

Ethnic Disparities in Treatment of Schizophrenia and CMHC Catchment Area Characteristics

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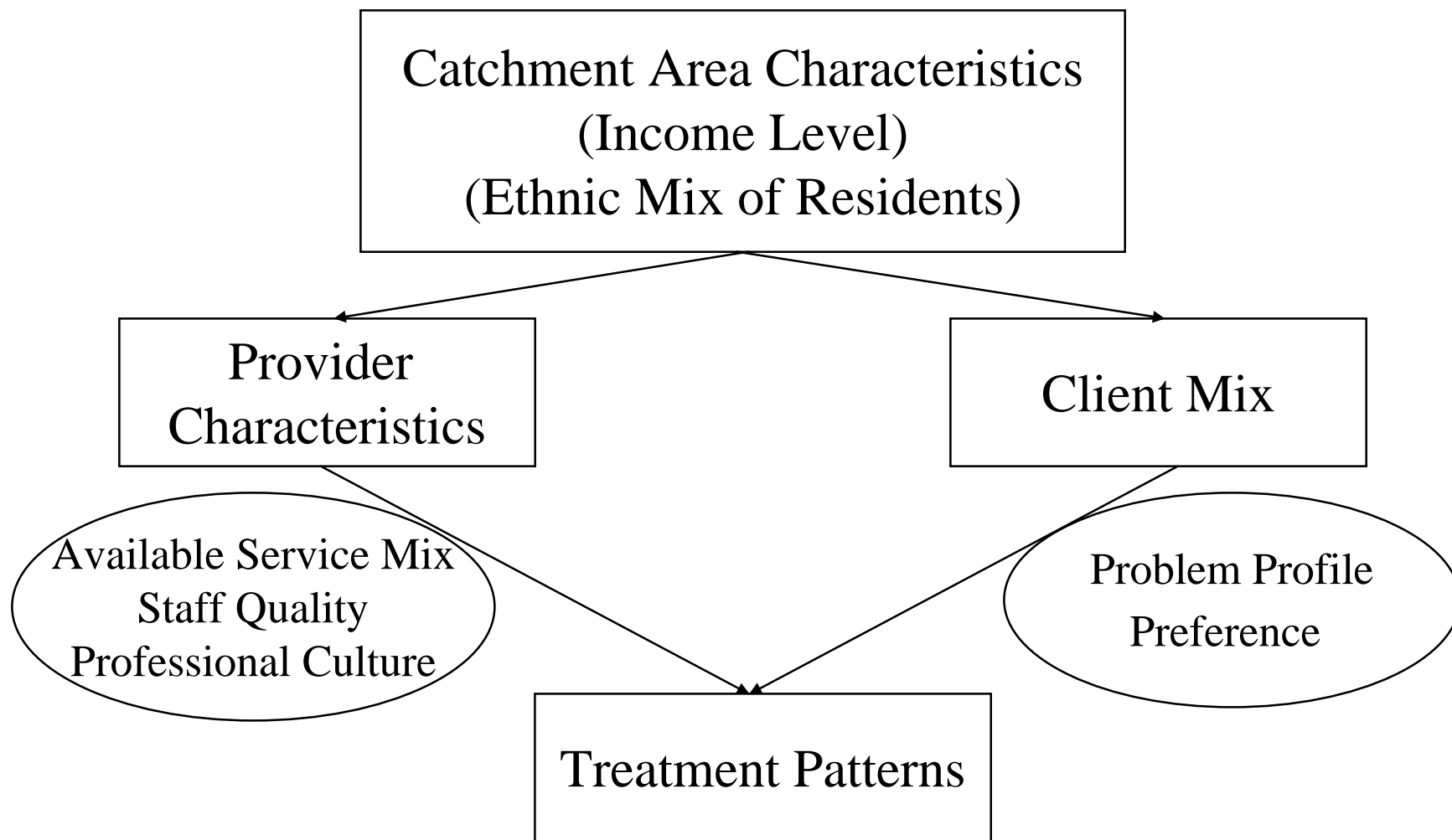
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Study Purpose

- To examine differences in treatment patterns of schizophrenia across different mental health catchment areas for publicly insured patients
 - Are treatment patterns different across CMHC catchment areas?
 - Are African-American patients treated differently within the similar catchment areas?

