

Preliminary Project Report

Project Title

Evaluation of a Model of Assertive Community Treatment for Persons with Schizophrenia who Live in Johnson County

Project Period

July 1, 1997- June 30, 1998

Project Objectives

The purpose of this project is to evaluate the treatment benefit of a model of assertive case management (IMPACT) on functional status, symptom reduction, inpatient service utilization, and cost in persons with schizophrenia and other psychotic disorders who live in Johnson County

Introduction

Comprehensive treatment for persons who have serious mental illnesses such as schizophrenia must include medical management and an array of community support services. While many types of services (e.g., vocational, social, assistance with activities of daily life) must be present in order for persons with these illnesses to live independently within the community, all services do not need to be provided by the same agency as long as they are effectively coordinated and communication occurs among providers. The cost of poor service coordination is high, and consequences of inadequate support services and poor system coordination that have been reported include hospital recidivism, overuse of emergency services, repeated encounters with the correctional system, increased burden on family members, and increased rates of homelessness (Stroul B: Community Support Systems for Persons with Long-Term Mental Illness. Rockville, MD: National Institute of Mental Health, Community Support Program, 1988).

In Iowa, mental health services for persons with serious and chronic mental illness, particularly inpatient services, are increasingly being restricted under managed care initiatives under Medicaid and private insurance companies. Although the goal of managed care is to deliver community based services of low cost in order to prevent inpatient services of high cost, persons with serious mental illness, as a consequence of their illness, often have difficulty accessing low intensity services and may not come to medical attention until high intensity services (e.g., police intervention or inpatient hospitalization) are necessary. Programs of Assertive Community Training (PACT) are an effective way of limiting the necessity of high intensity services by monitoring chronic illness on a continuous basis so that simple, low cost interventions can be implemented before symptom escalation occurs. Intensive case management programs emphasize team responsibility for continuous and comprehensive services to persons with serious mental illnesses such as schizophrenia.

Description of Project

Program Description (Dr. Clancy)

The University of Iowa, in collaboration with community agencies, implemented a program called IMPACT (Integrated Multi-Program for Assertive Community Treatment) under the direction of Gerard Clancy, M.D. A description of the project, provided by Dr.

Clancy, is attached. See appendix 1, "Programs for Assertive Community Treatment (PACT)".

Timetable

Originally, the intent of this study was to collect data for patients enrolled in the study from July 1, 1996 – December 31, 1997, and to collect data on individual patients for a one-year period only. However, we elected to extend the data collection period in order to include more patients in the study and so that the follow-up period on individual patients could be extended to a time duration of up to 18 months. However, by extending the data collection through 6/30/98, our original timetable was pushed back by 6 months and the final data analysis has been delayed with the anticipated benefit of having more useful information at the completion of the final analysis.

Dr. Clancy has provided dissemination of the preliminary findings through presentations at the local, state, and national level. He has also developed a protocol for the implementation of IMPACT and is involved in a collaborative training initiative with the Iowa State Department of Human Services to provide statewide dissemination, support, and on-site consultation for the IMPACT model.

Program Evaluation (Dr. Rohland)

The importance of program evaluation is that, if effectiveness can be demonstrated, IMPACT can serve as a model program for the statewide dissemination of assertive community treatment. Documentation of program benefit to consumers, and cost effectiveness to the providing agency, will enhance the potential for Johnson County to become a training center for the improvement of service delivery to persons with chronic schizophrenia who live not only in Johnson County, but in the state of Iowa.

Data Collected

Traditional PACT model programs have been successful in reducing inpatient hospital admissions and length of hospital stay while improving life quality as measured by changes in independent living, occupational, and social status. To demonstrate the effectiveness of the IMPACT program, several patient specific variables (described below) were measured at baseline (at entry into program), six months, one year, and 18 months enrollment in the program. Data collection is complete, and preliminary data analysis is also complete. A report of the final analysis from this study will be provided to the Board upon completion.

1. Descriptive Data

Demographic and clinical characteristics were identified on all patients enrolled as of 6/30/98 (n=61) and this information is summarized in Table 1. Patients enrolled in IMPACT were predominantly single white males between the ages of 30 and 50. Over one-half of the patients enrolled in IMPACT (36/61) had an enrollment duration of over 6 months. Of persons discharged from the program (25/61), only 5 left because they refused care or requested discharge. This suggests a relatively high rate of satisfaction with the IMPACT Program by program participants.

