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The Jewish Home and Hospital Lifecare System Medicare Coordinated Care Demonstration Program After One Year

Final Report

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EXECUTIVE SUMMARY

The Medicare Coordinated Care Demonstration (MCCD), mandated by the Balanced Budget Act of 1997, is testing a range of models aimed at improving the care of chronically ill beneficiaries with Medicare fee-for-service coverage. Fifteen programs are participating in the demonstration sponsored by the Centers for Medicare & Medicaid Services (CMS). Mathematica Policy Research, Inc. (MPR) is evaluating the demonstration, through both implementation analysis and impact analysis based on a randomized design. This report is one of a series that will describe each program during its first year and will provide estimates of its impact on Medicare service use and costs during the first six months of program operation.

Research during the past decade suggests that successful care coordination usually has several features. These features include effective ***patient identification, highly qualified staff, physician buy-in,*** and ***financial incentives*** aligned with program goals. Most successful programs also offer a well-designed, structured intervention that includes:

- A multifaceted assessment whose end product is a ***written care plan*** that can be used to monitor patient progress and that is updated as the patient's condition changes
- A process for providing ***feedback to care coordinators, program leaders,*** and ***physicians*** about patient outcomes
- ***Patient education*** that combines the provision of factual information with techniques to help patients change self-care behavior
- ***Procedures*** for ***integrating fragmented care, facilitating communication*** among providers and, when necessary, ***arranging for community services***

The ultimate purpose of this report series is to assess the extent to which demonstration programs have these features, as well as to describe early enrollees in the program and their Medicare service use and costs during the first few months after enrollment. Information for the report comes from telephone and in-person contacts with program staff, as well as analysis of Medicare and program-generated data. The next report series will focus on Medicare service use and costs over a longer time and will include all first-year enrollees.

This report describes the Jewish Home and Hospital Lifecare System's (JHH's) MCCD program, called "Lifecare Plus." After presenting an overview of Lifecare Plus, the report addresses the following questions: Who enrolls in the program? To what extent does the program engage physicians? How well is the program implementing its approaches to improving patient health and reducing health care costs? What were enrollees' Medicare service use and costs during its first months of operation? Thereafter follows a discussion of the program's strengths and unique features, as well as potential barriers to program success.

Program Organization, Service Environment, and Approaches. JHH is the host for the Lifecare Plus demonstration program. JHH has three campuses in Manhattan's Upper West

Side, the Bronx, and Westchester that provide in-patient and community-based long-term care services for area residents. The Lifecare Plus program operates within JHH's Department of Community Services; the department also provides home health care, adult day health, respite care, and transportation. The prototype for Lifecare Plus was JHH's Geriatric Outreach (GO) program. Since 1976, the GO program has served more than 1,000 socially isolated elderly people who have no informal caregivers; staff believe the program has helped them live safely at home and improved the quality of their lives. JHH staff report that, during 2000, GO program clients had 68 percent fewer hospital admissions and 71 percent fewer skilled nursing facility admissions than Medicare beneficiaries age 85 and older had in 1997. The Lifecare Plus program, as envisioned, would contain all the elements of the GO program, plus coordination of medical care and a fall prevention program.

In the first year of the demonstration, the key Lifecare Plus staff included the program director who also was the care coordination supervisor (she is referred to as the care coordination supervisor for the remainder of the report), enrollment coordinator, the care coordinators, a psychiatrist, and case aides. The staff, with the exception of some per diem nurse care coordinators and some contracted case aides, are employees of Lifecare Plus who work from JHH's Manhattan campus.

The program planned to make nutrition, physical therapy, and occupational therapy services available to its clients, but, to lower its own costs, it wanted to contract for these services through JHH. However, problems in writing the contracts delayed the availability of these services until the third year of the demonstration. Until then, when clients needed these services, the care coordinators obtained referrals from clients' physicians, and the services were billed directly to Medicare.

Most program clients are assigned a social worker as their primary care coordinator; she then calls in a nurse care coordinator when she believes the client's situation requires it. However, a client whose needs are primarily clinical is assigned to a nurse care coordinator. This arrangement is usually temporary—when the client's condition stabilizes, a social worker assumes primary responsibility. The program also considers clients' language preferences and will assign them to a Spanish-speaking care coordinator if needed.

The program had difficulty finding staff and did not hire its first care coordinator until three months after it started enrolling patients. Because it then took several months for orientation, the care coordinators did not begin interacting with clients until approximately five to six months after the program's start. In the interim, the program's care coordination supervisor and enrollment coordinator made welcoming telephone calls and sent packets of information to all clients. One year after its start, the program had four full-time care coordinators (one nurse and three social workers) and a care coordinator-to-client ratio of 1 to 65.

The Lifecare Plus program partners with two physician practices—Coffey Geriatrics Associates at the Mount Sinai School of Medicine (Mt. Sinai) and Geriatrics Associates within University Medical Practice Associates at St. Luke's Hospital (St. Luke's)—which are the program's primary sources of patient referrals. The program has two medical directors, one associated with each of the two physician practices. The medical directors act as liaisons with Lifecare Plus and as opinion leaders among physicians at their hospitals, encouraging physicians

to promote the program to their patients. The role of medical director is vital, because Lifecare Plus does not have existing relationships with these physicians, even though many JHH clients are patients of physicians in the two practices.

The Lifecare Plus program operates in an environment already rich in services for the elderly. Several other care coordination programs serve frail elderly people in Manhattan, but they target a different population than the demonstration does or feature a less intensive intervention. For example, the Jewish Association for Services for the Aged, a local nonprofit organization, offers some care coordination services, but the demonstration staff believe that this program is less intensive than their own. The Visiting Nurse Service of New York offers a care coordination program called VNS Choice. The care coordination supervisor reported that approximately 14 percent of the clients enrolled in the Lifecare Plus program also receive care coordination services from VNS Choice. In addition, the two physician practices referring patients to the demonstration each have social workers associated with them who help patients obtain energy assistance, apply for Medicaid, or deal with psychosocial issues. In contrast, the program sees itself as a coordinator of services, facilitating communication among providers.

Program staff state that Lifecare Plus seeks to improve client health and reduce health care costs by (1) improving client adherence to medical regimens, (2) improving communication and coordination among clients and physicians, and (3) maintaining clients' independence. Specifically, the program planned to improve adherence by providing client education through group meetings and one-on-one teaching. To improve coordination of care, it planned to integrate physicians into their care coordination team and serve as a communications hub for care and service providers. In addition, it planned to maintain clients' independence by reducing social isolation, identifying and treating undiagnosed mental disorders such as depression, and having its case aides directly provide assistance with daily living activities. As implemented, however, the program appears to place more emphasis on interventions to maintain client independence than those to improve client adherence or improve communication and coordination of care, as discussed in more detail below.

The program's goals do not include improving physicians' clinical practice patterns. Moreover, as implemented, the program requires only minimal physician contact beyond having physicians review potential clients for program appropriateness and introduce the program to their patients during office visits. Currently, the program asks only that physicians answer care coordinators' questions about specific patients when the need arises.

Program staff emphasized that Lifecare Plus is neither a disease management nor a disease-specific intervention. Rather, it is based on a social work model that incorporates some clinical elements (such as diagnosis-specific education) to reduce hospital use. Consistent with its social work focus, the program refers to participants as "clients," not "patients."

Patient Identification. In June 2002, Lifecare Plus began enrolling Medicare beneficiaries (age 65 or older) living in Manhattan and the Bronx who had been diagnosed with a chronic condition such as heart disease; diabetes; liver disease; chronic lung disease; stroke or other cerebrovascular disease; a major psychological disorder; cancer; or dementia. To be eligible, beneficiaries must have had at least one hospitalization or three physician visits in the past year, but these encounters need not have been for any of the targeted conditions. As in all the MCCD

demonstration programs, beneficiaries must also meet three CMS requirements: (1) be enrolled in Medicare Parts A and B, (2) not be in a Medicare managed care plan of any kind, and (3) have Medicare as their primary payer.

In its first year of operation, the program identified nearly all its participants from the St. Luke's and Mt. Sinai practices. (The program also identified a small number of participants from JHH's assisted-living facilities and other senior housing units.) Each week, the program received a list of patients scheduled for office visits at the two participating physician practices. A program staff member verified patients' Medicare eligibility, then used patient medical records to check program-specific eligibility criteria. The staff member then alerted the practice staff as to which patients met the program's eligibility criteria and asked that physicians mention the program to eligible patients during their upcoming office visit. After the office visit, a program staff member met with the patient in the physician's office to provide information about the program and obtain informed consent. The program staff member then helped the patient complete a preliminary questionnaire that collected information on health service use and general health status.

The staff member input information from the chart review and preliminary questionnaire into Canopy, the program's web-based case management software system, which calculated a PraPlus score to determine the patient's risk of future health care service use. This score was supplemented with information on cognitive or functional deficits and caregiver support to categorize patients into low-, moderate-, and high-risk groups that determined CMS's program payment. MPR then randomly assigned participants in each risk group to either Lifecare Plus or the control group. CMS pays the program $379 per month for each high-risk client, $259 for moderate-risk clients, and $74 for low-risk clients. In its first year of operation, 60 percent of Lifecare Plus clients were assessed as high risk, 30 percent as moderate risk, and 10 percent as low risk.

Assessment, Care Planning, and Monitoring. All clients assigned to Lifecare Plus receive an initial assessment. The program had planned to have a nurse and a social worker jointly assess all clients with a tool that covered both medical and psychosocial issues. However, when the care coordinators began to conduct assessments, they faced a considerable backlog because of the delays the program encountered in hiring staff and initiating its intervention. As a result, although a social worker and nurse sometimes conducted the initial assessment together, more frequently, one saw the client before the other. The nurse, who usually saw clients after the social worker, gradually increased the medical focus of her assessment. Eventually, the program separated the assessment tool into two tools—one for the nurse care coordinators and one for the social worker care coordinators. The social workers' assessment includes psychosocial and environmental issues (such as the adequacy of financial resources and home safety). The nurses' assessment includes health-related issues (such as activities of daily living, medication regimens, bowel/bladder function, risk of falling, and cognitive status).

Although the program intended that both a social worker and a nurse assess all clients, this does not always happen. The program determines which care coordinator will conduct the first assessment by looking at the client's PraPlus score, the number of medications, and number of chronic conditions. If the client's needs are mostly clinical, the nurse care coordinator does the initial assessment first. If the client's needs are mostly social, the social worker care coordinator

does the initial assessment first. However, the program sometimes decides that one of the initial assessments is not needed. Moreover, if both assessments are done, they may be done weeks or months apart.

Before the start of the demonstration, the program had planned to develop care plans during multidisciplinary team meetings attended by the care coordination supervisor, the care coordinators, a psychiatrist, an occupational therapist, a nutritionist, and representatives from both of the physician practices. However, this process was not implemented as planned, largely because physician practice staff did not have time to attend the meetings. Currently, the care coordinators develop care plans on their own with input from the other care coordinators, the care coordination supervisor, and the psychiatrist, as needed. The care plans focus on the services that each client needs, as determined by the information collected during assessment, and they do not follow a template or other standard structure. The care coordinators use the care plan template in the program's care management information system, which they customize to clients' individual needs. In the first two years of the demonstration, the program did not require care coordinators to update care plans on any set schedule. In the third year of the demonstration, the program began to require that care plans be updated every 60 days.

The program uses several strategies to monitor clients' status. The care plans specify the frequency of monitoring contacts for specific clients (although all clients are contacted at least monthly). Higher-risk clients usually will be monitored more frequently than lower-risk clients, but the program does not require this. (Program protocols do not specify different intensities of interventions for clients in its low-, moderate-, and high-risk groups. However, it is likely that, in addition to more frequent monitoring, higher-risk clients will need more one-on-one teaching, case aide services, and coordination of Medicare- and non-Medicare-covered services.) The care coordinator may use her discretion in deciding whether to monitor a client in person or by telephone. For program clients who had community-based services already in place before entering Lifecare Plus (such as the VNS Choice program), the care coordinators usually monitor clients by contacting the service provider, rather than the client. The program does this because the community-based providers complained that clients were confused about who was calling (or visiting) them. The program's weekly client group meetings (see description below) provide another opportunity for program staff to check and monitor some clients. Finally, as another monitoring tool for clients with heart failure, the program used an in-home monitoring device distributed by Viterion Telehealthcare. (This telemonitoring device was used for just 10 clients, however.)

Although the care coordinators initiate most client contacts, the program does receive a small number of calls from clients. In the first year of the program, care coordinators were available to clients during normal office hours. If clients had a medical emergency at any time, the program instructed them to call 911. In the second year of the program, clients also were instructed to call 911 in an emergency, but they could reach a care coordinator through a 24-hour paging system. The care coordination supervisor reported that these calls usually are not medical emergencies; instead, most are from clients who need emotional support or refills of medications.

Staffing and Program Quality Management. Maintaining and improving care quality and ensuring that programs attain their goals both require that staff have adequate qualifications,

training, and supervision and that management has the tools and support to monitor program progress toward its goals. The Lifecare Plus program requires its care coordinators to be either registered nurses (preferably baccalaureate-prepared) with home care experience or to be master's-prepared social workers with community and geriatric experience. The program changed its orientation for new care coordinators from an informal format focusing on local community resources to a more formal one covering JHH-required policies and procedures, as well as information systems, care coordination team members' roles, and the difference between care coordination services and direct service provision.

In the first year of the demonstration, the care coordination supervisor held several staff meetings each week that focused on day-to-day program operations and scheduling. However, in the second year of operation, the program eliminated one of the meetings because the staff felt that it was too time-consuming. The care coordination supervisor also meets individually with the social worker care coordinators to supervise their work with individual clients, but she reported that these meetings were sometimes cancelled because of more pressing program needs. The nurse care coordinator receives clinical supervision from JHH's long-term home health care department. In the first two years of the demonstration, the care coordination supervisor reported on the operation of the program to a succession of Jewish Home and Hospital managers including the vice president of community services and the vice president of home care. These managers provided input regarding program billing and information systems but they did not play a role in day-to-day program operations.

One year into the demonstration, the program was monitoring enrollment and costs, but not the implementation of its intervention. Staff used reports to monitor the number of clients enrolling but did not have data on the number of beneficiaries referred from each physician practice or on the reasons why referred beneficiaries were ineligible or declined to participate. Although the program monitored its costs and tracked payments, it had no mechanism to track whether its interventions were being implemented as planned. For example, the program did not monitor whether all clients were receiving an initial assessment by both a social worker and a nurse care coordinator. When staff used the case management software, they entered most information in free-text fields rather than in discrete-data fields and, thus, could not generate meaningful reports of their activities. In addition, staff were not experienced computer users and had difficulty using the software's reporting features.

WHO ENROLLS IN THE PROGRAM?

The Lifecare Plus program fell short of its first-year enrollment target. After a year of operations, the program had enrolled 261 patients in the evaluation treatment group and 260 patients in the control group (71 percent of the 730 beneficiaries expected in the first year). Staff reported that the main source of the shortfall was too few staff to conduct enrollment. Contrary to the program's expectations, the physicians at the two participating practices did not describe the demonstration program to their patients or encourage them to enroll, because it took to much time away from their patient visits. Instead, program staff had to identify potentially eligible patients and explain the program to them and ask them to participate. The program used part-time and temporary staff for these tasks. The ongoing presence of an enrollment worker at each

practice likely would have facilitated enrollment. However, the care coordination supervisor reported that the program could not afford to hire two full-time enrollment workers.

To gain another perspective on the proportion of eligible beneficiaries enrolling in the program and to describe their characteristics, the evaluation simulated Lifecare Plus eligibility criteria using Medicare enrollment and claims data. The simulation showed that 280 of 126,101 eligible beneficiaries (less than one percent) enrolled in the program's first six months of operation. (The time lag associated with processing Medicare claims data precluded the use of a longer reference period for this report.) The simulation clearly overestimates the number of beneficiaries eligible for the program, however, because it was not possible to limit beneficiaries included in this analysis to those receiving care from the two physician practices participating in the demonstration.

Program participants and eligible nonparticipants differed substantially in their demographic, clinical, and health care utilization characteristics. Participants are older and more likely to be female, nonwhite, and dually eligible for Medicare and Medicaid (Table 1). One-third of participants were age 85 or older (compared to a fifth of nonparticipants), and more than three-quarters are female (compared to two-thirds of nonparticipants). More than half of participants are nonwhite, and 39 percent are dually eligible.

TABLE 1

CHARACTERISTICS OF MCCD PARTICIPANTS AND ELIGIBLE NONPARTICIPANTS DURING FIRST SIX MONTHS OF PROGRAM ENROLLMENT (PERCENT, EXCEPT AS NOTED)

	Participants[a]	Eligible Nonparticipants
Age		
Younger than 65	0.3	0.0
65 to 84	65.5	80.3
85 or older	34.2	19.7
Male	22.5	35.5
Nonwhite	53.8	35.3
State Buy-In for Medicare A or B	38.8	24.2
Medical Conditions Treated in Past Two Years		
Coronary artery disease	50.8	49.9
Diabetes	38.8	31.5
Congestive heart failure	35.5	26.5
Chronic obstructive pulmonary disease	30.0	30.6
Hospital Admission in Past Year	39.4	28.1
Hospital Admission in Past Month	6.5	4.2
Total Medicare Reimbursement per Month (Dollars)	$1,410	$982
Number of Beneficiaries	**307**	**125,821**

TABLE 1 *(continued)*

Source: Medicare Enrollment Database and National Claims History.

Note: For participants, the intake date is their date of enrollment. For eligible nonparticipants, it is September 15, 2002, the midpoint of the six-month enrollment period covered by the participation analysis.

[a]Participants who do not meet CMS's Medicare requirements for the demonstration or who had invalid Health Insurance Claim (HIC) numbers on MPR's enrollment file are excluded from this table because Medicare service use data are not available. Participants who are members of the same household as a research sample member are included above but are not part of the research sample.

Participants were more likely than nonparticipants, during the two years before program intake, to have been treated for a number of chronic conditions targeted by the program. Among participants, 36 percent had been treated for congestive heart failure, 39 percent for diabetes, 19 percent for dementia, and 24 percent for peripheral vascular disease. Nonparticipants had significantly lower rates of these conditions. Participants also were more likely than eligible nonparticipants to have been hospitalized and to have had higher Medicare expenditures in the year before enrollment. About 39 percent of participants had a hospitalization in the year before enrolling and incurred average monthly Medicare expenditures of $1,410 over the same period—44 percent higher than nonparticipants. (September 2002 is used as the comparison month for nonparticipants because it is the midpoint of the six-month intake period included in this analysis.)

When developing the cost estimate for its waiver application, MPR estimated that Medicare costs would average $1,581 per month for eligible beneficiaries who did not participate in the program. Thus, it appears that the program has enrolled patients who had roughly the expected expenditure levels.

The program staff report that Lifecare Plus clients are satisfied with the program. One year into the demonstration, the program had not received any complaints from clients, but nine clients asked to be disenrolled. Of these nine clients, two moved into long-term care, three relocated out of the program area, and four refused care coordination services. In the second year of the demonstration, the program developed two client survey tools. The first measured client satisfaction with the program as a whole and was sent to 210 treatment group members who spoke English in summer 2003. (The program had difficulty translating the survey into Spanish and so did not send it to approximately 60 Spanish-speaking clients.) The program reported that, based on its survey responses, clients appeared to be satisfied overall with the Lifecare Plus program.

TO WHAT EXTENT DOES THE PROGRAM ENGAGE PHYSICIANS?

As originally envisioned, the Lifecare Plus program's care coordination model viewed physicians as collaborative partners. The program staff expected that physicians would (1) approve patients' referral to the program and explain the program to their patients during office visits, (2) attend multidisciplinary care planning meetings (or send a representative to the

meetings), and (3) respond to care coordinators' requests for information and assistance with specific patients. Because of their expected level of involvement, the program planned to pay the physician practices for the time physicians spent in care coordination activities. The program did not seek to improve physician's clinical practice because staff felt that physicians associated with these large academic medical centers were already familiar with evidence-based practice guidelines.

In the months leading up to the demonstration, the medical directors, who both hold leadership positions in the two referring medical practices, made presentations to their colleagues at faculty meetings to acquaint them with the Lifecare Plus program. The program's care coordination supervisor also met with the physicians to explain the program's goals, the intervention, and the program's plan for physician-care coordinator communication.

Program staff realized shortly after operations started that physicians were not willing to take on the role that the program had envisioned for them. Physicians felt explaining the program to patients initially and attending program meetings would require too much of their time. In addition, the St. Luke's medical director also reported that the physicians in her practice were disappointed because they had expected that Lifecare Plus would provide more case aide services to their patients than it actually did. The lack of physician enthusiasm for the program caused staff to redesign its care coordination model to work largely independently of clients' physicians. Although the program still requires physicians to approve their patients' referral to the program, the program now expects only that the physicians will be responsive to the care coordinators' requests for information and assistance as the need arises.

One year into the demonstration, there was disagreement among program staff about the frequency of care coordinators' contacts with clients' physicians. The medical director at St. Luke's reported that it had been several months since a care coordinator had called her about one of her patients. The care coordinators appear to agree, reporting that they spent one hour or less per week communicating with physicians or leaving messages for them. In contrast, the care coordination supervisor believed that the care coordinators frequently communicated with physicians. Neither the care coordination supervisor nor the medical directors reported any disagreements between the care coordinators and physicians.

HOW WELL IS THE PROGRAM IMPLEMENTING KEY INTERVENTION APPROACHES?

Improving Client Adherence. The program planned to improve clients' self-management and adherence to treatment recommendations through an educational intervention that included group meetings, distribution of a monthly newsletter, and one-on-one interactions with nurse care coordinators. In practice, however, the program's educational intervention is reaching only a minority of its clients.

The program's formal teaching efforts focus on its group meetings, which it offers approximately twice a month, on such health education topics as stroke, diabetes, skin care, foot care, fall prevention, and medications. One of the groups, which meets monthly, is conducted in Spanish, since about a third of program clients are Spanish-speaking. In addition, the program

offers weekly exercise groups, along with a monthly blood pressure screening and lectures on general wellness topics, such as nutrition. The program holds the one-hour group meetings at its Manhattan offices and provides free transportation to clients. The care coordination supervisor reported that, in the first year of the demonstration, the same clients attend the groups each month and estimated that attendees represent about five percent of all clients. The program tried to increase participation by having staff members call clients to encourage them to attend. In its second year, the program surveyed clients about their satisfaction with, and interest in, the group meetings. As a result, the program added more exercise classes, and attendance at these groups increased to about 10 percent. However, attendance at the other health-related groups remained at five percent.

A second tool to promote self-care skills is the program's monthly newsletter, which contains health education articles written by the care coordinators. However, staff note that the newsletter is also meant to provide emotional support to clients and includes contributions from clients and articles to promote emotional well-being. Thus, the health education articles make up only a small portion of the newsletter. Moreover, the newsletter is produced only in English, even though about a third of the program's clients cannot read English.

As a third strategy to improve clients' self-management skills and adherence, nurse care coordinators will provide one-on-one education to clients whose initial assessment identifies clinical needs. Data provided by the program indicate that, in the first six months of operations, only about a third of clients had contact with a nurse care coordinator. In the second six months, this fraction rose to about two-fifths. During these contacts, the nurse care coordinators teach clients self-care skills for their specific conditions, how to take their medications, and the importance of drug safety and adherence to medical regimens. However, the program's initial assessment is not designed to identify clients' specific education needs, nor do its care plans identify goals for client education. Care coordinators do not use an established teaching curriculum or standardized condition-specific teaching materials. The program does not provide additional patient education training to care coordinators; it relies instead on the training nurses typically receive as part of their nursing degrees. The program has no specific strategies to monitor the effectiveness of its education intervention—the care coordinators do not assess whether clients appear to understand the information presented or are incorporating either disease-specific teaching or more general wellness training into their lives.

Improving Communication and Coordination. In its proposal to CMS, the Lifecare Plus program outlined many plans for improving communication and coordination among medical and service providers, and clients. The program implemented some, but decided not to, or was not able to, implement others.

First, the program planned to better coordinate medical care on behalf of its clients and increase communication among clients' physicians by (1) including primary care physicians (or their representatives) in regularly scheduled multidisciplinary care team meetings, (2) giving those physicians access to the program's case management information system, (3) providing reminders to physicians to schedule routine preventive care and screening, and (4) alerting physicians to urgent changes in clients' conditions. As already described, neither the primary care physicians nor any of their designated representatives had the time to attend the program's multidisciplinary team meetings. Because of the lack of physician engagement with the program

and program staff dissatisfaction with the case management database, the program decided not to offer physicians access to the database. The program had also planned to remind physicians about clients' needs for routine care but decided that such reminders were beyond the scope of the program as it was ultimately implemented. The program does, however, use email and telephone calls to alert physicians to changes in clients' status. Nevertheless, when some physicians did not respond to program emails and calls, the medical directors had to appeal to them to cooperate with program staff. During the second program year, the care coordination supervisor reported that the Mt. Sinai medical director asked the program to provide a one- to two-sentence status update of each of that practice's patients. However, it does not appear that these updates were ever provided, nor were such updates requested by, or provided to, St. Luke's physicians.

Second, the program planned to act as a communications hub for primary and specialty medical and service providers (such as home care agencies). The program does not appear to have established communication with clients' specialty physicians. The program also planned to coordinate the flow of information from service providers and, in that, have been more successful. The care coordinators regularly contact these providers, as well as staff in assisted-living facilities and skilled nursing homes, to discuss clients' care coordination needs.

Third, the program planned for its case aides to accompany clients on primary care physician visits to provide translation services and to ensure that clients understand physicians' instructions and teaching. In fact, while the case aides help clients get to medical appointments, they are not present when the client meets with the physician, nor do they provide translation services. Program staff could not say why this aspect of the demonstration was not implemented. However, they noted that translation services were available through another JHH program and that Lifecare Plus had, in fact, arranged this service for one or two clients.

Fourth, Lifecare Plus planned to have care coordinators review client medications and provide assistance to ensure medications were taken as recommended. During the initial assessment, the care coordinators identify which medications clients have been prescribed and whether clients are taking them correctly. To help ensure that clients take their medications on the correct day and time, the nurse care coordinators will set up clients' medications in cassette dispensers, if necessary. The case aides ensure that clients are having their prescriptions filled.

Fifth, because many elderly people have undiagnosed or untreated mental disorders, during the initial assessment, care coordinators identify clients with cognitive deficits or mental health problems they believe might benefit from mental health services. These clients are referred to the program's psychiatrist, who then reviews the clients' assessment information and medications. She coordinates with clients' primary care physicians to establish a plan of care and may see clients herself, as appropriate. As of fall 2004, the psychiatrist estimated getting 100 such client referrals (out of approximately 350 clients enrolled). Although she has tried to get most of these clients to speak with her (or another psychiatrist), she has only seen a small number of them. The program does not track whether clients receive mental health care from other sources.

Finally, the program also tracks adverse events, such as unexpected hospitalizations or trips to the emergency room, to ascertain their cause and prevent them from happening again. This

tracking process was implemented in the program's second year, when Mt. Sinai's institutional review board required the program to complete an adverse-event form to track falls, emergency room visits, hospital admissions, and deaths. Mt. Sinai provides the program with data on emergency room visits and hospitalizations for clients seen in its facility. St Luke's does not, however, and, for its patients, the program relies on client self-reports of adverse events. In response to adverse events, the care coordinator tries to identify underlying causes of the unplanned event and works with the client to recognize preventable causes and minimize or eliminate the risk of recurrence.

Maintaining Client Independence. To maintain clients' independence, the program planned to (1) implement a fall prevention program, (2) directly provide, or arrange for, support services, and (3) reduce social isolation by providing telephone reassurance calls and inviting clients to groups and parties. Again, the program was able to implement some of these interventions, but not others; among those that were implemented, client participation was often limited.

The Lifecare Plus program had a two-part approach to reducing client falls. First, it planned to enroll clients with balance and gait deficiencies or a history of falls in a fall prevention program. However, this program did not start until nearly two years after the start of the demonstration. The care coordination supervisor could not elaborate on the cause of this delay. During their initial assessment, the care coordinators use a fall risk assessment tool to identify clients at risk of falling. All clients receive information on fall prevention and clients with high-risk scores are referred for physical or occupational therapy, vision or hearing assessment, or pharmacist review of medications. The second part of the program's approach to reducing falls is to conduct in-home safety checks. If unsafe conditions are identified in the client's home, the program sends a case aide to tidy up or will arrange for someone to tack down rugs or install grab bars.

The program also planned to maintain independence by increasing client access to support services. First, it planned to increase access directly by hiring two case aides to do light housework (including laundry, shopping, and errands) and bathe clients, as well as to accompany clients to physician appointments, as already noted. As implemented, the program's start-up difficulties delayed it from offering case aide services until approximately nine months after the start of the demonstration. The program employs one half-time case aide, a certified home health aide, who serves about 12 clients per week. In addition, the program contracts out to JHH's licensed home care services agency for additional case aide services that amount to approximately six hours per week.

The program's second approach to increasing access to support services was to provide clients with referrals to Medicare- and non-Medicare-covered services and, in some instances, pay for these services directly. The care coordinators refer clients assessed as needing services to a wide range of community-based, non-Medicare-covered service providers, which they identify on the Internet. If the client cannot follow through on the referral, the care coordinator helps arrange these services. The care coordinator then follows up with the client to ensure that services are in place and that they are being provided satisfactorily. During its first six months of operations, the program made almost no referrals to either Medicare- or non-Medicare-covered services. In the second six months, however, the program referred 13 percent of clients to

Medicare-covered services and 65 percent of clients to non-Medicare-covered services. The non-Medicare-covered services to which the program most often referred clients were transportation, respite care, and programs that provided fans or air conditioners. Despite the large number of referrals to services, program data reported that only 21 percent of clients had had contacts with a staff member to monitor services being provided. It is likely that (1) clients did not follow up on care coordinators' referrals to services, so few services were in place to monitor; or (2) clients did secure these services, but the care coordinators did not monitor their effectiveness or clients' satisfaction with them.

As a third strategy to maintain client independence, Lifecare Plus planned to have client volunteers make weekly telephone reassurance calls to more isolated program clients to informally check on their status and provide emotional support. One year into the demonstration, the program had 25 clients receiving telephone reassurance and two volunteers making calls. As of spring 2004 (nearly two years after the program started), the program had four volunteers (one of whom speaks Spanish) to make reassurance calls. Together, these volunteers made about 20 calls per week. The care coordination supervisor believes that more clients have not volunteered to make calls because they may be too frail, not willing to travel to the program offices to make calls, or just not interested. To make up the shortfall, the program's enrollment coordinator and administrative assistant also make reassurance calls.

The Lifecare Plus program's final planned intervention to maintain clients' independence was to invite clients to groups and parties, which would increase social interactions and reduce loneliness. The program planned to hold four weekly groups: a lunch meeting with a speaker addressing either a wellness issue or a recreational topic such as "arm-chair travel" and three support groups (reminiscence, relaxation, and loneliness). The program implemented these groups, as well as an exercise group. In the first two years of the demonstration, the program tried to increase participation in groups by having its support staff call clients to encourage them to attend and by conducting a survey about clients' satisfaction with the group. As a result of this survey, the program began to have one party a month, at which attendance has averaged about 15 clients (out of approximately 350 enrolled as of fall 2004). The survey did not ask why clients did not attend the group meetings. By better understanding the barriers to clients' attendance, the program may be better able to evaluate whether increasing attendance at its meetings is feasible.