Conceptual Framework



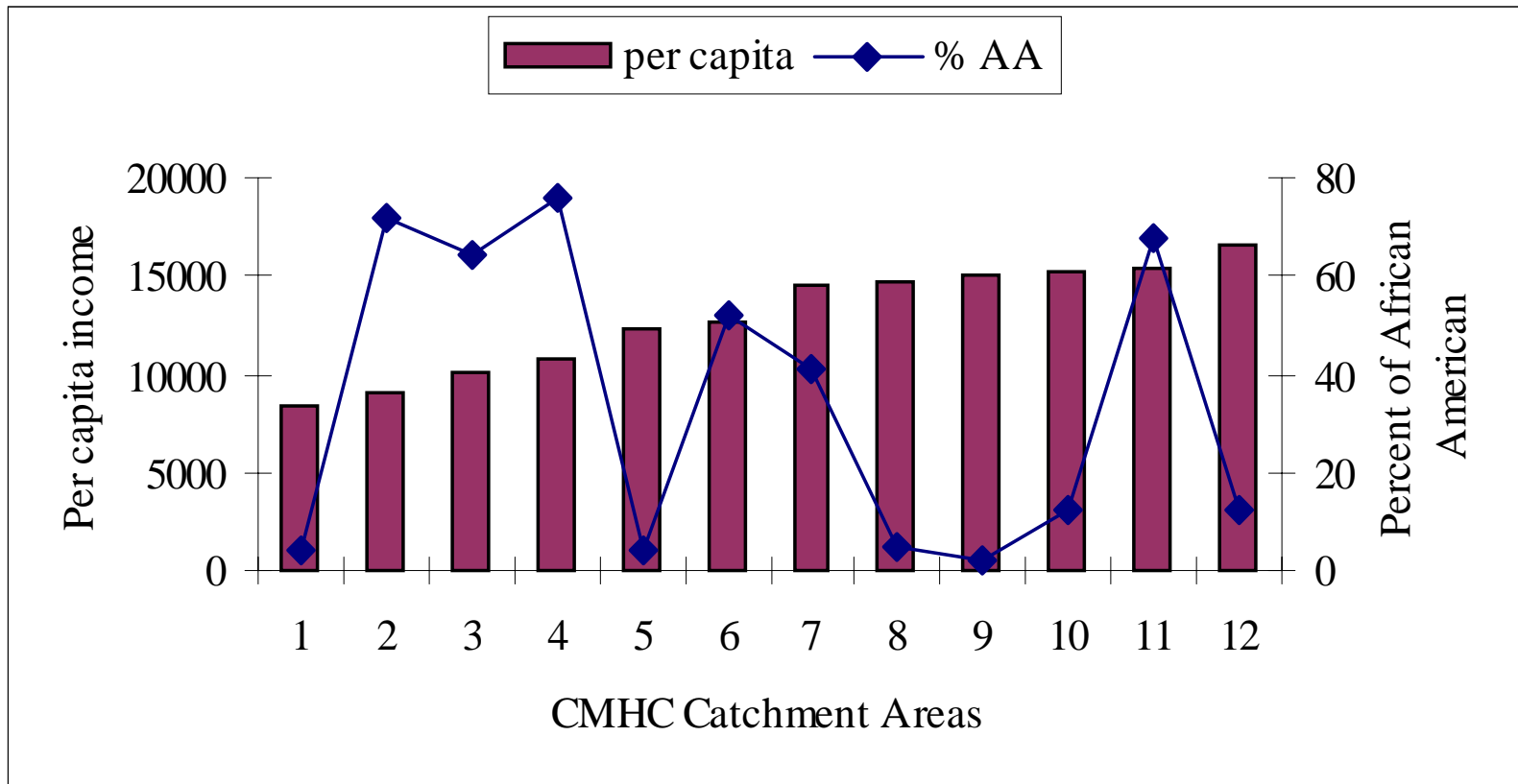
Study Steps

1. Identify CMHC Catchment area characteristics and group the catchment areas by income level and proportion of African-American residents of the areas
2. Examine mental health service use patterns of people treated by the CMHCs in the areas
3. Compare service patterns across the catchment area groups and between African-American and Caucasian clients within the group

Grouping of Catchment Areas

- Setting: 12 CMHC catchment areas in an urban county
- Data: Census data by census tract
 - calculate total number of residents, number of African-American (AA) residents, and per-capita income for each catchment area
- Variables: Income level and AA ratio
 - Rank order the areas by per-capita income: Higher Income (6 areas in upper half) vs. Lower Income (6 areas in lower half)
 - Rank order the areas by AA ratio: Higher AA (6 areas in upper half) vs. Lower AA (6 areas in lower half)
- Grouping: High Income-High AA; High Income-Low AA; Low Income-High AA; Low Income-Low AA

CMHC Area Characteristics



Characteristics of Groups

| | Higher Income | | Lower Income | |
|---------------------------|---------------|---------|--------------|---------|
| | Low AA | High AA | Low AA | High AA |
| Catchment Area Population | 401,294 | 204,012 | 270,240 | 709,598 |
| % of African American | 7% | 54% | 4% | 68% |
| Per capita income | 15,190 | 14,912 | 10,667 | 10,053 |

Characteristics of CMHC Clients with Schizophrenia

- Study Subjects
 - Adults individuals who were continuously enrolled in Medicaid and received treatment for schizophrenia through any of 12 CMHCs during fiscal year of 1996
 - Identify a CMHC with which a client had the most frequent contacts during the study period

