

RESEARCH LETTER

The Use of Telephonic Case Management to Link a Special-Needs Population with a Primary Care Physician

Linda S. Kahn, PhD, Jennifer Aiello, MS, Diane E. Berdine, BA, and
Chester H. Fox, MD

Background: Gold Choice, a Medicaid managed care organization for individuals with mental health and/or substance abuse diagnoses, uses telephonic case management to link members with primary care providers (PCPs). This study assessed the effectiveness of this approach.

Methods: The number of new members without a PCP at baseline were compared with primary care encounter data documenting first PCP visits from 2003 to 2006. Paired *t* tests compared the mean number of new Gold Choice members linked to primary care who received telephonic case management.

Results: During the 4 years, 52% of new members without a PCP at baseline were linked to a provider within 12 months. Paired sample *t* tests comparing the mean number of members linked to a PCP from baseline to 12 months for each of the 4 years yielded statistically significant results.

Conclusion: More than 50% of members who indicated at baseline that they had not seen a PCP were linked to primary care during the first 12 months of their enrollment in Gold Choice, suggesting that telephonic case management may be an effective approach to linking mentally ill and/or chemically dependent patients to primary care. (J Am Board Fam Med 2009;22:585–587.)

Case management has been documented as an effective means to link underserved patients, including those with serious mental illnesses, with appropriate care.^{1–3} In western New York, Gold Choice developed a telephonic case management system to link its members, all of whom have a behavioral health diagnosis, with primary care providers. Gold Choice is a partially capitated Physician Case Management Program for mentally ill and/or chemically dependent Medicaid recipients in Erie County, New York. The purpose of this evaluative study was to assess the effectiveness of telephonic case management in linking new Gold Choice members with primary care providers.

When enrolled in Gold Choice, new members are mailed a survey asking if they have a primary care physician (PCP). If a member's response indicates that they have no contact with a PCP, their name is referred to telephonic case management for follow-up. Because of high transience in this population, case managers make at minimum 3 contact attempts with the member to ensure linkage to a PCP. The members' primary care encounter data are checked to verify if they have seen their PCPs. Encounter data consists of billing codes describing the content of primary care office visits, and is required for utilization tracking by the New York State Department of Health for all Medicaid programs.

Data encompassing a 4-year period (2003 to 2006) were analyzed using Microsoft Excel (Redmond, WA) and SPSS software version 16.0 (SPSS Inc., Chicago, IL). The number of new members indicating on the survey that they had not seen a PCP was compared with encounter data documentation of first PCP visits. Paired *t* tests were conducted comparing the mean number of Gold Choice members for all 4 years not linked to primary care.

This article was externally peer reviewed.

Submitted 6 November 2008; revised 29 January 2009; accepted 2 February 2009.

From the Department of Family Medicine, School of Medicine and Biomedical Sciences, State University of New York at Buffalo (LSK, JA, DEB, CHF), and Gold Choice, UB Family Medicine, Inc. (JA, DEB), Buffalo, New York.

Funding: none.

Conflict of interest: none declared.

Corresponding author: Linda S. Kahn, PhD, Department of Family Medicine, Primary Care Research Institute, ECMC Clinical Center, 462 Grider St, Buffalo, New York, 14215 (E-mail: lskahn@buffalo.edu).

Table 1. New Gold Choice Members Linked to Primary Care

Year	Members Linked to PCP			
	Baseline (n)	3 Months (%)	6 Months (%)	12 Months (%)
2003	104	32	40	52
2004	111	37	45	52
2005	82	43	45	54
2006	71	41	48	52
2003–2006 (mean [SD])		34.5 (5)	40.8 (7)	48.3 (10)
<i>P</i> *		.005	.035	.027

**P* values from paired *t* tests of members linked to PCP during 2003–2006.
PCP, primary care physician.

From 2003 to 2006, 368 new Gold Choice members completed surveys (response rate, 16%) and nearly one-third of all respondents (32%) indicated that they had not seen a PCP. During the 4-year period, 52% of new members, on average, indicated that they did not have a PCP at baseline and were linked to a provider within 12 months.

For each time period (baseline to 3 months, 3 months to 6 months, 6 months to 12 months, and baseline to 12 months) the average number of Gold Choice members linked to a PCP increased (Table 1). A paired sample *t* test comparing the mean number of members linked to a PCP for each of these time periods yielded statistically significant results (Table 1). Despite the small sample, this is a robust and consistent finding, suggesting that telephonic case management played a role in improving the proportion of Gold Choice members linked to primary care.

There are several limitations to this evaluative study. The survey response rate (16%) as well as the sample are small and encompass only those members that submitted a completed survey. This may have also contributed to a respondent bias: individuals completing the survey might be healthier and/or more receptive to obtaining a regular PCP compared with nonresponders. There was also no control group.

Despite these limitations, this study has important health care service delivery implications, especially in the context of the medical home model.^{4,5} A key tenet of the medical home concept is the central role of the patient's PCP who, along with a health care team, provides patient-centered care and appropriate referral when necessary.⁶ Other key components of the medical home concept entail integration and coordination of care, which is

especially important for patients with multiple chronic illnesses and psychiatric disorders or behavioral health issues^{6,7} The Gold Choice telephonic case management model provides a useful and practical approach to enable individuals with a serious mental illness and/or substance abuse to establish a continuity relationship with a PCP who can provide first contact care and medically appropriate referrals, thereby limiting the need for unnecessary use of an emergency room. Gold Choice also uses a team approach to case management to arrange appointments for the client and encourage adherence to care. Taken together, the Gold Choice model encompasses several key aspects of the medical home concept and suggests that, with the proper supports, patients with mental illnesses and/or substance abuse can be connected to a personal PCP who can provide comprehensive, continuous care.

Andrew Swanson, BA, provided statistical guidance.

References

1. Griswold KS, Zayas LE, Pastore PA, Smith SJ, Wagner CM, Servoss TJ. Primary care after psychiatric crisis: a qualitative analysis. *Ann Fam Med* 2008;6:38–43.
2. Miller E, Lasser KE, Becker AE. Breast and cervical cancer screening for women with mental illness: patient and provider perspectives on improving linkages between primary care and mental health. *Arch Womens Ment Health* 2007;10:189–97.
3. Zanjani F, Miller B, Turiano N, Ross J, Oslin D. Effectiveness of telephone-based referral care management, a brief intervention to improve psychiatric treatment engagement. *Psychiatr Serv* 2008;59:776–81.
4. American Academy of Family Physicians, American Academy of Pediatrics, American College of Physi-

- cians, American Osteopathic Association. Joint principles of the patient-centered medical home. 2007. Available at <http://www.medicalhomeinfo.org/joint%20statement.pdf>. Accessed 27 January 2009.
5. Robert Graham Center. The patient centered medical home: history, seven core features, evidence and transformational change. 2007. Available at www.adfammed.org/documents/grahamcentermedicalhome.pdf. Accessed 27 January 2009.
 6. Rosenthal TC. The medical home: growing evidence to support a new approach to primary care. *J Am Board Fam Med* 2008;21:427–40.
 7. Parks J, Svendsen D, Singer P, Foti ME. Morbidity and mortality in people with serious mental illness. Alexandria (VA): National Association of State Mental Health Program Directors Medical Directors Council; 2006.