Project: Improve Access and Care Coordination for the Frail Elderly
(Revised 4/30/04)

Introduction

The frail elderly living in the community frequently lack access to appropriate medical care and social supports that could improve their quality of life and increase the likelihood of avoiding institutional long term care. The medical care that is delivered to this population is often fragmented involving multiple providers across multiple levels of care and multiple, sometimes conflicting, medications. The consequences of limited access to timely, consistent care on the one hand, and receiving uncoordinated, inconsistent and delayed care on the other, compromise the health status of the frail elderly and lead to excessive health care expenditures.

Montefiore Medical Center is an integrated delivery system located in the Bronx, New York, a borough that has over 36,500 residents over the age of 80. Forty percent of the Bronx residents aged 80 and over are minorities, at higher risk for many cardiovascular diseases, end stage renal disease (ESRD), strokes and diabetes. A high proportion of Bronx seniors are poor, with many being dually eligible for Medicare and Medicaid. The dually eligible represent 17% of all Medicare beneficiaries and account for 24% of all Medicare spending. In fact, health care expenditures for the dually eligible are more than double those of the non-dually eligible ($16,278 for each dual eligible vs. $7,396 on average for those who are not dually eligible). The highest cost, non-disabled, dually eligible elderly in New York City have average annual costs of $92,753 (4,400 people in NYC).

Montefiore’s Frail Elderly Initiative will focus on Bronx residents aged 80 or over (36,500 persons) including an estimated 13,233 frail individuals. Persons in this age group experience higher hospital expenditures than the 65 and over age group as a whole (1.363 time higher hospitalization rates for males and to 1.118 time higher for females) as well as higher expenditures for hospital outpatient services, physician services, prescription drugs and nursing home services. Seventy percent of those aged 80 and older have two or more chronic conditions and Medicare beneficiaries with multiple chronic conditions are 99% more likely to be hospitalized than those without any chronic conditions. Overall, Medicare beneficiaries with five or more chronic conditions account for one-fifth of the Medicare population but two-

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1 While there is no single definition of the “frail elderly,” the population usually encompasses persons aged 65 or more needing assistance with two or more Activity of Daily Living (ADL).
2 23% are Black, 12% are Hispanic and 5% are from other minority groups based on US Census data.
3 Centers for Disease control and Prevention quoted in CMS RFO for the Chronic Care Improvement Project.
4 The George Washington University NHPH Issue brief, September 30, 2003
5 Ibid.
6 Kaiser Permanente’s model for predicting the proportion of the frail elderly in selected age groups indicate a rate of 214 frail elderly per 1000 population for those aged 80-84; 368/1000 for those aged 85-89; and 563 for those aged 90 and over.
7 Persons age 85 and over experience hospital expenditures 1.393 (males) to 1.148 (females) higher than the 65 and over population as a whole. based on unpublished actuarial data.
8 From unpublished actuarial data and from studies by the Kaiser Permanent Center for Health Research, 2002
9 Coordinating Care for the Chronically Ill, Partnership for Solutions, February 2003
10 82% of Medicare beneficiaries have at least 1 chronic condition and the 65% of the Medicare population with multiple chronic conditions account for 95% of all Medicare expenditures.
thirds of Medicare expenditures. Medicare expenditures increase with the number of chronic conditions that a beneficiary has, with average annual costs of $2,394 a year for those with 2 chronic conditions, increasing to almost $14,000 a year for those with 4 or more chronic conditions.

Montefiore has a long tradition of service to the elderly, largely Medicare, heavily minority population of the Bronx. Throughout Montefiore’s integrated delivery system, 35,667 patients aged 80 received services in 2003. Twenty-three percent of the patients treated were black and 22% were Hispanic. A total of 5,279 patients aged 80 and over were admitted to Montefiore in 2003, accounting for a total of 8,002 admissions, for an average of 1.5 admissions for each patient aged 80 or over.

