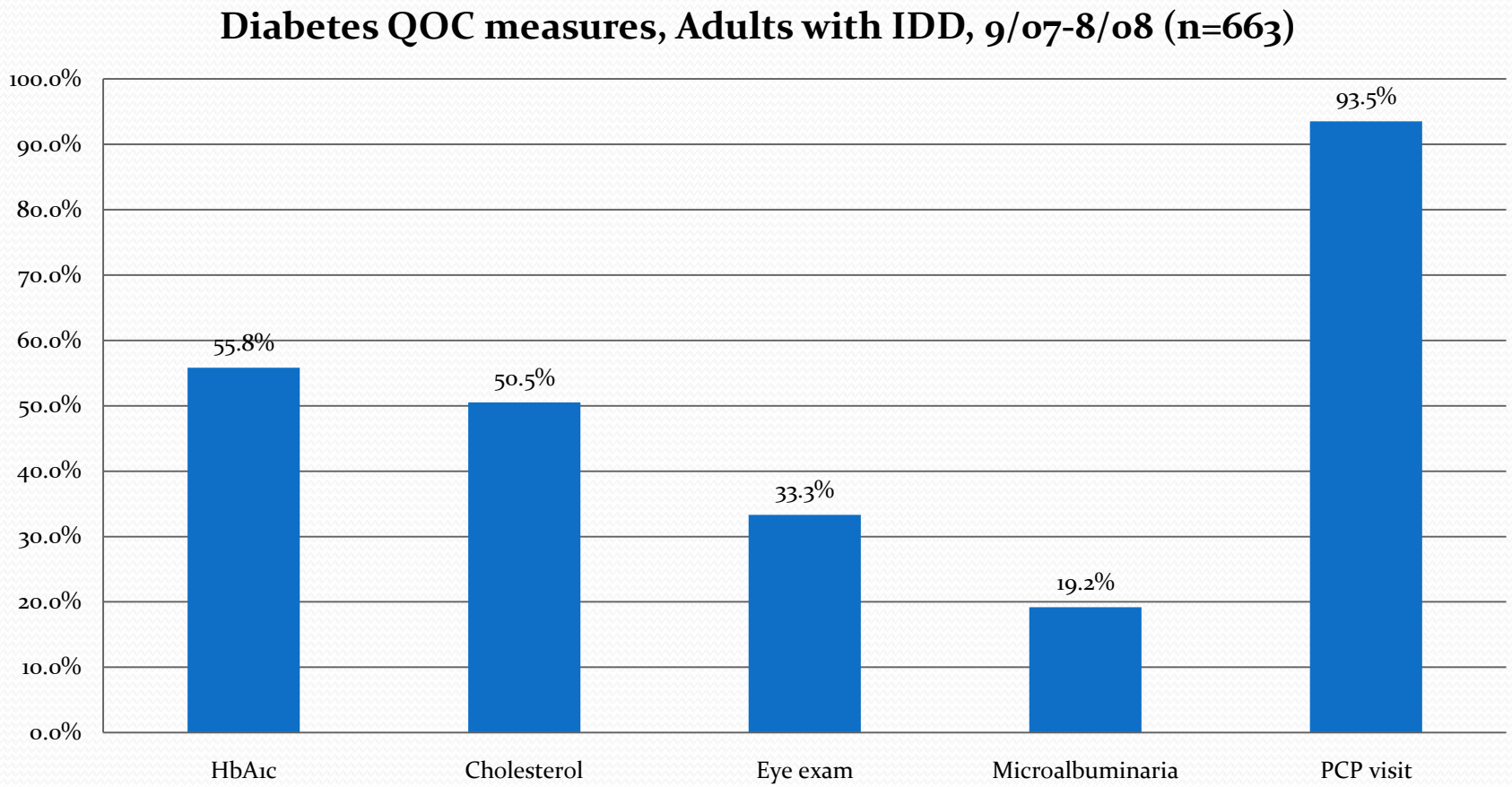
Multivariable Results

- 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)

