

025: HOW TO MAKE A DIFFERENCE IN A POPULATION: ONE PERSON AT A TIME

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Objective:

The purpose of the Community-Based Case Management (CBCM) project was to determine the clinical and financial effectiveness of advanced practice nurse case managers working with complex, high risk medical clients of a self insured employer.

Methods:

Case management was defined as the organization and sequencing of coordinated services to respond to an individual's health care problems. The nurse case manager's role was reserved for complex clients demonstrating risk for poor health care outcomes, high cost, high utilization, sub-optimal self-management, and poor coordination of service. The nurse case manager partnered with the client, physician, pharmacist and social worker to collaborate on a plan of care. The plan supports the client's self-management in the community. The case manager visited the patient primarily in their home or at the physician's clinic or in the hospital. To successfully meet goals, the behaviors exhibited by the case manager were collaboration, interpretation, advocacy and surveillance.

The CBCM service was selectively provided for clients enrolled in a self-insured commercial health care contract. Clients were able to voluntarily enroll or decline the service. This insurance contract covered approximately 16,000 lives in a mid-size urban city in the United States of America. The CBCM project had limited services with this employer; with 120 referrals to the program, which resulted in 53 clients actively case managed. The case management service was at no cost to the client. The cost savings came from the decrease in patterned utilization of total health care dollars.

Results:

The performance results will focus on the data from the client's case managed in 2001; N equals 47 with complete data. The performance indicators have two major categories: clinical and financial. The clinical data is comprised of indicators from the preventative health measures as noted in Healthy People 2010 for example: influenza and pneumovax immunizations, mammograms, pap smears and primary care follow up established. There were research based best practice indicators for chronic illnesses that have been accepted within the integrated delivery system for example: biannually HbA1c for diabetes or weight monitoring for congestive heart failure. These indicators are assessed on admission and discharge from the CBCM program. Then the aggregate number is per population that was case managed that completed all applicable indicators. The percent of completed indicators was approximately 65%.

The financial data was derived from third party administrator data that included all inpatient and outpatient costs paid by the insurance. The financial indicators included: total costs for inpatient care, the total number of days in the hospital, the total number of admissions to the hospital, and the number of emergency room visits.

The total cost for care of these 47 clients was \$4,727,416 with 12 months of data equaled a monthly cost of \$393,951.

After the case management intervention the cost was \$2,060,399 with 7.3 months of data equaled a monthly \$282,246.

A cost savings of approximately \$100,000 monthly.

Prior to case management the total inpatient utilization was 101 admission with a monthly average 8.4 admissions and a total 621 days of stay with monthly 51.75 days.

After the case management intervention the inpatient utilization was 60 admissions with a monthly admissions of 8.2 with a total of 237 days with monthly 32.4 days.

The average monthly admissions were not effected but the average length of stay in the hospital was decreased by 62%.

Emergency room visits decreased by 20% after CBCM.

Conclusions:

The community-based advance practice nurse case management intervention has been successful in both the clinical and financial outcomes for high risk, complex patients.