Table 1. Characteristics of Patients Enrolled in IMPACT.

Characteristics	N (%)
Gender	
Male	40/61 (65.6%)
Female	21/61 (34.4%)
Age (at admission to IMPACT)	
Under 20	3/61 (4.9%)
20-29	10/61 (16.4%)
30-39	17/61 (27.9%)
40-49	17/61 (27.9%)
50 and older	14/61 (23.0%)
Ethnicity	
White	56/61 (91.8%)
Black	5/61 (8.2%)
Marital status	
Single	43/61 (70.5%)
Married	3/61 (4.9%)
Divorced	15/61 (24.6%)
Age at 1 st hospitalization for psychiatric reasons	
Under 20	12/61 (19.7%)
20-29	25/61 (41.0%)
30-39	12/61 (19.7%)
40 and older	12/61 (19.7%)
Diagnosis at admission to IMPACT	
Schizophrenia	32/61 (52.5%)
Schizoaffective	6/61 (9.8%)
BPAD	16/61 (26.2%)
MDD	4/61 (6.6%)
Psychotic d/o NOS	2/61 (3.3%)
Other	1/61 (1.6%)

Characteristics	N (%)
Outpatient commitment at IMPACT enrollment	
Yes	18/61 (29.5%)
No	43/61 (70.5%)
Discharged from program (7/1/96-6/30/98)	
Yes	25/61 (41.0%)
No	36/61 (59.0%)
Of patients discharged, duration in program (7/1/96-6/30/98)	
0-6 months	13/25 (52.0%)
7-12 months	9/25 (36.0%)
more than 1 year	3/25 (12.0%)
Of patients not discharged, duration in program (7/1/96-6/30/98)	
0-6 months	12/36 (33.3%)
7-12 months	5/36 (13.9%)
more than 1 year	19/36 (52.8%)
Reasons for discharge	
Transferred to residential care	5/25 (20.0%)
Left town	5/25 (20.0%)
Refused care/requested discharge	5/25 (20.0%)
Transferred to other treatment system	4/25 (16.0%)
Did not meet criteria for IMPACT	4/25 (16.0%)
Deceased	2/25 (8.0%)

2. Evaluation of IMPACT on Inpatient Hospitalization (data analysis in progress)

Information on the use of inpatient hospitalization (pre-IMPACT versus post-IMPACT) was collected on 36 IMPACT subjects with an enrollment duration of 6 months or longer.

- Number of admissions per year
- Average length of stay per admission
- Total number of hospital days, per year

3. Evaluation of Cost Effectiveness (data analysis in progress)

Cost Per Year per patient: Pre-IMPACT cost per year (based on 2-year pre-impact history) versus IMPACT cost per year.

- Total inpatient cost/year (hospital + physician)
- Total outpatient cost/year (hospital + physician):
- Total hospital cost/year (inpatient + outpatient)
- Total physician cost/year (inpatient + outpatient)
- Total cost/year (hospital + physician)

4. Evaluation of Functional Status (MCAS score) (data analysis in progress)

Multnomah Community Ability Scale (MCAS) score was calculated at baseline (point of enrollment into the program), 6 months, 12 months, and 18 months. Fifty patients had MCAS scores recorded and scores were evaluated at the time intervals below.

Baseline (0): -35 to +35 days of admission

Follow-up period 1 (FU1): 3 to 9 months (91 to 273 days)

Follow-up period 2 (FU 2): 9 months to 15 months (274 to 455 days)

Follow-up period 3 (FU 3): 15 to 21 months (456 to 638 days)

5. Evaluation of Symptom Reduction (BPRS scores) (data analysis in progress)

Brief Psychiatric Rating Scale (BPRS) score was calculated at baseline (enrollment into the program), 6 months, 12 months, and 18 months. Thirty-five patients had a recorded BPRS score, and scores were calculated at the same time intervals as for the MCAS data.

Summary

As of 6/30/98, 61 persons with serious and persistent mental illness received services through the IMPACT program. Hence, program implementation has been successful and satisfaction by participants appears to be good, as demonstrated by the low drop out rate. Preliminary analysis of the data suggest that enrollment in IMPACT is successful in reducing the use of inpatient hospital services. Further data analysis is currently underway to evaluate the effect of IMPACT on functional status, symptom reduction, and (economic) cost. Future studies will address satisfaction by consumers, family members, and community agencies.