**Statement of the problem**

There are four basic barriers to providing high quality, timely and well-coordinated care to the frail elderly and ensuring a high degree of patient compliance with treatment plans:

1. Problems with access to care related to insurance gaps, limited physical mobility of the frail elderly and lack of appropriate means of transportation leading to lack of care or delays in receiving care.
2. Complexity of treatment regimes for multiple conditions common among the frail elderly with particular challenges faced by those who live alone and do not have family and social supports to assist with medication and ADLs resulting in problems with patient compliance.
3. The complexities of navigating an a la carte array of medical services offered by a myriad of unaffiliated providers, without a common information infrastructure accessible to all providers caring for an individual patient, with no revenue stream to cover the costs of case management of the FFS population, leading to fragmented, uncoordinated care with duplicate testing and multiple, possibly conflicting, treatment protocols.
4. Evidence that patients with chronic diseases (which includes many if not most of the frail elderly) do not receive care based on well-established clinical guidelines.

The frail elderly often lack access to the right care at the right time. Many frail elderly, particularly those in urban areas, do not have private cars (or can no longer drive them) and are no longer able to maneuver public transportation because of have limited physical mobility. Access to the right care at the right time is also constrained by poor understanding of health care symptoms and available treatments, with no reliable source of patient information on specific conditions. Inadequate insurance can be an obstacle to receiving appropriate care, especially for seniors without dual coverage or supplemental insurance who cannot afford prescription drugs, home care, and/or nursing home care. Delays in receiving care result in emergency department visits or hospitalizations and poor outcomes. Studies have shown that the rate of preventable hospital admissions for Ambulatory Sensitive Conditions (ASC) increases with number of chronic conditions, and most of the frail elderly have multiple chronic conditions.

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11 Partnership for Solutions, quoted in CMS RFP for The Chronic Care Improvement Program
12 Johns Hopkins Bloomberg School of Public Health, “Medicare beneficiaries with Multiple chronic Conditions 99 Times more Likely to be hospitalized,” November 2002
Self-care regimes for people with multiple chronic conditions usually require a multitude of
drugs, changes in eating and exercise patterns and regular office visits to monitor blood sugar,
blood pressure and other indicators of disease status. Noncompliance puts the frail elderly at high
risk for development of complications and health care crises that can result in hospitalizations.
Not only are the frail elderly faced with managing complicated treatment protocols, but their
ability to comply with treatment plans is compromised by deterioration in their ability to function
independently (e.g., limited ability to read labels on prescription drugs and on food packaging
indicating salt or carbohydrate contents). Persons 85 years of age and older are seven times as
likely as adults aged 65-74 to need help with personal care (ADLs) from other persons. This
oldest segment of the population has been largely by-passed by the Internet revolution denying
them access to detailed patient education materials and many have unanswered questions about
what their doctors expect them to do. The stereotype of the elderly person with a shoe box full
of pills of varying dates and doses, to be taken with meals or not with food, at various times of
the day, prescribed by a variety of specialists and internists, is often true. Patients in their 80’s
advised to “exercise” and “eat right” frequently have no sense of what exercise they can (or
should) do, what foods/ beverages are most beneficial, whether they should be taking a daily
aspirin and whether vitamin and herbal supplements are appropriate. Frequently the frail elderly
are unaware of available social support services that can provide patient education and assistance
with ADLs and extend the beneficiary’s life in the community.

The frail elderly also face challenges receiving well coordinated care from a health care system
grounded on the provision of care on an episodic basis by a range of providers, none of whom has
overall responsibility for providing patient guidance and treatment across disease conditions.
Fragmentation of care is particularly problematic in the older population—the average Medicare
beneficiary sees seven different physicians and fills up to 20 prescriptions a year.
Communication and coordination among the multiple health providers serving this population is
extremely difficult because there is no shared information base on the patients’ conditions or
treatment plans and no one assigned “gatekeeper” helping the patients navigate the delivery
system and ensuring that the multiple providers are informed of changes in patient status. Quality
of care is compromised when many providers make independent judgments based on incomplete
clinical information and are unaware of the patient’s access to social, economic and emotional
resources. Recent studies have shown that physicians managing chronic conditions do not
consistently follow available evidence-based guidelines in their treatment of patients. Less than
30% (true?) of aged Medicare beneficiaries in the Bronx have joined a Medicare Advantage
program that would provide a Primary Care Provider (PCP) and access to case management and
disease management programs.