WHAT WERE ENROLLEES' MEDICARE SERVICE USE AND COSTS?

This report provides preliminary estimates of the effect of the Lifecare Plus program on Medicare service use and costs. These estimates do not necessarily indicate the true effects of the program over a longer period because the follow-up period for the analysis is too short (the first two full calendar months after random assignment). Among treatment group members enrolled during the first four months of program operations, total Medicare costs during the first two months after enrollment, exclusive of demonstration costs, were $2,932, on average, compared with $1,964 for the control group. This difference ($969) although large, was not statistically significant ($p = 0.3$). The treatment-control difference in costs increases by $573 over the first two months, from $969 to $1,542, taking into account CMS's monthly program payment. Since, as discussed earlier, it was several months before the program began delivering

services, a number of clients received no program intervention at all during this period. As a result, this analysis is unlikely to reflect even the short-term effects of the program. Moreover, it is too soon to tell whether the Lifecare Plus program's interventions will be able to reduce hospitalizations and costs and improve participants' health in the longer term.

CONCLUSION

The Lifecare Plus program has some features commonly associated with effective care coordination programs, plus a few unique features.

- The program targets elderly clients with diagnoses that are typically associated with high health care costs and appears to be enrolling patients with the high costs it expected.
- The program offers group meetings that provide clients with general health and wellness education and offers transportation to the meetings. In addition, nurse care coordinators provide one-on-one condition-specific education to clients who need it.
- The program improves communication and coordination of care by sending physicians email and telephone alerts about changes in client status, coordinating with long-term care providers, and tracking hospital encounters. It also ensures that clients take their medications correctly, helps clients get to their medical appointments, and identifies clients with mental health service needs and urges them to seek care.
- To maintain client independence, the program provides case aide services and telephone reassurance calls to some clients. The program also holds group meetings and parties that are designed to decrease loneliness and social isolation. It also recently implemented a fall prevention program. In addition, the program refers clients to, or arranges for, a wide variety of community services.

Potential Barriers to Program Success. The Lifecare Plus program's care coordination model does not include several of the features that the literature suggests are associated with effective care coordination. For example, it does not provide feedback to its care coordinators, program leaders, or physicians about patient outcomes. While it has adopted other features suggested by the literature, some of these have been weakly implemented. In addition, Lifecare Plus experienced several barriers to success in its first year of operation. First, it does not appear that the care coordination supervisor had the resources and support needed to manage the program effectively. She was not involved in the design of the program or the submission of the program's proposal to CMS (then HCFA). The Jewish Home and Hospital managers who were involved in these activities had a minimal role in the implementation of the program. Moreover, the tasks of hiring staff and enrolling clients distracted the care coordination supervisor from other vital aspects of the program such as establishing communications with the medical directors and referring physicians, developing documentation protocols for the care coordinators, and monitoring the quality of the intervention being provided. As a result, the program strayed from its original objectives when it faced obstacles. Despite a significant investment in an electronic care coordination information system, the program did not use this system to develop

reports on its activities and clients. Thus, the program has no process for identifying program implementation barriers quickly and, therefore, no systematic way of devising approaches to overcoming obstacles or revising program objectives. For example, when faced with continuing enrollment shortfalls, program staff continued to use the same processes and resources to identify and recruit clients. Similarly, the program continued to pursue group meetings as a primary intervention despite continued low attendance.

Second, delays in hiring staff and beginning its intervention make it nearly impossible for the program to have had any effect on its earliest enrollees. Some interventions, such as one-on-one condition-specific teaching, group meetings, telephone reassurance calls, case aide services, and the fall prevention program, have reached only a small number of clients. Moreover, other interventions, such as integrating primary care physicians into the multidisciplinary care team, improving communication between clients and physicians and between primary care and specialty physicians, and ensuring optimal preventive care, were never implemented. Consequently, the program's interventions, as implemented, may not be sufficient to reduce utilization of health care services and Medicare costs, especially given the program's relatively high fees.

Third, the program has not been able to engage physicians. This is a barrier that prevents the program from achieving its key objective of expanding its social service orientation to more effectively address clients' medical needs. The lack of communication between the program staff and the medical director prevented the program from identifying ways to make itself more attractive to physicians. The lack of program integration with medical care providers may have contributed to the low proportion of enrollees participating in the program's group meetings and is likely to make it difficult to improve clients' health and reduce their use of high-cost health care services.

It is too early to determine whether the Lifecare Plus program's care coordination model can reduce hospitalizations and other avoidable health care expenses. However, it is clear that clients enrolling in the first year of the demonstration (who will be the subjects of the evaluation's second Report to Congress) received less than full exposure to the program's interventions, as originally envisioned and proposed to CMS. Given the barriers described above, the Lifecare Plus program may have difficulty demonstrating positive impacts that will offset its costs.

INTRODUCTION

The Medicare Coordinated Care Demonstration (MCCD), mandated by the Balanced Budget Act of 1997, is testing a range of models aimed at improving the care of chronically ill beneficiaries with Medicare fee-for-service coverage. Fifteen programs are participating in the demonstration sponsored by the Centers for Medicare & Medicaid Services (CMS). The programs are hosted by organizations as diverse as hospital systems, disease management vendors, and retirement communities and are serving patients in 16 states and the District of Columbia. Mathematica Policy Research, Inc. (MPR) is evaluating the national demonstration, through both impact and implementation analyses based on a randomized design.[1]

This report is one of a series that describes each program during its first year of implementation and provides preliminary estimates of its impact on Medicare service use and costs. First, it briefly describes the data and methodology used in this series of reports and presents an overview of the program that is the focus of this report. It then addresses the following questions: Who enrolls in the program? To what extent does the program engage physicians? How well is the program implementing its approaches to improving patient health and reducing health care costs? What were enrollees' Medicare service use and costs during its first months of operation? The report concludes with a discussion of the program's strengths and unique features, as well as potential barriers to program success.

This report describes the Jewish Home and Hospital Lifecare System's (JHH's) MCCD program, which it calls "Lifecare Plus." Jewish Home and Hospital is a large, nonprofit provider

[1]Lovelace Health System's CMS Medicare Case Management Demonstration for Congestive Heart Failure and Diabetes Mellitus is also part of the MPR evaluation. Appendix Table A.1 lists the host for each demonstration program in the evaluation, as well as each program's service area and target diagnoses.

of long-term care services in New York City. The Lifecare Plus program began enrolling Medicare beneficiaries in June 2002.

DATA SOURCES AND METHODOLOGY

Implementation Analysis. The evaluation's implementation analysis uses information gathered during telephone interviews with program staff conducted approximately three months after the program began enrolling patients and in-person interviews conducted approximately six months later. For each site, one of three MPR implementation team members conducted the telephone and in-person interviews using semistructured protocols. The interviews covered (1) organization and staffing; (2) targeting and patient identification; (3) program goals; (4) care coordination activities (such as assessment, patient education, and service arranging); (5) physicians' attitudes toward the program and interventions with physicians; (6) quality management; (7) record keeping and reporting; and (8) financial monitoring. Use of the protocols ensured that each interviewer collected as consistent a set of information for each program as possible, while allowing the interviewer to explore issues of specific importance to each program. The structure of the protocols also makes synthesizing findings across programs more efficient. MPR staff also reviewed written materials that each program provided, including (1) its proposal to CMS, (2) its operational protocol, (3) materials it provided to patients and physicians, and (4) forms used in its operation. (Appendix Table A.2 contains a full list.) This analysis also includes an examination of data each program collected specifically for the evaluation describing care coordinator contacts with patients, patient disenrollment, and services the program purchased for patients during its first six months of operation.

Participation Analysis. The evaluation uses Medicare claims and eligibility data to estimate the number of beneficiaries in the Lifecare Plus program's service area who were eligible for the program and the percentage that actually enrolled during the program's first six

months of operations. Beneficiaries are identified as eligible if, for any month between June and December 2002, they (1) lived in the program's service area, (2) were enrolled in Medicare Parts A and B, (3) had Medicare as the primary payer, (4) were not in a Medicare managed care (Medicare + Choice) plan, and (5) met the program's target diagnosis and service use requirements (described in detail in Appendix B). The midpoint of the six-month enrollment period examined in this analysis—September 15, 2002—is used as a pseudo-enrollment date for nonparticipants; the actual enrollment date is used for participants. Participants and eligible nonparticipants were then compared with respect to demographic characteristics, diagnoses, and utilization histories to determine the extent to which participants are typical of the pool of eligible beneficiaries.

Impact Analysis. This report also presents early impact estimates based on key study outcomes. The evaluation's impact analysis is based on the random assignment of consenting, eligible Medicare beneficiaries to either receive the program intervention in addition to their regular Medicare benefits or receive only their regular Medicare benefits as usual. Comparison of outcomes for the two groups will yield unbiased estimates of the impact of care coordination. Disenrollees are not excluded from the analysis sample because doing so would introduce unmeasured, preexisting differences between the treatment and control groups that random assignment is meant to avoid.

The report provides two types of comparisons of estimated treatment and control group means for Medicare-covered service use and costs. The first uses outcomes measured over the first two months after random assignment for beneficiaries who enrolled in the program during its first four months. The second compares treatment and control group means for each calendar month after program startup, using all sample members enrolled through the end of each month, to observe any trends in treatment-control differences over time.

In this report, the impact of the program's intervention is estimated as the simple difference in mean outcomes between treatment and control patients. T- and chi-squared tests are used to establish whether differences are statistically significant. The next round of site-specific reports will use regression to adjust for any chance baseline differences between the two groups that arose despite random assignment. (Appendix B describes in more detail the methods used to obtain Medicare data, construct variables, and choose analysis samples.)

The treatment-control comparisons presented in this report may not reflect the true long-term impacts of the program, for several reasons. First, the comparisons are based on a relatively small sample (only patients enrolling during the first four months of program operations). Second, the outcomes are measured too soon after patient enrollment to expect programs to be able to have sizable impacts. (The timetable for the evaluation's first Report to Congress defined the observation period for this report.) Third, program interventions may change as staff gain more experience with the specific patients they have enrolled. Finally, if programs change their eligibility criteria or the type of outreach they conduct, they may enroll different types of patients.

Despite these shortcomings, the treatment-control differences are presented to provide some limited feedback to the programs on how the two groups compare. Later analyses will examine Medicare service use and cost impacts over a longer time and will include all enrollees during the program's first 12 months. These analyses also will examine patient outcomes based on telephone interviews with treatment and control group members. Interview-based outcomes include the receipt of preventive health services, general health behaviors, self-management, functioning, health status, and satisfaction with care, as well as disease-specific behaviors and health care.

OVERVIEW OF THE JEWISH HOME AND HOSPITAL MCCD PROGRAM

Program Organization, Relationship to Physicians, and Service Environment. JHH is the host for the Lifecare Plus demonstration program. JHH has three campuses (in Manhattan's Upper West Side, the Bronx, and Westchester) that provide in-patient and community-based long-term care services for area residents. JHH operates skilled nursing facilities, subacute care centers, and short-stay rehabilitation facilities. The Lifecare Plus program operates within JHH's Department of Community Services; the department also provides home health care, adult day health, respite care, and transportation.

The prototype for Lifecare Plus was JHH's Geriatric Outreach (GO) program. Started in 1976 by JHH social workers, the aim of the GO program is to allow socially isolated elderly people who have no informal caregivers to live safely at home and to improve the quality of their lives. The GO program has provided social service interventions, along with limited nursing and personal care, to more than 1,000 chronically ill clients older than age 80. JHH staff report that, during 2000, GO program clients had 68 percent fewer hospital admissions and 71 percent fewer skilled nursing facility admissions than Medicare beneficiaries age 85 and older had in 1997. The Lifecare Plus program was designed to contain all the elements of the GO program, plus two new components. It would expand coordination of medical care by including participants' physicians (or their representatives) in care coordination team meetings, teaching clients one-on-one about their medical conditions; and referring clients to physical and occupational therapy services. It also would include a fall prevention program led by an occupational therapist who would assess home safety.[2]

[2]The GO program is not accepting new members but continues to serve existing clients. Current GO clients are not eligible for the demonstration, and beneficiaries assigned to the demonstration's control group are not eligible for the GO program.

In the first year of the demonstration, the key Lifecare Plus staff included the program director who also was the care coordination supervisor (she is referred to as the care coordination supervisor for the remainder of the report), enrollment coordinator, the care coordinators, and a psychiatrist. In addition, in-house and contracted case aides provide personal care, perform errands, and accompany clients to medical visits. The staff, with the exception of some per diem nurse care coordinators and some case aides for whose services the program contracts with JHH's home care program, are employed by Lifecare Plus (through JHH) and work from JHH's Manhattan campus. The care coordination supervisor has responsibility for overall program oversight and day-to-day program operations as well as supervision of the program's care coordinators and the case aides.

The program planned to make nutrition, physical therapy, and occupational therapy services available to its clients, but, to lower its own costs, it had wanted to contract for these services through JHH. However, problems in writing the contracts delayed the availability of these services until the third year of the demonstration. Until then, when clients needed these services, the care coordinators obtained referrals from clients' physicians and the services were billed directly to Medicare.

The program uses social workers and nurses as care coordinators. Depending on the participant's circumstances and needs, either a nurse or a social worker will take the lead in coordinating care. For example, if a client has primarily social service needs (such as a need to sign up for Medicaid), the client's case is assigned to a social worker care coordinator. If the client has primarily medical needs (such as a newly diagnosed condition), the client's case is assigned to a nurse care coordinator. One year after its start, the program had four full-time care coordinators (one nurse and three social workers) and a care coordinator-to-client ratio of 1 to

65. The program plans to have six care coordinators (three nurses and three social workers) for a care coordinator-to-client ratio of 1 to 60 when it reaches full enrollment.[3]

The program initially had difficulty hiring staff. Like many other areas of the country, New York City has a shortage of nurses and social workers. The limited duration of the demonstration and the salaries the program offered made it difficult for the demonstration to attract qualified staff. The program did not hire its first care coordinator until three months after it started enrolling patients. Because it then took several months for orientation, the care coordinators did not begin interacting with clients until approximately five to six months after the program's start. In the interim, the program's care coordination supervisor and enrollment coordinator made welcoming telephone calls and sent packets of information to all clients. The program also used per diem nurses as care coordinators in its first year of operation.

The design of the Lifecare Plus program called for JHH to partner with two physician practices associated with large academic medical centers in Manhattan that would be the program's primary sources of patient referrals. These practices—Coffey Geriatrics Associates at the Mount Sinai School of Medicine (Mt. Sinai) and Geriatrics Associates within University Medical Practice Associates at St. Luke's Hospital (St. Luke's)—agreed to take part in the demonstration program.

The program has two medical directors, one associated with each of the two physician practices. The Mt. Sinai medical director is the vice chair for Clinical Affairs of the Department of Geriatrics and Adult Development, and the St. Luke's medical director is the director of University Medical Practice Associates. The medical directors act as liaisons with Lifecare Plus and as opinion leaders among physicians at their hospitals, encouraging physicians to promote

[3]The program hired a second nurse after 18 months of operation.

the program to their patients. The role of medical director is vital, because Lifecare Plus itself does not have existing relationships with these physicians, even though many JHH clients are patients of physicians in the two practices.

The Lifecare Plus program operates in an environment already rich in services for the elderly. Several other care coordination programs serve frail elderly people in Manhattan, but they target a different population than the demonstration does or feature a less intensive intervention. Mt. Sinai operates a Program of All Inclusive Care for the Elderly (PACE) site. As a PACE site, however, it targets dually eligible beneficiaries at risk of nursing home placement, and, unlike in Lifecare Plus, enrollees must be willing to give up their primary care physicians.[4] The program staff do not try to prevent PACE enrollees from enrolling in the demonstration, however. The New York City Department of Aging has a case management program that targets people older than age 60 living at home, but it provides only telephone assessment and personal care. Jewish Association for Services for the Aged, a local nonprofit organization, also offers some care coordination services, including assistance applying for government benefits and entitlement programs and help finding home care, transportation, or long-term care services (Jewish Association for Services for the Aged 2004). The Lifecare Plus staff believe that this program is less intensive than their own. The Visiting Nurse Service of New York offers a comprehensive care coordination program for Medicaid beneficiaries called VNS Choice (Visiting Nurse Service of New York 2004). The care coordination supervisor reported that approximately 14 percent of the clients enrolled in the Lifecare Plus program also receive care coordination services from VNS Choice.

[4]PACE is a capitated managed care benefit in which a multidisciplinary team provides comprehensive medical and social services through an adult day health center, along with in-home and referral services as needed.

In addition, each of the two physician practices referring patients to the demonstration has social workers associated with them. The demonstration staff characterized the services available from these social workers as case management, not care coordination. For example, the practice social workers help patients obtain energy assistance, apply for Medicaid, or deal with psychosocial issues. In contrast, the program sees itself as a coordinator of services, facilitating communication among providers.

Program Approaches. Program staff state that Lifecare Plus seeks to improve client health and reduce health care costs by (1) improving client adherence to medical regimens, (2) improving communication and coordination between clients and physicians, and (3) maintaining clients' independence. Specifically, the program planned to improve adherence by providing client education through group meetings and one-on-one nurse care coordinator reinforcement for those who need it. The program planned to improve care coordination by integrating physicians into their care coordination team and by serving as the focal point of communication among clients' care and service providers. In addition, it planned to maintain clients' independence by reducing social isolation, identifying and treating undiagnosed mental disorders such as depression, and providing case aide services. As implemented, the program appears to place more emphasis on interventions to maintain client independence than to improve client adherence or improve communication and coordination of care, as discussed in more detail below.

The program's goals do not include improving physicians' clinical practice patterns. Moreover, as implemented, the program requires only minimal physician contact beyond having physicians review potential clients for program appropriateness and introduce the program to their patients during office visits. Currently, the program asks only that physicians answer care coordinators' questions about specific patients when the need arises.

Program staff emphasized that Lifecare Plus is neither a disease management nor a disease-specific intervention. Rather, it is based on a social work model that incorporates some clinical elements (such as diagnosis-specific education) to reduce hospital use. Consistent with its social work focus, the program refers to participants as "clients," not "patients."

Target Criteria and Patient Identification. Lifecare Plus targets Medicare beneficiaries (age 65 or older) living in Manhattan and the Bronx. Eligible beneficiaries must have been diagnosed with a chronic condition such as congestive heart failure, coronary artery disease, or other heart disease; diabetes; liver disease; chronic obstructive pulmonary disease or other lung disease; stroke or other cerebrovascular disease; a psychotic, major depressive, or anxiety disorder; cancer; or Alzheimer's disease or another dementia. To be eligible, beneficiaries must have had at least one hospitalization or three physician visits in the past year, but these encounters need not have been for any of the targeted conditions. In addition, enrollees must meet CMS's criteria for all the demonstration programs: have both Medicare Parts A and B, have Medicare as their primary payer, and not be in a Medicare managed care plan of any type. The program has no exclusion criteria.[5]

In its first year of operation, the program identified nearly all its participants from the St. Luke's and Mt. Sinai practices.[6] Each week, the program received a list of patients scheduled to see the physicians in the physician practices. A program staff member verified patients' Medicare eligibility on the Common Working File, then used patient medical records to

[5]Although the program does not exclude clients who plan to temporarily leave its catchment area, it will disenroll clients who are out of the area for more than three months. These clients can reenroll in the program when they return. The care coordination supervisor estimates, however, that only two or three program clients spend part of the year out of the program area.

[6]During its first year, the program also identified a small number of participants from JHH's assisted-living facilities and other senior housing units. These facilities, like the physician practices, also have social work services available to their residents (and, by definition, the assisted-living facility provides help with daily living activities).

complete a chart review instrument (see Appendix C) that checked the program-specific criteria. The staff member then let the practice staff know which patients met the program's eligibility criteria and asked that physicians mention the program to eligible patients they believed would benefit from it during each patient's upcoming office visit. After the patient saw the physician, a program staff member met with the patient in the physician's office, provided more information about the program, and obtained informed consent from interested patients. After obtaining the signed consent, the program staff member helped the patient complete a preliminary questionnaire that collected information on health service use and general health status (see Appendix C).

The staff member then returned to the program office and input information from the chart review and questionnaire into Canopy, the program's web-based case management software system (developed by Canopy Systems, Inc.). The software then calculated a PraPlus score, which was supplemented with information on cognitive or functional deficits and caregiver support to categorize patients into the low-, moderate-, and high-risk groups that determined CMS's program payment.[7] Having a functional deficit or few social supports elevated clients with low-risk PraPlus scores to moderate risk. Severe or moderate functional deficits plus poor social support elevated clients to high risk. CMS pays the program $379 per person per month for high-risk clients, $259 for moderate-risk clients, and $74 for low-risk clients.

MPR randomly assigned people within each risk group who consented to participate to either the treatment or the control group. Treatment group members received care coordination

[7]PraPlus™, a 17-item screening questionnaire, identifies elderly people at high risk for future use of health care services. The items include self-rating of health status, presence of certain chronic illnesses, indicators of physical functioning, and use of health services during the previous year. The PraPlus score has been shown to be a valid predictor of utilization (Pacala et al. 1997). Clients with PraPlus scores of 0.50 or above are high risk, those with scores between 0.35 and 0.50 are moderate risk, and those with scores below 0.35 are low risk.

services in addition to their usual Medicare-covered services, while control group members received their usual Medicare-covered services without care coordination. In its first year of operation, 60 percent of Lifecare Plus clients were assessed as high risk, 30 percent as moderate risk, and 10 percent as low risk.

The program has used several types of staff to conduct participant identification and recruitment. Before the start of the demonstration, one staff member reviewed patient charts and identified a list of eligible patients from the St. Luke's practice. However, this person left before the demonstration began. Because of delays in the start of the demonstration, some of these patients were no longer eligible when the program began. After the demonstration started, the program employed two part-time enrollment workers at the St. Luke's practice. Using the previously created list of eligible patients, they met with patients after physician visits to describe the program to them and ask for their consent to participate. Within the first six months of program operations, one part-time enrollment worker left, and the program used its newly hired nurse care coordinator to identify newly eligible patients through chart reviews and to meet with patients to ask them to participate. At the end of the first year of the demonstration, the program had exhausted the pool of potential participants at St. Luke's and stopped enrolling patients from that practice.

At the Mt. Sinai practice, the program had planned to have three practice social workers review medical records to identify eligible patients and ask for their participation. Soon after the start of the demonstration, however, it became clear that the practice social workers would not have time to do this. As a result, the program enrolled almost no patients from the Mt. Sinai practice in the first six months of the demonstration (June through November 2002). In November 2002, however, the daughter of the Mt. Sinai medical director joined the program as a temporary employee. She reviewed the charts of Mt. Sinai practice patients with upcoming

appointments, checked with the physicians of eligible patients for their approval to recruit, and asked patients to consent to participate when they came in for their appointments. The part-time enrollment staff member who had been working at St. Luke's moved to Mt. Sinai to help with recruitment. The medical director's daughter left the program in February 2003, and the nurse care coordinator who had been doing enrollment at St. Luke's moved to Mt. Sinai. In April 2003, the nurse care coordinator's caseload became too high for her to continue working on enrollment. The program's part-time staff member continued working at Mt. Sinai and was joined by the program's enrollment coordinator, both of whom currently continue to enroll patients.

The care coordinators also help with participant recruitment by making presentations directly to seniors at assisted-living facilities, community organizations, and senior housing facilities. Although the program allows self-referrals from individuals and direct referrals from physicians, few clients have been identified in this way.

Assessment, Care Planning, and Monitoring. All clients assigned to the treatment group receive an initial assessment. The program had planned to have a nurse and a social worker jointly assess all clients with a tool that covered both medical and psychosocial issues. However, when the care coordinators first began to conduct assessments, they faced a considerable backlog because of the delays the program encountered in hiring and orienting staff and initiating its intervention. As a result, although a social worker and nurse sometimes conducted the initial assessment together, more frequently, one saw the client before the other. The nurse, who usually saw clients after the social worker, gradually increased the medical focus of her assessment. Eventually, the program separated the assessment tool into two tools—one for the nurse care coordinators and one for the social worker care coordinators (see Appendix C).

All clients still are supposed to be assessed by both a social worker and a nurse, but this does not always happen.[8] The care coordination supervisor determines which care coordinator will conduct the first assessment by looking at the client's PraPlus score, the number of medications the client is taking, and the number of chronic conditions the client has. If the client's needs are mostly clinical, the nurse care coordinator does the initial assessment first. If the client's needs are mostly social, the social worker care coordinator does the initial assessment first. However, the supervisor may also decide that one of the initial assessments is not needed. Even if both assessments are done, they may be done weeks or months apart.

The social worker's assessment includes psychosocial issues (such as the ability to access community resources and the adequacy of family or caregiver support) and environmental issues (such as the adequacy of the client's financial resources and home safety).[9] The nurse's assessment includes health-related issues (such as activities of daily living, medication regimens, bowel/bladder function, risk of falling, and cognitive status). (Appendix C contains a copy of the Fall Risk Assessment and Transfer Evaluation Tool.) Both the social work and nursing assessments are conducted in clients' homes and take approximately 1.5 hours each.

Clients provide most of the information for the initial assessments. If a service provider (for example, a home health nurse) is already assisting the client, however, the care coordinator will seek that person's input. Assessments are documented in Canopy.

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[8]The care coordination supervisor believes that nearly all clients are, indeed, assessed by both a social worker and a nurse care coordinator. However, the contact data provided by the program does not support this contention. It may be that inconsistencies in documentation by the care coordinators have contributed to this situation.

[9]Initially, the program planned to have an occupational therapist conduct a home safety assessment. As mentioned earlier, the program did not provide occupational therapy services until the third year of the demonstration. Instead, the program added a home safety component to the social work assessment tool. When the care coordinator determines it is necessary, she obtains a physician's referral for an occupational therapist consultation. The occupational therapist's assessment is not part of the program's assessment, and the care coordinators do not have access to these data. Any therapeutic intervention that the occupational therapist provides is not part of the program's care plan. The care coordinators do not monitor the therapist's contacts with the client.

The program assigns most clients to a social worker as their primary care coordinator; the social worker then calls in a nurse care coordinator if the client's situation requires it. A nurse care coordinator is assigned to the few clients whose needs are primarily clinical. This arrangement is usually temporary, however—when the client's condition stabilizes, a social worker will assume primary responsibility. The program also considers clients' language preferences when assigning a care coordinator. One nurse and one social worker care coordinator speak Spanish.

Initially, the program had planned to conduct reassessments at six-month intervals and after certain trigger events. In the second year of operation, the program determined that reassessments were needed only every 12 months. The same tools are used in client reassessments as in the initial assessment. The program also conducts a reassessment if a client has an adverse event or a change in status, such as a new diagnosis or worsening of a current diagnosis.

During the program's first six months, 155 participants enrolled and had been randomly assigned to the Lifecare Plus program's treatment group (Table 1). Of these clients, 28 percent had an assessment contact; among these, only 2 percent had their first contact within two weeks of enrollment. Staff had hoped to complete all client assessments within two weeks. As mentioned earlier, the program had difficulty hiring care coordinators and only hired its first care coordinator three months after it received permission from CMS to start enrolling clients. The program did not begin to perform client assessments until its fifth month. Completing assessments also took longer than expected because the care coordinators were responsible for doing both client assessment and recruitment. By the end of the program's second six months of operations, additional staff had been hired, and 83 percent of the 257 clients enrolled in the program had received an initial assessment contact (Table 1).

TABLE 1

PROGRAM CONTACTS WITH CLIENTS DURING FIRST 12 MONTHS OF OPERATION

	First Six Months[a]	Second Six Months[a]
Cumulative Number of Clients Enrolled	155	257
Number of Clients with at Least One Program Staff Member Contact (Percent)	84 (54)	221 (86)
Total Number of Contacts for All Clients	260	3,354
Average Number of Contacts per Client, Among Those Contacted	3	15
Number of Program Staff Contacting Clients[b]	7	15
Among Those Clients with at Least One Contact:		
Percentage of contacts initiated by program staff	99.6	80.1
Percentage of contacts by telephone	62.3	66.2
Percentage of contacts in person at client's residence	37.7	15.0
Percentage of contacts in person elsewhere[c]	0.0	18.7
Of All Clients Enrolled, Percentage with Assessment Contact	27.7	82.5
Among Those Clients with an Assessment, Percentage of Clients Whose First Assessment Contact Is:		
Within a week of random assignment	2.3	1.4
Between one and two weeks of random assignment	0.0	8.0
More than two weeks after random assignment	97.7	90.6
Of All Clients Enrolled, Percentage of Clients with Contacts for:		
Routine client monitoring	31.6	49.4
Providing emotional support[d]	45.2	80.5
Providing disease-specific or self-care education[e]	36.1	46.7
Explaining tests or procedures	0.0	6.2
Explaining medications	0.6	0.4
Monitoring abnormal results	0.0	1.9
Identifying need for non-Medicare service	0.0	65.0
Identifying need for Medicare service	1.3	12.5
Monitoring services	4.5	21.4
Average Number of Clients Contacted per Program Staff Member	12.0	14.9
Average Number of Client Contacts per Program Staff Member	37.1	223.6

Source: Lifecare Plus program data received October 2002 and updated in January and July 2003. Covers 12-month period beginning June 17, 2002, and ending June 11, 2003.

[a]The first six months of operation cover the period from June 17, 2002, through December 13, 2002. The second six months of operation cover the period from December 14, 2002, through June 11, 2003. The Lifecare Plus program had just begun its intervention at the end of its first six months of operation. To more accurately depict program operations, this table presents data for the program's first and second six months. Data are not cumulative unless noted.

[b]Includes the program's care coordinators, care coordination supervisor, enrollment coordinator, case aides, and administrative assistant.

[c]This category includes contacts by case aides in clients' homes and contacts with clients at group meetings.

[d]This category includes telephone reassurance calls made by the program's enrollment coordinator and administrative assistant, as well as calls made by other program staff to encourage attendance at group meetings and confirm in-home appointments.

[e]This category includes education provided in group meetings, as well as one-on-one contacts between nurse care coordinators and clients.

Before the start of the demonstration, the program had planned to develop care plans during multidisciplinary team meetings attended by the care coordination supervisor, the care coordinators, a psychiatrist, an occupational therapist, a nutritionist, and representatives from each of the physician practices. This plan was not implemented, however, primarily because physician practice staff did not have enough time to attend the meetings.[10]

The program does use care plans, but the care coordinators develop these on their own, with input from the other care coordinators, the care coordination supervisor, and the program's consulting psychiatrist, as needed. The care coordinators do not routinely seek the input of clients when developing care plans, but they will incorporate clients' personal goals in the plan if clients mention them.