Data Sources and Analysis

- Medicaid Enrollment and Claims Files
 - Medicaid eligibility data -- MA enrollment and demographics
 - Inpatient use
 - Specialty MH and DA clinics ambulatory service use
 - Psychotropic prescription
- Analysis
 - ANOVA and Chi-Square tests for between group differences and AA versus non-AA differences within groups

Client Mix by Area Group

| | | Higher Income | | Lower Income | | | |
|------------------|------------|---------------|---------|--------------|---------|----------|-------|
| | | Low AA | High AA | Low AA | High AA | Chi-squa | Prob. |
| N | | 415 | 504 | 354 | 722 | | |
| Age | Mean | 42.7 | 45.2 | 43.2 | 42.6 | F=6.81 | 1E-04 |
| | <i>STD</i> | 10.0 | 11.1 | 10.7 | 10.4 | | |
| Male | % | 56% | 58% | 58% | 57% | | |
| African American | | 31% | 68% | 18% | 82% | 644 | 0.001 |
| Caucasian | | 62% | 23% | 73% | 8% | | |
| Other | | 7% | 8% | 9% | 10% | | |
| SSI Recipients | | 88% | 90% | 86% | 92% | | |

Treatment Patterns by Area Group

| | Higher Income | | Lower Income | | Chi-square | Prob. |
|------------------------|---------------|---------|--------------|---------|------------|-------|
| | Low AA | High AA | Low AA | High AA | | |
| Any antipsychotics | 93% | 96% | 94% | 91% | 9.78 | 0.020 |
| Any newer type | 47% | 37% | 40% | 33% | 22.29 | 0.001 |
| Depot | 19% | 21% | 18% | 23% | | |
| Anti depressant | 37% | 25% | 41% | 26% | 37.65 | 0.001 |
| ICM | 52% | 37% | 5% | 15% | 295 | 0.001 |
| Partial care | 50% | 71% | 49% | 34% | 161.7 | 0.001 |
| Medicaition Management | 58% | 45% | 60% | 58% | 25.79 | 0.001 |
| Other outpatient | 49% | 41% | 63% | 62% | 67.91 | 0.001 |
| Hospitalization | 30% | 25% | 25% | 25% | | |

Within Group Differences: AA versus Non-AA - Demographics

| | Higher Income | | | | Lower Income | | | |
|----------------|---------------|--------|-----------|-----------|--------------|--------|------------|------------|
| | Low AA | | High AA | | Low AA | | High AA | |
| | AA | Non-AA | AA | Non-AA | AA | Non-AA | AA | Non-AA |
| N | 130 | 285 | 344 | 160 | 65 | 289 | 594 | 128 |
| Age | 44 | 42 | 43 | 49 | 42 | 44 | 42 | 46 |
| (SD) | 11 | 9.7 | 11 | 11 | 10 | 11 | 10 | 11 |
| Male % | 53 | 57 | 60 | 51 | 55 | 59 | 57 | 60 |
| SSI Recipients | 92% | 87% | 90% | 91% | 86% | 85% | 93% | 85% |

Within Group Differences: AA versus Non-AA - Service use

| | Higher Income | | | | Lower Income | | | |
|--------------------|---------------|------------|------------|------------|--------------|------------|------------|------------|
| | Low AA | | High AA | | Low AA | | High AA | |
| | AA | Non-AA | AA | Non-AA | AA | Non-AA | AA | Non-AA |
| Any antipsychotics | 94% | 93% | 97% | 94% | 91% | 95% | 91% | 94% |
| Any newer type | 36% | 52% | 36% | 38% | 35% | 40% | 31% | 41% |
| Depot | 24% | 16% | 24% | 15% | 23% | 17% | 25% | 16% |
| Anti depressant | 34% | 38% | 21% | 34% | 38% | 41% | 24% | 37% |
| ICM | 50% | 52% | 39% | 33% | 8% | 4% | 15% | 15% |
| Partial care | 43% | 53% | 68% | 76% | 62% | 47% | 32% | 43% |
| Medication Mng | 63% | 55% | 46% | 45% | 48% | 63% | 60% | 49% |
| Other outpatient | 41% | 53% | 44% | 36% | 58% | 64% | 64% | 55% |
| Hospitalization | 28% | 31% | 28% | 18% | 22% | 25% | 26% | 24% |

Conclusions

- Clients treated by CMHCs in the poorer catchment areas had a lower chance to receive newer type of antipsychotic medications and intensive forms of mental health treatment.
- Differential treatment patterns were found between AA and non-AA subjects among those who were treated by CMHCs in the similar area characteristics.
- Treatment patterns of AA subjects differed depending on the location of CMHCs.

Policy Implications

- Access to high quality of mental health care may differ depending on where clients are treated -- need to reduce structural disparities.
- Future research is required to determine if observed ethnic disparities in treatment pattern reflect client problem profile, client preference or clinician's biases