CMS has recently released an RFP to establish 10 large-scale regional contractors who will
support patients with CHF and diabetes in managing all of their health care needs, having drawn
the conclusion that better coordination of care can improve outcomes and lower costs.
Montefiore’s initiative will focus specifically on the frail elderly FFS population, although some
will also have diagnoses of diabetes and CHF.
Objective of Montefiore’s Frail Elderly Initiative

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14 National Center for Health Statistics, Monitoring the Nation’s Health, 1st quarter 2002 data.
15 Anderson, G., Chronic Conditions: Making the Case for Ongoing Care, p. 4
Montefiore acknowledges that it cannot change the aging “trajectory” and the eventual decline of the health of the elderly, but believes that medical and social interventions can achieve the following objectives:

- Increase access to health care and social services and increase patient compliance with treatment protocols to enhance health status and improve the quality of life for the frail elderly and their caregivers
- Safely maintain the frail elderly in the community for longer periods of time
- Reduce avoidable costs for the frail elderly by avoiding or at least postponing nursing home admissions and reducing inpatient episodes and emergency department visits, reducing duplicate testing, and improving medication management of multiple conditions
- Diminish health disparities among Medicare beneficiaries by addressing unmet needs of minority seniors
- Identify and test new strategies to improve the quality of care and quality of life and reduce avoidable costs for frail elderly FFS Medicare beneficiaries.

Overview of the Frail Elderly Initiative

Target population:
Montefiore’s frail elderly initiative will target Fee-for Service (FFS), Medicare beneficiaries age 80 and over who are living in the Bronx in the community, with a focus on those who are dually eligible for Medicaid and Medicare (Parts A and B). There will be two levels of intervention: one that targets 500 beneficiaries most of whom currently use one or more services of Montefiore’s integrated delivery system (the individualized approach); the other that provides a range of services for a broader group of frail elderly living in Naturally Occurring Retirement Communities (NORCs) in the Bronx (a population-based approach).

To identify participants in the individualized approach initiative, Montefiore staff will conduct screenings in the Montefiore ERs, in its ambulatory care sites, and in its home care program as well as screening patients hospitalized at both of Montefiore’s hospital divisions (Moses and Weiler). Montefiore will also conduct outreach in NYCHA and Section 220 housing in the Bronx and obtain referrals from community based agencies. Patients currently living in nursing homes will be excluded during the initial recruitment process but community-resident beneficiaries can continue as participants if they are discharged to nursing home for acute rehabilitation. As participants are recruited, a registry will be established to capture baseline information including current level of functioning (using a standardized instrument and other measures of health status, recent history of utilization of health services, current medications, name and contact information for family and social supports, and measures of satisfaction with health care services. Program interventions, changes in participant health status, utilization, patient satisfaction and health expenditures will be entered into the registry over time. Participants would be stratified by risk level and self-care concerns.

Participants in the population-based approach will be all seniors living in selected NORCS with a total population of 5,000 (will be get close to this with Co-Op city and a few other complexes?).

Program Components:
For its intensive, individual-focused initiative, Montefiore staff will schedule a follow-up meeting in each participant’s home with a nurse or social worker to conduct a complete
assessments of the individual’s needs (medical, social, economic, information, assistance with ADLs, transportation, home delivered meals, DME, etc.) that will be used to develop an individualized action/care plan. Baseline information on the beneficiary’s use of health services, medications, quality of life, and satisfaction with health services will also be captured during this interview. Participants will be asked to sign a waiver allowing Montefiore to contact their providers to describe the program and their interest in collaborating in efforts to increase care coordination. Participants will also be asked for permission to access information available about them in Montefiore’s clinical information and claims systems and medical records.

