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Seniors-at-Home: A Case Management Program for Frail Elders

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Abstract

- **Objective:** To describe a case management program to provide social services to frail elders living at home.
- **Setting:** The San Francisco Bay Area in northern California.
- **Program:** The Seniors-at-Home (SAH) program identifies at-risk seniors through a referral network that includes health maintenance organizations, hospitals, and physician offices. A geriatric care manager conducts a detailed health status assessment in the patient's home, documenting any unmet activities of daily living and instrumental activities of daily living, social support needs, emotional status, any unaddressed health issues, and power of attorney status. A level of care is assigned, and an individualized care plan is developed. The care manager arranges for necessary resources to address the patient's needs.
- **Results:** Frail elders receive services that improve their quality of life and reduce utilization of unnecessary medical services.
- **Conclusion:** This collaborative model provides for timely intervention to assist frail elderly at risk for increased utilization of medical resources as a result of social problems.

Within the next 2 decades, 55 million people in the United States will be older than 65 years and 13 million will be over 85 years. While a substantial portion of older adults remain independent in daily function throughout their lives, a significant number will have chronic illnesses that diminish their ability to carry out the activities of daily living (ADLs). The majority of those over age 85 will be frail and isolated and have social problems that compound their medical problems. Frail elders are at greater risk for falls, disability, hospitalization, and mortality.

Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties, a nonprofit social service agency, has developed an intervention model to address the needs of the frail elderly living in the community. Seniors-at-Home (SAH) is a social work-based case man-

agement program to improve health outcomes for at-risk seniors. The program, which received the American Society on Aging award for quality and innovation in managed care and aging in 1999 and 2001, helps elders to access in-home services that enable them to remain living safely in the community, thereby reducing the use of unnecessary medical services. This paper will describe the intervention model and our methods of tracking the delivery and impact of services.

Program Description

Setting

SAH serves the San Francisco Bay Area in northern California, a densely populated urban environment made up of 9 counties with over 6.2 million people. The area is ethnically and linguistically diverse, with 36% of households speaking a language other than English in the home. Eleven percent of the population is 65 years of age or older.

Screening and Referral

At-risk seniors are identified in several ways, including through physician offices, health plans, hospitals, and community members. To facilitate referrals from the physician's office, front office staff in primary care offices are offered free training to recognize frail community-dwelling seniors who might be at risk for functional decline and/or loss of independence. We teach basic geriatric care concepts, provide information and resource manuals about community resources, and demonstrate how to refer patients to community-based agencies for help with nonmedical problems using illustrative cases. The 10-hour training program takes place at lunchtime, and to date 50 people have participated. The trained office staff member, called a geriatric resource person (GRP), uses a screening method developed by SAH that focuses on non-medical reasons for referral. In addition, GRPs are alerted to certain chronic diseases that put seniors at risk for hospitalization. The GRPs also learn to pick up other cues, such as worsening forgetfulness, deteriorating personal hygiene, a pattern

From the Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties, San Francisco, CA.

of missed appointments, increasingly frequent contacts with the office, or simply "not doing as well as expected." GRPs refer to SAH with the permission of the physician.

At health plans in our referral network, utilization management staff identify "frequent fliers"—those with frequent visits to the emergency room, high frequency of physician office visits, and/or 2 hospitalizations within a 6-month period. At hospitals, utilization review staff and discharge planners identify patients who are hospitalized repeatedly, are frequent users of the emergency room, are to be discharged to an empty house with no social support, or are confined to the hospital because there is no responsible party or no place to go. Community members and individual professionals also call SAH with referrals.

Assessment and Care Planning

Once identified and referred to SAH, patients receive a comprehensive assessment within 48 hours by a social work geriatric care manager. The assessment generally takes place in the home to determine the client's nonmedical and psychosocial needs. The care manager completes a detailed assessment including risk factor identification and a mental status assessment. A health status assessment form is completed, documenting unmet ADLs and instrumental ADLs, adequacy of social supports, emotional and mental health status, unaddressed health issues, and whether a power of attorney has been completed (Figure). A weighted score for these elements is calculated.

Authorization forms to disclose confidential information are obtained at the initial visit in order to coordinate care with physicians, other involved professionals and the older adult's personal support system. Care managers also consult with family members as appropriate to ensure that family members get the support needed to cope with the problems presented by their elderly relatives. A summary that describes the problems identified and interventions recommended is faxed to the referral source.

Based on the assessment, the geriatric care manager develops an individualized care plan that identifies priorities, desired outcomes, and the strategies and resources to be used in attaining the outcomes. The responsibilities of the social worker, client, and others are clarified throughout the development of the plan and the client signs the care plan. The care manager then arranges necessary resources, such as home care, therapy, respite, and nutrition services. Frequently, bill paying, transportation, meal delivery, and volunteer services are also part of the care plan. Services are initiated through the use of the senior's informal network as well as community resources, such as visiting nurses, home health aides, adult day health centers, durable medical equipment acquisitions, Meals on Wheels, paratransit, etc.—whatever is needed to address the patient's needs.