The care coordination supervisor reported that the care plans focus on services needed. The program provides some services directly. Others are funded through outside sources (for example, Medicare, Medicaid, other public funds, or private pay). For example, if the care coordinator determines that a client needs help with grocery shopping, the care plan may call for the program's case aide to help with this task once a week. The care coordinators use Canopy's care plan template, which they customize to clients' individual needs (Appendix C contains a copy of Canopy's care plan template). In the first two years of the demonstration, the program did not require care coordinators to update care plans on any set schedule. The care coordination supervisor reported that care plans evolved continuously, and changes were marked in the care

[10]The program initially had an agreement with each practice to send a representative to the meeting—a geriatrics fellow from the Mt. Sinai practice and a nurse practitioner from the St. Luke's practice—to ensure that the physicians had input into program care plans. However, the Mt. Sinai medical director reported that its geriatrics fellow could not attend care planning meetings because the meetings required too much time. She then delegated interactions with the Lifecare Plus program to a social worker from that practice. However, the social worker also did not feel she had time to attend these meetings, so the care coordinators call her as needed to discuss care planning issues. Similarly, the nurse practitioner from the St. Luke's practice does not attend team meetings, but the program care coordinators contact her as needed.

coordinators' handwritten notes. In the third year of the demonstration, the program began to require that care plans be updated every 60 days.

The program monitors clients' status in several ways. First, the care plans specify the frequency of monitoring contacts for specific clients (although all clients are contacted at least monthly). Higher-risk patients usually will be monitored more frequently than lower-risk patients, although the program does not require this.[11] The care coordinator may use her discretion in deciding whether to monitor a client in person or by telephone.

Second, for program clients who receive community-based services (such as home health nursing) that were already in place before they entered Lifecare Plus, the care coordinators usually monitor clients by contacting the service provider, rather than the client. (This is true for approximately 14 percent of program clients.) The program does this because the community-based providers complained that clients were confused about who was calling (or visiting) them. During monitoring contacts with providers, care coordinators ask how the client is doing, if there have been any changes in the client's status, and if the client is taking any new medications.

Third, care coordinators also monitor clients when they attend weekly group meetings at JHH (described in more detail below).

Finally, the program entered into a six-month contract with Viterion Telehealthcare (a joint venture operated by Bayer and Panasonic) to use a telemonitoring device for 10 clients with congestive heart failure. To select clients to receive the devices, the program first identified all its participants with congestive heart failure, then approached each to ask if they were interested in using the devices. Interested clients were asked to provide additional informed consent.

[11]Program protocols do not specify different levels or intensities of interventions for clients in its low-, moderate-, and high-risk groups. However, it is likely that, in addition to more frequent monitoring, higher-risk clients will need more one-on-one teaching, case aide services, and coordination of Medicare- and non-Medicare-covered services.

Many clients were not willing to use the device, and the program had difficulty finding 10 clients to participate.[12]

Of the 155 clients enrolled in the first six months of operation, about 54 percent had at least one contact with a program staff member (Table 1).[13] Among those having contacts, the average client had three contacts with a program staff member. Program staff initiated nearly all client contacts (99.6 percent), and most contacts (62 percent) were by telephone. Among all clients enrolled, due to the start-up difficulties already noted, only 32 percent had received a contact from a staff member for routine monitoring during the program's first six months, and 45 percent received contacts during which staff provided emotional support. During the program's second six months, however, 86 percent of the 257 clients enrolled had contact with a program staff member. Program staff initiated 80 percent of these contacts, and 66 percent were by telephone.

Although the care coordinators initiate most contacts, the program does receive a small number of calls from clients. In the first year of the program, care coordinators were available to clients from 8:00 A.M. to 5:00 P.M. Monday through Friday. If clients had a medical emergency at any time, the program instructed them to call 911. In the second year of the program, clients also were instructed to call 911 in an emergency, but they could reach a care coordinator through a 24-hour paging system. The program had planned to have this system at the start of the demonstration. Because of other priorities, however, it took some time to get it in place. The

[12]The device was installed by Viterion staff, who also provided clients with one hour of training on its use. Viterion charged $175 per unit per month for the device, but this fee was paid for by a grant to JHH and not by the program itself. Clients were to use the device every day to measure their blood oxygen level, blood pressure, temperature, and weight. The data from these measurements were transmitted through the clients' telephone lines to the nurse care coordinators, who monitored the data for abnormal values. The care coordination supervisor could not provide information on whether the monitoring parameters for the device were set by the care coordinators themselves or in consultation with clients' primary care physicians. If the care coordinators detected anything out of the ordinary, they followed up with the client.

[13]Client-monitoring contacts conducted with service providers instead of direct contacts with clients are recorded in case notes and not in the data reported in Table 1.

program receives pages from one to two clients per week. The care coordination supervisor reported that these calls usually are not medical emergencies; instead, most are from clients who need emotional support or refills of medications.

Staffing and Program Quality Management. Maintaining and improving care quality and ensuring programs attain their goals both require that staff have adequate qualifications, training, and supervision and that managers have the tools and support to monitor the program's progress toward its goals. The Lifecare Plus program requires its care coordinators to be either registered nurses (preferably baccalaureate-prepared) with home care experience or to be master's-prepared social workers with community and geriatric experience.

During its first year, the program conducted an informal orientation for new care coordinators. To familiarize staff with the providers and types of services available, the orientation focused on local community resources. It did not use a formal training format because the program director and care coordination supervisor planned to hire only experienced staff and felt that formal training was unnecessary. At the end of the first year of the demonstration, however, the care coordination supervisor decided a more formal training format was needed. In the second year of the program, she implemented training for care coordinators that, in addition to covering JHH-required policies and procedures, included Canopy software and Microsoft Office training, an explanation of care coordination team members' roles, and an explanation of the difference between care coordination services and direct service provision. (See Appendix C for the checklist developed to track staff training in these areas.)

In the first year of the demonstration, the care coordination supervisor held several staff meetings each week that focused on day-to-day program operations and scheduling. On Mondays, she met with all the care coordinators to plan the week's work. On Wednesdays, she met with the care coordinators, program case aide, and the enrollment coordinator (who also

oversees scheduling for the case aides) to discuss client needs for the case aides' services. On Fridays, she met with the program's care coordinators and the psychiatrist to review clients' cases. The program had planned for a nutritionist and occupational therapist to attend staff meetings, but, as mentioned earlier, contracts for these services were not in place until the third year of the demonstration. Consequently, neither a nutritionist nor an occupational therapist participated in the team meetings. In the second year of operation, the program combined the Monday and Wednesday meetings because the staff felt that the meetings were too time-consuming.

The care coordination supervisor also meets individually with the social worker care coordinators in a supervisory role, meeting weekly with one who is a recent graduate and needs additional help developing care plans. She tries to meet every other week with the other two social workers, but she reported that these meetings were sometimes cancelled because of more pressing program needs. During the second year of the demonstration, the care coordination supervisor arranged for the nurse care coordinators to receive clinical supervision from JHH's long-term home health care department. A member of this department reviews their case notes and provides in-service training.

In the first two years of the demonstration, the care coordination supervisor reported on the operation of the program to a succession of Jewish Home and Hospital managers including the vice president of community services and the vice president of home care. These managers provided input regarding program billing and information systems but they did not play a role in day-to-day program operations. In addition, while some of these managers were involved in the design of the program and the submission of the program's proposal to CMS (then HCFA), the care coordination supervisor was not. It appears that these managers did not provide sufficient

direction to the care coordination supervisor to ensure that the program was implemented as planned.

One year into the demonstration, the program was monitoring enrollment and costs, but not intervention implementation. Staff used reports to monitor the number of clients enrolling but did not have data on the number of beneficiaries referred from each physician practice or on why referred beneficiaries were ineligible or declined to participate. The program monitored its costs relative to its budget and tracked payments from CMS. However, the program had no mechanism to track whether its interventions were being implemented as planned. For example, the program did not monitor whether all clients were receiving an initial assessment by both a social worker and a nurse care coordinator. When staff used Canopy, they entered most information in free-text fields rather than in discrete-data fields and, thus, could not generate meaningful reports of their activities. In addition, staff were not experienced computer users and had difficulty using Canopy's reporting features.

WHO ENROLLS IN THE PROGRAM?

Due to a lack of staff, the program did not meet its enrollment target within the first year of operation. However, preenrollment Medicare expenses for those who did enroll during the program's first six months were similar to the program's Medicare waiver estimates. Thus, the program appears to be enrolling its intended target population. Patients also appear satisfied with the program.

Enrollment After One Year. After one year of operation, the Lifecare Plus program had enrolled 261 clients in the demonstration treatment group and 260 clients in the control group (MPR Weekly Enrollment Report, week ending June 22, 2003). This is 71 percent of the program's target of 730 beneficiaries in the first year.

It is difficult to identify the exact source of the program's enrollment shortfall because, as noted, the program kept data only on the numbers of beneficiaries enrolling, not on their reasons for declining to enroll. During the program's first few months (summer 2002), staff reported the enrollment shortfall was due to physicians being on vacation and expected that the pace of enrollment would pick up in the fall (which it did). In these early months, the staff also recognized that many of the patients they identified through physician practice records ultimately were ineligible for the program because they were in managed care. As a result, staff began to check for managed care enrollment in Medicare's Common Working File before reviewing medical records. Staff also believed that some home care workers who assisted potential clients were dissuading them from enrolling because they feared they might lose their jobs. In response, staff began to more carefully explain the program's purpose to reassure home care workers that there would be no duplication of services. These changes to the recruitment process do not appear to have had a major effect on enrollment, however.

Perhaps more important, the medical director from Mt. Sinai reported that the physicians in her practice had not been describing the demonstration program to their patients or encouraging them to enroll, as the program had originally planned, because it took to much time away from their patient visits. However, they were willing to permit an enrollment worker from the program to talk to their patients in the practice's office. She also said that, during the months when a full-time enrollment worker was present (November 2002 through February 2003), participant enrollment was good, and, when the enrollment worker was not present, enrollment declined considerably. MPR enrollment reports confirm the medical director's impressions. The ongoing presence of an enrollment worker at each practice likely would have facilitated enrollment. However, the care coordination supervisor reported that the program could not afford to hire two full-time enrollment workers.

The program did not plan to promote itself directly to Medicare beneficiaries. Although JHH developed a brochure about the program (see Appendix C), it was used only by enrollment workers to explain the program when they met with potential participants in physicians' offices. Late in the first year of the demonstration, however, as the program began to exhaust the pool of potential enrollees in the physician practices, it started to market itself directly to beneficiaries at assisted-living facilities, community organizations, and senior housing facilities.

Percent of Eligible Beneficiaries Participating. To gain another perspective on the proportion of eligible beneficiaries enrolling in the Lifecare Plus program and their characteristics, the evaluation simulated the program's eligibility criteria using Medicare enrollment and claims data. (Appendix B contains a detailed description of the simulation.) This simulation showed 126,101 beneficiaries to be eligible for the Lifecare Plus program between June and December 2002, the program's first six months of operation. That is, they lived in the program's service area, met CMS's demonstrationwide eligibility criteria, and met the program's diagnostic and service use criteria.[14] During the same six months, 280 of these eligible beneficiaries enrolled in the demonstration (about 0.22 percent of the 126,101 eligible beneficiaries).[15] (See Tables B.2 and B.3.)

[14]Between June and December 2002, 377,763 beneficiaries were living in the program's service area. Of those, 137,418 (36 percent) would have been ineligible for the program because they did not meet one of CMS's demonstrationwide criteria. Of the remaining 240,345 beneficiaries who met these criteria, 126,101 (52 percent) also met the program's diagnostic and service use criteria at some point during the six-month intake window (to the extent they could be simulated with the Medicare data). (See Table B.2.)

[15]In fact, 320 beneficiaries actually enrolled in the program during its first six months. When estimating the participation rate, the evaluation excludes enrollees with incorrect Health Insurance Claim (HIC) numbers on MPR's enrollment file and those who did not meet CMS's demonstrationwide criteria or the program's geographic, diagnostic, utilization, or exclusion criteria (as measured with Medicare data). These enrollees were excluded from the participation analyses so that the definition of eligibility for the numerator and denominator of the ratio would be consistent. (Beneficiaries with invalid HIC numbers may well be eligible, but the beneficiaries' Medicare data could not be obtained to assess that, so they were excluded. The HIC numbers have since been corrected.) This leaves 280 *known eligible* participants. Just over a quarter of the reduction was due to participants not meeting the utilization criteria for the target conditions during the enrollment month, and another quarter was due to their not meeting one of the demonstrationwide criteria. The comparison of participants to eligible nonparticipants in Table 2,

The program staff estimated the size of the pool of eligible beneficiaries to be 2,500—about two percent of the simulation's estimate. The primary reason for the difference in estimates is that, whereas the simulation's estimate is based on all eligible beneficiaries in Manhattan and the Bronx, the program estimate is restricted to eligible patients at the two physician practices from which it recruits (1,000 participants from the Mt. Sinai practice and 1,500 from the St. Luke's practice). The program projected a target enrollment of 730, meaning that about 29 percent of its estimated eligible population would have to agree to participate. The actual enrollment of 320 represents 13 percent of its estimated eligible population.

Comparison of Participants and Eligible Nonparticipants. An analysis of Medicare enrollment and claims data shows the program participants and eligible nonparticipants differed substantially. Participants are older and more likely to be female, nonwhite, and dually eligible for Medicare and Medicaid (Table 2). One-third of participants were age 85 or older (compared to a fifth of nonparticipants), and more than three-quarters are female (compared to two-thirds of nonparticipants). More than half of participants are nonwhite, and 39 percent are dually eligible.

Participants were more likely than nonparticipants, during the two years before program intake, to have been treated for a number of chronic conditions targeted by the program. Among participants, 36 percent had been treated for congestive heart failure, 39 percent for diabetes, 19 percent for dementia, and 24 percent for peripheral vascular disease. Nonparticipants had significantly lower rates of these same conditions. Rates of other conditions targeted by the program were roughly similar for the two groups: half had coronary artery disease, one-quarter

(continued)

however, excludes only participants with invalid HIC numbers and those who did not meet CMS's demonstrationwide criteria, leaving 307 participants. Thus, the comparison more closely reflects the differences between all actual participants and those who were eligible to participate but did not.

TABLE 2

CHARACTERISTICS OF ALL PARTICIPANTS AND ELIGIBLE NONPARTICIPANTS DURING THE FIRST SIX MONTHS OF PROGRAM ENROLLMENT
(Percentages, Unless Otherwise Noted)

	Demonstration Participants (Treatments and Controls)[a]	Eligible Nonparticipants	
Age at Intake			
Average age (in years)	81.0	77.3	***
Younger than 65	0.3	0.0	***
65 to 74	23.1	41.2	***
75 to 84	42.4	39.1	
85 or older	34.2	19.7	***
Male	22.5	35.5	***
Nonwhite	53.8	35.3	***
Original Reason for Medicare: Disabled or ESRD	9.8	10.1	
State Buy-In for Medicare Part A or B	38.8	24.2	***
Newly Eligible for Medicare (Eligible Less than Six Months)	0.00	0.35	
Enrolled in Fee-for-Service Medicare 6 or More Months During Two Years Before Intake	100.00	98.87	*
Medical Conditions Treated During Two Years Before Month of Intake[b]			
Coronary artery disease	50.8	49.9	
Congestive heart failure	35.5	26.5	***
Stroke	26.7	24.6	
Diabetes	38.8	31.5	***
Cancer	24.1	27.3	
Chronic obstructive pulmonary disease	30.0	30.6	
Dementia (including Alzheimer's disease)	19.2	7.4	***
Peripheral vascular disease	24.1	17.6	***
Renal disease	8.8	5.6	**
Total Number of Diagnoses (number)	2.6	2.2	***
Days Between Last Hospital Admission and Intake Date[b]			
No hospitalization in past two years	45.3	59.3	***
0 to 30	6.5	4.2	**
31 to 60	6.8	3.4	***
61 to 180	12.7	9.9	
181 to 365	13.4	10.6	
366 to 730	15.3	12.6	

TABLE 2 (continued)

	Demonstration Participants (Treatments and Controls)[a]	Eligible Nonparticipants	
Annualized Number of Hospitalizations During Two Years Before Month of Intake[b,c]			
0	45.9	59.7	***
0.1 to 1.0	34.2	28.6	**
1.1 to 2.0	12.7	7.7	***
2.1 to 3.0	4.9	2.4	***
3.1 or more	2.3	1.6	
Medicare Reimbursement per Month in Fee-for-Service During One Year Before Intake[b]			
Part A	$914	$612	***
Part B	$496	$370	***
Total	$1,410	$982	***
Distribution of Total Medicare Reimbursement per Month in Fee-for-Service During One Year Before Intake[b]			
$0	0.0	0.9	*
$1 to 500	50.8	63.5	***
$501 to 1,000	12.7	12.5	
$1,001 to 2,000	13.0	9.2	**
More than $2,000	23.5	14.0	***
Number of Beneficiaries	**307**	**125,821**	

Source: Medicare Enrollment Database and National Claims History File.

Note: The intake date used in this table is the date of enrollment for participants. For eligible nonparticipants, the intake date is July 15, 2002, the midpoint of the six-month enrollment period examined.

[a]Participants who do not meet CMS's demonstration-wide requirements for the demonstration or had an invalid HIC number on MPR's enrollment file are excluded from this table because we do not have Medicare data showing their reimbursement in the fee-for-service program. Members of the same households as the research sample members are included.

[b]Calculated among beneficiaries with six or more months in Medicare fee-for-service in the two years before intake. (See Note, above, concerning intake date definition.)

[c]Calculated as 12 x (number of hospitalizations during two years before month of intake) / (number of months eligible). For example, if a beneficiary was in fee-for-service all 24 months and had two hospitalizations during that time, they would have one hospitalization per year [(12 x 2) / 24]. If another beneficiary was in fee-for-service eight months during the previous two years, and had two hospitalizations during those eight months, they would have [(12 x 2) / 8], or three hospitalizations per year. The estimate of the proportion with no hospitalization in the two years before the month of intake may differ slightly from the proportion with no hospitalization in the two years before the date of intake because the two measure slightly different periods. Someone enrolled on September 20, 2003, whose only hospitalization in the preenrollment period occurred on September 5, 2003, would not be counted as hospitalized during the 24 months before the month of intake. Conversely, someone hospitalized on September 25, 2001, would be captured in the measure defined by month of enrollment, but not in the measure based on the day of enrollment.

*Difference between participants and eligible nonparticipants significantly different from zero at the .10 level, two-tailed test.

**Difference between participants and eligible nonparticipants significantly different from zero at the .05 level, two-tailed test.

***Difference between participants and eligible nonparticipants significantly different from zero at the .01 level, two-tailed test.

had had a stroke, one-quarter had cancer, and just under a third had chronic obstructive pulmonary disease.

Participants were also more likely to have been hospitalized and had higher Medicare expenditures than eligible nonparticipants in the year before enrollment. About 39 percent of participants had a hospitalization in the year before enrolling and incurred average monthly Medicare expenditures of $1,410 during the same period—44 percent higher than nonparticipants. In addition, participants were more likely than nonparticipants to have had a hospitalization in the 30- and 60-day periods before intake.[16]

When developing the cost estimate for its waiver application, MPR estimated that Medicare costs would average $1,581 per month for eligible beneficiaries who did not participate in the program.[17] Therefore, it appears that the program has enrolled patients who had roughly the expected expenditure levels.

Satisfaction and Voluntary Disenrollment. The care coordination supervisor used her experience with home health care to develop a form for clients to make complaints about the program. The program mailed this form to all clients in the first year of the demonstration, but the mailing has not been repeated. One year into the demonstration, the program had not received any complaints from clients.

In the second year of the demonstration, a JHH staff member responsible for performance improvement helped the program develop a plan to measure client satisfaction. The program

[16]September 2002 is used as the comparison month for nonparticipants because it is the midpoint of the six-month intake period included in this analysis

[17]Waiver cost calculations for all the demonstration programs assume that each program will reduce Medicare costs by 20 percent. According to these calculations, Lifecare Plus will save Medicare an average of $31 per patient per month, or approximately $327,874 over the four-year life of the demonstration, assuming 365 beneficiaries will be randomly assigned to the treatment group. These estimates are net of the fees paid by CMS to the program but do not include the program's start-up costs or the costs of the evaluation.

developed a survey tool to measure client satisfaction with the program as a whole, including clients' perceptions of their interactions with staff members, ability to access program services, content of the newsletter, and group meetings (see Appendix C). The program sent the survey to 210 clients (approximately 75 percent of all treatment group members) in summer 2003. (The program had difficulty translating the survey into Spanish and so did not send it to approximately 60 Spanish-speaking clients.) Of the 210 surveys distributed, 56 (27 percent) were returned and valid for analysis. The program reported that, based on its survey responses, clients appeared to be satisfied with the Lifecare Plus program. However, it also reported that the validity of this data may have been compromised by typographic errors in the questionnaire that may have led respondents to rate items less favorably than they had intended. The program planned to repeat this survey.

Clients may stay in the Lifecare Plus program for the duration of the demonstration (that is, until June 2006). Of the 257 treatment group participants who enrolled during the first 12 months of operations, 4 percent had been enrolled for 5 weeks or less, 2 percent had been enrolled between 6 and 10 weeks, 50 percent had been enrolled between 11 and 30 weeks, and 44 percent had been enrolled for 31 weeks or more (Table 3). The program disenrolled 23 participants during the first 12 months of operation. Of these, six had died, eight lost program eligibility, and nine asked to be disenrolled. Among these nine clients, two moved into long-term care, three relocated out of the program area, and four refused care coordination services.

TO WHAT EXTENT DOES THE PROGRAM ENGAGE PHYSICIANS?

While the importance to program success of engaging eligible beneficiaries is self-evident, engaging physicians also is critical. Care coordinators must develop trusting, collaborative relationships with primary care physicians for physicians to feel comfortable communicating important information to them about their patients (for example, medication changes, new

TABLE 3

DISENROLLMENT FOR CLIENTS ENROLLED DURING FIRST 12 MONTHS OF OPERATION

Number of Clients Enrolled[a]	257
Length of Enrollment as of June 11, 2003 (Percentage of Clients Enrolled)	
5 weeks or less	4
6 to 10 weeks	2
11 to 30 weeks	50
31 or more weeks	44
Mean Length of Enrollment (Weeks)	28
Number of Clients Who Disenrolled	23
Number Who Disenrolled Because:	
Client died	6
Client lost program eligibility	8
Client initiated disenrollment	9
Program assessed client as uncooperative	0
Client completed program	0
Number Disenrolling:	
Within a week of random assignment	0
Between 1 and 4 weeks	1
Between 5 and 12 weeks	5
More than 12 weeks	17

Source: Lifecare Plus program data received October 2002 and updated in January and July 2003. Covers 12-month period beginning June 17, 2002, and ending June 11, 2003.

[a]Number of clients enrolled in the treatment group as of June 11, 2003.

problems identified during office visits, or areas for additional patient education). Good communication also is important so that physicians feel that information they get from the care coordinators (for example, regarding problems in the home environment that affect patients' health, functional deficits that patients do not tell physicians about, or reminders about providing

preventive care) is credible and warrants their attention. A trusting, respectful relationship will also facilitate care coordinators' access to physicians when urgent problems arise, and it will make communication and coordination across medical care providers easier (Chen et al. 2000). Moreover, to increase acceptance of care management among physicians in general, care coordinators need to engage physicians.

Relationship Between Physicians and Care Coordinators. As originally envisioned, Lifecare Plus' care coordination model viewed physicians as collaborative partners. The program staff expected that physicians would (1) approve patients' referral to the program and explain the program to their patients during office visits, (2) attend multidisciplinary care planning meetings (or send a representative to the meetings), and (3) respond to care coordinators' requests for information and assistance with specific patients. Because of their expected level of involvement, the program planned to pay the physician practices for the time physicians spent in care coordination activities.

In the months leading up to the demonstration, the medical directors, who both hold leadership positions in the two referring medical practices, made presentations to their colleagues at faculty meetings to acquaint them with the Lifecare Plus program. The program's care coordination supervisor also met with the physicians to explain the program's goals, the intervention, and the program's plan for communication between physicians and care coordinators.

Despite their outreach efforts, program staff realized shortly after operations started that physicians were not willing to take on the roles envisioned for them. Physicians felt explaining the program to patients initially and attending program meetings would require too much of their time. In addition, the St. Luke's medical director reported that the physicians in her practice were disappointed because they had expected that Lifecare Plus would provide more case aide

services (such as personal care and help with errands) to their patients than it actually did. Thus, the St. Luke's physicians may have been discouraged from encouraging any more of their patients to enroll. The medical director noted that, in fact, only three or four of the physicians in her practice were actively encouraging their patients to enroll in the program.

The lack of physician enthusiasm for the program caused staff to redesign their care coordination model to work largely independently of clients' physicians. Although the program still requires physicians to approve their patients' referral to the program, it does not expect them to discuss the program with patients or encourage them to enroll. After clients enroll in Lifecare Plus, the program now expects only that the physicians will be responsive to the care coordinators' requests for information and assistance as the need arises. The medical director from St. Luke's expected that physicians would view these calls as they do calls from home care nurses.

One year into the demonstration, there was disagreement among program staff about the frequency of care coordinators' contacts with clients' physicians. The medical director at St. Luke's reported that it had been several months since a care coordinator had called her about one of her patients. She said that, when care coordinators had called, it was usually when a patient began exhibiting new symptoms or because the care coordinator wanted her to refer the patient to a podiatrist or physical therapist. The care coordinators reported that they spent one hour or less per week communicating with physicians or leaving messages for them. In contrast, the care coordination supervisor believed that care coordinators frequently communicated with physicians. Neither the care coordination supervisor nor the medical directors reported any disagreements between the care coordinators and physicians. At the end of the first year of the demonstration, the program's management still anticipated that they would be making payments to physician practices to reimburse them for physicians' care coordination activities, but they had

not yet been billed by either practice. At the end of the second year, the program had paid the Mt. Sinai practice an amount equal to $27.75 per patient per month. The program has offered to make similar payments to the St Luke's practice, but it has not received a response.

Improving Practice. Changing physician practice is not a goal of the Lifecare Plus program. The demonstration staff believe that, because the physicians referring patients to the program are all on the staff of academic medical centers, their standard of practice is already high. The staff suggested that they might see an increase in physician satisfaction with care coordination if patients adhered more closely to their medical regimens and if the care coordinators could reduce some of the burden on them (or their office staff) related to caring for very frail patients. However, since the program has so little contact with physicians, it is unclear whether they perceive that the program is reducing their patient care burden. The evaluation's physician survey is likely to provide some insight into this issue.

HOW WELL IS THE PROGRAM IMPLEMENTING KEY INTERVENTION APPROACHES?

Improving Client Adherence. The program planned to improve clients' self-management and adherence to treatment recommendations through group meetings, distribution of a monthly newsletter, and one-on-one interactions with nurse care coordinators. In practice, however, the program's educational intervention is reaching only a minority of its clients.

The program's formal teaching efforts focus on its group meetings (see Appendix C for the program's newsletter, which includes a group meeting schedule). The program offers group meetings approximately twice a month on such health education topics as stroke, diabetes, skin care, foot care, fall prevention, and medications. The program's nurse care coordinators conduct some of these meetings, while qualified health professionals not affiliated with the program lead

others.[18] The program tries to have one care coordinator (either a nurse or social worker) at each meeting. One of the groups, which meets monthly, is conducted in Spanish, since about a third of program clients are Spanish-speaking. In addition, the program offers weekly exercise groups, along with a monthly blood pressure screening and lectures on general wellness topics, such as nutrition. The program holds the one-hour group meetings at its Manhattan offices and provides free transportation to clients.

Because these group meetings are the program's primary mode of education, and only a small number of program participants attend the meetings, this component of the program's education intervention is not being implemented as planned. The care coordination supervisor reported that, in the first year of the demonstration, the same clients attended the groups each month and estimated that attendees represented about five percent of all clients. The program tried to increase participation by having staff members call clients to encourage them to attend. However, attendance did not increase.

In the second year of the demonstration, the program surveyed clients about their satisfaction with, and interest in, the group meetings (Appendix C contains a copy of the survey). The program fielded this survey in November 2003 to English-speaking clients only. Of the 200 surveys mailed, 27 (15 percent) were returned and contained analyzable data. (Since the care coordination supervisor reported that only approximately five percent of clients regularly attended group meetings, most responses to this survey appear to be from clients who had never attended a group meeting.) The program reported that 100 percent of the respondents to the survey were satisfied with the content of the program's groups. Some respondents suggested new meeting topics, such as tai chi and yoga, as well as day trips and concerts. Although this

[18]Volunteers, or other members of the community who are paid for their services, lead the program's non-health-related groups.

survey was conducted to find ways to increase attendance at group meetings, it did not ask about barriers that prevent clients from attending group meetings (such as the convenience of the group's location and times). As a result of this survey, the program added more exercise classes, and attendance at these groups increased to about 10 percent. However, attendance at the other health-related groups remained at about five percent.

A second tool to promote self-care skills is the program's monthly newsletter, which it mails to all clients. The newsletter contains health education articles written by the care coordinators that parallel the topics covered in the health-related group meetings for the month (see Appendix C). Staff note that the newsletter is also meant to provide emotional support to clients and includes contributions from clients and articles to promote emotional well-being. Thus, the health education articles make up only a small portion of the newsletter. Moreover, the newsletter is produced only in English, even though about a third of the program's clients are not able to read English. Therefore, the one program vehicle for health education that could reach all its clients is not accessible to one-third of them.

As a third strategy to improve clients' self-management skills and adherence, nurse care coordinators provide one-on-one education to some clients. If a client's initial assessment identifies clinical needs, the care plan will call for contacts with a nurse care coordinator. The program staff report that not all clients require contact with a nurse. Data provided by the program indicate that, in the first six months of operations, only about a third of clients had contact with a nurse care coordinator, and in the second six months, this fraction rose to about two-fifths (data not shown).[19]

[19]Table 2 reports contacts for all program staff members, including the case aide, care coordination supervisor, and enrollment coordinator. Nurse care coordinator contacts with clients are as subset of these data and are not reported separately in the table.

During these contacts, the nurse care coordinators teach clients self-care skills for their specific conditions, how to take their medications, and the importance of drug safety and adherence to medical regimens. However, the program's initial assessment is not designed to identify clients' specific education needs, nor do its care plans identify goals for client education. The program does not have an established teaching curriculum or standardized condition-specific teaching materials. (See Appendix C for samples of the program's educational materials.) It does not provide additional patient education training for the care coordinators; instead, it relies on the training nurses typically receive as part of their nursing degrees. The program has no specific strategies to monitor the effectiveness of its education intervention. (That is, the care coordinators do not assess whether clients appear to understand the information presented or are incorporating either disease-specific teaching or more general wellness training into their lives.)

Although the staff stated that improving client self-management skills and adherence is a major goal of the Lifecare Plus program, the program's interventions do not appear to support this assertion. Most of the program's organized teaching efforts concentrate on its group education classes and newsletter. Few clients attend the group meetings, however, and the format of the newsletter precludes discussing education topics in any depth. In addition, the newsletter is in English, while the program estimates that a third of its clients cannot read English. The program provides about 40 percent of clients with one-on-one teaching by a nurse care coordinator. However, these efforts appear unfocused and unstandardized.

