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Just for Us: An Academic Medical Center–Community Partnership to Maintain the Health of a Frail Low-Income Senior Population

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Purpose: To promote health and maintain independence, Just for Us provides financially sustainable, in-home, integrated care to medically fragile, low-income seniors and disabled adults living in subsidized housing. ***Design and Methods:*** The program provides primary care, care management, and mental health services delivered in patient's homes by a multidisciplinary, multiagency team. ***Results:*** After 2 years of operation, Just for Us is serving nearly 300 individuals in 10 buildings. The program is demonstrating improvement in individual indices of health. Medicaid expenditures for enrollees are shifting from ambulances and hospital services to pharmacy, personal care, and outpatient visits. The program is not breaking even, but it is moving toward that goal. The program's success is based on a partnership involving an academic medical center, a community health center, county social and mental health agencies, and a city housing authority to coordinate and leverage services. ***Implications:*** Just for Us is becoming a financially sustainable way of creating a ''system within a nonsystem'' for low-income elderly persons in clustered housing.

Key Words: Care coordination, In-home care, Subsidized housing, Sustainability

The system of providing and financing health care and related services to elderly and disabled persons in the United States suffers from widely acknowledged deficiencies; indeed, one could characterize the system as a nonsystem (Kane, Kane, & Ladd, 1998). There is recent evidence that in-home medical services can overcome obstacles to appropriate care, improve functional status and use of outpatient services, and reduce nursing home admissions (Ricauda, Pla, Marinello, Molaschi, & Fabris, 1998; Campion, 1995). In-home services would seem a natural approach to serving poor and fragile elderly persons who live in subsidized housing, because clustered living makes cost-effective in-home care possible. However, mobilizing and coordinating services to realize this potential has generally proven difficult (Golant, 2003). In this article we describe Just for Us, one community's approach to providing integrated, financially sustainable care to

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medically fragile, low-income adults in independent, clustered housing.

Methods

Program Development

In 1999, results from a 10-year study by Duke University's Center for the Study of Aging and Human Development (Burchett, Fillenbaum, & Service, 1999) indicated that large numbers of elderly individuals in Durham were living alone. The majority had chronic diseases; limitations in activities of daily living (ADLs) and instrumental ADLs (IADLs) were widespread; and reliance on prescription medications was high. At the same time, the North Carolina Aging Services Plan showed that between 1997 and 2020, Durham County's projected growth rate for seniors was 61.9% (Division of Aging, 1999). In 1990, the Area Agency on Aging estimated that the poverty level among Durham residents over the age of 60 years was 21.6%.

In 1998, the Duke University Health System had leased the only other general hospital in Durham, thus assuming greater responsibility for the health of county residents. In November 1999, Duke's Division of Community Health, through support from The Fullerton Foundation, convened its community partners to consider how to improve the health of frail low-income seniors in Durham (other activities of this coalition are described in Michener, Champagne, Yaggy, Yaggy, & Krause, 2005). This coalition, which included Durham's federally funded community health center, the county public health agency, social and mental health agencies, the city housing authority, and others, had a history of successful collaboration. Over the next year, the coalition examined the needs of Durham's low-income seniors and the ability of public and private agencies to meet those needs.

The coalition found limited coordination among helping agencies and large holes in support services for seniors. Providers faced bureaucratic hurdles in enrolling low-income seniors in public programs, and no program provided overall management of poor seniors' multiple needs. City Housing Authority building managers were the sole support system for many of Durham's poorest older adults living in public and subsidized housing.

The coalition reviewed the existing interventions that addressed the needs of low-income seniors. Of particular interest was research demonstrating the prevalence of unmet need for mental health services among elderly public housing residents (Black, Rabins, German, McGuire, & Roca, 1997), and the efficacy of outreach nurses to screen and treat residents (Rabins et al., 2000). Unfortunately, such programming required an extension of Medicare's home-care benefit to be financially viable, and that was not feasible. Coalition members also investigated creating a Program for All-Inclusive Care for the Elderly (PACE model), but the required financial reserves and risk arrangements negated that possibility. However, in designing Just for Us, the coalition applied the PACE concept of care delivered by an interdisciplinary team as well as the recognition of Black and colleagues of the importance of mental health and the efficacy of in-home care. In the process, the coalition reinvented the home visit.

Just for Us Model

Just for Us launched in September 2002 with its first full-time provider. It is a voluntary, fee-for-service care model rather than a health plan. The program organizes multiple agencies under one administrative umbrella to provide innovative, in-home care to poor seniors and disabled adults living independently in clustered housing. Because of Medicare-reimbursement policies, only those who have an "access impediment," that is, are unable to get to a primary care provider, are eligible. Care goals include increasing access to care, managing and improving chronic illnesses, and establishing financial sustainability. The Just for Us model is a system of in-home care by an interagency interdisciplinary team, and it is an innovative administrative structure that coordinates and leverages existing resources.