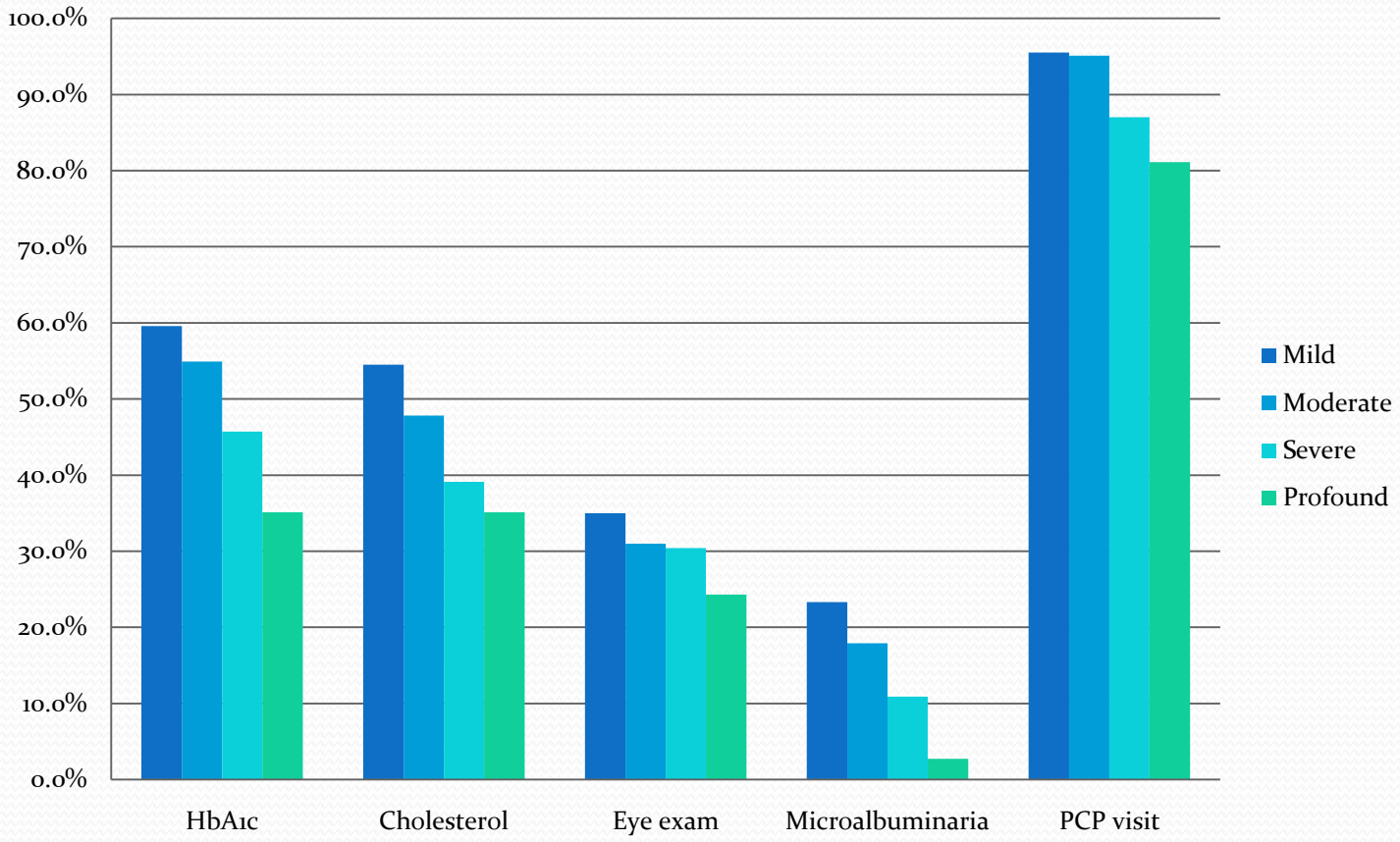
Discussion

- 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