Improving Communication and Coordination. In its proposal to CMS, the Lifecare Plus program outlined many plans for improving communication and coordination among medical and service providers and clients. The program implemented some, but decided not to, or was not able to, implement others.

First, the program planned to better coordinate medical care on behalf of its clients and increase communication among clients' physicians by (1) including primary care physicians (or their representatives) in regularly scheduled multidisciplinary care team meetings, (2) giving those physicians access to the program's case management database, (3) providing reminders to physicians to schedule routine preventive care and screening, and (4) alerting physicians to urgent changes in clients' conditions. As already described, the program planned to have multidisciplinary care coordination team meetings every other week that would have included primary care physicians, but neither the physicians nor any of their designated representatives had the time to attend these meetings.

Given the lack of physician engagement with the program and the dissatisfaction of program staff with their case management information system, the program decided not to offer physicians access to the information system. The program had also planned to remind physicians about clients' needs for routine care (such as mammography, sigmoidoscopy, prostate cancer screening, and immunizations). However, program staff decided that such reminders were beyond the scope of the program as it was ultimately implemented. However, the program does use email to alert physicians to changes in clients' status and telephone calls to alert them to more urgent client matters. Nevertheless, when some physicians did not respond to program emails and calls, the medical directors had to appeal to them to cooperate with program staff. During the second program year, the care coordination supervisor reported that the Mt. Sinai medical director asked the program to provide a one- to two-sentence status update of each of that practice's patients. However, it does not appear that these updates were ever provided, nor were such updates requested by, or provided to, St. Luke's physicians.

Second, the program planned to act as a communications hub for primary and specialty medical and service providers (such as home care agencies). The program does not appear to

have established communication with specialty physicians. The medical directors were not aware of the care coordinators having interacted with specialists at all during the program's first year, although they did consider it within the scope of the program to do so. However, the program's psychiatrist occasionally contacts psychologists, neurologists, and other psychiatrists about mental health management and medication issues. The program also planned to coordinate the flow of information from service providers, and they have been more successful in doing this. As described previously, many program clients had community-based services in place before they enrolled. The care coordinators regularly contact these providers, as well as staff in assisted-living facilities and skilled nursing homes.

Third, the program planned for its case aides to accompany clients on primary care physician visits to provide translation services and to ensure that clients understood physicians' instructions and teaching. In fact, while the case aides help clients get to medical appointments, they are not present when the client meets with the physician, nor do they provide translation services. Program staff could not say why this aspect of the demonstration was not implemented. However, they noted that translation services were available through another JHH program and that Lifecare Plus had, in fact, arranged this service for one or two clients.

Fourth, Lifecare Plus planned to have care coordinators review client medications and provide assistance to ensure medications were taken as recommended. During the initial assessment, the care coordinators identify which medications clients have been prescribed and whether they are taking them correctly. To help ensure that clients take their medications on the correct day and time, the nurse care coordinators will set up clients' medications in cassette dispensers, if necessary. However, they also try to identify a caregiver who can regularly perform this activity for the client. The case aides ensure that clients are having their prescriptions filled.

Fifth, because many elderly people have undiagnosed or untreated mental disorders, during clients' initial assessment, care coordinators identify those with cognitive deficits or mental health problems they believe might benefit from mental health services. These clients are referred to the program's psychiatrist, who then reviews the clients' assessment information and medications. She coordinates with clients' primary care physicians to establish a plan of care and may see clients herself, as appropriate. For example, clients may appear confused and need an evaluation for dementia or may be depressed but not be receiving treatment. As of fall 2004, the psychiatrist estimated getting 100 such client referrals (out of approximately 350 clients enrolled). Although she has tried to get most of these clients to speak with her (or another psychiatrist), she has seen only a small number of them. She believes that most clients are unwilling to seek care from a psychiatrist because of the stigma associated with mental illness. (The program does not track whether clients receive mental health care from other sources.)

Finally, the program also tracks adverse events, such as unexpected hospitalizations or trips to the emergency room. In response to adverse events, the care coordinator tries to identify underlying causes of the unplanned event and to work with the client to recognize preventable causes and minimize or eliminate the risk of recurrence. The program implemented its adverse-event tracking process in its second year, when Mt. Sinai's institutional review board required the program to complete an adverse-event form to track falls, emergency room visits, hospital admissions, and deaths (see Appendix C). Mt. Sinai provides the program with data on emergency room visits and hospitalizations for clients seen in its facility. St Luke's does not, however, and for its patients, the program relies on client self-reports of adverse events. Following a fall or an emergency room visit not resulting in a hospitalization, a nurse care coordinator will make a home visit within 24 hours. If the client is hospitalized, the care coordinator will call the floor or visit the client to help coordinate discharge planning.

In summary, Lifecare Plus had many plans for improving communication and coordination of care, but, during its first two years, implemented only a few of them. It sends physicians email and telephone alerts about changes in client status, coordinates with long-term care providers and tracks hospital encounters, helps clients get to physicians' appointments, reviews medications to ensure clients are filling and taking them as they should, and screens clients for undiagnosed mental disorders. On the other hand, because the program did not engage either primary or specialty physicians of their clients, it could not include them or their input in program interventions (like care planning or education), nor could it help clients resolve conflicting information from different physicians. Although the program did assist clients in taking their medications as prescribed, it did not have a procedure for ensuring that clients were getting all the medications evidence-based guidelines suggest would be appropriate for their conditions or for checking for redundancy or adverse interactions among prescribed medications.

Maintaining Client Independence. To maintain clients' independence, the program planned to (1) implement a fall prevention program; (2) directly provide, or arrange for, support services; and (3) reduce social isolation by providing telephone reassurance calls and inviting clients to groups and parties. Again, the program was able to implement some of these interventions, but not others; among those that were implemented, client participation was often limited.

The Lifecare Plus program had a two-part approach to reducing client falls. First, it planned to enroll clients with balance and gait deficiencies or a history of falls in a fall prevention program operated by JHH's rehabilitation department, with the goal of reducing avoidable hospitalizations due to falls and maintaining clients in their own homes. This program would have provided approximately eight physical therapy sessions. In fact, the program did not refer clients to the JHH rehabilitation program, but the care coordination supervisor could not

elaborate about why this plan was not implemented. However, she reported that, nearly two years after the start of the demonstration, Lifecare Plus developed its own fall prevention program after staff were alerted to the high number of falls being reported on the adverse-event report form, described above. The care coordination supervisor stated that, during clients' initial assessment, the care coordinators use a fall risk assessment tool to identify clients at risk of falling. All clients receive information on fall prevention, and clients with high-risk scores are referred for physical or occupational therapy, vision or hearing assessment, or pharmacist review of medications.[20] The program does not have data on the number of clients who have been assessed with the tool or the number referred to physical or occupational therapy.

The second part of the program's approach to reducing falls was to conduct in-home safety checks. If unsafe conditions were identified in the client's home, the program would send a case aide to tidy up or send someone to tack down rugs or install grab bars. The program does not pay for assistive devices such as raised toilet seats or grab bars but will pay to have them installed.

The program also planned to maintain client independence by increasing client access to support services in two ways. First, it planned to increase access directly by hiring two case aides to do light housework (including laundry, shopping, and errands) and bathe clients, as well as to accompany clients to physician appointments, as already noted. However, the program did not provide the anticipated level of case aide services in the first year of the demonstration. As implemented, the program's start-up difficulties delayed it from offering case aide services until

[20]The agreement with JHH for physical and occupational therapy services was not implemented until mid-2004. During the preceding two years, the program had to obtain a physician's referral for these services to bring in a therapist from JHH and have the service covered by Medicare. (During this time, the services appear as nonprogram Medicare costs on Table 5.) As of fall 2004, Lifecare Plus will no longer need a referral to provide occupational or physical therapy services and will use its monthly program payment from CMS to pay for the cost of those services.

approximately nine months after the start of the demonstration. The program employs one half-time case aide, a certified home health aide, who serves about 12 clients per week. In addition, the program contracts out to JHH's licensed home care services agency for additional case aide services that amount to approximately six hours per week. (For example, in the second quarter of 2004, the program also contracted out for 74 hours of case aide services for 15 clients.) The program's care coordination supervisor believes that the demand for case aide services is so high that the program could never supply the level of service that clients want.

The program's second approach to increasing access to support services was to provide clients with referrals to Medicare- and non-Medicare-covered services and, in some instances, pay for these services directly. The care coordinators refer clients assessed as needing services to a wide range of community-based, non-Medicare-covered service providers, which they identify on the Internet.[21] If the client cannot follow through on the referral, the care coordinator helps arrange these services. The care coordinator then follows up with the client to ensure that services are in place and that they are being provided satisfactorily. The program also purchases medication cassettes and transportation to the program's group meetings for clients who need these services.

During its first six months of operations, the program made almost no referrals to either Medicare- or non-Medicare-covered services (Table 1). As discussed previously, staffing problems delayed the start of program interventions. In the second six months, however, the program referred 13 percent of clients to Medicare-covered services and 65 percent of clients to non-Medicare-covered services (Table 1). The non-Medicare-covered services to which the

[21]The program staff spent many months compiling a list of community-based services that they entered into Canopy's care plan resource list. However, the care coordination supervisor reported that this list is seldom used because the care coordinators prefer to access more up-to-date information from the Internet.

program most often referred clients were transportation, respite care, and programs that provided fans or air conditioners. Despite the large number of referrals to services, only 21 percent of clients had had contacts with a staff member to monitor services being provided. The care coordination supervisor's explanation for this was that the first care coordinator was not hired until October 2002. However, more likely explanations are that (1) clients did not follow up on care coordinators' referrals to services, so few services were in place to monitor; or (2) clients did secure these services, but the care coordinators did not monitor their effectiveness or clients' satisfaction with them.[22] In the second six months of the demonstration, the program paid for medication cassettes for approximately five percent of clients and transportation to program group meetings for nine percent (Table 4).

Third, Lifecare Plus planned to have client volunteers make weekly telephone reassurance calls to more isolated program clients to informally check on their status and provide emotional support. The program has been providing these calls since the start of the demonstration. One year into the demonstration, the program had 25 clients receiving telephone reassurance calls and two volunteers making calls. The program also had 20 Spanish-speaking clients on a waiting list for calls during its first year because none of the volunteers spoke Spanish. As of spring 2004 (nearly two years after the program started), the program had four volunteers (one of whom speaks Spanish) to make reassurance calls. Together, these volunteers made about 20 calls a week. The program was giving the highest priority to calling clients who live alone. The care coordination supervisor believes that more clients have not volunteered to make calls because

[22]The program's care coordination supervisor believes that more than 21 percent of program clients had contacts with staff that concerned the monitoring of services. However, the documentation of care coordinator contacts provided by the program does not show conclusively whether services were being monitored.

TABLE 4

GOODS AND SERVICES PURCHASED FOR CLIENTS ENROLLED DURING FIRST 12 MONTHS OF OPERATION

	First Six Months	Second Six Months
Cumulative Number of Clients Enrolled	155[a]	257[a]
Percentage of Clients for Whom Program Purchased:		
Meals[b]	6	9
Medication cassettes	1	5
Personal care/ homemaker services[c]	3	0
Transportation[d]	8	9
Other[e]	65	0

Source: Lifecare Plus program data received October 2002 and updated in January and July 2003. Covers 12-month period beginning June 17, 2002, and ending June 11, 2003.

[a]The first six months of operation covers the time period from June 17, 2002 through December 13, 2002. The second six months of operation covers the time period from December 14, 2002 through June 11, 2003. The Lifecare Plus program had just begun its intervention at the end of its first six months of operation. To more accurately depict program operations, this table presents data for both the program's first and second six months. Data are not cumulative unless noted.

[b]The program provides meals to clients during group meetings only. The program does not purchase home-delivered meals or groceries for clients.

[c]The care coordination supervisor reported that this category includes case aide service provided by the program. However, the program did not begin to provide case aide services until approximately nine months after the start of the demonstration. It is unclear what services the program actually purchased.

[d]The program provides transportation to group meetings only. The program does not provide client transportation to medical appointments or for shopping or errands.

[e]In its first six months of operation, the Lifecare Plus recorded mailings to clients of its program newsletter as "Other" services. This practice was discontinued in the second six months of operations.

they may be too frail, not willing to travel to the program offices to make calls, or just not interested. To make up the shortfall, the program's enrollment coordinator and administrative assistant also make reassurance calls. The callers record information from the calls on a form, noting when the contacted client seems to require the immediate attention of a nurse or social work care coordinator (see Appendix C). The program staff enter the information from the forms into Canopy.

The Lifecare Plus program's final planned intervention to maintain clients' independence was to invite them to groups and parties, which would increase social interactions and reduce loneliness. The program planned to hold four weekly groups: a lunch meeting with a speaker addressing either a wellness issue or recreational topic such as "arm-chair travel" and three support groups (reminiscence, relaxation, and loneliness). The program implemented these groups, as well as an exercise group. However, as discussed, attendance at the group meetings has been low. The care coordination supervisor stated that more clients came to parties than regular group meetings and more Spanish-speaking clients attended the parties than other groups. In the first two years of the demonstration, the program tried to increase participation in groups by having its support staff call clients to encourage them to attend and by conducting a survey about clients' satisfaction with the group. As a result of this survey, the program began to have one party a month, attendance at which has averaged about 15 clients (out of approximately 350 enrolled as of fall 2004).

One question that the program's survey did not ask was why clients did not attend the group meetings. By better understanding the barriers to clients' attendance, the program may be better able to evaluate whether increasing attendance at its meetings is feasible. Some clients are homebound, but the program does not know how many. It is unlikely that these clients would attend the groups. Another significant percentage of the client population is cognitively

impaired. It may be difficult for these clients and their caregivers to attend groups. In addition, approximately 30 percent of the program's clients are Spanish-speaking, but only one of the program's groups is aimed at Spanish speakers, and this group (café con leche) is not held every month. By identifying which of its clients would be able to attend group meetings, the program may be better able to target its efforts to increase attendance.

The program has had mixed success in implementing its interventions to maintain client independence. Some of these interventions, such as the fall prevention program and case aide services, were late in getting started, so they will have no impact on clients during the first year of the demonstration. In addition, the program's interventions to maintain independence only reach a small number of clients. It has provided case aide services and telephone reassurance to less than 10 percent of clients. Similarly, less than 10 percent of clients attend group meetings and parties. Thus, even if these interventions do help to maintain client independence, their impact will be limited.

WHAT WERE ENROLLEES' MEDICARE SERVICE USE AND COSTS?

This report provides preliminary estimates of the postenrollment Medicare service use and expenditures of the Lifecare Plus program's evaluation treatment and control groups. Due to lags in data availability, analysis for this report included only an early cohort of enrollees (those enrolling during the first four months of program operation) and allowed observation of their experiences during their first two months in the program. The estimates thus include clients' experiences only during the program's first few months of operation, when Lifecare Plus had not begun delivering the intervention, as discussed earlier. As a result, these estimates are included merely to illustrate the types of analyses the evaluation will conduct and should not be viewed as reliable indicators of the true effect of the program.

Not surprisingly, therefore, there were no statistically significant differences between the treatment and control groups in the use of any Medicare services or their total cost to Medicare during the first two months after random assignment (Table 5). Total Medicare Part A and B costs for the treatment group members enrolled during the first four months of program operation, exclusive of demonstration costs, were $2,932, on average, during the first two full months after enrollment ($1,466 per month), compared with $1,964 for the control group ($982 per month). This difference ($969, or $485 per month) is not statistically significant ($p = 0.3$).[23] The CMS per-member, per-month payment to the program averaged $287 ($573 over the two-month period).[24] The analysis also examined monthly trends in treatment-control differences from June through November 2002, the first six months of program operation (Table 6). Again, there were no significant differences between the treatment and control groups.

CONCLUSION

Research during the past decade suggests, but is by no means conclusive, that successful care coordination programs have many features. These features include effective patient identification, a well-designed and structured intervention, highly qualified staff, physician buy-in, and financial incentives aligned with program goals.

First, to generate net savings over a relatively short period, effective programs tend to target high-risk people. These people may include those with recognized high-cost diagnoses such

[23]As would be expected with random assignment, the treatment and control groups were statistically similar before enrollment. (See Appendix Table B.6.)

[24]The per-member per-month fee charged to Medicare by the program is $379 for high-risk patients, $259 for moderate-risk patients, and $74 for low-risk patients, or $758, $518, and $148 over the two-month period. Of the 75 clients whose Medicare costs and service use are shown in Table 5, 63 percent are in Lifecare Plus' high-risk group, 31 percent in the moderate-risk group, and 6 percent in the low-risk group. The mean calculated using Medicare data may differ due to billing errors, payment delays, or payment adjustments for patients who disenrolled or died.

TABLE 5

MEDICARE-COVERED SERVICE USE DURING THE TWO MONTHS AFTER THE MONTH OF RANDOMIZATION, FOR EARLY ENROLLEES

	Treatment Group	Control Group	Difference[a]	
Inpatient Hospital Services				
Any admission (percent)	12.0	9.6	2.4	
Mean number of admissions	0.15	0.14	0.01	
Mean number of hospital days	1.53	0.66	0.88	
Emergency Room Services				
Any emergency room encounters (percent)				
Resulting in admission	10.7	9.6	1.1	
Not resulting in admission	8.0	8.2	–0.2	
Total	17.3	13.7	3.6	
Mean number of emergency room encounters				
Resulting in admission	0.12	0.14	–0.02	
Not resulting in admission	0.09	0.11	–0.02	
Total	0.21	0.25	–0.03	
Skilled Nursing Facility Services				
Any admission (percent)	2.7	0.0	2.7	
Mean number of admissions	0.03	0.00	0.03	
Mean number of days	1.00	0.00	1.00	
Hospice Services				
Any admission (percent)	0.0	0.0	0.0	
Mean number of days	0.00	0.00	0.00	
Home Health Services				
Any use (percent)	9.3	16.4	–7.1	
Mean number of visits	2.67	3.04	–0.37	
Outpatient Hospital Services[b]				
Any use (percent)	73.3	68.5	4.8	
Physician and Other Part B Services[c]				
Any use (percent)	86.7	83.6	3.1	
Mean number of visits or claims	6.1	4.4	1.8	
Mortality Rate (percent)	1.3	0.0	1.3	
Total Medicare Reimbursement[d]				
Part A[e]	$1,809	$1,101	$709	
Part B	$1,123	$863	$260	
Total	$2,932	$1,964	$969	
Reimbursement for Care Coordination[f]	$573	$0	$573	***
Number of Beneficiaries	**75**	**73**		

TABLE 5 *(Continued)*

Source: Medicare National Claims History File.

Note: Sample includes those enrolled during the first four months of program operations. Participants were excluded from this table if they had an invalid HIC number on MPR's enrollment file, were identified as a member of the same household as a research sample member, or did not meet Medicare coverage and payer requirements (defined as having Medicare as a secondary payer, being in Medicare managed care plan, or not having Part A and Part B coverage) during the month of randomization. Patient-months were excluded if the participant did not meet the above Medicare coverage and payer requirements that month, or had died in a previous month.

"Percents with any medical encounter type" are the percent of treatment or control group members who have at least one encounter of a particular type; "mean numbers of medical encounter types" are the average number of encounters of a particular type per treatment or control group member.

[a]The direction of the treatment-control difference does not by itself signify whether the program is "effective." That is, for some outcomes a statistically significant negative difference (such as lower hospitalization rates for the treatment group than for the controls) suggests that the program is working as intended. However, a positive difference for other outcomes, such as number of physician visits, does not necessarily mean the program is ineffective or having adverse effects, because the program may encourage patients to see their physician more regularly for preventative care or to obtain recommended laboratory tests for their target conditions than they would have in the absence of the demonstration.

Due to rounding, the difference column may differ slightly from the result when the control column is subtracted from the treatment column.

[b]Includes visits to outpatient hospital facilities as well as emergency room visits that do not result in an inpatient admission. Laboratory and radiology services are also included.

[c]Includes diagnostic laboratory and radiology services (including pathologist and radiologist services) from nonhospital providers, suppliers and devices, mammography, ambulance, covered medications, blood, and vaccines.

[d]Does not include reimbursement for care coordination services provided by demonstration programs.

[e]Includes reimbursement for inpatient, skilled nursing facility, hospice, and all home health care (including that paid under Medicare Part B). Excludes reimbursement for care coordination services provided by demonstration programs.

[f]This is the average amount paid to the program as recorded in the Medicare claims data for the two months following randomization. The difference between the recorded amount and two times the amount the program was allowed to charge per-member-per-month may reflect billing errors, delays, or payment adjustments for patients who disenrolled.

*Difference between treatment and control groups significantly different from zero at the .10 level, two-tailed test.
**Difference between treatment and control groups significantly different from zero at the .05 level, two-tailed test.
***Difference between treatment and control groups significantly different from zero at the .01 level, two-tailed test.

TABLE 6

MONTHLY MEDICARE SERVICE USE FOR PARTICIPANTS WHO ENROLLED DURING THE FIRST SIX MONTHS OF PROGRAM OPERATIONS

	Group	Jun 02	Jul 02	Aug 02	Sep 02	Oct 02	Nov 02
Cumulative Enrollment Through Month End	Treatment	1	12	49	73	94	141
	Control	1	13	46	69	93	142
Mean Number of Beneficiaries Enrolled Who Meet Medicare Coverage and Payer Requirements and Are Alive That Month	Treatment	1	12	47	70	90	136
	Control	1	13	45	66	90	136
Average Medicare Reimbursement During the Month[a]	Treatment	$41	$206	$2,142	$1,429	$1,376	$1,634
	Control	$108	$2,301	$1,495	$1,478	$924	$1,187
Average Reimbursement for Care Coordination During the Month[a,b]	Treatment	$259	$310	$296	$298	$294	$293
Whether Admitted to Hospital This Month[a] (Percentage)	Treatment	0.0	0.0	8.5	5.7	7.8	6.6
	Control	0.0	15.4	8.9	4.5	4.4	5.1
Treatment - Control Difference[c]							
Average Medicare Reimbursement[a]		–$67	–$2,095 *	$647	–$49	$452	$447
Average Reimbursement for Medicare plus Care Coordination[a]		$192	–$1,786	$943	$249	$746 *	$741
Percentage Hospitalized[a]		0.0	–15.4	–0.4	1.2	3.3	1.5

Source: Medicare National Claims History File.

[a]Participants were excluded if they died in a previous month or failed to meet the Medicare coverage and payer requirements during the month of randomization or the month examined—that is, if they were in a Medicare managed care plan, had Medicare as a secondary payer, or did not have both Part A and Part B coverage. Participants were also excluded entirely from this table if they had an invalid HIC number on MPR's enrollment file.

TABLE 6 *(continued)*

[b]This is the average amount paid to the program as recorded in the Medicare claims data. The difference between the recorded amount and the program's approved per-member-per-month fee may reflect billing errors, delays, or payment adjustments for patients who disenrolled.

[c]The direction of the treatment-control difference does not by itself signify whether the program is "effective." That is, for some outcomes a statistically significant negative difference (such as lower hospitalization rates for the treatment group than for the controls) suggests that the program is working as intended. However, a positive difference for other outcomes, such as number of physician visits, does not necessarily mean the program is ineffective or having adverse effects, because the program may encourage patients to see their physician more regularly for preventative care or to obtain recommended laboratory tests for their target conditions than they would have in the absence of the demonstration.

*Difference between treatment and control groups significantly different from zero at the .10 level, two-tailed test.
**Difference between treatment and control groups significantly different from zero at the .05 level, two-tailed test.
***Difference between treatment and control groups significantly different from zero at the .01 level, two-tailed test.

as heart failure, but also those with prevalent geriatric syndromes such as physical inactivity, falls, depression, incontinence, misuse of medications, and undernutrition (Rector and Venus 1999; and Fox 2000).

Second, successful programs tend to have a comprehensive, structured intervention that can be adapted to individual patient needs. One key feature is a multifaceted assessment whose end product is a written care plan that can be used to monitor patient progress toward specific long- and short-term goals and that is updated and revised as the patient's condition changes (Chen et al. 2000). Another key feature is a process for providing aggregate- and patient-level feedback to care coordinators, program leaders, and physicians about patient outcomes (Chen et al. 2000).

Another critical aspect is patient education that combines the provision of factual information with techniques to help patients change self-care behavior and better manage their care, as well as addressing affective issues related to chronic illness (Williams 1999; Lorig et al. 1999; Vernarec 1999; Roter et al. 1998; and Aubry 2000). Finally, successful programs tend to have structures and procedures for integrating fragmented care and facilitating communication among providers, to address the complexities posed by patients with several comorbid conditions, and, when necessary, to arrange for community services (Chen et al. 2000; Bodenheimer 1999; and Hagland 2000).

The third and fourth characteristics that have been associated with successful programs are having highly trained staff and having actively involved providers. Strong programs typically have care coordinators who are baccalaureate-prepared nurses or who have case management or community nursing experience. They also tend to have the active support and involvement of patients' physicians (Chen et al. 2000; and Schore et al. 1999).

Finally, periodic feedback during the demonstration period can motivate providers and care coordinators and enable the program to modify or intensify the intervention if it appears that it is

not having the expected effect on intermediate or ultimate outcome indicators. Financial incentives can help encourage physicians and program staff to look for creative ways to meet patient goals and reduce total health care costs (Schore et al. 1999).

Program Strengths and Unique Features. The Lifecare Plus program has some of the features associated with effective care coordination programs, plus a few unique features.

- The program targets elderly clients with diagnoses that are typically associated with high health care costs and appears to be enrolling patients with the high costs it expected.
- The program offers group meetings that provide clients with general health and wellness education and offers transportation to the meetings. In addition, nurse care coordinators provide one-on-one condition-specific education to clients who need it.
- The program improves communication and coordination of care by sending physicians email and telephone alerts about changes in client status, coordinating with long-term care providers, and tracking hospital encounters. It also ensures that clients take their medications correctly, helps clients get to their medical appointments, and identifies clients with mental health service needs and urges them to seek care.
- To maintain clients' independence, the program provides case aide services and telephone reassurance calls to some clients. The program also holds group meetings and parties that are designed to decrease loneliness and social isolation. It also recently implemented a fall prevention program. In addition, the program refers clients to, or arranges for, a wide variety of community services.

Potential Barriers to Program Success. The Lifecare Plus program's care coordination model does not include several of the features that the literature suggests are associated with effective care coordination. For example, it does not provide feedback to its care coordinators, program leaders, or physicians about patient outcomes. While it has adopted other features suggested by the literature, some of these have been weakly implemented. In addition, Lifecare Plus experienced several barriers to success in its first year of operation. First, it does not appear that the care coordination supervisor had the resources and support needed to manage the program effectively. She was not involved in the design of the program or the submission of the program's proposal to CMS (then HCFA). The Jewish Home and Hospital managers who were

involved in these activities had a minimal role in the implementation of the program. Moreover, the tasks of hiring staff and enrolling clients distracted the care coordinator supervisor from other vital aspects of the program such as establishing communication with the medical directors and referring physicians, developing good documentation protocols for the care coordinators, and monitoring the quality of the intervention being provided. As a result, the program strayed from its original objectives when it encountered obstacles. Despite making a significant investment in an electronic care coordination information system, the program did not use this system to develop reports on its activities and clients. Thus, the program has no way to identify program implementation barriers quickly and thus no systematic way of devising approaches to overcoming obstacles or revising program objectives. For example, when faced with continuing enrollment shortfalls, program staff continued to use the same processes and resources to identify and recruit clients. Similarly, the program continued to use group meetings as a primary intervention despite continued low attendance.

Second, delays in hiring staff and beginning its intervention make it nearly impossible for the program to have had any effect on its earliest enrollees. Some interventions, such as one-on-one condition-specific teaching, group meetings, telephone reassurance calls, case aide services, and the fall prevention program, have reached only a small number of clients. Moreover, other interventions, such as integrating primary care physicians into the multidisciplinary care team, improving communication between clients and physicians and between primary care and specialty physicians, and ensuring optimal preventive care, were never implemented. Consequently, the program's interventions, as implemented, may not be sufficient to reduce the use of health care services and Medicare costs, especially given the program's relatively high fees.

Third, the program has not been able to engage physicians. This is a barrier that prevents the program from achieving its key objective of expanding its social service orientation to more effectively address clients' medical needs. The lack of communication between the program staff and the medical director prevented the program from identifying ways to make itself more attractive to physicians. The lack of program integration with medical care providers may have contributed to the low proportion of enrollees participating in the program's group meetings and is likely to make it difficult to improve clients' health and reduce their use of high-cost health care services.

It is too early to determine whether the Lifecare Plus program's care coordination model can reduce hospitalizations and other avoidable health care expenses. However, it is clear that clients enrolling in the first year of the demonstration (who will be the subjects of the evaluation's second report to Congress) received less than full exposure to the program's interventions, as originally envisioned and proposed to CMS. Given the barriers described above, the Lifecare Plus program may have difficulty demonstrating positive impacts that will offset its costs.

Plans for the Second Site-Specific Report. We will prepare a second report on the Lifecare Plus program's activities during its second and third years of operation that will focus more heavily on program impacts based on survey and claims data. That report will also describe changes made to the program over time and the reasons for those changes, as well as staff impressions of program successes and shortcomings. The report is due in mid-2005.

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APPENDIX A

ADDITIONAL TABLES

A.1 DEMONSTRATION PROGRAMS PARTICIPATING IN THE EVALUATION

A.2 LIST OF DOCUMENTS REVIEWED FOR THIS REPORT

TABLE A.1

DEMONSTRATION PROGRAMS PARTICIPATING IN THE EVALUATION

Host Organization	Organization Type	Service Area	Targeted Diagnoses
Avera Research Institute/Avera McKennan Hospital and University Health Center	Hospital	49 counties in South Dakota and 22 contiguous counties in Minnesota, Nebraska, and Iowa	CHF
Carle Foundation	Integrated delivery system	11 counties in east-central Illinois and 2 counties in west-central Indiana	Heart conditions Diabetes Chronic lung disease
CenVaNet	Provider of care coordination services owned by hospitals and physicians	Richmond, Virginia metropolitan area	Heart conditions Diabetes Chronic lung disease Cerebrovascular disease
Charlestown Retirement Community	Part of Erickson Retirement Communities	2 retirement communities in the Baltimore, Maryland metropolitan area[a]	Heart conditions Diabetes COPD
CorSolutions	Provider of disease management services	Harris, Fort Bend, Bruzoria, and Montgomery counties, Texas (Houston area)	CHF
Georgetown University Medical School	Academic institution in partnership with Medstar, owner of Georgetown University Hospital and Washington Hospital Center	Washington, DC, and parts of Maryland and Virginia	CHF
Health Quality Partners	Provider of quality-improvement services	Four counties in eastern Pennsylvania	Heart conditions Diabetes Asthma Moderate to severe hyperlipidemia or hypertension
Hospice of the Valley	Hospice	Maricopa County, Arizona (Greater Phoenix)	CHF COPD Cancer Neurological conditions

TABLE A.1 *(continued)*

Host Organization	Organization Type	Service Area	Targeted Diagnoses
Jewish Home and Hospital Lifecare System	Long-term care provider, in partnership with the medical practices of St. Luke's and Mt. Sinai hospitals as referral sources	Manhattan and the Bronx, New York City	Heart conditions Diabetes Chronic lung disease Cancer Liver disease Stroke or other cerebrovascular disease Psychotic disorder Major depressive or anxiety disorder Alzheimer's or other cognitive impairment
Lovelace Health Systems	Integrated delivery system	Albuquerque metropolitan statistical area (Bernalillo, Valencia, and Sandoval counties in New Mexico)	CHF Diabetes
Medical Care Development	Consortium of 17 Maine hospitals hosted by a health services research organization	Rural areas of Maine	Heart conditions
Mercy Medical Center/North Iowa	Hospital	Rural areas of Iowa	CHF Chronic lung disease Liver disease Stroke Vascular disease Renal failure
QMed	Provider of disease management services	2 counties in northern California	CAD
Quality Oncology, Inc.	Provider of disease management services	Broward and Dade counties, Florida	Cancer
University of Maryland Medical School	Academic institution	Baltimore, Maryland metropolitan area, two counties in western Maryland, four in eastern Maryland, and two in Pennsylvania	CHF
Washington University School of Medicine	Academic institution in partnership with American Healthways, a disease management services provider	St. Louis, Missouri metropolitan area	No specific diagnoses targeted[b]

TABLE A.1 *(continued)*

Note: Each program's service area and targeted diagnoses refer to its first year of operations.