Care Delivery Model

Overview.—Our discussion of the care delivery model is based on elements of Wagner's chronic care model (Wagner et al., 2001).

Just for Us uses available public reimbursement to deliver three core services in enrollees' homes: primary care, mental health, and case management. The care team includes Duke primary care providers credentialed through the local federally qualified community-health center (Lincoln Community Health Center, or LCHC), social workers from the county Department of Social Services (DSS), a geriatric psychiatrist and licensed clinical social worker from the area mental health center, and a part-time doctor of pharmacy. The LCHC serves as the base practice, providing laboratory and radiology services, a repository for the base medical chart, discounted medications, and evening and weekend coverage. Program offices are located in public–subsidized housing sites served by Just for Us, in donated space. The model includes a practice team with clearly defined roles, a focus on disease management, and a clinical information system that links acute care providers and Just for Us.

Services and Practice Team.—The delivery team is led by a medical director who meets weekly with all team members (social workers, the doctor of pharmacy, the nurse practitioner or NP, and the physician assistant, or PA) to discuss patient care, including medication changes, social issues, support services, chronic-disease management, and post-hospital care. The medical director works closely with the NP and PA to ensure the use of evidence-based care guidelines and to identify complex patients (usually those with dementia, substance abuse, or behavioral issues) who need to be visited by the physician. The director, NP, and PA audit

patient charts monthly by using an evidence-based quality-assurance approach, and they address deviations in care. On average, the medical director visits between one and four patients a week (1–2 hr of direct care); she has visited about 20% of the patients. The medical director coordinates hospital admission, and, with Just for Us social workers, hospital discharge to ensure that the support services needed in the first 2 weeks after discharge are provided. A part-time nutritionist, occupational therapist, and phlebotomist complete the team.

The majority of Just for Us in-home primary care is delivered by the NP or PA. On the first medical visit, the NP or PA completes a comprehensive physical assessment (usual current procedural terminology code, 99343), with particular attention to the management of chronic illnesses. Because the fragility and complexity of patients demand a high level of attention, the NP or PA schedules return visits at 5- to 6-week intervals (usual current procedural terminology codes 99348 and 99349). Each follow-up visit includes a complete review of medications, patient symptoms, and health status, focusing on chronic-disease management (including the determination of disease progression or treatment success); assessment of vital signs; and a multisystem physical exam. The NP or PA sets individual goals, discusses self-management supports, and adjusts medical regimes and medication. The NP or PA schedules acute visits as needed.

Enrollment and care management are provided by DSS social workers contracted through the county. Social workers enroll new patients and assist with Medicaid applications. There are self-referrals as well as referrals from local agencies and physicians. Social workers enroll all patients as LCHC patients, obtain demographic or insurance information, and ascertain social needs and potential eligibility for Medicaid, food stamps, Meals on Wheels, and other services. If the patient has a primary care provider other than the LCHC, Just for Us contacts the provider to determine his or her preferences for being kept informed of the patient's medical condition and medication changes.

After patients are enrolled, social workers provide ongoing case management, arranging and coordinating nonmedical services and advocating for patients. Services include protective services (i.e., when abuse is identified), in-home assistance, post-hospitalization follow-up, and assistance in obtaining durable medical equipment. Approximately one third of the patients receive intensive care management; however, all residents with social service needs identified by the clinical staff receive some case management. The social workers provide a pivotal service with the resident's family members, contacting the family if the resident's condition deteriorates or the resident needs institutional placement.

Mental health care is provided by the area mental health center, which originally assigned a licensed clinical social worker and geriatric psychiatrist to Just for Us. Following the mental health center's transition to managed care, one of their contracted providers will serve Just for Us patients. Previously, 12 to 20 clients were receiving mental health services at any given time.

Information System.—Just for Us clinicians need a comprehensive information system to communicate with other providers about the conditions and medication regimens of patients. Visit notes are kept electronically by using the Duke browser Web-based medical records system. Clinicians carry laptops when they visit residents. Each morning, the clinicians download recent notes and lab and visit information for the patients they will see that day; they transfer the day's patient notes and LCHC billing sheets at day's end. Electronic records are available to all clinicians in Just for Us, in the Duke University Health System, and in the LCHC. Because the LCHC uses a paper-based system, medical notes are printed and carried to Lincoln weekly for inclusion in the permanent chart.

To facilitate coordination of care between Just for Us and the hospital emergency department, the program developed a computer program to identify Just for Us patients who arrive at the emergency department or are admitted to either of the two Durham hospitals. The system identifies program patients and enables hospital staff to e-mail Just for Us staff. Because the computer interface misses certain insurance types and uninsured patients, Just for Us patients carry plastic yellow cards on their key chains that alert emergency medical service and hospital personnel that patient information is in the Duke system, and that Just for Us coordinates their regular care and provides care postdischarge. The rewards of the system have been immediate: hospital staff treating patients in the emergency department and inpatient units link quickly with Just for Us clinicians and receive crucial information about patients' medical conditions, medications, and social or family support. The system helps hospital staff discharge Just for Us patients home and ensure that they have needed services and food.