A level of care is assigned. The level of care defines the time period and intensity of the activities that the care manager anticipates will be needed for an individual case. The Table describes the levels of care seniors may require.

To strengthen the support system of frail elderly, SAH also provides opportunities for families and friends to further their education on issues surrounding aging and offer them volunteer support, counseling services, respite help, and community resource information. The care manager engages with the senior and his support system, stays involved until reversible problems have been addressed, and then continues to monitor the situation to address changing needs.

Measurement and Tracking

SAH has developed a database using Microsoft Access that is designed to allow real-time tracking ability of the day-to-day operation of the program and the outcome of the social work intervention. All clients are registered in the database. Standard client demographics as well as physician, diagnosis, and results of the health status assessment (completed at opening and closing) are stored in the database. Comparisons are easily made, and the results of the interventions are noted. In addition, the database also functions as a "time and billing" program, tracking time spent by staff in carrying out the activities of the care plan.

The tracking system generates the following reports:

- Client care summary
- Active, pending, or closed clients
- Closed clients per physician
- Health status assessment totals per client
- Health status assessment statistics/change between open and closed/diagnosis
- Case manager time sheet, hours by client, by level, and by week
- Referrals by source
- Itemization of services provided

SAH reports outcome measures quarterly to health maintenance organizations (HMOs) and other referral sources in the form of health status assessment scores. We also code and report individual activities on an outcomes form that is completed at the initial visit and at closing.

Program Evaluation

With the support of foundation funding, studies of SAH have been undertaken to measure the effects of the program. A study funded in 1995 by the the Robert Wood Johnson Foundation sought to measure the effects of the program on

Health Status Assessment Form

Client Name	DOB	Age	SSN#	MIS#
PCP	Auth Date	Case Mgr.	CM Phone #	Date of Home Visit

1. ADLs
 Rate from 1-4: 1 = independent; 2 = minimal assistance; 3 = moderate assistance; or 4 = total dependent (because of health problems)

a. Walking across the room
 b. Getting out of a chair/bed
 c. Dressing
 d. Bathing or showering
 e. Using the bathroom
 f. Feeding

2. IADLs

a. Using telephone
 b. Light housework
 c. Taking medications
 d. Using transportation
 e. Running errands
 f. Preparing meals
 g. Grocery shopping
 h. Paying bills or doing paperwork
 i. Walking 2-3 blocks
 j. Walking up steps
 k. Lifting/carrying

3. Unmet ADLs
 Unmet needs for formal or informal care and/or equipment (Yes = 1; No = 0)

a. Walking across the room
 b. Getting out of a chair/bed
 c. Dressing
 d. Bathing or showering
 e. Using the bathroom
 f. Feeding

4. Unmet IADLs

a. Using telephone
 b. Light housework
 c. Taking medications
 d. Using transportation
 e. Running errands
 f. Preparing meals
 g. Grocery shopping
 h. Paying bills or doing paperwork
 i. Walking 2-3 blocks
 j. Walking up steps
 k. Lifting/carrying

5. Living Arrangement

1. Spouse/partner
 2. Others
 3. Alone

6. Losses
 Suffered losses in past year? (Yes = 1; No = 0)

a. Death
 b. Move
 c. Separation
 d. Divorce
 e. Retirement
 f. Physical

7. Social Supports
 (Inadequate = 1; Adequate = 0)

8. Caregiver to Another
 (Yes = 1; No = 0)

9. Emotional Status

Feels downhearted or blue (Rate 1-4)

1. Never
 2. Some of the time
 3. Most of the time
 4. A lot

Anxiety in last month (Rate 1-4)

1. None
 2. A little
 3. Some
 4. A lot

Sleep problems (Yes = 1; No = 0)

10. Cognitive Status

Lacks cognitive orientation (Yes = 1; No = 0)

a. Date b. Place c. Person

Impaired judgement (Yes = 1; No = 0)

Memory problems in past month (Yes = 1; No = 0)

a. Short term b. Long term

Mental illness (Yes = 1; No = 0)

a. Acute b. Chronic

11. Health Status

Health condition (Self-Report) (Rate 1-4)

1. Excellent 2. Good 3. Fair 4. Poor

(Yes = 1; No = 0)

Drinks 2 or more drinks per day
 Smokes cigarettes
 At risk for abuse or neglect

12. Unaddressed Health Issues (Yes = 1; No = 0)

Nutrition problems
 Fell 1 or more times within the past month
 Physical environment unsafe
 Needs DME equipment
 Vision problem unaddressed
 Hearing problem unaddressed
 Abnormal weight gain or loss (≥ 10 lb)
 Dental problem unaddressed
 Podiatry services unaddressed
 Urine problems unaddressed
 Bowel problems unaddressed

13. Needs Power of Attorney for Health Care
 (Yes = 1; No = 0)

14. Medications

Total number of prescriptions taken regularly
 Total number of nonprescription medications taken regularly

15. Housing (Inadequate = 1; Adequate = 0)

Summary of Each Area			
1. ADLs	2. IADLs	3. Unmet ADLs	4. Unmet IADLs
5. Living Arrangement	6. Losses	7. Social Supports	8. Caregiver to Another
9. Emotional Status	10. Cognitive Status	11. Health Status	12. Unaddressed Health Issues
13. Needs POA/HC	14. Medications	15. Housing	

Figure. Health status assessment form used in the Seniors-at-Home program.