Heart conditions may include congestive heart failure (CHF); coronary artery disease (CAD); atrial fibrillation; and ischemic, hypertensive, or other heart diseases. Chronic lung disease includes asthma and chronic obstructive pulmonary disease (COPD). Neurological conditions include stroke, Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis.

[a]Charlestown added a third retirement community in April 2003.

[b]Washington University uses an algorithm developed by its demonstration partner, American Healthways, to target Medicare beneficiaries who are likely to become clinically unstable and require hospitalization during the next 12 months.

TABLE A.2

Proposal to the Health Care Financing Administration (October 11, 2000)

GO Coalition, Operational protocol plan

Chart review instrument*

Patient introductory letter and consent form*

Preliminary questionnaire*

Social work assessment*

Nursing assessment*

Fall risk assessment and transfer evaluation tool*

Care plan template*

Staff training and development record*

Lifecare Plus program brochure*

Performance improvement survey*

Client satisfaction survey results (summer 2003)

Lifecare Plus newsletter*

Groups survey*

Group survey results (winter 2003)

Sample educational materials*

Serious adverse event report form*

Telephone reassurance form*

* Included in Appendix C.

APPENDIX B

METHODS USED TO ANALYZE PARTICIPATION AND PROGRAM IMPACTS

This appendix describes the methods and data sources used to analyze participation and treatment-control service use and reimbursement differences using Medicare data.

A. METHOD FOR CALCULATING PARTICIPATION RATE AND PATTERNS

We measured the proportion and types of beneficiaries attracted to the program by calculating the participation rate and patterns. The participation rate was calculated as the number of beneficiaries who met the program's eligibility criteria and actually participated during the first six months of the program's operations, divided by the number who met the eligibility criteria. The six-month window spanned 179 days, from June 17, 2002, through December 13, 2002. We explored patterns of participation by comparing eligible participants and eligible nonparticipants, noting how they differed on demographics, the reason for Medicare eligibility, and the costs and use of key Medicare services during the previous two years.

1. Approximating Program Eligibility Criteria

We began by identifying the program's eligibility criteria, reflecting CMS's insurance coverage and payer criteria for all programs and the Lifecare Plus program's specific criteria. CMS excluded beneficiaries from the demonstration who were not at risk for incurring full costs in the fee-for-service (FFS) setting because they (1) were enrolled in a Medicare managed care plan, (2) did not have both Parts A and B coverage, or (3) did not have Medicare as the primary payer.

In addition to the Medicare coverage and payer requirements, Lifecare Plus applied program-specific criteria to identify the target population. Table B.1 summarizes these criteria, which were approved by CMS and the Office of Management and Budget (Brown et al. 2001). The program confirmed these criteria in spring 2003. To be considered for the Lifecare Plus

TABLE B.1

ELIGIBILITY CRITERIA

Inclusion Criteria	At least one inpatient hospitalization or at least three doctor visits in the past year for: congestive heart failure (CHF) (428.0-428.9, 402.00-402.91, 404.00-404.93), diabetes (250-250.93), liver disease (570-573.9), lung disease (COPD) (493.10-493.23, 460-519), cerebrovascular disease (stroke, coronary artery disease) (410-414.9, 430-438.9, 441-444.9), vascular disease (440, 451-453.9), psychotic disorders, major depressive disorders (311), anxiety disorders (300.00), Parkinson's disease (332.0, 331.0, 335.20, 340), Alzheimer's disease or other dementias (290-290.9, 294-298.9) or cancer (excluding skin cancer) (140-172.9, 174-208.91)
Exclusion Criteria	Under 6
Providers/Referral Sources	St. Luke's/Roosevelt–UMPA, Mount Sinai Coffey Geriatric Practice, Senior Living Facilities, and Community-Based Senior Organization
Geographic Location	Manhattan and the Bronx, New York

program, beneficiaries must have had at least one inpatient hospital admission or at least three doctor's visits in the past year for one of the following target conditions: congestive heart failure (CHF), diabetes, liver disease, lung disease (COPD), cerebrovascular disease (stroke), vascular disease, psychotic disorders, major depressive disorders, anxiety disorders, Parkinson's disease, Alzheimer's disease or other dementias, or cancer. Also, beneficiaries had to be 65 years of age or older at the time of enrollment.

We could approximate most of the Lifecare Plus program's criteria using Medicare data with some exceptions. We implemented the program's requirement that a patient must have had the target conditions by examining whether a beneficiary had such encounters at any point during

the 30-month period beginning July 1, 2000, two years before enrollment began, and ending six months after enrollment started (December 31, 2002). To identify whether a beneficiary met the program's utilization criteria (at least one hospital admission or at least three doctor visits), we examined hospital claims over an 18-month period starting July 1, 2001 and ending December 31, 2002.[1] We used the same period to approximate whether beneficiaries met the program's medical exclusion criteria or were under age 65 at the time of enrollment. We were unable to observe the complete diagnostic history for beneficiaries who had not been in FFS Medicare during the full two years before the six-month enrollment window.[2] In addition, we did not limit eligible beneficiaries to people who had used specific hospitals or doctors who refer patients to the program, making our estimates potentially overstate the true number of people Lifecare Plus would have approached about participating.

2. Identifying Health Insurance Claim (HIC) Numbers and Records of Participants and All Beneficiaries

We used Medicare claims and eligibility data and data submitted by the program to identify participants and eligible nonparticipants. For all participants, we used the Medicare enrollment database (EDB) file to confirm the HIC numbers, names, and dates of birth submitted by the program when beneficiaries were randomized. We identified potentially eligible nonparticipants by identifying the HIC numbers of all Medicare beneficiaries who were alive and living in the

[1]We approximated these criteria by counting medical visits in those months where a beneficiary had at least one claim for a target diagnosis. We did not require that *all* visits in the specified month be for a target diagnosis. For example, if a patient had an emergency room visit and two physician visits and that same month had a claim with a target diagnosis, the patient is considered to meet the criteria. Medical visits include physician encounters, lab visits, hospital outpatient visits, and emergency room visits.

[2]Among the 307 beneficiaries who enrolled in the first six months, who had valid Health Insurance Claim (HIC) numbers reported and who met CMS's insurance requirements at intake, under 3 percent were enrolled in Medicare FFS 12 or of the previous 24 months before they enrolled in the demonstration; 0.33 percent of participants were in FFS less than 6 of the 24 months before enrolling.

catchment area during the six-month enrollment window. Initially, two years of Denominator records (2000-2001) and one year of HISKEW records (2002) were used to identify people living in the catchment area at any time in the 2000-2002 period. HIC numbers of potentially eligible nonparticipants and all participants together formed a "finder file." The finder file was used to gather data on the beneficiary's state and location of residence during the six-month enrollment period, as well as to obtain eligibility information from the EDB. Using this information, we limited the sample to people living in the catchment area at any point during the six-month enrollment window. This finder file was also used to make a "cross-reference" file to ensure that we obtained all possible HIC numbers the beneficiary may have been assigned. This was done using Leg 1 of CMS's Decision Support Access Facility. At the end of this step, we had a list of HIC numbers for all participants, as well as all beneficiaries living in the catchment area during the six-month enrollment period.

3. Creating Variables from Enrollment and Claims Data

We obtained eligibility information from the EDB and diagnostic and utilization data from the National Claims History (NCH). All claims files were accessed through CMS's Data Extract System. At the end of June 2003, we requested Medicare claims from 2000 through 2002. We received all claims that were updated by CMS through December 2002. This allowed a minimum of a three-month lag between a patient's receipt of a Medicare-covered service in the last month we examined—December 2002—and the appearance of the claim on the Medicare files.[3]

[3]Occasionally, the HIC number in the cross-reference file was not in the EDB file that we used. Because data from the EDB were needed for the analyses, such beneficiaries were dropped from the sample. One reason for differences between the HIC numbers in the EDB and cross-reference files was that the two files were updated at different times. CMS created the cross-reference file using the unloaded version of the EDB, which was updated quarterly. We extracted data using the production version of the EDB, which was updated every night.

Medicare claims and eligibility information were summarized as monthly variables from July 2000 through December 2002, for a total of 30 months. This enabled us to look at the eligibility status and the use of Medicare-covered services during any month in the two years before the program's start, to analyze participation in the first six months of program operation, and to analyze treatment-control differences in Medicare service use and reimbursement following enrollment.

The EDB file provided us the information with which to construct measures of beneficiaries' demographic characteristics (age, sex, race), dates of death, original reason for Medicare entitlement, Medicare managed care enrollment, Part A and B coverage, whether Medicare was the primary payer, and the state buy-in proxy measure for enrollment in Medicaid.

The Medicare claims data in the NCH files were used to construct measures of Medicare-covered service use and reimbursement by type of service (inpatient hospital, skilled nursing facility, home health, hospice, outpatient hospital, and physician and other Part B providers). When the services spanned months, the monthly variables were allocated based on the number of days served in that month, as documented in the CLAIM FROM and CLAIM THRU dates. The length of stay for a month represented actual days spent in the facility during that month; costs were prorated according to the share of days spent in each month. Ambulatory visits were defined as the unique counts of the person-provider-date, as documented in the physician/supplier and hospital outpatient claims. Durable medical equipment (DME) reimbursements were counted in other Part B reimbursement. A small number of negative values for total Part A and Part B reimbursements during the past two years occurred for some of the demonstration programs. Any negative Part A and Part B amounts were truncated to zero. The few patients with a different number of months in Part A and Part B were dropped from the analysis of reimbursement in the two years before intake.

When we examined a beneficiary's history from the month during which he or she was randomized, we used the actual date of randomization for participants and a simulated date of randomization for nonparticipants, picked to be September 15, 2002, or roughly the midpoint of the six-month enrollment window.

4. Defining Eligible Nonparticipants and Eligible Participants

We used target criteria information to reduce the number of beneficiaries who lived in the catchment area to those who met the program's eligibility criteria, which we could measure using the Medicare data. Tables B.2 and B.3 illustrate the exclusions used to identify the sample of eligible participants and nonparticipants used to analyze participation patterns.

We identified 377,763 beneficiaries who lived in the Lifecare Plus program's catchment area at some point during the first six months of enrollment (Table B.2). We then excluded 137,418 people (36.4 percent) who did not meet the insurance requirements set by CMS for participation in the program during one or more months during the six-month enrollment window. Another 52,407 of those remaining (13.9 percent of all area beneficiaries) were dropped from the sample, since they were not treated for one or more of the target diagnoses the program identified as necessary for inclusion during the two years before the program began or during the first six months of enrollment. Seventeen percent of the remaining beneficiaries (32,018 people) did not meet the utilization requirements we measured (at least one hospital admission or at least three doctor visits) during the 18 months from July 2001 through December 2002 (which includes six months of the current year and the last six months of the previous year, as well as the six-month enrollment window). Finally, 29,819 people were identified as meeting the program's exclusion criterion (under the age of 65), leaving us with a sample of 126,101 beneficiaries we estimated would have been eligible to participate in the program.

TABLE B.2

SAMPLE OF ALL ELIGIBLE BENEFICIARIES FOR PARTICIPATION ANALYSIS

Sample	Number
Full Sample of Eligible Beneficiaries Who Live in Catchment Area One or More Months During the First Six Months of Enrollment	377,763
Minus those who:	
During 6-month enrollment period, either (1) were always in a Medicare managed care plan, or (2) never had Medicare Part A coverage, or (3) never had Medicare Part B coverage, or (4) Medicare was not primary payer during one or more months	–137,418
Did not have one or more of the target diagnoses on any claim during the two years before the program started or during the six month enrollment window	–52,407
Did not have a hospitalization or three or more medical visits for the target condition during the 18 months from July 2001 through December 2002	–32,018
Met at least one of the exclusion criteria during the 18 months from July 2001 through December 2002	–29,819
Eligible Sample	**126,101**

TABLE B.3

SAMPLE OF ELIGIBLE PARTICIPANTS FOR PARTICIPATION ANALYSIS

Sample	Treatment Group	Control Group	All
Full Sample of Participants Randomized During the First Six Months of Enrollment	160	160	320
Minus those who:			
Had an invalid HIC number on MPR's enrollment file	–0	–2	–2
Not in geographic catchment area during the month of intake	–1	–4	–5
In a Medicare managed care plan, or did not have Medicare Part A and B coverage, or Medicare is not primary payer during the month of intake	–6	–5	–11
Did not have one or more of the target diagnoses on any claim during the two years before the program started or during the six-month enrollment window	–1	–8	–9
Did not have a hospitalization or three or more medical visits for the target condition during the 18 months from July 2001 through December 2002	–3	–9	–12
Met at least one of the exclusion criteria during the 18 months from July 2001 through December 2002	–1	–0	–1
Eligible Sample	**148**	**132**	**280**

Note: The number of sample members reported as excluded at each point reflects *people in the previous line* who did not meet the additional eligibility criteria according to Medicare data. Thus, the table applied sequential criteria. The program actually used patient self-reports of diagnosis and service use. The total number of people who failed to meet a particular exclusion criterion may have been greater than the number reported in this table for program criteria that we could not fully assess using claims data (for example, reading level).

Lifecare Plus randomized 320 beneficiaries who enrolled in the demonstration program during the first six months of operation (Table B.3). Of these, two people could not be matched to their Medicare claims data due to problems with their reported HIC number and were excluded from the participation sample.[4] JHH randomized five beneficiaries who had an address on the EDB that was outside its catchment area. We excluded these cases from the participation analysis to maintain comparability with the eligible nonparticipant sample. We also excluded 11 participants who did not meet CMS's insurance requirements for participation in the program during the month of intake. We dropped 9 beneficiaries for not having at least one claim for a target diagnosis during the two years before the program began or the first six months of the program, and 12 beneficiaries for not meeting the utilization criteria during the 18-month period, July 1, 2001 through December 31, 2002. Finally, one participant was dropped from the participation analysis for being under the age of 65. Thus, among the 320 participants randomized by Lifecare Plus into the program during its first six months of operation, 280 people are included in the participation analyses as eligible participants.

The Lifecare Plus program's participation rate for the first six months of enrollment is therefore calculated as the number of participants who met the eligibility requirements (280), divided by the number of eligibles who live in the catchment area (126,101), or 0.22 percent.

Table B.4 describes the characteristics of the 280 participants who were enrolled by the program during its first six months and who appear to meet the program's eligibility requirements, as measured in Medicare data, and the 125,821 eligible nonparticipants. This table

[4]This number includes both beneficiaries with invalid HIC numbers reported and those whose claims we could not obtain when we extracted the files due to the way the Medicare files are created (described in footnote 3). Those with incorrect HIC numbers may well be eligible, but we could not obtain the Medicare data for them to assess that; so they were excluded. HIC numbers have since been corrected, and those beneficiaries will be included in the final report.

TABLE B.4

CHARACTERISTICS OF ELIGIBLE PARTICIPANTS AND ELIGIBLE NONPARTICIPANTS DURING THE FIRST SIX MONTHS OF PROGRAM ENROLLMENT
(Percentages, Unless Otherwise Noted)

	Eligible Demonstration Participants (Treatments and Controls)[a]	Eligible Nonparticipants	
Age at Intake			
Average age (in years)	81.2	77.3	***
Younger than 65	0.0	0.0	
65 to 74	22.9	41.2	***
75 to 84	42.5	39.1	
85 or older	34.6	19.7	***
Male	22.1	35.5	***
Nonwhite	54.3	35.3	***
Original Reason for Medicare: Disabled or ESRD	10.0	10.1	
State Buy-In for Medicare Part A or B	39.6	24.2	***
Newly Eligible for Medicare (Eligible Less than Six Months)	0.00	0.35	
Enrolled in Fee-for-Service Medicare 6 or More Months During Two Years Before Intake	100.00	98.87	*
Medical Conditions Treated During Two Years Before Month of Intake[b]			
Coronary artery disease	55.0	49.9	*
Congestive heart failure	38.2	26.5	***
Stroke	28.6	24.6	
Diabetes	41.4	31.5	***
Cancer	25.0	27.3	
Chronic obstructive pulmonary disease	32.1	30.6	
Dementia (including Alzheimer's disease)	19.6	7.4	***
Peripheral vascular disease	25.0	17.6	***
Renal disease	8.9	5.6	**
Total Number of Diagnoses	2.7	2.2	***
Days Between Last Hospital Admission and Intake Date[b]			
No hospitalization in past two years	42.5	59.3	***
0 to 30	7.1	4.2	**
31 to 60	7.1	3.4	***
61 to 180	13.9	9.9	**
181 to 365	13.9	10.6	*
366 to 730	15.4	12.6	

TABLE B.4 *(continued)*

	Eligible Demonstration Participants (Treatments and Controls)[a]	Eligible Nonparticipants	
Annualized Number of Hospitalizations During Two Years Before Month of Intake[b,c]			
0	43.2	59.7	***
0.1 to 1.0	35.0	28.6	**
1.1 to 2.0	13.9	7.7	***
2.1 to 3.0	5.4	2.4	***
3.1 or more	2.5	1.6	
Medicare Reimbursement per Month in Fee-for-Service During One Year Before Intake[b]			
Part A	$995	$612	***
Part B	$527	$370	***
Total	$1,522	$982	***
Distribution of Total Medicare Reimbursement per Month Fee-for-Service During One Year Before Intake[b]			
$0	0.0	0.9	
$1 to 500	47.5	63.5	***
$501 to 1,000	12.9	12.5	
$1,001 to 2,000	13.9	9.2	***
More than $2,000	25.7	14.0	***
Number of Beneficiaries	**280**	**125,821**	

Source: Medicare Enrollment Database and National Claims History File.

Note: The intake date used in this table is the date of enrollment for participants. For eligible nonparticipants, the intake date is July 15, 2002, the midpoint of the six-month enrollment period examined.

[a]Participants who do not meet CMS's demonstration-wide requirements for the demonstration, or who had an invalid HIC number on MPR's enrollment file, are excluded from this table because we do not have Medicare data showing their reimbursement in the fee-for-service program. Members of the same households as the research sample members are included.

[b]Calculated among beneficiaries with six or more months in Medicare fee-for-service in the two years before intake. (See Note, above, concerning intake date definition.)

[c]Calculated as 12 x (number of hospitalizations during two years before month of intake) / (number of months eligible). For example, if a beneficiary was in fee-for-service all 24 months and had two hospitalizations during that time, they would have one hospitalization per year [(12 x 2) / 24]. If another beneficiary was in fee-for-service eight months during the previous two years, and had two hospitalizations during those eight months, they would have [(12 x 2) / 8], or three hospitalizations per year. The estimate of the proportion with no hospitalization in the two years before the month of intake may differ slightly from the proportion with no hospitalization in the two years before the date of intake because the two measure slightly different periods. Someone enrolled on September 20, 2003, whose only hospitalization in the preenrollment period occurred on September 5, 2003, would not be counted as hospitalized during the 24 months before the month of intake. Conversely, someone hospitalized on September 25, 2001 would be captured in the measure defined by month of enrollment but not in the measure based on the day of enrollment.

*Difference between eligible participants and eligible nonparticipants significantly different from zero at the .10 level, two-tailed test.

**Difference between eligible participants and eligible nonparticipants significantly different from zero at the .05 level, two-tailed test.

***Difference between eligible participants and eligible nonparticipants significantly different from zero at the .01 level, two-tailed test.

is identical to Table 2 in the text, except that the participant sample has been restricted to the beneficiaries who meet the eligibility criteria according to Medicare claims data. The results are very similar to those in Table 2, except that a slightly higher proportion of eligible demonstration participants had been treated for coronary artery disease in the two years before intake and a slightly lower proportion had no hospitalizations in the past two years than all demonstration participants.[5]

B. METHOD FOR CALCULATING TREATMENT-CONTROL DIFFERENCES

Sample sizes are too small and the follow-up period too short to estimate program impacts. Comparing the treatment and control groups on mean outcomes, however, provides an early indication of potential effects. The analysis draws on the data and the variables constructed for the participation analysis, but is restricted to the program's participants (treatments and controls). The cost of the intervention was estimated as the amount CMS paid to the Lifecare Plus program for the treatment group patients, using G-coded claims in the physician claims file.

1. Treatment-Control Differences

We used two approaches to estimate treatment-control differences in Medicare-covered service use and cost outcomes. First, we estimated differences over a two-month follow-up

[5]Nonparticipants were identified as eligible if they met the target criteria anytime during the six-month enrollment window, as well as the two years before the window. When we calculated preenrollment use of Medicare services for nonparticipants, we measured use over the time before a pseudo-enrollment date fixed at three months after the program began enrollment (that is, the middle of the six-month window). As a result, for nonparticipants who became eligible based on service use in the latter three months of the six-month enrollment window, this method does not capture that service use. We tested the sensitivity of the findings to this approach. For the sensitivity test, we limited the eligible nonparticipants to those who met the diagnostic and service-use criteria before their pseudo-enrollment date. This subsample of eligible nonparticipants had slightly higher reimbursements and service use than the sample shown in Tables 2 and B.4. For most programs, reimbursements for the eligible nonparticipants increased between 2 and 10 percent, and hospitalizations stayed the same or increased up to 10 percent.

period for all people randomized by the program during the first four months of enrollment. The four-month enrollment window covered June 17, 2002 through October 14, 2002. The follow-up time covered the two calendar months after the month of randomization. For example, for a beneficiary randomized on June 25, we examined outcomes in July and August.

Second, we estimated treatment-control differences by calendar month over the first six months of the program's enrollment to look at how cost-effectiveness might vary over the life of a program. One might expect programs to have little effect at first, since it takes time for patients to be assessed, the program to become fully functional, the patients to adopt case managers' recommendations, and these behavior changes to affect the need for health care. Analyzing costs by program month will allow us to examine such patterns. For each month from June 2002 through November 2002, we identified the patients who were enrolled in the Lifecare Plus program and analyzed their Medicare-covered service use. For example, a person randomized in June would be present in June through November, provided that person is eligible and alive in each month.[6] Someone randomized in July would not be part of the calculations for June but would be included in July through November, again provided that the person is eligible during those months.

The sample used to analyze treatment-control differences in outcomes differs from that used to analyze participation. Like the participation analyses, we excluded randomized individuals for whom we have an invalid HIC number from the analysis sample because we could not obtain their Medicare claims data. We also excluded those who enrolled but were ineligible for the demonstration according to CMS's insurance criteria (as determined from data on the EDB). However, we also excluded beneficiaries flagged as a household member of a participant, since

[6]Patients were excluded as ineligible during months when we could not observe their full costs (when they were enrolled in a Medicare managed care plan for the full month).

they were not part of the research sample and thus were not used for the outcomes analysis.[7] Furthermore, in contrast to the participation analyses, participants who did not meet the program's target criteria according to the claims and EDB data were not excluded from the outcomes analyses. Given this, of the 158 people randomized in the first four months of the demonstration, the sample for analyzing treatment-control differences contained 148 people. For the six-month sample, 300, or 94 percent of the 320 randomized people, were included in the final sample (Table B.5). In addition to excluding beneficiaries, we excluded months during which we could not observe the beneficiaries' full costs in fee-for-service (described in footnote 6).

2. Integrity of Random Assignment

Eligible applicants to the program were randomly assigned to the treatment or control group. To assess whether random assignment successfully produced treatment and control groups with similar baseline characteristics, we used two-tailed t-tests and chi-squared tests to compare the two research groups. Table B.6 presents the baseline characteristics for both the four-month and the six-month sample.

As expected under random assignment, the treatment and control groups had similar characteristics in both the four- and six-month samples. In the four-month sample, there were statistically significant differences in the proportion of beneficiaries who were: (1) nonwhite, (2) treated for coronary artery disease in the previous two years, (3) treated for renal disease in the previous two years, and (4) residents of Manhattan.

[7]Household members were excluded from treatment-control comparisons to keep the two groups balanced. Household members were assigned to the same experimental status to avoid the contamination that might occur if one person in the household was in the treatment group and another was in the control group. As a result, we expected to find fewer household members in the control group than in the treatment group, since household members have less incentive to join the demonstration if they know a household member has already been assigned to the control group and they will not receive care coordination.

TABLE B.5

SAMPLES FOR TREATMENT-CONTROL COMPARISONS

	First Four Months	First Six Months
Number of beneficiaries who were randomized	158	320
Minus those who:		
Were members of the same household as research sample members	–4	–8
Had invalid HIC numbers on MPR's enrollment file	–2	–2
In a Medicare managed care plan, or did not have Medicare Part A and B coverage, or Medicare is not primary payer during the month of intake	–4	–10
Number of usable sample members	**148**	**300**

TABLE B.6

CHARACTERISTICS OF TREATMENT AND CONTROL GROUPS
IN THE RESEARCH SAMPLE ENROLLED DURING
THE FIRST FOUR MONTHS AND SIX MONTHS
OF PROGRAM ENROLLMENT

	Four-Month Sample				Six-Month Sample			
	Treatment Group	Control Group		Total Research Sample	Treatment Group	Control Group		Total Research Sample
Age at Intake								
Average age (in years)	81.4	81.1		81.3	81.6	80.6		81.1
Younger than 65	1.3	0.0		0.7	0.7	0.0		0.3
65 to 74	21.3	23.3		22.3	20.0	25.3		22.7
75 to 84	45.3	38.4		41.9	45.3	39.3		42.3
85 or older	32.0	38.4		35.1	34.0	35.3		34.7
Male	16.0	21.9		18.9	21.3	22.7		22.0
Nonwhite	50.7	68.5	**	59.5	51.3	56.0		53.7
Original Reason for Medicare: Disabled or ESRD	10.7	4.1		7.4	13.3	6.0	**	9.7
State Buy-In for Medicare Part A or B	44.0	39.7		41.9	40.0	37.3		38.7
Newly Eligible for Medicare (Eligible Less than Six Months)	0.0	0.0		0.0	0.0	0.0		0.0
Enrolled in Fee-for-Service Medicare Six or More Months During Two Years Before Intake	100.0	100.0		100.0	100.0	100.0		100.0
Medical Conditions Treated During Two Years Before Month of Intake[a]								
Coronary artery disease	57.3	39.7	**	48.6	54.7	47.3		51.0
Congestive heart failure	29.3	31.5		30.4	38.0	33.3		35.7
Stroke	37.3	27.4		32.4	28.7	24.7		26.7
Diabetes	37.3	35.6		36.5	39.3	38.7		39.0
Cancer	22.7	13.7		18.2	24.7	23.3		24.0
Chronic obstructive pulmonary disease	30.7	20.6		25.7	36.0	24.7	**	30.3
Dementia (including Alzheimer's disease)	20.0	16.4		18.2	20.0	18.0		19.0
Peripheral vascular disease	22.7	24.7		23.6	22.0	26.0		24.0
Renal disease	4.0	13.7	**	8.8	7.3	10.7		9.0
Total Number of Diagnoses (number)	2.6	2.2		2.4	2.7	2.4		2.6

TABLE B.6 *(continued)*

	Four-Month Sample				Six-Month Sample			
	Treatment Group	Control Group		Total Research Sample	Treatment Group	Control Group		Total Research Sample
Days Between Last Hospital Admission and Intake Date[a]								
No hospitalization in past two years	53.3	45.2		49.3	47.3	42.0		44.7
0 to 30	8.0	9.6		8.8	7.3	6.0		6.7
31 to 60	4.0	5.5		4.7	4.0	9.3	*	6.7
61 to 180	12.0	15.1		13.5	14.0	12.0		13.0
181 to 365	8.0	15.1		11.5	13.3	14.0		13.7
366 to 730	14.7	9.6		12.2	14.0	16.7		15.3
Annualized Number of Hospitalizations During Two Years Before Month of Intake[a,b]								
0	54.7	46.6		50.7	48.0	42.7		45.3
0.1 to 1.0	25.3	27.4		26.4	32.7	36.0		34.3
1.1 to 2.0	13.3	15.1		14.2	13.3	12.7		13.0
2.1 to 3.0	4.0	8.2		6.1	4.0	6.0		5.0
3.1 or more	2.7	2.7		2.7	2.0	2.7		2.3
Medicare Reimbursement per Month in Fee-for-Service During One Year Before Intake[a]								
Part A	$942	$1,010		$975	$947	$919		$933
Part B	$412	$451		$431	$529	$470		$499
Total	$1,353	$1,461		$1,406	$1,476	$1,389		$1,433
Distribution of Total Medicare Reimbursement per Month in Fee-for-Service During One Year Before Intake[a]								
$0	0.0	0.0		0.0	0.0	0.0		0.0
$1 to 500	58.7	53.4		56.1	50.0	50.7		50.3
$501 to 1,000	10.7	11.0		10.8	10.7	14.7		12.7
$1,001 to 2,000	10.7	11.0		10.8	15.3	10.7		13.0
More than $2,000	20.0	24.7		22.3	24.0	24.0		24.0
Location During Program Intake Period								
New York								
Manhattan	97.3	89.0	**	93.2	92.0	90.7		91.3
Bronx	2.7	8.2		5.4	8.0	6.7		7.3
Outside catchment area	1.3	2.7		2.0	0.7	2.7		1.7
Number of Beneficiaries	**75**	**73**		**148**	**150**	**150**		**300**

Source: Medicare Enrollment Database and National Claims History File.

Notes: The intake date used in this table is the date of enrollment for participants. For eligible nonparticipants, the intake date is September 15, 2002, the midpoint of the six-month enrollment period examined. Participants who do not meet CMS's demonstration-wide requirements, had an invalid HIC number on MPR's enrollment file, or were identified as a member of the same household as a research sample member were excluded from this table.

TABLE B.6 *(continued)*

[a]Calculated among beneficiaries with six or more months in Medicare fee-for-service in the two years before intake. (See Note, above, concerning intake date definition.)