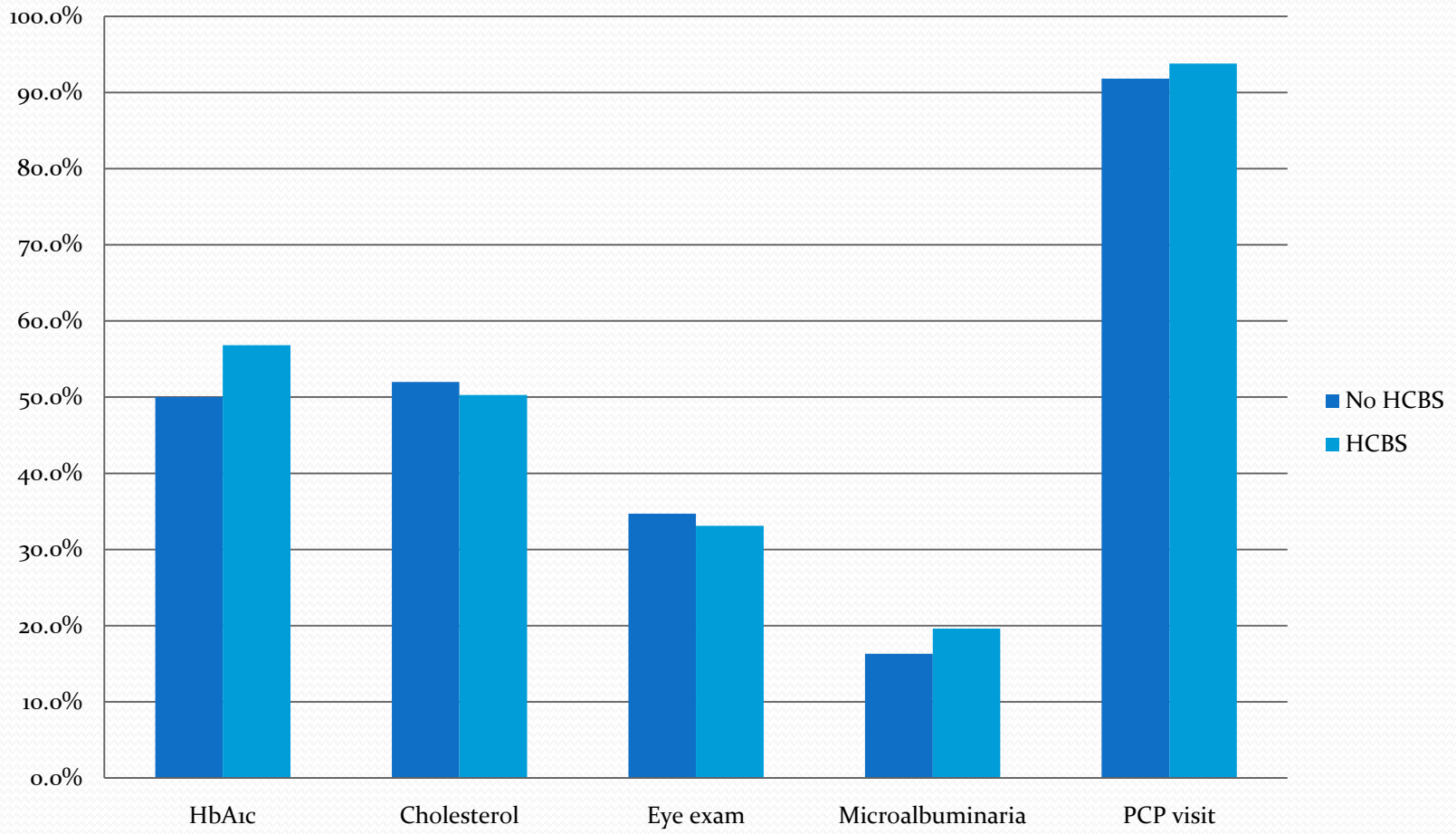
Value of BASIS data (SRS)