Services that will be offered will include those that will address access, coordination of care and assistance with the management of complex medical regimes and would include:

- Assistance in obtaining entitlements, including help with applications for NYS drug assistance program (EPIC) and Medicaid
- Assistance in linkages to community-based services including meals on wheels
- Assistance in selecting a primary care provider in the Montefiore system to assist in care coordination and referral to appropriate specialists
- Physician home visits, if appropriate
- Patient educational materials on the diseases and conditions of concern
- Advice on nutrition and exercise
- Advice on medication management
- Assignment of a Case Manager to coordinate care and provide linkage to primary and specialty outpatient care, disease management programs, home care, social supports and link to community based services (meals on wheels, etc), for the most compromised frail elderly. All other participants will have the name and phone number of a contact person in the Senior Concierge program (described below) to contact with questions and requests for help.
- Transportation to health services (via a Montefiore van)
- Additional support in care coordination from the patient’s PCP (if PCP agrees)

The individualized care plan will be entered into the registry and regular follow up calls will be made to the patient to assess their ongoing care needs and concerns. Professional case managers will manage participants in the highest risk category; participants in the lowest risk groups may be called once a quarter unless a specific intervention is required (e.g., arranging transportation for a visit). Physicians who serve as the PCPs for these individuals (as identified by the participants at the outset or chosen by the participants during the 1:1 interviews,) will receive materials describing the initiative and be asked whether they would be interested in receiving periodic reminders related to the care of the patient (e.g., time to have patient’s A1C tested for diabetics) and updates on the patient’s health status available in the registry.

Along with the 500 frail elderly who agree to participate and are tracked through the registry, Montefiore will provide a population-based outreach and support to segment of the broader community-based frail elderly population in the Bronx. It is anticipated that 5,000 Medicare beneficiaries living in selected NORCs will have access to this part of the initiative (although not all of the 5,000 will be over age 80). Specific interventions for this group will include the following (which will also be available to those 500 individuals in the more customized approach):
• On-site blood pressure screening and flu-vaccinations in selected buildings with high concentrations of seniors (Naturally Occurring Retirement Communities) including Co-Op City with large numbers of senior residents and other large middle and lower-income housing complexes
• On-site classes in cooking and exercise appropriate for the frail elderly in selected NORCS
• On-site lectures and resources to assist in applications for EPIC, Medicaid and other entitlements in selected NORCS
• On-site community fairs to advise residents of available community resources in selected NORCS
• On-site patient education series on common chronic illnesses and their appropriate management (e.g., diabetes, hypertension) in selected NORCS
• On-site education on pain management/palliative care in selected NORCS
• On-site session on smoking cessation in selected NORCS
• On-site education on medication management (tips on how to organize your medications for increased compliance, use of generic drugs, bringing a list of medications and current dosage and use to PCP and other physician visits, getting all prescriptions filled at same pharmacy) in selected NORCS
• On-site education on medico-legal issues affecting the elderly (e.g., advanced directives, Health proxy) in selected NORCS
• On-site session on tips for handling hospitalizations (e.g. information to bring, notifying the PCP, copy of advanced directives, etc.) in selected NORCS
• Telephone outreach to the frail elderly though Montefiore’s Seniors Concierge program, to determine if beneficiaries need assistance in referrals to health care providers including Montefiore’s Geriatric Care Center and Montefiore’s Certified Home Care Agency and linkage to the Montefiore palliative care program (as appropriate)
• Provide transportation to physician office visits from the largest NORCS on scheduled days/times of the week
• In partnership with community-based social service programs, a “rent-a-son/daughter” programs to provide practical, social and emotional support (social service corps)
• In partnership with community-based social service programs, a “pay-my-bills” service to support seniors living in the community with practical help
• In partnership with community-based social service programs, respite services for families caring for frail elderly

Montefiore will track the number of activities/services offered to this larger group, track the number of individuals served, and complete a participant satisfaction survey before and after the program is initiated but will not maintained detailed records on the health status and level of functioning of each individual who might use the available services (many of these individuals will be under age 80—those that choose to obtain blood pressure screenings for example).