[b]Calculated as 12 x (number of hospitalizations during two years before month of intake) / (number of months eligible). For example, if a beneficiary was in fee-for-service all 24 months and had two hospitalizations during that time, they would have one hospitalization per year [(12 x 2) / 24]. If another beneficiary was in fee-for-service eight months during the previous two years, and had two hospitalizations during those eight months, they would have [(12 x 2) / 8], or three hospitalizations per year. The estimate of the proportion with no hospitalization in the two years before the month of intake may differ slightly from the proportion with no hospitalization in the two years before the date of intake because the two measure slightly different periods. Someone enrolled on September 20, 2003, whose only hospitalization in the preenrollment period occurred on September 5, 2003, would not be counted as hospitalized during the 24 months before the month of intake. Conversely, someone hospitalized on September 25, 2001, would be captured in the measure defined by month of enrollment, but not in the measure based on the day of enrollment.

ESRD = end-stage renal disease.

*Difference between treatment and control groups significantly different from zero at the .10 level, two-tailed test.
**Difference between treatment and control groups significantly different from zero at the .05 level, two-tailed test.
***Difference between treatment and control groups significantly different from zero at the .01 level, two-tailed test.

For the six-month sample, there were statistically significant differences in the proportion of beneficiaries: (1) whose original reason for entitlement to Medicare was a disability or ESRD, (2) who were treated for COPD in the previous two years, and (3) whose days between last hospital discharge and intake was 31 to 60 days. We would expect this number of false-positive differences to occur by chance, given the number of characteristics examined. Thus, none of the differences in this small, early sample create any cause for concern.

3. Sensitivity Tests

To assess outcomes, we calculated Medicare-covered service use and cost in the two months after the month of randomization. For example, for an individual who was randomized in the month of June, we tabulated the individual's outcomes in July and August. To examine whether our results were affected by not including costs and services that occurred closer to the

randomization date, we conducted a sensitivity analysis examining outcomes for three months—during the month the individual was randomized, as well as the two months after randomization (Table B.7). The results were similar to those for outcomes measured over the two-month period with no statistically significant difference between the use and cost of traditional Medicare services for the treatment and control groups (text Table 5). Thus, the results are not sensitive to how the month of randomization is treated.

TABLE B.7

MEDICARE-COVERED SERVICE USE DURING THE MONTH OF RANDOMIZATION AND THE FOLLOWING TWO MONTHS FOR EARLY ENROLLEES

	Treatment Group	Control Group	Difference[a]	
Inpatient Hospital Services				
Any admission (percent)	14.7	17.8	–3.1	
Mean number of admissions	0.20	0.23	–0.03	
Mean number of hospital days	1.79	1.21	0.58	
Emergency Room Services				
Any emergency room encounters (percent)				
Resulting in admission	12.0	17.8	–5.8	
Not resulting in admission	10.7	8.2	2.5	
Total	20.0	21.9	–1.9	
Mean number of emergency room encounters				
Resulting in admission	0.16	0.23	–0.07	
Not resulting in admission	0.15	0.11	0.04	
Total	0.31	0.34	–0.04	
Skilled Nursing Facility Services				
Any admission (percent)	2.7	0.0	2.7	
Mean number of admissions	0.04	0.00	0.04	
Mean number of days	1.85	0.30	1.55	
Hospice Services				
Any admission (percent)	0.0	0.0	0.0	
Mean number of days	0.00	0.00	0.00	
Home Health Services				
Any use (percent)	16.0	19.2	–3.2	
Mean number of visits	5.08	4.96	0.12	
Outpatient Hospital Services[b]				
Any services (percent)	85.3	86.3	–1.0	
Physician and Other Part B Services[c]				
Any use (percent)	94.7	91.8	2.9	
Mean number of visits or claims	8.9	7.0	1.9	
Mortality Rate (percent)	1.3	0.0	1.3	
Total Medicare Reimbursement[d]				
Part A[e]	$2,736	$2,255	$481	
Part B	$1,583	$1,301	$282	
Total	$4,320	$3,556	$763	
Reimbursements for Care Coordination[f]	$871	$0	$871	***
Number of Beneficiaries	**75**	**73**		

Source: Medicare National Claims History File.

Note: Sample includes those enrolled during the first four months of program operations. Participants were excluded from this table if they had an invalid HIC number on MPR's enrollment file, were identified as a member of the same household as a research sample member, or did not meet Medicare coverage and payer requirements (defined as having Medicare as a secondary payer, being in Medicare managed care plan, or not having Part A and Part B coverage) during the month of randomization. Patient-months were excluded if the participant did not meet the above Medicare coverage and payer requirements that month or had died in a previous month.

"Percents with any medical encounter type" are the percent of treatment or control group members who have at least one encounter of a particular type; "mean numbers of medical encounter types" are the average number of encounters of a particular type per treatment or control group member.

[a]The direction of the treatment-control difference does not by itself signify whether the program is "effective." That is, for some outcomes a statistically significant negative difference (such as lower hospitalization rates for the treatment group than for the controls) suggests that the program is working as intended. However, a positive difference for other outcomes, such as number of physician visits, does not necessarily mean the program is ineffective or having adverse effects, because the program may encourage patients to see their physician more regularly for preventative care or to obtain recommended laboratory tests for their target conditions than they would have in the absence of the demonstration.

Due to rounding, the difference column may differ slightly from the result when the control column is subtracted from the treatment column.

[b]Includes visits to outpatient hospital facilities as well as emergency room visits that do not result in an inpatient admission. Laboratory and radiology services are also included.

[c]Includes diagnostic laboratory and radiology services (including pathologist and radiologist services) from nonhospital providers, suppliers and devices, mammography, ambulance, covered medications, blood, and vaccines.

[d]Does not include reimbursement for care coordination services provided by demonstration programs.

[e]Includes reimbursement for inpatient, skilled nursing facility, hospice, and all home health care (including that paid under Medicare Part B). Excludes reimbursement for care coordination services provided by demonstration programs.

[f]This is the average amount paid to the program as recorded in the Medicare claims data for the month of randomization and the two following months. The difference between the recorded amount and three times the amount the program was allowed to charge per-member-per-month may reflect billing errors, delays, or payment adjustments for patients who disenrolled.

*Difference between treatment and control groups significantly different from zero at the .10 level, two-tailed test.
**Difference between treatment and control groups significantly different from zero at the .05 level, two-tailed test.
***Difference between treatment and control groups significantly different from zero at the .01 level, two-tailed test.

APPENDIX C

SELECTED PROGRAM DOCUMENTS

Chart review instrument

Patient introductory letter and consent form

Preliminary questionnaire

Social work assessment

Nursing assessment

Fall risk assessment and transfer evaluation tool

Care plan template

Staff training and development record

Lifecare Plus program brochure

Performance improvement survey

Lifecare Plus newsletter

Groups survey

Sample educational materials

Serious adverse event report form

Telephone reassurance form

GO COORDINATED CARE DEMONSTRATION PROGRAM
CHART REVIEW INSTRUMENT FOR ELIGIBLE PATIENTS

I. IDENTIFICATION *(for Research Assistant only)*

Patient Name: _____

Medicare Number: _____

II. PATIENT ELIGIBILITY CRITERIA *(check that each applies)*

____ Age: Year of birth 1937 or prior

____ Coverage: Has both Medicare Part A and Part B

____ Diagnosis: Has at least one of these eligible diagnoses:

- Heart disease (eg, CHF)
- Diabetes
- Liver disease
- Lung disease (eg, COPD)
- Vascular disease (eg, CAD)
- Cerebrovascular (eg, Stroke, Parkinson's)
- Psychotic disorders
- Major depressive disorders
- Anxiety disorders
- Cancer
- Alzheimer's
- Dementia

____ Utilization: 3 MD visits and/or 1 hospitalization in the last 12 months

____ Geography: Address in Manhattan or Bronx

____ Functional Impairment/Risk of Impairment: As evidenced by: *(check all that apply)*

___ Presence of a Home Attendant
___ Presence of assistive devices
___ Noted memory loss/cognitive impairment
___ Noted depression
___ Noted hearing and/or vision loss
___ Physician response to question of risk of functional impairment
___ Other: _____

III. ELIGIBLE PARTICIPANT DATA COLLECTION

Patient Name and Medicare Number: _____ *(please fill in at top of form)* _____

Date of Birth: _____

Address: _____

Telephone: _____

Next-of-Kin/Surrogate Name, Address, Phone: _____

_____

Provider Name: _____ *Check here if in UMPA or Community* ☐

Doctor Address: _____ Tel. # _____

List Pertinent Diagnoses: _____

_____

Additional Information: _____

MEDICARE COORDINATED CARE DEMONSTRATION PROGRAM
PARTICIPATION OPPORTUNITY

Congratulations!

Your doctor has suggested that you participate in a very important Medicare program and research study. This study—being conducted jointly by Saint Luke's-Roosevelt Hospital Center, The Jewish Home and Hospital, and The Mount Sinai School of Medicine—will determine whether a brand new Medicare benefit will be added for all seniors in the United States.

The new benefit being studied is called "Care Coordination," whereby a team of specially-trained health care professionals will closely follow your health and social situation, in a partnership with your doctor, to ensure that you are receiving all the necessary services to which you are entitled. In the case of the New York City program, the care coordination benefit also includes such important features as medication management, home safety improvement, and opportunities to socialize with your peers.

If you agree to participate in this study, you will be randomly assigned to one of two groups. If you are assigned to the "Control Group," *absolutely nothing* will change for you, except that we ask you to complete the questionnaire included in this package; then, in six months you will be contacted for a telephone interview. You will continue to get all your Medicare benefits, all your doctors' usual care, and all your health care services as you do now.

If you are assigned to the "Program Group," you also will continue to get all your Medicare benefits, all your doctors' usual care, and all your health care services as you do now. The difference will be that *in addition*, you will have free access to social workers and nurses from the Jewish Home and Hospital who will advise you, your significant others, and your doctors about the best care for you. These professionals will also work with you to get you some

important services. If you are in the Program Group, we ask that you first complete the questionnaire in this package, and then agree to a home visit at your convenience.

Under no circumstances will you be required to accept or change anything without your agreement. Because of this, there are no identified risks to your participating. There is nothing to lose, and a 50/50 chance of getting free enhancements to your health care.

It should also be noted that the enhanced care coordination program provided by The Jewish Home and Hospital has served thousands of New York City seniors for over 26 years now, and continues to receive the highest marks for quality and satisfaction among those served. A brochure describing this existing program (called Geriatric Outreach, or "GO") is included in this package.

More information on this program and this participation opportunity is included in the Informed Consent form, attached. Moreover, the Program staff member who gave you this package is here to answer any questions you may have, and [Dr. Such-and-Such] will also be happy to answer any questions. If you have questions or concerns that they cannot answer, we encourage you to call the Project Director, Allison Braunstein, at (212) 870-5051.

Again, congratulations, and we look forward to your help in shaping the best Medicare system for America's seniors!

Sincerely,

Patricia Bloom, MD
Co-Principal Investigator

Brenda Matti, MD
Co-Principal Investigator

MEDICARE COORDINATED CARE DEMONSTRATION
INFORMED CONSENT FOR PARTICIPATION

STUDY TITLE: Medicare Coordinated Care Demonstration
SOURCE OF SUPPORT: Centers for Medicare & Medicaid Services
IRB STUDY NUMBER: [*Insert IRB number here*]
PRINCIPAL INVESTIGATOR: Brenda Matti, MD

PURPOSE: The purpose of this study is to test whether a new type of service called "Coordinated Care" will help Medicare beneficiaries with chronic illnesses to have better coordination of their medical treatment plans, fewer hospital stays, and a better quality of life. Coordinated Care services may include assessment, care planning, patient education, physician education, monitoring of patient's symptoms, service arrangement, and attempts to improve communication among the multiple health care providers caring for the patient.

PROCEDURES: Coordinated Care services will be provided by [name of program] and are described in [insert name of informational booklet, brochure, or videotape]. This study will randomly assign participants to two groups. One group will receive coordinated care services in addition to their usual Medicare benefits. The other group which will receive their usual Medicare benefits without the additional coordinated care services. Random assignment helps to ensure that selection of the two study groups is fair and that the study results are not biased by differences between the groups at the start of the study. Your assignment to the coordinated care or usual care group will take place after you sign this consent form and your eligibility for participation is confirmed. As a participant in this study, you will not receive experimental medication, diagnostic tests, or treatments.

ABOUT THE RESEARCH: This study is funded by the Centers for Medicare & Medicaid Services (formerly the Health Care Financing Administration), the Federal agency that runs the Medicare program. The Centers for Medicare & Medicaid Services has funded a private company, Mathematica Policy Research, Inc., to evaluate [program name].

Six months from now someone from Mathematica will call you to conduct a telephone interview. All the participants in both the coordinated care and the usual care groups will be interviewed. The interviewer will ask you about: (1) how you are feeling, (2) recent doctor visits you have had, (3) your understanding of your illness, and (4) your satisfaction with the

health care and supportive services you receive. The interview will take about 20 minutes. If you are not able to speak on the telephone, a family member or friend may answer the questions for you.

In addition to the interview, Mathematica will get information from the Centers for Medicare & Medicaid Services about the Medicare services you use during the study. Mathematica will use this information to see if the coordinated care services provided by [name of program] were able to improve the quality of care for study participants and lower Medicare costs.

STUDY DURATION: This study, including any coordinated care services you may receive, is scheduled to end [insert completion date].

RISKS: This study has no identified risks. All of the Medicare benefits and other coverage for which you are eligible will be available to you during and after the study.

BENEFITS: This study addresses issues important to the future of the Medicare program: increasing the quality of patient care and holding down Medicare costs. Participants in the program will not be required to change their doctors or restricted in their choice of providers for Medicare services in any way. Participants in the coordinated care group will receive services that may improve their health and quality of life. Participants in the usual care group will help to determine if coordinated care services are beneficial. If the study results show that coordinated care services are beneficial, they may be added as a routine benefit of the Medicare program.

STUDY COSTS AND COMPENSATION: There are no costs to you for participating in the study. You will not be paid for your participation in this study.

CONFIDENTIALITY: The information about you collected for this study is confidential and protected by law. The information collected by [program name] will be used for your medical care and for research and will be shared only with your doctor, the [program name] staff, Mathematica, and the Centers for Medicare & Medicaid Services with your written consent. The information collected by Mathematica will be used for research purposes only and will not be shared with either [program name] or with the Centers for Medicare & Medicaid

Services in a way which can identify you. You will not be identified in reports about the study written by [program name] or Mathematica.

VOLUNTARY PARTICIPATION: You do not have to take part in this study. Your decision to be in the study is completely voluntary. If you change your mind about participating, you can withdraw from the study at any time. Your decision to not participate or to withdraw will not affect your Medicare benefits in any way. Signing this consent form does not waive any of your legal rights.

I have read and understood this entire consent form. I have been given the chance to ask questions about [program name] and all my questions have been answered to my satisfaction. I understand that if I have other questions about this study I can call [insert program staff name and telephone number]. If I have questions about my rights as a participant in this study I can call [insert IRB name and telephone number].

I agree to participate in this study, and will respond to the confidential survey by Mathematica in approximately six months:

Participant Name (Please Print): _____

Participant Signature: _____ Date: _____

☐ Check here if the participant is unable to provide consent

Signature of Authorized Representative: _____ Date: _____

Program Representative: _____ Date: _____

MEDICARE COORDINATED CARE DEMONSTRATION PROGRAM
PRELIMINARY QUESTIONNAIRE
(Based on PraPlus Scored Items and Override, and MPR Information Sheet)

Name: _____ Medicare Number: _____

Date of Birth (day/month/year): _____

Participant's Address: _____

_____

Participant's Phone: _____

Who to contact in case of an emergency:

Name: _____

Address: _____

Phone: _____

Who is your Proxy Decision-maker?

_____

_____

_____

Doctor's Name: _____ Phone: _____

Primary Diagnosis—see Chart Review Instrument—Do Not Write In This Space

1. Are you: ☐ Male ☐ Female

2. In general, would you say your Health is: (Check one)
   - ☐ Excellent
   - ☐ Very Good
   - ☐ Good
   - ☐ Fair
   - ☐ Poor

3. In the previous 12 months, have you stayed overnight as a patient in a Hospital?
   - ☐ Not at all
   - ☐ Once (one time)
   - ☐ Two or three times
   - ☐ More than three times

4. In the previous 12 months, how many times did you visit a Doctor or clinic?
   - ☐ Not at all
   - ☐ One or two times
   - ☐ Three, four, or five times
   - ☐ Six or more times

5. In the previous 12 months, did you have Diabetes?
   - ❑ Yes
   - ❑ No

6. Have you ever had Coronary Artery Disease (hardening of the arteries)?
   - ❑ Yes
   - ❑ No

7. Is there a friend, relative, neighbor, or someone who would take care of you for a few days, if necessary?
   - ❑ Yes
   - ❑ No

8. Do you live:
   - ❑ Alone
   - ❑ With spouse
   - ❑ With other family—who: _____
   - ❑ In an adult care/assisted living residence
   - ❑ Other—explain: _____

9. Are you currently receiving Medicaid or DFTA Home-care?
   - ❑ Yes
   - ❑ No

10. How many different prescription and "over-the-counter" medications do you take? _____ (number)

11. Eligibility for this program depends on your Medicare status. Therefore, we would like to know if you have both Medicare Part A and Part B, no Medicare HMO, and no other "primary" health insurance (eg, no working spouse, no workers comp or auto accident insurance, etc.)
    - ❑ Yes
    - ❑ No

ADL/IADL Information: Please circle 1 (able to do this without help), 2 (need some help), or 3 (cannot do at all without help) for each of these activities:

	Able to do this without help	Need some help	Cannot do this at all without help
Bathing/Showering	1	2	3
Dressing	1	2	3
Eating	1	2	3
Toileting	1	2	3
Walking	1	2	3
Getting from bed to chair/wheelchair	1	2	3
Taking Medications	1	2	3
Meal Preparation	1	2	3
Housekeeping/Cleaning	1	2	3
Shopping and Errands	1	2	3
Transportation	1	2	3
Managing Money/ Bill-Paying	1	2	3

Environmental | Psychosocial

CC Level: Medium - G9005

Episode Type: Program Group

Care Coordinator: Mulvey, Patricia

Assessment Date: 11/10/2004

NAD:

Environmental

☐ Inadequate Financial Resources to Meet Health Care ☐ Onset Date:

- ☐ Able to buy necessities only
- ☐ Inadequate money management
- ☐ Unable to afford medications/healthcare
- ☐ Unable to buy necessities
- ☐ Uninsured/low income

☐ Unsafe Living Environment ☐ Onset Date:

- ☐ High crime rate
- ☐ High pollution level
- ☐ Homeless
- ☐ Inadequate food storage/disposal
- ☐ Inadequate heating/cooling
- ☐ Inadequate living space (cluttered, crowded)
- ☐ Inadequate safety devices/steep stairs
- ☐ Inadequate sewage disposal
- ☐ Inadequate water supply
- ☐ Soiled living area
- ☐ Structurally unsound/physical hazards

Psychosocial

- ☐ Dysfunctional Human Sexuality ☐ Onset Date: [ ]
  - ☐ Difficulty expressing intimacy
  - ☐ Dissatisfied with sexual relationships
  - ☐ Fear of sexual contact due to disease process
  - ☐ Sexual identity/value confusion
- ☐ Emotional Instability ☐ Onset Date: [ ]
  - ☐ Difficulty managing stress
  - ☐ Expresses desire to die/attempts suicide
  - ☐ Expression of sadness/hopelessness/worthlessness
  - ☐ Involuntary reversal of dependent/independent roles
  - ☐ Involuntary reversal of traditional male/female roles
  - ☐ Irritable/agitated/flat affect/scattered attention
  - ☐ Loss of interest/involvement in activities/self-care
  - ☐ Somatic complaints/chronic fatigue
- ☐ Inability to Access Community Resources ☐ Onset Date: [ ]
  - ☐ Difficulty understanding roles/regulations of service providers
  - ☐ Inadequate/unavailable services
  - ☐ Lack of transportation
  - ☐ Unable to communicate concerns
  - ☐ Unfamiliar with options/procedures for obtaining services
- ☐ Inadequate Social Contact/Interpersonal Relationships ☐ Onset Date: [ ]
  - ☐ Difficulty establishing/maintaining relationships
  - ☐ Inadequate interpersonal communication skills
  - ☐ Limited social contact

- ☐ Lives alone
- ☐ Minimal outside stimulation/leisure time activities
- ☐ Use health care system/providers for social contact

☐ Lack of Family/Caregiver Support ☐ Onset Date: [ ]

- ☐ Caregiver at risk for destabilization
- ☐ Caregiver difficulty providing emotional support
- ☐ Caregiver difficulty providing physical care/safety
- ☐ Lacks adequate emotional support
- ☐ Lacks adequate physical care
- ☐ Lacks necessary supervision
- ☐ Patient needs placement/long-term care options

☐ Verbalization of Spiritual Distress/Difficulty Coping with Grief ☐ Onset Date: [ ]

- ☐ Conflicting spiritual beliefs and medical regimen
- ☐ Difficulty coping and/or expressing grief process
- ☐ Disrupted spiritual rituals
- ☐ Fails to recognize normal grief responses

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Nursing Assessment

Health Related Patterns

CC Level: Medium - G9005

Episode Type: Program Group

Care Coordinator: Mulvey, Patricia

Assessment Date: 11/10/2004

NAD:

Health Related Patterns

- ☐ Difficulty Managing ADLs (Activity of Daily Living) ☐ Onset Date:
  - ☐ Assistive Devices (cane, walker, wheelchair, brace, etc.)
  - ☐ If client is using 'Brand', determine if 'generic' form is available.
  - ☐ Needs assistance with bathing
  - ☐ Needs assistance with dressing
  - ☐ Needs assistance with feeding
  - ☐ Needs assistance with toileting
  - ☐ Needs assistance with transferring
- ☐ High Utilization of Healthcare Resources ☐ Onset Date:
  - ☐ Frequent Emergency Room (ER) Visits
  - ☐ Frequent Inpatient Hospital Stay
  - ☐ Numerous Specialty Physician Referrals
- ☐ Inadequate Healthcare Supervision ☐ Onset Date:
  - ☐ Fails to obtain routine medical/dental/vision evaluation
  - ☐ Fails to return to follow-up appointments
  - ☐ Fails to seek care for symptoms requiring medical attention
  - ☐ Inability to coordinated multiple appointments
  - ☐ Inability to manage medical regimen

- ☐ Inadequate prescribed medical regimen

☐ Inadequate Physical Activity ☐ Onset Date: [ ]

- ☐ Inadequate/inconsistent exercise routine
- ☐ Neuromuscular deficit
- ☐ Obesity or Morbid Obesity
- ☐ Orthopedic, cardiac or respiratory diagnoses
- ☐ Sedentary lifestyle

☐ Non-compliance with Prescribed Medication Regimen ☐ Onset Date: [ ]

- ☐ Deviates from prescribed dosage/schedule
- ☐ Improper storage of medications
- ☐ Inadequate system for taking medications
- ☐ Knowledge deficit regarding indications for taking medication and side effects
- ☐ Unable to afford/obtain medications

☐ Polypharmacy ☐ Onset Date: [ ]

- ☐ 5 of more prescription medications on admission
- ☐ Insufficient Dosage
- ☐ Non-therapeutic (drug no longer indicated
- ☐ Non-therapeutic (drug no longer indicated)
- ☐ Possible/probable drug-drug interaction

☐ Substance Abuse ☐ Onset Date: [ ]

- ☐ Alcohol abuse
- ☐ Drug abuse (over-the-counter, prescription, illegal)
- ☐ Tobacco abuse

☐ Unable to Perform Technical Medical Procedures ☐ Onset Date: [ ]

- ☐ Lack of caregiver support to perform/assist with technical medical procedures
- ☐ Technical medical procedures requiring skilled nursing
- ☐ Unable to demonstrate/perform procedure accurately
- ☐ Unable/unwilling to perform procedures without assistance

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Physiological

CC Level: Medium - G9005

Episode Type: Program Group

Care Coordinator: Mulvey, Patricia

Assessment Date: 11/10/2004

NAD:

Physiological

☐ Abnormal Circulatory Pattern ☐ Onset Date:

- ☐ Abnormal blood pressure
- ☐ Anginal pain
- ☐ Change in color/temperature of extremity
- ☐ Decreased pulses
- ☐ Elevated/slowed heart rates
- ☐ Intermittent Claudication
- ☐ Irregular heart rates
- ☐ Mental confusion
- ☐ Swelling/Edema of lower extremities
- ☐ Syncopal episodes

☐ Altered Bowel/Bladder Function ☐ Onset Date:

- ☐ Abnormal frequency/consistency of stool
- ☐ Bladder or bowel diversion
- ☐ Burning/painful urination
- ☐ Cramping/abdominal discomfort
- ☐ Difficulty empting bladder
- ☐ Incontinence of stool
- ☐ Incontinence of urine

- ☐ Painful defecation
- ☐ Urgency/frequency

☐ Altered Cognitive Ability /Mental Status Changes ☐ Onset Date: [ ]

- ☐ Disoriented to time, person, and/or place
- ☐ Impulsiveness/diminished judgment
- ☐ Language barrier
- ☐ Limited concentration/sequencing skills
- ☐ Limited reasoning/abstract thinking ability
- ☐ Limited recall of recent or long past events
- ☐ Poor understanding of medical condition/regimen
- ☐ Repetitious language/behavior

☐ Altered Hearing/Vision Function ☐ Onset Date: [ ]

- ☐ Blurred vision
- ☐ Corrective Devices (Glasses, Contacts, Magnifying Glass, Hearing Aides)
- ☐ Difficulty differentiating colors
- ☐ Difficulty hearing normal speech tones
- ☐ Difficulty seeing distant/near objects
- ☐ Double vision

☐ Altered Level of Consciousness ☐ Onset Date: [ ]

- ☐ Agitation
- ☐ Comatose
- ☐ Lethargic
- ☐ Stuporous
- ☐ Unresponsive

☐ Altered Neuro-musculo-skeletal Function ☐ Onset Date: [ ]

- ☐ Decrease balance (gait disturbance)
- ☐ Decreased coordination
- ☐ Decreased muscle strength
- ☐ Decreased muscle tone
- ☐ Decreased sensation
- ☐ Limited range of motion
- ☐ Seizure/muscle tremors

☐ Altered Nutritional Pattern ☐ Onset Date: [ ]

- ☐ Difficulty/inability to chew/swallow/digest
- ☐ Eating disorders
- ☐ Enteral or Parenteral feedings
- ☐ Hypoglycemia/Hyperglycemia
- ☐ Improper feeding schedule
- ☐ Lacks/Exceeds standards for daily caloric/fluid intake
- ☐ Nausea/vomiting/indigestion/reflux
- ☐ Non-adherence to prescribed diet/unbalanced diet
- ☐ Sore/swollen/bleeding gums

- ☐ Unexplained/progressive weight loss
- ☐ Weighs 10 % less than average
- ☐ Weighs 10 % more than average

☐ Altered Respiratory Pattern ☐ Onset Date: [ ]

- ☐ Abnormal breath patterns/sounds
- ☐ Supportive equipment/medications needed
- ☐ Unable to breathe independently
- ☐ Unable to cough/expectorate independently

☐ Altered Skin Integrity ☐ Onset Date: [ ]

- ☐ Bruises/Abrasions
- ☐ Drainage
- ☐ Excessively dry skin
- ☐ Hypertrophy of nails
- ☐ Incontinence
- ☐ Inflammation
- ☐ Lesions
- ☐ Pressure wound (decubitis ulcer)
- ☐ Rashes
- ☐ Stoma, any location
- ☐ Surgical incision

☐ Altered Speech/Language Function ☐ Onset Date: [ ]

- ☐ Absent/abnormal ability to understand
- ☐ Aphasia/dysphasia

- ☐ Inappropriate word usage/sentence structure
- ☐ Limited enunciation/clarity
- ☐ Native language other than English

☐ Dysfunctional Sleep and Rest Patterns ☐ Onset Date: [ ]

- ☐ Insomnia
- ☐ Insufficient sleep/rest
- ☐ Sleep/rest patterns disrupts family
- ☐ Somnambulism

☐ Inadequate Pain Control ☐ Onset Date: [ ]

- ☐ Compensated movement/guarding
- ☐ Elevated pulse/respirations/blood pressure
- ☐ Expresses discomfort/pain
- ☐ Facial grimaces
- ☐ Pallor/perspiration
- ☐ Restless behavior

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THE JEWISH HOME & HOSPITAL LIFECARE SYSTEM

MANHATTAN • BRONX • SARAH NEUMAN CENTER/WESTCHESTER • LIFECARE SERVICES

Life Care Plus: Fall Risk Assessment & Transfer Evaluation Tool

Complete all 4 sections below:

Patient Name:	**Age:**

1. Fall Risk Assessment : Directions for Scoring: Circle all that apply and total score below

Patient Factors:			Score
History of Falls	# of falls within last year :	# of falls within past month:	15
Confusion			5
Impaired Judgement			5
Sensory Deficit (Vision/Hearing)			5
Incontinence/Urgency			5
Over 10 Medicines (includes over the counter)	* Over 5 ☐	* Over 10 ☐	5
Suspected Substance Abuse			5
Postural Vertigo generalized			5
Sleeping Difficulties			5
Mini-mental Score < 22			5

*** See back for Fall Prevention Protocol**

2.Timed Get Up and Go Test Score = _____ ☐ Unable to perform

Ask your patient to get up from a chair and walk 10 feet and return to the seated position. Observe the quality of movement. Time the patient from the moment they get off the chair to when they sit back down

*** See Back for Timed Get Up and Go scoring parameters**

3.Evaluate Transfer Ability:							
Evaluate the following transfers using scale below: Place a check in the appropriate box	Indep	Stand By	Min	Mod	Max	Total	Not Applicable
Sit to Stand							
Bed to Chair							
Chair to Bed							
On/Off Toilet or Commode							
In and Out of Tub							
Poor upper body muscle strength							
Poor lower body muscle strength							
Degree of assist required with transfers							
Necessary equipment is not in place yet							

*** See back for description of degree of assistance**

4. Observation of Safety Risk Factors for Transfers (Check all that apply)	√
Poor Furniture	
Amount of Time spent alone	
Surfaces that transfers will occur from: height, firmness	
Dizziness precautions in place	
Observable Balance Problems	
History of falls especially during transfers	

Rev 06/2004

LIFECARE SERVICES
LIVING INDEPENDENCE FOR THE ELDERLY
THE JEWISH HOME & HOSPITAL

1. Fall Precaution Protocol: Implement Falls Precautions Protocol for a total score of 15 or greater

1. Review Fall Prevention Tips on initial visit with every patient
2. Notify Life Care Plus Agency within 24 hours of Notification of Fall, RN to visit within 48 hours (if not serviced by another agency)
3. RN will reevaluate patient with FRAT Tool
4. PT Referral for a score of 15 or greater (Mandatory if a patient experiences a fall at any time while on program)
5. OT and or MSW Referral as indicated

Make recommendations as indicated:

- ☐ Maximize Visual/ Auditory Ability
- ☐ (Referral Opthamologist, Audiologist, Home Lighting Modifications)
- ☐ Fax Medication List to pharmacy for review if number of meds or types of meds are questionable

2. Transfer Terms

Grade of Assistance	Description	OASIS #
Independent status	= no physical or cognitive assistance is required to perform functional activities. With this level, clients are able to implement the activity, consider the potential errors, and anticipate safety hazards in familiar and new situations	0
Stand by Assist	= the need for supervision by one person for the client to perform an activity safely and or effectively is indicated. The need for supervision by one person for the client to perform new activity procedures and also when errors and need for safety precautions may not always be anticipated by client.	1
Min assistance	= the need for 25% assistance by one person to perform activity safely and or effectively. The client requires assist after physical set up by the caregiver and physical help is required to initiate or sustain the activity	1
Mod Assistance	= the need for 50% assistance by one person to perform activity safely and or effectively. Requires one –to one demonstration or intermittent cueing (physical or verbal) throughout performance of the activity. Caregiver must be in the immediate environment to help the client through a sequence to complete a functional activity.	1
Max Assistance	= the need for 75% assistance by one person to perform the activity safely or effectively. One to one demonstration by caregiver is required due to the client's lack of cognitive awareness	2
Total assistance	=the need for 100% assistance by one or more persons to perform all physical activities. The client is only able to initiate minimal voluntary motor actions and requires the development of a therapeutic program and or maintenance program to prevent or minimize deterioration.	2/3

3. Timed Get Up and Go Test Parameters: Normal Response = 9-15 Seconds,
Abnormal Response Time= > 30 seconds

Refer to Therapy for the Following Scores:

Test	Scoring Criteria	Initiate Referral to:
1. Fall Risk Assessment	15 Points or greater	PT
2. Timed Get Up & Go Test	> 30 seconds or a score that takes longer than last assessment	PT and or OT
3. Transfers	Mod Assist, Max & Total	PT and or OT

Name:_____ **Date:**_____

rev 06/2004

Contact Initiation | History of Falls | Safety Hazards | Sanitation Hazards | Substance Abuse | Advance Directives Incomplete and/or Non-Specific | Emotional Instability | Inadequate Social Contact/Interpersonal Relationships | Lack of Family/Caregiver Support | Altered Bowel/Bladder Function | Altered Neuro-musculo-skeletal Function

Problem: Contact Initiation

Onset Date: 01/06/2003 Open CLOSE

Goal:

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: History of Falls

Onset Date: 10/15/2003 Open CLOSE

Goal: review falls program to reduce frequency

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Safety Hazards

Onset Date: 10/15/2003 Open CLOSE

Goal: encourage cleaning of apartment

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Sanitation Hazards

Onset Date: 11/25/2002 Open CLOSE

Goal: Encourage client to permit cleaning service into apartment

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Substance Abuse

Onset Date: 03/25/2003 Open CLOSE

Goal: Stops smoking.