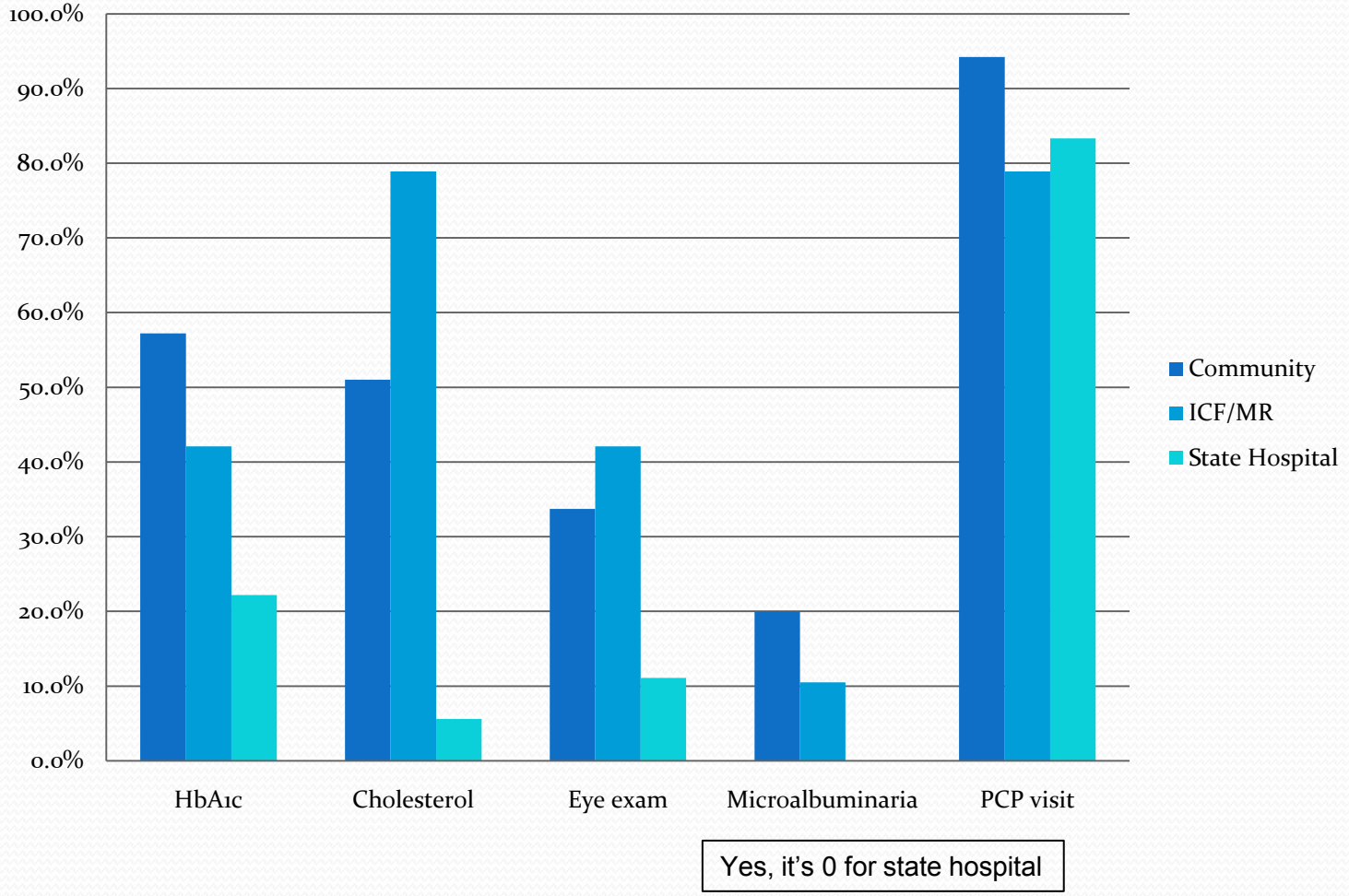
Diabetes QOC measures, Adults with IDD, by severity of IDD



Diabetes QOC measures, Adults with IDD, by HCBS enrollment



Diabetes QOC measures, Adults with IDD, by living arrangement



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

Diabetes QOC Measure	FY 2006	FY 2007	FY 2008	FY 2009
Diabetes HbA1c Test Rate	60%	68%	68%	82%
Diabetes Lipid Test Rate	41%	51%	55%	65%
Diabetes Eye Exam Rate	34%	41%	39%	44%
Diabetes Microalbumin Rate	55%	50%	55%	60%
Members	814	838	851	854