Implementation:

Montefiore has experience managing the delivery of health care delivery for Medicare beneficiaries, through its risk contracts which currently cover [number] Medicare beneficiaries and [number] beneficiaries over the age of 80.  (The CMO currently manages [number] HIP members aged 80 or more and the average annual cost for these individuals is $12,733.  35% of
the expenditures specialty physician services; 10% of the expenditures were for in-patient hospital care; 10% for dialysis, 2.4% for SNF services; and 1% for home health)

Montefiore also has much of the necessary infrastructure in place to implement this frail elderly initiative in the FFS Medicare population including

- A Senior Concierge program
- Procedures for providing on-site services in various NORCS (flu vaccine campaigns, various screenings) based on past experiences
- A van to transport patients to medical appointments
- A sophisticated call center to conduct telephone outreach and make appointment reminder calls
- A network of [number] ambulatory care centers offering preventive, primary, and specialty care and diagnostic testing
- A certified home care agency
- Care management information software
- Data analysis and reporting capabilities to design and maintain a patient registry
- A Care Management Resource Center to assist in identifying and expediting discharge of program participants and notification of PCPs of participant admissions
- A House Call program to arrange and provide physician home visits
- Disease management programs for congestive heart failure and diabetes with plans to initiate programs for COPD and Asthma
- An inpatient palliative care program that would be a resource for a community-based initiative
- A grant-supported initiative to formalize mechanisms for collaboration between several large NORCS and Montefiore to increase support to NORC residents hospitalized at Montefiore and to communicate pro-actively to enhance coordination of care delivery
- A House Call program to arrange and provide physician home visits
- A substantial IT infrastructure

The initiative would be managed out of Montefiore’s Care Management organization (CMO), a wholly owned subsidiary of Montefiore Medical Center that manages all of the organization’s risk business.

Additional resources would include:

- Project Manager
- 2 Case Managers (one nurse and one social worker)
- 1 Outreach Worker
- 1 Data Analyst (to support the registry and track services and satisfaction surveys provided to the population-based portion of the initiative)
- A budget to cover expenses of Other Than Personal Expenses (including telephone expenses, mailing expenses, patient education material)
- IT expenses

**Evaluation**

Montefiore will collect and track a variety of measures to assess the impact of the program. Initiative results will be compared to patterns observed in similar populations of 80+ individuals
and comparisons will be made between baseline and post-intervention utilization, expenditure, and health status and satisfaction indicators.

For the 500 participants in the intensive program the expected outcomes will include:

- Decreased in baseline rates of ER visits and hospital days (combination of fewer admissions and shorter lengths of stay)
- Increase in baseline annual number of physician visits
- Increased percentage of individuals linked to entitlement programs including EPIC and Medicaid (for those not already dually eligible)
- Improved patient compliance with medication regimes
- Improvements in healthy lifestyle (changes in smoking, eating, exercise, alcohol use) among participants (compared to information collected at baseline)
- Increased percentage of patients receiving flu vaccines (compared to similar population and baseline)
- Improved management of chronic conditions common in the frail elderly (based on higher than average percentage of patients receiving “recommended care”16)
- Reduction in fatal stroke with treatment of hypertension (compared to incidence in broader 80+ population)
- Reduction in nursing home admission (compared to broader 80+ population)
- Increased number of individuals with advanced directives (compared to baseline)
- Improved patient compliance with medication regimes
- Improved management of chronic conditions common in the frail elderly (based on higher than average percentage of patients receiving “recommended care”)
- Increased percentage of patients receiving flu vaccines (compared to similar population and baseline)
- Increased number of individuals with advanced directives (compared to baseline)
- Reduced Medicare expenditures compared to similar population and to baseline

For the broader community of elderly living in the NORCs where Montefiore will conduct outreach and provide selected services, the following outcomes are anticipated:

- Increased percentage of individuals linked to entitlement programs including EPIC and Medicaid (for those not already dually eligible)
- Better understanding of chronic illnesses, advanced directives, pain management, medication management
- Improved patient compliance with medication regimes
- Improvements in healthy lifestyle (changes in smoking, eating, exercise, alcohol use) (based on survey responses)
- Increased percentage of patients receiving flu vaccines (compared to similar population)
- Increased number of individuals with advanced directives (compared to baseline)

The basic approaches of the initiative for both the focused intervention on 500 frail elderly and the broader population based approach could be replicated within communities where providers work collaboratively to provide community-based care. Such initiatives would require some seed money for start-up costs and possibly some ongoing revenue stream to physicians selected by the beneficiaries to act as overall guides and advisors on managing all of the beneficiaries’ health care needs.

16 “Recommended Care” as identified in evidence based guidelines for chronic conditions