Table. Levels of Care Assigned in the Seniors-at-Home Program

Intervention	Activities	Time Frame	# of ADLs/IADLs Identified	Support System	Cognitive Functioning
Low risk care management	Up to 3 home visits and calls to the client, physician, and referral source; written report to the physician	60 days	Up to 4 ADLs/ IADLs	Patient is capable of being responsible or responsible party fully available	Able to follow directions
Moderate risk care management	Up to 5 home visits and calls to the client, physician, and referral source; written report to the physician	90 days	More than 4 ADLs/ IADLs	Inadequate social supports due to caregiver stress or lack of responsible party	Moderate cognitive impairment
High risk care management	Up to 10 home visits and calls to the client, physician, and referral source; written report to the physician	120 days	More than 4 ADLs/ IADLs	Inadequate social supports due to caregiver stress or lack of responsible party	Severe cognitive or emotional impairment
Monitoring for chronic high risk clients	Monthly home visits; weekly calls to client; calls to the physician and referral source; written report to the physician	180 days	More than 6 ADLs/ IADLs	Inadequate social supports due to caregiver stress or lack of responsible party	Unstable home situation

ADL = activities of daily living; IADL = instrumental activities of daily living.

costs [1]. The study was a randomized controlled trial conducted within a San Francisco independent practice association composed mostly of small practices, including 200 primary care physicians under capitated contracts with 6 HMOs providing care for 14,000 older Medicare beneficiaries. Financial risk for care was shared by the medical group and its affiliated hospital, California Pacific Medical Center. Fifty primary care practices were invited to participate and 35 accepted. Of these, 16 practices (3480 patients) were randomly assigned to case management program and 19 practices (2929 patients) to usual care. The cost of hospital, physician, case management, and other health-related services were measured. The study found that the program was cost-neutral; including the cost of case management, it neither reduced or increased the use of health care.

In a second study funded by the California HealthCare Foundation, the Retirement Research Foundation, and the Evelyn and Walter Haas Jr. Fund, 24 primary care internal medicine practices were randomized to receive either the SAH intervention or usual care. A total of 1098 older patients with histories of high medical care utilization were evaluated at baseline and at 1 year with self-reports of health; cost and utilization information was obtained from automated databases. Our sample size was not large enough to show results; changes in the health care environment during the recruitment phase negatively impacted our ability to recruit subjects. Using the sample of 1098 patients, SAH conducted a retrospective cohort study to compare the health care costs of 50 patients who had received SAH care management with 50 who had not. The 2 groups were similar in important

variables, but the comparison group differed at baseline in that they were significantly more dependent (lower functioning) and costly than intervention clients; thus, statistically valid conclusions about the effects of SAH could not be made. Nevertheless, the study did report cost savings for these very ill SAH clients, including the reduction of average annual cost of health care per patient from \$28,000 before the intervention to \$6000 after the intervention.

Replicability and Applicability to Other Settings

This model of care management can be replicated by other organizations. The implementation manual and standardized forms developed by SAH are available on the agency's website (www.jfcs.org). Programs more likely to succeed will be associated with the following factors: strong, reliable referral partners; well-trained care managers, preferably with master-level degrees in social work; software tools to identify and track activities; and an infrastructure to manage and ensure quality outcomes.

Next Steps

More research is needed to refine our understanding of care management in general and in particular the unique areas of care management overseen by a social worker. This understanding might permit more focused clinical trials of the aspects of social work care management that are most likely to improve health outcomes and lower costs. This research, if favorable results are demonstrated, should ultimately lead to federal policies that allow Medicare to pay for care management.

Score on Mini Mental Status Exam	Risk Factors	Action
25-30	2 or less	Provide education and support to the client; provide resources as indicated in the care plan.
15-24	3-5	Provide education and support to the family; provide resources as indicated in the care plan.
< 15	Over 5	Provide education and support to the family; provide resources as indicated in the care plan
< 24	3 or more	Provide continual monitoring for change in conditions and assistance as indicated

HMOs and medical groups in northern California with Medicare risk contracts have undergone substantial changes. Blue Shield, Aetna, and CIGNA no longer offer a senior HMO product; other insurers have added a monthly premium, increased co-pays, and decreased some benefits. Many California independent practice associations have gone out of business. Because of the declining number of seniors enrolled in Medicare managed care, it will be important to study the effects of this model on a Medicare fee-for-service population. A research project to address this question, for which SAH will be a demonstration site, is in its initial planning phases.

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References

1. Boulton C, Rassen J, Rassen A, et al. The effect of case management on the costs of health care for enrollees in Medicare Plus Choice plans: a randomized trial. *J Am Geriatr Soc* 2000; 48:996-1001.

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