

Research Capability to Study Comparative Effectiveness in Complex Patients

Principal Investigator: Carol Annette DuBard, MD, MPH
Institution/Partners: North Carolina Community Care Networks, Inc.; Cecil G. Sheps Center for Health Services Research; University of North Carolina at Chapel Hill; North Carolina Department of Health and Human Services
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Infrastructure Description

This project developed and helped sustain the Mental Health Data Integration (MHDI) database, a comprehensive infrastructure for comparative effectiveness research. The MHDI integrates medical health care information with mental health care services and outcomes data for Medicaid and uninsured populations in North Carolina who have complex medical and mental health comorbidities.

Specific Aims

1. Create an integrated database of publicly funded behavioral health services for a statewide population by linking three datasets from a capitated behavioral health carve-out program in one service area.
2. Develop a structure for making the MHDI database available to the research community to support comparative effectiveness research.

Pilot Study

The pilot study used the MHDI database to test how well medical homes serve individuals with mental illness. This new, integrated data infrastructure permitted an analysis of how factors such as mental illness, race and ethnicity, and availability of providers affect patients' medical home use in North Carolina. The study also was able to assess the relationship between use of the medical home model and quality of care, and the effectiveness of a transitional care intervention after a mental health hospitalization among Medicaid recipients with complex chronic conditions:

Infrastructure Goal

Develop and sustain a comprehensive database that integrates medical and mental health data for Medicaid and uninsured patients in North Carolina.

Data Sources

North Carolina Medicaid claims
State psychiatric hospital inpatient data
State-funded outpatient mental health services data

Data Access

The process for requesting access to the integrated data is detailed at <https://www.communitycarenc.org/informatics-center/ncidr/>.

Researchers interested in requesting access are strongly encouraged to contact the Director of Evaluation to discuss their intent to submit a Request Form. Some may also need to complete the Data Use Agreement, if they request data that are not completely de-identified.

Strategies Addressed from the HHS Strategic Framework on Multiple Chronic Conditions

- 1.D. Implement and effectively use HIT
- 1.F. Evaluate models of care
- 3.A. Identify best practices and tools
- 4.C. Increase clinical research
- 4.D. Address disparities

Research Capability to Study Comparative Effectiveness in Complex Patients (continued)

- Complex patients with mental illness were significantly less likely to have ever participated in a medical home than were complex patients without mental illness. Complex patients with both schizophrenia and depression were less likely to have ever participated compared to patients with only one of these conditions.
- Complex patients in a medical home were significantly more likely to have engaged in primary care than those not in a medical home. Among patients in a medical home, those with mental illness were significantly more likely to have engaged in primary care than were patients without mental illness.
- Complex patients with schizophrenia had a higher proportion of outpatient mental health visits to a specialist than those without schizophrenia.
- Following discharge from a mental health-related hospitalization, patients who received transitional care were significantly less likely to experience a readmission than were those who did not.

Publications (as of September 2013)

Domino M, Beadles CA, Lichstein JC, Farley JF, Morrissey JP, Ellis AR, Dubard CA. Heterogeneity in the quality of care for patients with multiple chronic conditions by psychiatric comorbidity. *Medical Care*. In Press, 2014.

(Additional publications currently under review).

Posters and Presentations

Domino M. Quality of care for Medicaid patients with multiple chronic medical and psychiatric conditions. Presentation at 9th World Congress on Health Economics: Celebrating Health Economics. 2013 Jul; Sydney, Australia.

DuBard A, Domino M, Jackson C, Lichstein J, Farley J, Morrissey J. Use of medical homes by patients with complex mental health and medical comorbidities. Poster presented at: Leveraging Knowledge and Action to Improve Health Care Quality. 6th Annual Conference of the Agency for Healthcare Research and Quality; 2012 Sept 9–12; Bethesda, MD.