DAI Run 07/28/2010

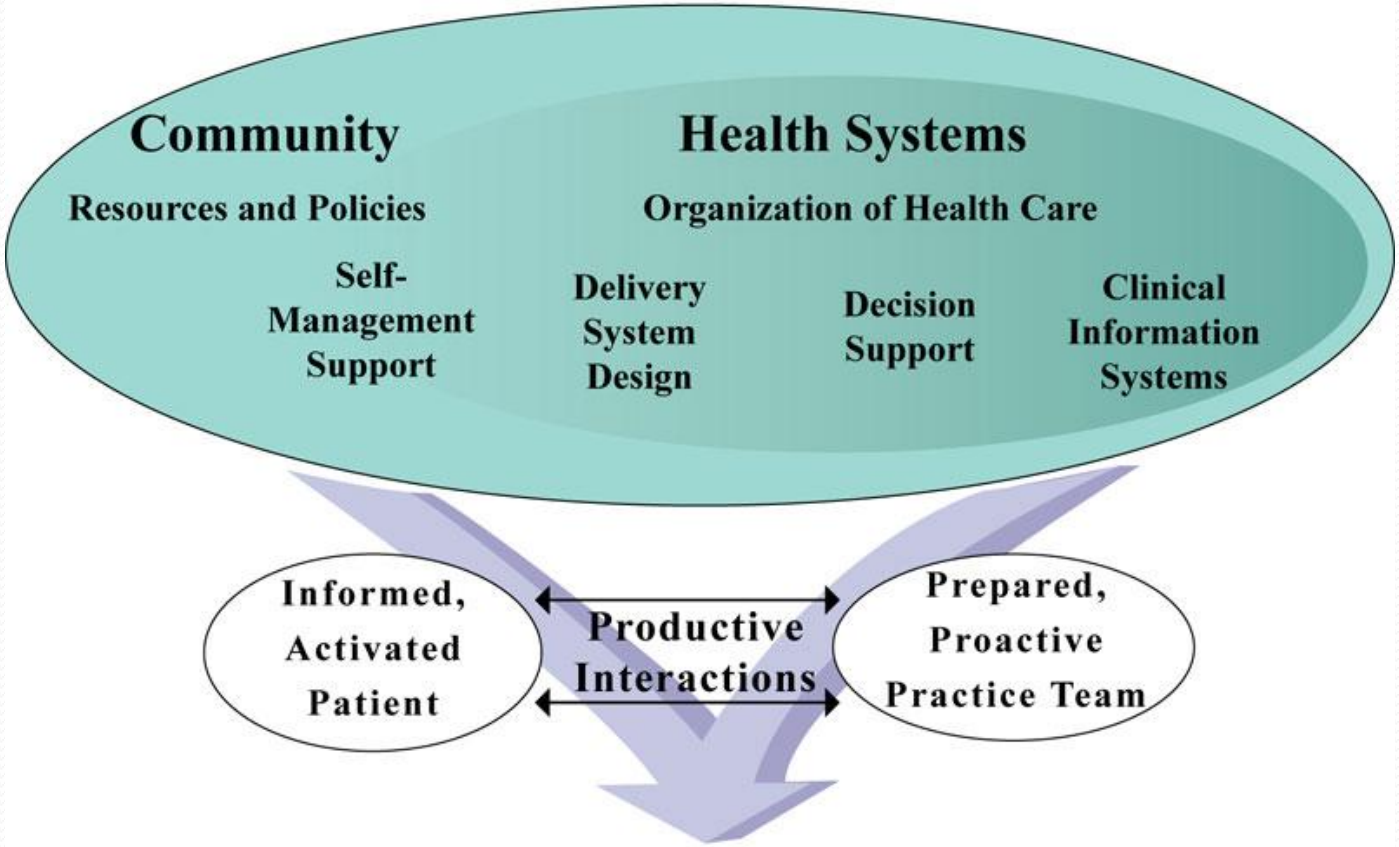
DAI vs. BASIS Analyses

- 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 → 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



Improved Outcomes