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Advance Directives Incomplete and/or Non-Specific

Onset Date: 12/09/2003 Open CLOSE

Goal:

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Emotional Instability

Onset Date: 12/03/2002 Open CLOSE

Goal: Client to continue visits to Psych MD & Psych CSW. Follow up with both for plan of care

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Inadequate Social Contact/Interpersonal Relationships

Onset Date: 11/25/2002 Open CLOSE

Goal: Encourage client to resume AA activities after disucssion with Psych CSW

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Lack of Family/Caregiver Support

Onset Date: 10/15/2003 Open CLOSE

Goal: Client comes to groups consistently

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Altered Bowel/Bladder Function

Onset Date: 06/02/2003 Open CLOSE

Goal: Cure of the urinary infection.

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

Problem: Altered Neuro-musculo-skeletal Function

Onset Date: 03/25/2003 Open CLOSE

Goal: Better gait balance.

Intervention Tasks ADD... EDIT

	Task Description	Due Date	Assigned To	Status	Notes

The Jewish Home & Hospital

2001
STAFF TRAINING & DEVELOPMENT RECORD

Name:_____ **Date of Hire**_____

Dept.:_____ **Employee #**_____

Job Class/Title: _____ **Division:**_____

	Date	Length of Course	Employee Signature	Instructor Name/ Department Head Signature
Facility Orientation: New Staff				
Compliance				
Residents Rights				
Confidentiality/Information Management				
Environment of Care:7 Management Plans				
Fire Safety				
Hazard Communication				
OSHA				
Performance Improvement				
Infection Control				
Dementia				
Subacute				
Workplace Violence				
Domestic Violence				
Department Orientation: New Staff				
Verification of Initial Competencies by Dept.				

-OVER-

THE JEWISH HOME AND HOSPITAL
MANHATTAN DIVISION

HUMAN RESOURCES DEPARTMENT

ORIENTATION CHECKLIST

Name: _____ Title: _____

Orientation Started: _____ Orientation Completed: _____

ORIENTATION CODE:
1. Physical Tour
2. Policy Manual
3. Observation
4. Meetings
5. Mandatory In-Service

TOPIC: (ORIENTATION CODE)	DATE	INITIAL
1. Department mission and philosophy (2)		
2. Scope of services (2)		
3. Table of organization/staffing pattern (2)		
4. Department hours (2)		
5. Human Resources practices (2/4)		
6. Telephone, paging and beeper system (2/3)		
7. Communication skills (2/3)		
8. Job description (2)		
9. Performance appraisal (2/4)		
10. In-Service (5)		
11. Continuing Education programs (2)		
12. Supplies and equipment (2/3)		

THE JEWISH HOME AND HOSPITAL
MANHATTAN DIVISION

Departmental Orientation Checklist

Name: _____ **Title:** _____

TOPIC	DATE	INITIAL
13. Canopy Software training		
14.Microsoft Office training		
15. Roles of team members		
16. Definition of Care Coordination versus direct service		

Brochures for Beneficiaries

Serving

The Elderly

Where They

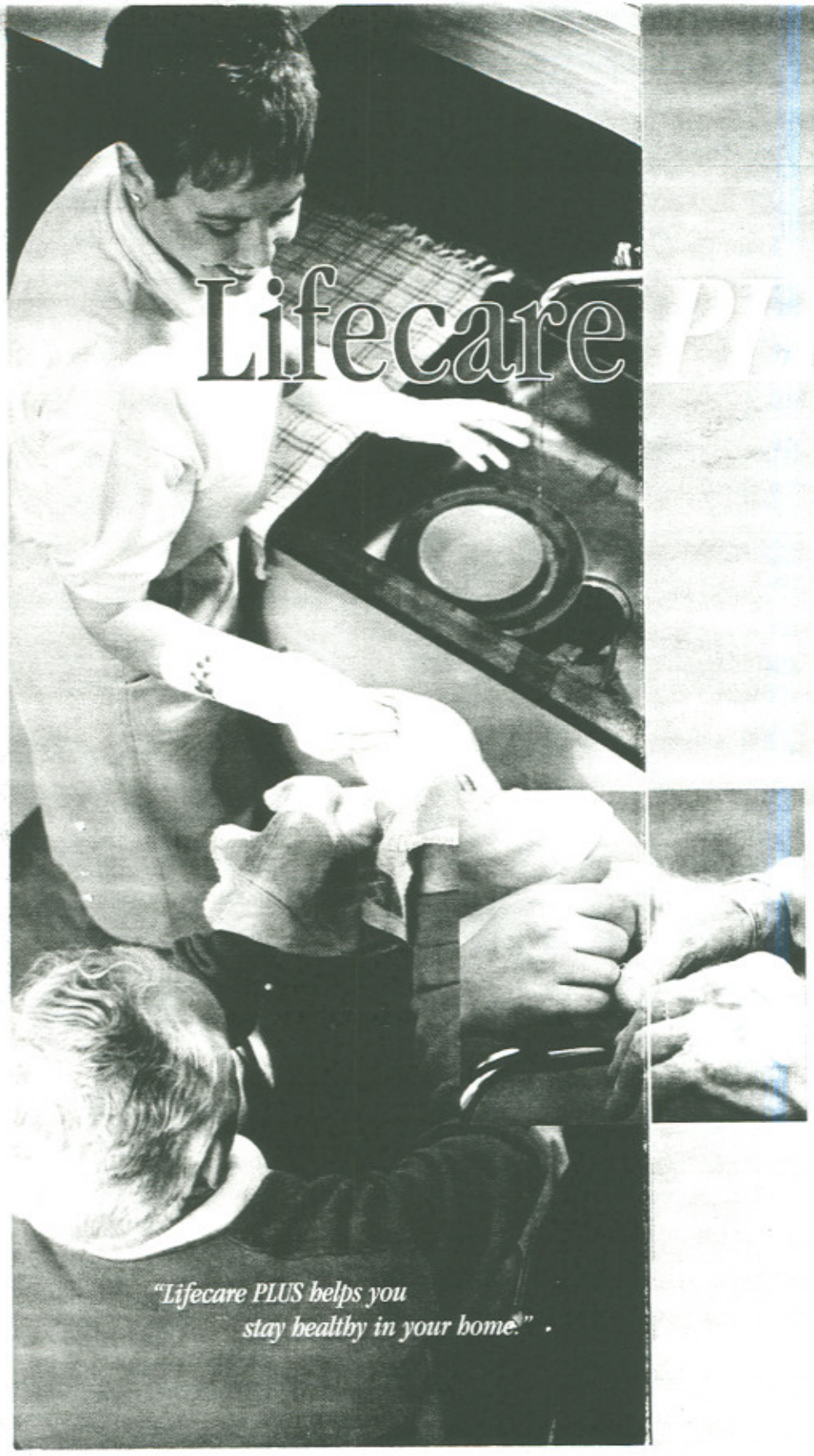
Want To Be...

In Their Homes.

LIFECARE

THE JEWISH
HOME & HOSPITAL
LIFECARE SYSTEM

MANHATTAN
BRONX
SARAH NEUMAN CENTER/WESTCHESTER
LIFECARE SERVICES



Lifecare PLUS is designed for the elderly who have an illness and need assistance with daily living. Our services make it possible for people to live successfully at home.

LUS:

Eligibility

- 65 years of age or older
- Has both Medicare Part A & B
- Had three doctor visits or one hospitalization in past 12 months
- Lives at a Manhattan or Bronx address
- Has at least one of these eligible diagnoses:
    - Heart disease, diabetes, liver disease, lung disease
    - Vascular disease, cerebrovascular disease
    - Psychotic major depression or anxiety disorders
    - Cancer
    - Alzheimer's Disease, dementia

Lifecare PLUS Coordinated Care Program

is for persons 65 years of age or older, living at home and needing assistance with activities of daily living.

Lifecare PLUS helps older adults

through its team of nurses, social workers, therapists and medical providers who work together to plan the best care possible for each individual client. Best of all, it's FREE.

Lifecare PLUS provides:

- Professional assessment and oversight
- Coordination with physicians for all your healthcare needs
- Regular telephone contact with our care coordinators
- Lectures and holiday events
- Home safety assessments
- Social service outreach
- Assistance with medication management
- Home visits
- Assistance with securing entitlements
- Monthly newsletters
- Crisis intervention

LIFECARE SERVICES
LIVING INDEPENDENCE FOR THE ELDERLY
THE JEWISH HOME & HOSPITAL

Sirviendo A

Los De Avanzada Edad

Donde Ellos

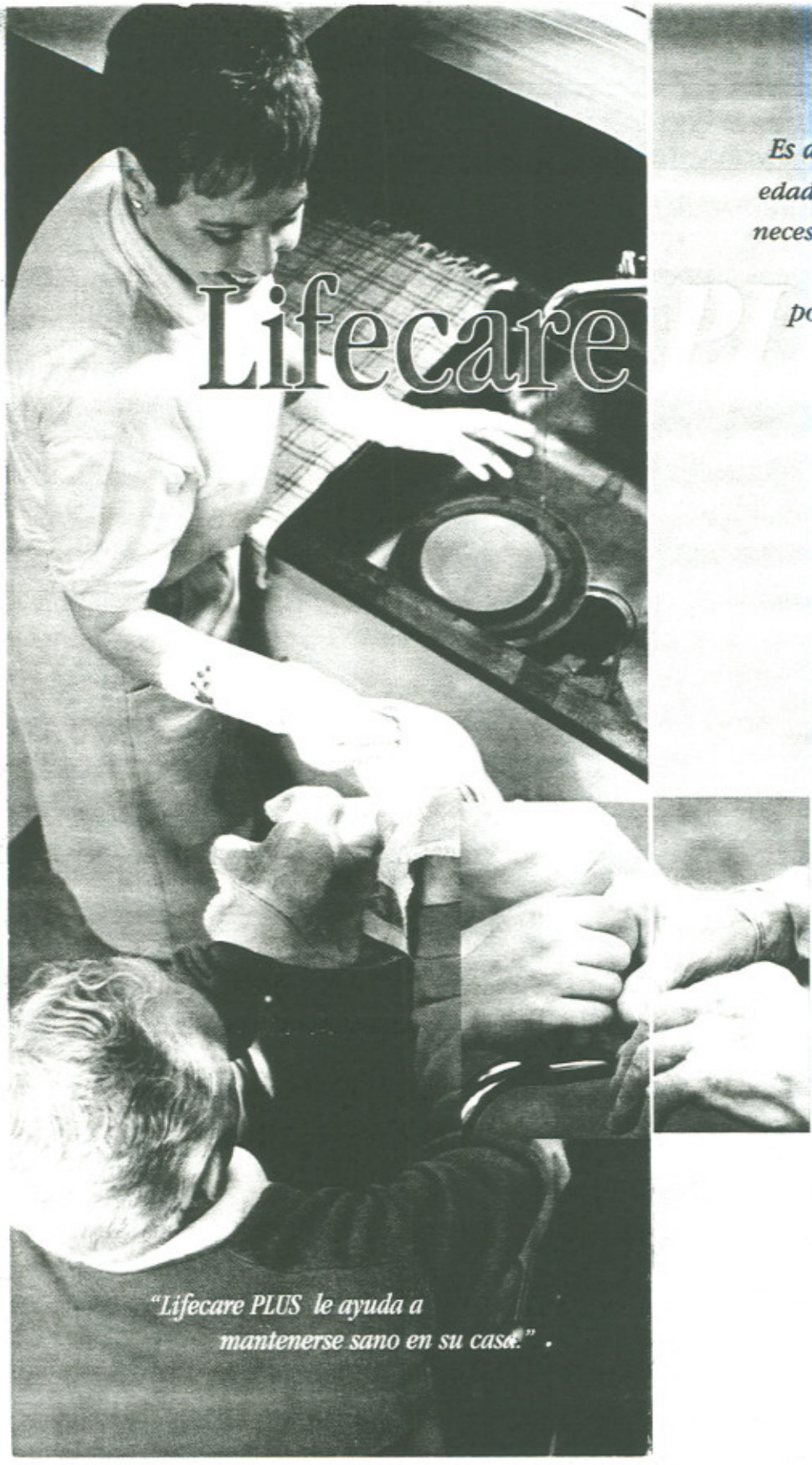
Quieren Estar...

En Sus Casas.

LIFECARE

THE JEWISH
HOME & HOSPITAL
SISTEMA DE CUIDADO DE LA VIDA

MANHATTAN
BRONX
SARAH NEUMAN CENTER/WESTCHESTER
LIFECARE SERVICES



Lifecare PLUS

Es diseñado para los de avanzada edad que tienen una enfermedad y necesitan ayuda con la vida diaria. Nuestros servicios lo hacen posible para que la gente viva exitosamente en casa.

PLUS:

Eligibilidad

- Hay que tener 65 años de edad o mayor
- Hay que tener ambos Medicare Parte A & B
- Hay que haber tenido tres visitas al doctor o una hospitalización durante los 12 meses pasados
- Hay que vivir en una dirección de Manhattan o Bronx
- Hay que tener por lo menos una de estos diagnósticos eligibles:
  - Enfermedad cardíaca, diabetes, enfermedad hepática, neumopatía
  - Enfermedad vascular, enfermedad cerebrovascular
  - Depresión mayor psicótica o desórdenes de ansiedad
  - Cáncer
  - Enfermedad de Alzheimer, demencia

Programa de Cuidado Coordinado de Lifecare PLUS

es para personas de 65 años de edad o mayores, que viven en casa y necesitan ayuda con actividades de la vida diaria; y . . .

Lifecare PLUS les ayuda a adultos mayores

por su equipo de enfermeras, trabajadores sociales, terapistas y proveedores médicos que trabajan juntos para planear el mejor cuidado posible para cada cliente individual. Lo mejor del caso, es GRATIS a inscribirse.

Lifecare PLUS provee:

- Evaluación y supervisión profesional
- Coordinación con doctores para todas sus necesidades de cuidado de la salud
- Contacto regular por teléfono
- Lecturas y eventos de día feriado
- Seguridad doméstica de evaluación
- Alcance de Servicios Sociales
- Ayuda con manejo de medicamento
- Visitas a casa
- Ayuda con asegurar titulares
- Intervención de crisis
- Boletines mensuales

SERVICIOS DE LIFECARE

INDEPENDENCIA DE VIVIR PARA LOS DE AVANZADA EDAD

THE JEWISH HOME & HOSPITAL

Dear :

Attached please find a Performance Improvement Survey. We would greatly appreciate if you would complete this survey as soon as possible.

By getting your honest feedback, it will hopefully enable us to make changes that will more fully fit your needs. Your satisfaction with the services that we have been providing, mean a great deal to us. Our goal is to ensure that you are getting the kind of help and support that you need.

We plan on conducting this survey on a quarterly basis. Thus, we will continue to consider your input when we are making changes to the program.

Thank you in advance for taking the time to complete this important survey.

Best regards,

Nancy Mintz, CSW
Director

Lifecare Plus Client Satisfaction Survey

PLEASE COMPLETE SURVEY AND RETURN IN SELF ADDRESSED STAMPED ENVELOPE

1. Overall, how satisfied are you will the care and services you receive from the following individuals from the Lifecare Plus Program?

	Very Satisfied 1	*Somewhat Satisfied* 2	*Neither Satisfied nor Dissatisfied* 3	*Somewhat Dissatisfied* 4	*Very Dissatisfied* 5	*Does not Apply* 6
Nurse	☐	☐	☐	☐	☐	☐
Social Worker	☐	☐	☐	☐	☐	☐
Psychiatrist	☐	☐	☐	☐	☐	☐
Escort Service	☐	☐	☐	☐	☐	☐
Case Aide Services	☐	☐	☐	☐	☐	☐
Transportation Service	☐	☐	☐	☐	☐	☐
Telephone Contact	☐	☐	☐	☐	☐	☐

2. Does our staff treat you with respect and courtesy?

Almost Never			Almost Always	
1	2	3	4	5

3. Is our staff receptive and able to direct your calls correctly?

Almost Never			Almost Always	
1	2	3	4	5

4. How satisfied are you with our staff's timeliness of initiation of services?

Very Dissatisfied				Very Satisfied
1	2	3	4	5

5. Have our social workers and nurses helped you in accessing needed services?

Not at all Helpful				Very Helpful
1	2	3	4	5

6. How satisfied are you with our staff's ability to handle an emergency situation?

Very Dissatisfied				Very Satisfied
1	2	3	4	5

7. How satisfied are you with the content of our monthly newsletter?

Very Dissatisfied				Very Satisfied
1	2	3	4	5

8. How satisfied are you with the groups that we offer during the week?

Very Dissatisfied				Very Satisfied
1	2	3	4	5

9. Overall, are you satisfied with our services?

Very Dissatisfied				Very Satisfied
1	2	3	4	5

10. Would you advise your friends to join Lifecare Plus?

Definitely No				Definitely Yes
1	2	3	4	5

Thank you!

Newsletter

LIFECARE PLUS

Volume 1, Issue 4 April, 2003

From the Director –

Nancy Mintz, CSW

Director of Lifecare Plus

Welcome to Spring! After one of the most difficult winters on record, we are all anxious for warm, sunny weather, and to see the crocus and daffodils begin to sprout.

This has been a very busy month for Lifecare Plus. We have enrolled a total of 481 people. Our goal is to reach 700. This will take a lot of work, but I think that what we have to offer is so exciting that people will want to be a part of this exciting study. If you know of neighbors and friends who may benefit from this study please have them call me at (212) 870-4834 to enroll.

In addition to our Monday and Wednesday groups we are adding two more groups starting on Thursdays and Fridays. It is our hope that more of you will be able to come in since the groups are offered on different days. We continue to provide ***FREE*** transportation and offer a $5.00 voucher

continued on page 2

INSIDE THIS ISSUE

Living with Diabetes –

Claudia Vieira, RN

Lifecare Plus Registered Nurse/Care Manager

If your Doctor has told you that you have been diagnosed with Diabetes, you are not alone. The incidences of Diabetes increases with age, with nearly half of all diabetes cases occur in people older than 55 years of age.

Just what is Diabetes?

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other foods into energy needed for our daily life. The cause of diabetes is a mystery, although both genetics and environmental factors, such as obesity and lack of exercise play a role.

There are three major types of diabetes:

♦ Type 1 Diabetes: Approximately 5-10% of Americans who are diagnosed with diabetes have type 1 diabetes. This results from the body's failure to produce insulin, the hormone that "unlocks" the cells of the body allowing glucose to enter and fuel the cells.

♦Type 2 Diabetes results when the body fails to properly use insulin. Approximately 90-95% of diabetics have type 2 diabetes. **Pre-Diabetes** is a condition that occurs when a person's blood glucose levels are higher than normal, but not high enough for a diagnosis of Type 2 diabetes.

continued on page 2

continued from page 1

for lunch in the Jewish Home and Hospital Cafeteria.

Would you like to volunteer?

We now have three volunteers providing friendly telephone calls to our members. If you would like to volunteer or receive a weekly telephone call, please let Shelley know (212-870-4825). We will gladly add your name to the list so that you will hear from one of our volunteers.

This Month....

Each month the newsletter will feature information about a chronic illness. This month our newsletter will be about diabetes. **Did you know that more than 18% of all people over the age of 65 are diagnosed with this condition?** Diabetes can be treated with diet and medication. Our groups this month will provide information on vision and foot care as they relate to diabetes. **On Wednesday, April 23rd The Lighthouse will present information on vision and services that are available for the visually impaired. On Wednesday, April 30th, a podiatrist will discuss foot care as it relates to diabetes. Don't miss these informative lectures!!**

On behalf of the entire Lifecare Plus team, we look forward to seeing you at groups, talking to you on the telephone, and working with you in your home over the next four years! Thank you, again, for your willingness to participate in this study! ☺

Foot Care For People with Diabetes

People with diabetes have to take special care of their feet. Never walk barefoot. Change daily into clean soft socks or stockings. Check your feet for blisters, cuts, or sores. Tell your doctor right away if you find something wrong. Wash your feet daily with lukewarm water and soap. Dry your feet well. Keep the skin supple with lotion.

From Novov Nordisk Pharmaceuticals, Inc.

COMPLICATIONS OF DIABETES - include heart disease, stroke, blindness, kidney disease, and nerve disease.

Take Care of Yourself! The time you spend on taking care of yourself is very important to avoid complications of diabetes. Oral health, skin care, foot care, eye care and heart health could delay or prevent the onset of dangerous diabetes complications later.

Your guide to healthy eating – It helps to plan ahead – whether you are eating at home or eating out. Choose wisely and you'll find foods that fit your meal plan and taste great! Some Healthy Choices include:

APPETIZERS: TOMATO JUICE, UNSWEETENED FRUIT JUICE, CLEAR BROTH, BOUILLON, CONSUMME, RAW VEGETABLES SUCH AS CELERY & RADISHES (SKIP THE DIP!), FRESH FRUIT

SALADS: TOSSED SALADS, LETTUCE, TOMATO, CUCUMBER, COTTAGE CHEESE, LOW CALORIE DRESSINGS, LEMON JUICE OR VINEGAR

Breads: Whole grain rolls or crackers, biscuits or breads

Potatoes & Substitutes: Baked, boiled, or steamed potatoes, plain rice or noodles

Fats: Diet margarine, low-calorie salad dressing, low-fat sour cream or yogurt

Vegetables: Raw, stewed, steamed or boiled

Meat, Poultry & Fish: Roasted, baked, broiled, or grilled poultry, fish or seafood. Lean meats with fat trimmed. Dishes without gravy or sauce.

DESSERTS: FRESH FRUIT, FRUIT JUICE, AND FAT-FREE OR LOW FAT YOGURT.

Beverages: Coffee, tea, milk, sugar free soda, water.

Remember – if you don't know what is in a dish- ask!

ADA Healthy Living – Eating out Guide.

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Oh, for the wonder that bubbles into my soul. D.H. Lawrence

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THE JEWISH HOME & HOSPITAL LIFECARE SYSTEM

Lifecare Plus

120 West 106th Street
New York, NY 10025

Phone: 212-870-4825

Transportation provided

April 2003

SUN	MON	TUE	WED	THU	FRI	SAT
	31 DISCUSSION DIABETES	1	2 Exercise with Ellen	3 Reminiscence with Phyllis	4 Groups with Elaine	5
6 DAY LIGHT SAVINGS	7 Exercise with Ellen	8	9 Interfaith Rituals Rabbi & Pastor	10 Reminiscence with Phyllis	11 MOMA Lecture: "Modern	12
13 Palm Sunday	14 Exercise with Ellen	15	16 **Holiday Party**	17 Reminiscence with Phyllis **First day of Passover**	18 Groups with Elaine **Good Friday**	19
20 Easter	21 Exercise with Ellen	22	23 Discussion: Vision	24 Reminiscence with Phyllis	25 Groups with Elaine	26
27	28 Exercise with Ellen	29	30 Discussion: Foot Care			

MEET THE LIFECARE PLUS STAFF:

ELIZABETH BISSELL, MSW

Liz is a recent graduate from Columbia University School of Social Work. Prior to working with us she worked at the Hebrew Home for the Aged in Riverdale. Liz enjoys singing, jazz music, baking, and hanging out with her friends from church. She is our Spanish speaking social worker. Liz was recently married last June and lives in Manhattan with her husband and pet rabbit, Zubi.

NEW GROUPS!!!

Lifecare Plus is delighted to expand our groups to four days a week! In addition to our Monday and Wednesday groups, we now have groups on Thursdays and Fridays. We are excited to add a Reminiscence group, led by Phyllis L. Brown, CSW and Friday groups with Elaine Goldman, CSW. Phyllis has been working with seniors at the Lenox Hill Neighborhood House Senior Center at St. Peter's Church (Citicorp Center) since the center's opening. She is a member of the Association of Personal Historians, as well as the National Association of Social Workers and the New York Chapter of the Gerontology Group.

Elaine Goldman has 18 years of experience as a social worker. She has a Masters degree in Social Work and Counseling. She has worked with children and elderly people in a variety of capacities. She is currently the Coordinator of the Geriatric Outreach Program at The Jewish Home and Hospital.

BROILED SCALLOPS

The naturally sweet and succulent taste of scallops requires a minimum of added ingredients. Scallops cook very quickly, so be careful not to overdo or they'll become rubbery. Sea Scallops are better suited for broiling than the smaller bay scallops. If you decide to use bay scallops, sauté them over medium heat in a large nonstick pan sprayed with vegetable cooking oil instead of broiling them; they'll cook in just a minute or two.

NUMBER OF SERVINGS: 4

SERVING SIZE: ¼ OF SCALLOPS PLUS 1 TBS OF TARTAR SAUCE

INGREDIENTS:

1 LB SEA SCALLOPS

1/3 CUP SEASONED BREAD CRUMBS

2 TBSP FRESH LEMON JUICE

1 TBSP OLIVE OIL

LEMON CUT INTO WEDGES

PREPARATION INSTRUCTIONS

Preheat the broiler; prepare the broiler pan with non-stick pan spray

Roll the scallops lightly in breadcrumbs; place on the prepared pan. Drizzle lemon juice & olive oil over the scallops.

Broil about 2 minutes on each side. Serve immediately with lemon wedges, and tartar sauce if desired.

Exchanges: ½ starch; 2 meat very lean; ½ fat monosaturated.

Nutrition Information: Amount per serving: Calories: 132, Calories from fat: 40; Total fat 4 g; saturated fat 1 g; Cholesterol 30 mg; Sodium 416 mg; Total carbohydrate 7 g; dietary fiber 0g; sugars 1g; Protein 15 g.

This recipe is from the New Family Cookbook for People with Diabetes, **published by the American Diabetes Association**

Thoughts on Passover

Nancy Mintz, CSW

Director of Lifecare Plus, Certified Social Worker

Passover is always a wonderful family holiday and always brings the warm weather. The Sedar is a wonderful meal and we always have fresh asparagus, which is a sign of spring. My mother makes a special effort to make the table look beautiful with a traditional white tablecloth, fresh flowers, and the Sedar plate. The Sedar can last up to four hours and is a lot of fun. My father always hides the matzo and the little children have to find it. As a child, I remember finding the matzo and being so proud of myself.

As our family has grown older, we do not always get together because we live in so many different cities. However, Passover is a time that we all make the effort to be at the Sedar table. I am looking forward to this year's Passover and I wish all of those celebrating, a Happy Passover.

Thoughts on Easter

Liz Bissell, MSW

Lifecare Plus, Masters in Social Work/ Care Manager

I have many fond memories of Easter beginning when I was a young girl. One of my favorite memories is going to church on Easter Sunday, all of us dressed in our best Sunday dresses and outfits. I remember admiring my friend's new Easter dress, white hat and white gloves. I remember the beautiful sunshine and the smells of Spring. The day was full of Easter egg hunts and Easter baskets full of chocolate eggs and jellybeans, a true delight to any child. The highlight of the day, however, was the Easter service. I remember singing "Christ the Lord is risen today. Hallelujah!" and filing into the sanctuary with all the other children and filling an old wooden cross with flowers. How beautiful the cross stood full of new life, symbolic of the day that Jesus rose from the grave and the new life that each of us can experience- as fresh, fragrant, and exuberant as the new life of the season.

LIFECARE SERVICES
The Jewish Home & Hospital
120 W. 106th Street
New York, NY 10025

ADDRESS CORRECTION REQUESTED

THE JEWISH
HOME &
HOSPITAL
LIFECARE SYSTEM

Groups Survey

The Jewish Home & Hospital, Lifecare Plus
October 2003

1. How satisfied are you with our monthly groups and activities?

1	2	3	4	5
Very Satisfied	Somewhat Satisfied	Neither Satisfied Nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied

2. Please rank your interest in the following groups

Exercise

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Current Events

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Live Music

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Reminiscence

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Spa Facials

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Nurse and Doctor Lectures

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Parties and Barbecues

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Improv with Bob

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

MOMA

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Armchair Travel

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

Chair Yoga

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

How interested would you be in attending a more advanced exercise group?

1	2	3	4	5
Very Interested	Somewhat Interested	Neither Interested Nor Disinterested	Somewhat Disinterested	Very Disinterested

If so, what type of exercise are you interested in?

3. **Are there any groups or activities that you would like Lifecare Plus to provide?**

Educational Materials

LIFECARE PLUS

HELPFUL RESOURCES FOR SENIORS

1. **EPIC---this is a New York State Prescription Program.**

   Eligibility—65 or older, Income-$35000 a year for one person, $50,000 a year for a couple

   Two types of plans: Annual Fee Plan and Deductible Plan

   Annual Fee Plan: Income-up to $20,000 for one person, $26,000 for a couple. Depending on your income, your annual fee ranges from $8 to $300 after which your prescriptions are free.

   Deductible Plan: Income from $20,000 to $35,000 or for a couple $26,000 to $50,000. The deductible ranges from $530 to $1,715 after which a co payment is paid for the prescriptions.

2. **SCRIE—Senior Citizen Rent Increase Exemption**

   This program exempts persons who live in rent controlled or rent stablilized apartments or in Mitchell-Lama Housing or in a hotel from rent increases.

   Eligibility: 62 years or older, $20,000 yearly income
   Rent: must be at least 1/3 of net monthly income.

3. **HEAP—Home Energy Assistance Program**
A one time grant per year to help low-income homeowners and to pay their fuel bills.

Eligibility: Income, monthly limit $1,678 for one person, $2,194 for a couple.

The benefit is a one time grant per year and ranges from $40 to $400 to be used to defray the cost of the heat.

4. **ACCESS-A-RIDE—Provides transportation within in NYC on an advanced reservation basis to persons who are unable to use public transit buses or subways.**

SUMMER SKIN CARE

by Yasmin de Leon-Kraus
Nurse Practitioner at Coffey
Geriatrics & Dermatology Clinic at
Mount Sinai Hospital, NY

There is no safe ultraviolet light. Invisible **UVA & UVB** rays from the sun can cause sunburn, wrinkles (premature aging), skin texture changes, freckles, and skin cancers.

Effects of the Sun

***Sunburn**
***Tanned Skin**
***Premature Aging**
***Skin Cancer**: 90% occur on sun-exposed areas. There are 3 types:
Basal Cell Carcinoma - red patch or shiny bump that is pink, red, or white; may be crusty or have an open sore that does not heal or heals temporarily; usually develops on the face, ears, nose, and around the mouth; localized; easily treated; no metastasis; 40% risk of 2nd BCC within 5 yrs; Risk Factors - fair skin, light-colored eyes, hair, and skin that doesn't tan easily
Squamous Cell Carcinoma - scaly patch or raised warty growth; high cure rate if found and treated early; can metastasize; in rare cases, if not treated can be deadly
Melanoma - the most dangerous form of skin cancer; looks like a dark brown or black mole-like patch with irregular edges; may be multicolored - shades of red, blue, or white; can occur anywhere on the body and when found early can be cured; can metastasize to other parts of the body if not found early, hence become deadly; 44,000 Americans/year diagnosed with melanoma; 7,300/year die; Risk Factors - excessive sun exposure, particularly sunburn; light-skin; heredity; atypical moles

Protect Yourself from the Sun

*Avoid going out at peak hrs (10am-4pm)
*Wear loose-fitting, light colored clothes (reflects UV light)
*Avoid deliberate sunbathing
*Wear a wide-brimmed hat, sunglasses
*Apply sunscreen with a sun protection factor (SPF) of at least 15, even on cloudy days
*Apply sunscreen 20 mins before going out.
*Reapply water-resistant sunscreens every 2 hrs if planning on exercising/water sports
*Drink plenty of fluids
*Report signs/symptoms of skin cancer to your doctor

References

http://www.aad.org/Press Releases/sunskin.html,bcc.html,skincan.html.

For Questions, refer to above website or call 1-888-462-DERM

The ABCDs of Melanoma

Asymmetry - One half doesn't match the other half.

Border irregularity - The edges are ragged, notched or blurred

Color - The pigmentation is not uniform. Shades of tan, brown, and black are present. Dashes of red, white, and blue add to the mottled appearance.

Diameter - The width is greater than six millimeters (about the size of a pencil eraser). Any growth of a mole should be of concern.

Periodic Self-Examination - Prevention of melanoma/skin cancer is the best weapon against these diseases. But if a melanoma should develop, it is almost always curable if caught in the early stages. Practice periodic self-examination to aid in early recognition of any new or developing lesion. The following is one way of self-examination that will ensure that no area of the body is neglected. To perform your self-examination you will need a full length mirror, a hand mirror and a brightly-lit room.

1. Examine body front and back in mirror, then right and left sides, arms raised.
2. Bend elbows, look carefully at forearms, back of upper arms, and palms.
3. Next, look at backs of legs and feet, spaces between toes, and soles.
4. Examine back of neck and scalp with a hand mirror. Part hair to lift.
5. Examine back of neck and scalp with a hand mirror. Part hair to lift.

FOOT CARE

MANY FOOT AILMENTS STEM FROM YEARS OF NEGLECT OR ABUSE

FEET TEND TO SPREAD AND LOSE THE FATTY PADS THAT CUSHION THE BOTTOM OF THE FEET

ADDITIONAL WEIGHT CAN AFFECT THE BONE AND LIGAMENT STRUCTURE

WHAT TO DO

HAVE YOUR FEET MEASURED FOR SHOE SIZES MORE FREQUENTLY

SHOES WITH FIRM SOLES AND SOFT UPPERS ARE BEST FOR DAILY ACTIVITIES

SHOP FOR SHOES IN THE AFTERNOON

TRIM OR FILE YOUR TOENAILS STRAIGHT ACROSS
WEAR CLEAN DRY SOCKS OR NON-BINDING PANTYHOSE

INSPECT YOUR FEET EVERY DAY

- **If you cannot do this yourself, have someone help you**
- **Decreased vision may cause problems to go unnoticed**
- **Consult podiatrist re redness, swelling, skin cracks or sores**

ASK YOUR DOCTOR TO LOOK AT YOUR FEET

COMMON FOOT AILMENTS

FUNGAL AND BACTERIAL CONDITIONS occur because our feet spend a lot of time in shoes (warm, dark, humid—perfect place for fungus to grow. To prevent, keep your feet clean and dry—change shoes and socks often to keep feet dry. Treatment for nail or skin fungus should be done by a podiatrist.

DRY, CRACKED SKIN use mild soap in small amounts and a moisturizing cream.

CORNS AND CALLLUSES caused by friction and pressure when the bony parts of your feet rub against your shoes. Have your doctor treat these.

WARTS are caused by viruses. Over the counter preparations rarely cure warts. Have your doctor treat these.

BUNIONS develop when joints in your big toe not longer fit together as they should. Tend to run in families. Many women have them because of wearing high heels with pointed toes. Sometimes correct fitting shoes or special bunion pads relieve pain. Orthotic devices can also help. Sometimes surgery is needed.

INGROWN TOENAILS common in the big toe. A doctor can remove the part of the nail that is cutting into the skin. Cutting the toenails straight across is helpful in preventing ingrown toenails.

HAMMER TOE is caused by a shortening of the tendons that control toe movements. Wearing shoes and stockings with plenty of toe room. In serious cases surgery may be needed.

SPURS are calicum growths that develop on bones. Treatments include using foot supports, heel pads, and heel cups.

THE FOOD GUIDE PYRAMID
A Guide to Daily Food Choices

Fats, Oils & Sweets
USE SPARINGLY

Cheese & Milk
Eat **2-3 servings each day** - ONE SERVING IS:

1 cup (8 oz.)
low fat milk or yogurt

½ cup (4 oz.)
evaporated skim milk

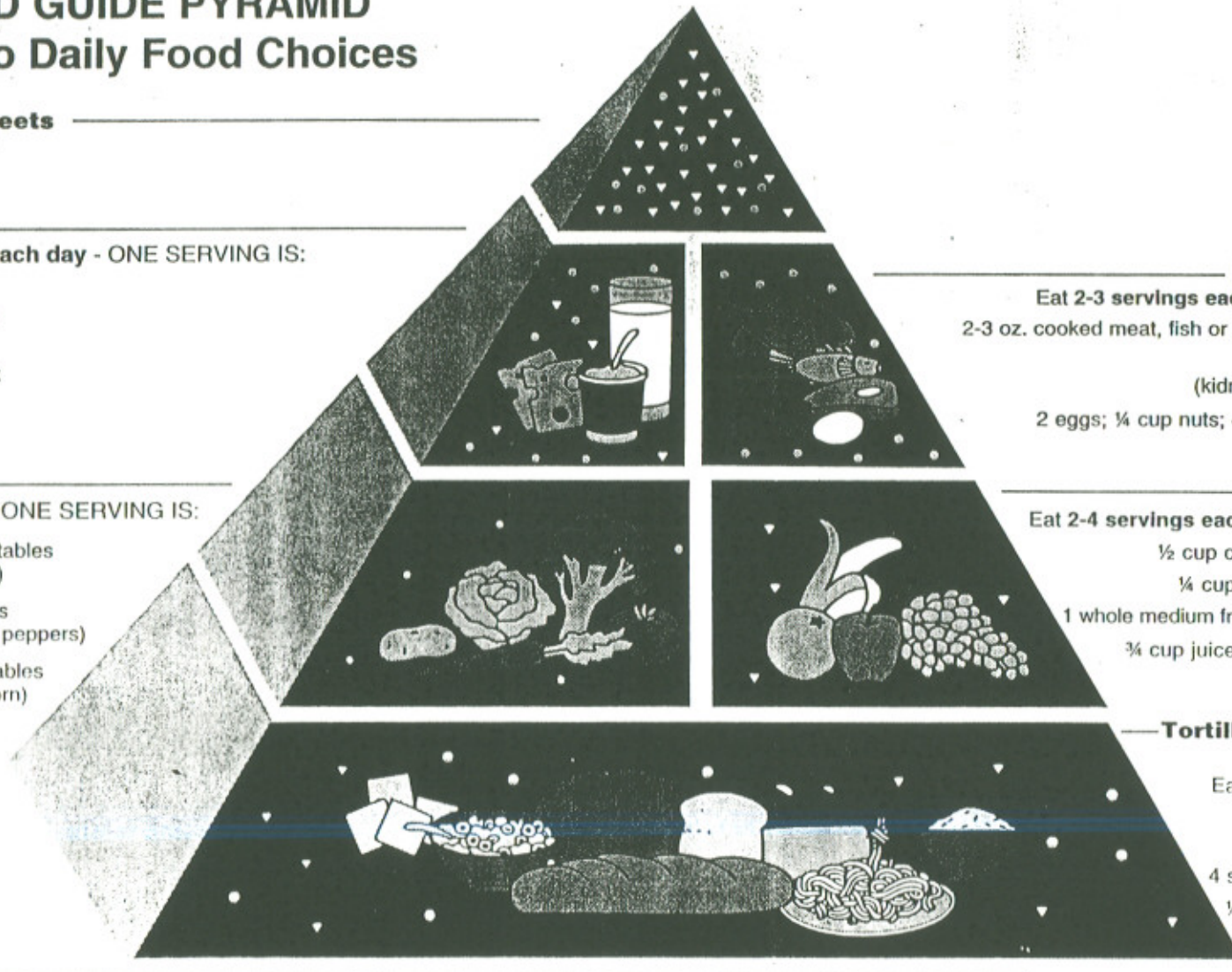
2 slices (1½ - 2 oz.)
low fat cheese

Vegetables
Eat **3-5 servings** - ONE SERVING IS:

1 cup raw leafy vegetables
(spinach, watercress)

½ cup raw vegetables
(tomatoes, cabbage, peppers)

½ cup cooked vegetables
(carrots, potatoes, corn)



Meat, Beans & Eggs
Eat **2-3 servings each day** - ONE SERVING IS:

2-3 oz. cooked meat, fish or poultry (chicken, pork chop)

1 cup cooked dried beans
(kidney, pink, black, chick peas)

2 eggs; ¼ cup nuts; 4 tablespoons peanut butter

Fruits
Eat **2-4 servings each day** - ONE SERVING IS:

½ cup canned fruit (pear, peaches)

¼ cup dried fruit (raisins, prunes)

1 whole medium fruit (½ cup) (orange, banana)

¾ cup juice (orange, pineapple, apple)

Tortillas, Breads, Cereals, Rice & Pasta
Eat **6-11 servings each day** -
ONE SERVING IS:

½ cup cooked pasta or rice

4 small crackers; 1 slice bread

½ hamburger or hot dog bun

1 8-9" flour tortilla

½ cup cooked cereal
(oatmeal, cream of wheat)

1 oz. ready-to-eat cereal (cornflakes)

1 4" square cornbread; 1 ½ corn tortillas

What is the Food Guide Pyramid? (This guide is for healthy Americans 2 years of age or more.)

The Food Guide Pyramid is a tool to help us select a variety of foods from each group every day. This way we can get all the nutrients that are necessary for good health and, at the same time, the right amount of calories to maintain healthy weight. Use the Pyramid as your guide to eat right.

When you plan your daily meals begin from the base; then continue to the next level of the Pyramid until you reach the tip. For example: add the vegetables, fruits, milk and alternates, meat and substitutes. Go easy on fats, oils, and sweets. Be sure to include the recommended number of servings from each food group of the Pyramid. Remember to include 8 glasses of water or its equivalent every day.

No one of these food groups is more important than another - for good health, you need them all.

The New York State Dietetic Association • 322 Eighth Avenue, Suite 1400, New York, NY 10001 • (212) 691-7906

Sample Snacks (12 – 20 grams of carbohydrate each)

Unsweetened fruit juice, 4 oz	14
Milk, regardless of fat, 8 oz	12
Cornflakes, ¾ cup	20
Rice crispies, ¾ cup	16
Oatmeal, instant, 1 pkt.	18
Roll, small, plain	15
Breadsticks, 2	14
Muffin, small, baked, homemade	19
Animal crackers, 8	15
Graham crackers, 3	16
Granola bar, 1 (135 calories)	18
Crackers, peanut butter, 3	12
Banana, small	16
Cantalope, 1 cup	13
Grapefruit, ½	13
Orange, medium	15
Peach, medium	15
Strawberries, 1 ¼ cup	13
Canned fruit, unsweetened ½ cup	17
Yogurt, non-fat, artificially sweet 6 oz	12
Pudding, unsweetened ½ cup	20

REMINISCENCE AND LIFE REVIEW

What was the biggest challenge of your work life? How did you cope with it?

REMINISCENCE AND LIFE REVIEW

What has been your favorite holiday? Why?

Fall Prevention Tips

Bedroom

*Have a light within reach of the bed
*Always sit down when getting dressed
*Avoid getting out of bed too quickly
*Use a clock with lighted dial
*Use a cordless phone
* Install sensor night lights

Bathroom

* Use non-skid floor rugs
* Use rubber mats or decals in tub
* Install sturdy grab bars in tub/toilet areas
* Use a bath bench and hand -held shower
* Keep a night light on
* Use Liquid Soap

Living Area:

* Secure all carpet edges
* Keep all traffic lanes clear of clutter
* Make sure all rooms have good lighting
* Use sound/ touch activated lights
* Raise the height of sofas and chairs
* Place telephone wires and electrical cords out of pathways

Kitchen:

*Store frequently used items at waist level

* Carry Items with a walker basket

*Wipe up spills immediately

* Do not wax floors with high gloss

* Use a sturdy chair with arms

1d

Exercises for Preventing Falls

1. Side Leg Swing – Slowly raise each leg to the side 6 to 8 times

2. Back Leg Lift – Alternate lifts between right and left leg; 10 times

3. Standing Knee Bend – Lift leg – Bend/straighten at knee – Alternate right and left leg; 10 times

4. Ankle Pumps – Lift body up onto tip toes and back down; 15 times

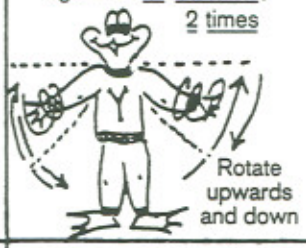
5. Heel Cord Stretch –
- Front leg bent
- Back leg straight
- Feet flat on floor

Stretch each leg 5 times

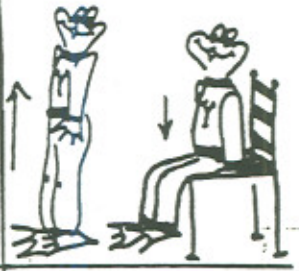
6. Figure 8 – Feet flat – sway body in a continuous figure 8 motion for 30 seconds

7. Trunk Stretch – With hands on hips, stretch trunk to:
right – hold 20 seconds
left – hold 20 seconds

8. Arm Circles – Begin with arms 6 inches from sides – circle arms upward and then to sides again for 20 seconds; 2 times



9. Chair Rise/Sit – Stand erect – sit down 8 times



10. Modified Sit Up – Lift leg from knee 6 to 8 times

11. Neck Stretch – Allow head to drop slowly right, left, front, and back – hold each position for 20 seconds

Use for: Client / Clinician

Clinician's signature

Date

NEURO-MUSCULO-SKE

Copy and use in partnership with your clients and for building your files.

(Courtesy of Tideiksaar R: Flexibility and balance exercises. *Pride Inst J of Long Term Home Health Care* XII(4), 9–17, 1993. © Springer-Verlag Publishing Co, Inc. New York. Used by permission.)

National Institute on Aging
National Osteoporosis Foundation

Age Page

Preventing Falls and Fractures

At any age injuries from a fall can limit a person's ability to lead an active, independent life. This is especially true for older people. Each year, thousands of older men and women are disabled, sometimes permanently, by falls that result in broken bones. Many of these injuries could be prevented by making simple changes in the home.

As people age, changes in their vision, hearing, muscle strength, coordination, and reflexes may make them more likely to fall. Older persons are also more likely to have treatable disorders that may affect their balance, including diabetes or conditions of the heart, nervous system, and thyroid. In addition, compared with younger people, older persons take more drugs that may cause dizziness or lightheadedness.

Prevention of falls is especially important for people who have osteoporosis, a condition in which bone mass decreases, causing bones to be more fragile and to break easily. Osteoporosis is a major cause of bone fractures in postmenopausal women and older persons in general. Although all bones are affected, fractures of the spine, wrist, and hip are most common. For the person with severe osteoporosis, even a minor fall may cause one or more bones to break.

Falls and accidents seldom "just happen," and many can be prevented. There are simple steps each of us can take to reduce the likelihood of falling and make our homes generally safer. The following are some guidelines for preventing falls and fractures.

Everyday Activities

- Have your vision and hearing tested regularly and properly corrected. Even the simple task of removing ear wax can improve your balance.
- Talk to your doctor or pharmacist about the side effects of the drugs you are taking and how they may affect your coordination or balance. Ask them to suggest ways to reduce the possibilities for falling.
- Limit your intake of alcohol. Even a little alcohol can further disturb already impaired balance and reflexes.
- Use caution in getting up too quickly after eating, lying down, or resting. Low blood pressure may cause dizziness at these times.
- Make sure that the nighttime temperature in your home is not lower than 65°F. Prolonged exposure to cold temperatures may cause body temperatures to drop, leading to dizziness and falling. Many older persons cannot tolerate cold as well as younger people can.

(over, please)

- Use a cane, walking stick, or walker to help maintain balance on uneven or unfamiliar ground or if you sometimes feel dizzy. Use special caution in walking outdoors on wet and icy pavement.
- Wear supportive, rubber-soled, low-heeled shoes. Avoid wearing only socks or smooth-soled shoes or slippers on stairs or waxed floors. They make it very easy to slip.
- Maintain a regular program of exercise. Regular physical activity improves strength and muscle tone, which will help in moving about more easily by keeping joints, tendons, and ligaments more flexible. Many older people enjoy walking, swimming, and exercise. Mild weight-bearing activities may even reduce the loss of bone from osteoporosis. It is important, however, to check with your doctor or physical therapist to plan a suitable exercise program.

Beyond these everyday activities, there are a number of things you can do around your home to prevent falls. Many falls that occur among older persons result from hazardous conditions at home. The following is a brief checklist to help you recognize and correct hazards in your home.

Safety Checklist for Your Home

Check to see that:

Stairways, hallways, and pathways have:

- Good lighting and are free of clutter
- Firmly attached carpet, rough texture, or abrasive strips to secure footing
- Tightly fastened handrails runn the entire length and along b sides of all stairs, with light switc at the top and bottom.

Bathrooms have:

- Grab bars conveniently located and out of tubs and showers and r toilets
- Non-skid mats, abrasive strips, carpet on all surfaces that may wet
- Nightlights.

Bedrooms have:

- Nightlights or light switches wit reach of bed(s)
- Easily reached telephones, c venient to the bed(s).

Living areas have:

- Electrical cords and telephone w placed out of walking paths
- Rugs well secured to the floor
- Furniture (especially low coffee bles) and other objects arranged they are not in the way
- Couches and chairs at proper hei to get into and out of easily.

For more complete information simple, relatively inexpensive rep and safety recommendations for y home, contact the U.S. Consumer P duct Safety Commission, Washingt D.C. 20207 (toll-free hotline: 800-6 2772). The Commission can also s you a single free copy of the boo *Safety for Older Consumers: Home S ty Checklist.*

November 1

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Seniority

Water - an essential nutrient for healthy aging

By Margaret C. McLean

Although it seems unusual to write about a seemingly instinctual response, getting an elderly person to drink and consume an adequate amount of liquid on a daily basis can be a challenge at best. The aging process produces physiological changes that can affect fluid balance in the older adult and when combined with a reduced intake of liquid complications related to dehydration can be an undesirable end result. On average, an adult's body weight is 55 to 75 percent water or about 10 to 12 gallons of water. The specific percentage varies from person to person, relating to body composition, age and gender among other factors. Compared with body fat, lean tissue holds more water. So the leaner you are, the higher proportion of water in your body. Males, with more muscle have a higher percentage of water than females do. And younger people usually have more than older adults. All body tissue contains water. For example, your blood contains approximately 83 percent, lean tissue 73 percent, body fat 25 percent and bone approximately 22 percent by weight. Water accounts for 75 percent of a newborn's body weight, while this amount declines to about 50 percent in an elderly individual. The decrease in body water in the elderly makes them more susceptible to problems such as urinary tract infections, pneumonia, pressure ulcers, confusion and disorientation. In

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addition, older adults have a reduced thirst session, and their kidneys are less able to conserve free water. About 1 in 5 elderly people suffer from xerostomia, dry mouth, caused by a severe reduction in the flow of saliva, which in turn affects food intake. This condition can be associated with the use of certain diseases, medications and treatments. In addition, elderly persons who have trouble getting around may deliberately limit fluids in order to avoid trips to the bathroom. Too often the vital need for water in older adults can be overlooked. It is for this reason that conscious attention to adequate fluid intake, not dependent on normal thirst, be advocated as an important aspect of the health care of elderly individuals.

You have probably heard that water is vital to health and life itself. You can survive approximately 6 weeks without food but you cannot live longer than a week or so without water. In fact losing 10 percent of your body weight from dehydration , or water loss causes extreme weakness and potential heat stroke. And a 20 percent loss is life-threatening. Dehydration an elderly individual may present in several ways. Some signs and symptoms may include altered mental status, lethargy, light-headedness, decreased skin turgor and dry mucous membranes. These signs and symptoms are not completely definitive as they may also appear in elderly persons who are adequately hydrated. Investigation of the possibly dehydration should include whether or not there is a history of decreased food or fluid intake, fever, illness, diabetes, vomiting, diarrhea, and use of diuretics.

Water does not supply any calories and yet it is found in every cell, tissue and organ in our bodies. It is the nutrient needed in the greatest amount and nearly every function of the human body takes place in a watery medium. Water regulates body temperature keeping it constant at 98.6 degrees, transports nutrients and oxygen to you body cells and carries waste products away. Water is the main component of every body fluid including blood, gastric juice and urine. It helps prevent constipation and cushions your joints. In order for your body to function normally your body needs an ongoing supply of water. To see if you are

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drinking enough fluid, check your urine. A small volume of dark-colored urine indicates that you aren't consuming enough fluid. Almost clear urine means you're drinking enough.

The average adult loses about 2 1/2 quarts (about 10 cups) of water daily through perspiration, urination, bowel movements and even breathing. During hot humid weather or strenuous physical activity fluid loss may be much higher. Unlike other nutrients, the human body does not store an extra supply of water for those times when you need more. On average, most people need between 8 to 12 cups of water daily. Water can come from all kinds of beverages, including juice, milk, soup, tea, coffee, and soft drinks. And, plain water is great, too! Remember that juice, milk, and soup offer other nutrients as well. Caffeinated beverages, such as regular coffee, tea and colas , should be consumed in moderation. Caffeine often causes you to urinate more and may prevent you from meeting your fluid needs. Remember also that you "eat" quite a bit of water in solid foods too-perhaps more than you think. Fruits and vegetables, such as celery, lettuce, tomato and watermelon, contain more than 90 percent water. Even dry foods, such as bread, supply some water. If you have trouble remembering how much water you drank during the day, try this. Fill a jug or jar with 8 cups (64 ounces) of water each morning. Place it in your refrigerator. Use the water to drink, to make juice, lemonade, soup, tea and coffee. When the water is gone, you likely have met your goal for the day.

Margaret C. McLean is a registered dietician for Hancock Hall and Filosa Convalescent Home Inc. in Danbury.

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving

Calories 260 Calories from Fat 120

	% Daily Value*
Total Fat 13g	**20%**
Saturated Fat 5g	**25%**
Cholesterol 30mg	**10%**
Sodium 660mg	**28%**
Total Carbohydrate 31g	**10%**
Dietary Fiber 0g	**0%**
Sugars 5g	
Protein 5g	

Vitamin A 4% • Vitamin C 2%

Calcium 15% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

Product-specific information

Footnotes. Information is consistent whenever these footnotes appear.

New Nutrition Label Format

Nutrition Facts/Datos Nutricional

Serving Size/Tamano por Racion 1 cup/1 taza (228g)
Servings Per Container/Raciones por Envase 2

Amount Per Serving/Cantidad por Racion

Calories/Calorias 260 Calories from Fat/Calorias de Grasa 120

	% Daily Value*/% Valor Diario*
Total Fat/Grasa Total 13g	**20%**
Saturated Fat/Grasa Saturada 5g	25%
Cholesterol/Colesterol 30mg	**10%**
Sodium/Sodio 660mg	**28%**
Total Carbohydrate/Carbohidrato Total 31g	**11%**
Dietary Fiber/Fibra Dietetica 0g	0%
Sugars/Azucares 5g	
Protein/Proteinas 5g	

Vitamin/Vitamina A 4% • Vitamin/Vitamina C 2%

Calcium/Calcio 15% • Iron/Hierro 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

* Los valores de los porcentajes Diarios estan basado en una dieta de 2,000 calorias. Sus valores diarios pueden ser mayor o menor dependiendo de sus necesidades caloricas:

	Calories/Calorias:	2,000	2,500
Total Fat/Grasa Total	Less than/Menos de	65g	80g
Sat Fat/Grasa Saturada	Less than/Menos de	20g	25g
Cholesterol/Colesterol	Less than/Menos de	300mg	300mg
Sodium/Sodio	Less than/Menos de	2,400mg	2,400mg
Total Carbohydrate/Carbohidrato Total		300g	375g
Dietary Fiber/Fibra dietetica		25g	30g

The American Dietetic Association
Your link to nutrition and health.[SM]

Nutrition fact sheet

Have you ever had a 24-hour flu? Or did you think it was something you ate? Very often what seems like the flu may be foodborne illness. Foodborne illness is what many people call food poisoning. For your health and the health of your family, you should learn home food safety habits.

7 STEPS TO HOME FOOD SAFETY

Step 1
Wash your hands more often. Wash hands in warm, soapy water for about 20 seconds. (Sing the happy birthday song twice. That's about 20 seconds.) Dry them with paper towels, clean cloth towels, or air dry.

When to wash your hands

- Before you touch food, eat meals, or feed children.
- After you use the restroom or change a diaper.
- After you cough or sneeze.
- After you touch garbage, dirty dishes, or animals.
- After you use the phone, touch your face, hair, body, and other people.
- After you touch a cut or sore.

Step 2
Keep Your Kitchen Clean. Wash with hot, soapy water:

- kitchen counters
- stove
- microwaves
- cooking spoons, knives, forks, and spatulas
- cutting boards

Wash dishcloths and towels in hot water in the washing machine. Clean sponges in a chlorine bleach solution. Throw old sponges away.

How to make a chlorine bleach cleaning solution.
Mix two teaspoons of chlorine bleach in one quart of water. Be sure to label the bottle.

Step 3
Keep raw meats and cooked foods apart. Use two cutting boards. One to cut raw meat, poultry, and fish. And, a second one

MEMORANDUM

TO: Institutional Review Board

FROM:

DATE: June 10, 2004

RE: Reporting of Serious Adverse Events for GCO #

Please find below our submission of the required information for reporting a Serious Adverse Event:

(a) **GCO # of the project:**

(b) **Subject's unit number:**

(c) **A descriptive narrative of the event:**

.

(d) **A descriptive narrative of any further action taken as a result of the event:**

(e) **An indication of the outcome of the event:**

(f) **A statement as to whether the investigator feels the event was related or not to the event:**
NA

(g) **If the sponsoring agency requires that a special form be completed and submitted, the investigator should forward a copy of the form to the IRB.**

Attached is the IRB Serious Adverse Event/Adverse Event/IND Safety Report Form for this particular event. Dr. is aware of the event noted above and concurs with the assessments made.

Please feel free to call me at if you require additional information.

Thank you.

INSTITUTIONAL REVIEW BOARD
SERIOUS ADVERSE EVENT/ ADVERSE EVENT/ IND SAFETY REPORT FORM

This form must be attached to all memos/reports describing an adverse event including IND Safety Reports.

Title of Project: Lifecare Plus

GCO # _____ **Contact Person:**
PI _____ **Extension:** **Box #**_____

What was the Adverse Event?:

The event was related to the subject's participation in the research in the following way: (check one)

Definitely Related: _____ Possibly Related: _____
Probably Related: _____ Definitely Not Related: _____

Have there been prior reports of the same adverse event?

(1) at MSSM Yes ___ No ___ If yes, how many ___
(2) at other institutions Yes ___ No ___ If yes, how many ___

Is this report a:

(1) serious adverse event (SAE) Yes ___ No ___
(2) adverse event (AE) Yes ___ No ___
(3) IND safety report Yes ___ No ___

When did you first become aware of the adverse event? _____
(date)

If the adverse event is RELATED to participation in this study, please check or complete one of the following:

The AE (non-serious) is **expected** and the consent form already includes a statement about the possibility of this adverse event, **but** it has occurred at a greater frequency and/or intensity than originally anticipated _____

The AE or SAE is **unexpected** and the consent form has been modified. Two copies are enclosed - one with all revisions highlighted and one clean copy to be stamped with IRB approval. _____

Although the event was possibly related to participation in the study, we feel that the consent form does not need to be modified at this time because: _____

_____

_____

_____

Principal Investigator's Signature: _____ **Date:**_____
If you have any questions, please contact an IRB Administrator (ext. 88980)

TELEPHONE REASSURANCE LIST
VOLUNTEER:

DATE: _____

CLIENT'S NAME	***PHONE #***	***COMMENT***	***URGENT RESPONSE SW***	***RN***