Administrative Structure

Governance and Management.—Just for Us is overseen by a steering committee representing all the partner agencies and Duke. The committee meets formally once or twice each year, but member interactions about the program are frequent. A Duke faculty member chairs the committee, enhances partner relationships, manages interagency contracts, and has final say on budget and personnel decisions. Key to success is Duke's ability to prepare and oversee interagency contracts, provide the leadership required to identify and confront issues, and facilitate collaboration.

Operations of Just for Us are handled by a part-time Duke administrator, two full-time office assistants, and a part-time data manager. The administrator handles day-to-day coordination and supervision of clinicians, support staff, social workers, and ancillary staff (the occupational therapist, nutritionist, and phlebotomist). In addition, he manages work flow, electronic connectivity, and daily coordination with the LCHC. The administrator and medical director establish databases for quality indicators and chronic-disease management. Finally, the administrator manages the program budget. The Just for Us office assistant schedules patient

visits, sets up electronic charts, processes billing information, assists in referrals, troubleshoots pharmacy and lab requests, and schedules the phlebotomist. The data manager gathers data on volume and productivity for review by management.

Finances.—Although the Just for Us staff members are drawn from several organizations, they operate as a single team, secured by contract. Each program office houses the NP or PA and support staff, and provides storage for supplies and records. Duke hires the physician, NP, and PA, and then contracts and credentials them with the LCHC, which reimburses Duke for clinical visits. Contracting with the LCHC for medical care is crucial: (a) Lincoln enjoys the long-term trust of low-income and African American patients in Durham; (b) many Just for Us patients initially identify themselves as Lincoln patients, although many had not been to Lincoln in years; (c) Lincoln receives reimbursement for Medicare Part B and Medicaid patients, as a federally qualified health center, at a level that covers most of the costs incurred by a clinical team making home visits; and (d) Lincoln provides low-cost pharmaceuticals.

Funding for the social workers is based on federal at-risk criteria, which allow counties to draw Medicaid dollars for each billable hour of service to Medicaid patients who qualify. Duke pays the DSS for the estimated hours during which the social workers will have no billable revenue (i.e., meetings.) Medicaid draw-down by the DSS against service hours for at-risk patients pays the difference between the social workers' pay and benefits and the Duke contribution. Thus, Durham County creates the positions; Duke adds funds not covered by direct patient services (approximately $14,000 annual salary and benefits per social worker); and the balance is drawn from the federal government by the DSS.

Just for Us is not yet breaking even, but we are making steady progress. For the program to break even, clinicians need to see nine patients per day, 225 days per year. Achieving this will require Just for Us to change from scheduling nine 45-min slots to scheduling eleven 40-min slots, and to gradually increase enrollment to 360 individuals (and, to optimize efficiency, 500).

Program Enrollees and Results

Just for Us serves residents of 10 public or subsidized housing complexes for low-income elderly and adult disabled persons in Durham: 4 buildings are senior public housing sites and 6 are subsidized private apartment buildings that house elderly and disabled residents. As of June 2004, one third (281) of the population of individuals in the buildings were active Just for Us enrollees. Participation is greater in buildings that have been in the program longer. There has been more time to publicize the program in these residences, and having Just for Us offices in two of these buildings increases awareness of the program. Further, the original buildings have a larger percentage of residents who meet the eligibility criterion of an access impediment. At the original program site, 90% of the individuals are enrolled.

Fifty-five percent of the 281 enrollees in June 2004 had annual incomes below the Medicaid-eligibility ceiling of $7,000. Eighty-one percent of enrollees were African American, and 63% were women. Many moved to their apartments when they were younger, and they aged in place. Their average age is 71 years. Although some have help from family, most do not. Nearly all rely on a patchwork of public and private services, including personal care assistants, Meals on Wheels (when they qualify), and public transportation (if they can use it.) Eighty-five percent have hypertension, and 45% have diabetes. Forty-four percent have been diagnosed with a mental health disorder and 27% have dementia. Medication regimens are complicated, with an average of 5 prescriptions per resident. Many qualify for nursing home placement, but, like other elderly persons, hold on to their independence.

At the program's inception, the DSS informed Just for Us that only 28% of the 316 residents in the first three buildings were enrolled in Medicaid. Building managers noted that getting residents to the DSS with the required documentation, and enduring the wait time once there, were barriers to enrollment, compounded by most residents' illiteracy. Blind, mentally ill, or demented patients faced nearly insurmountable barriers to enrollment. Low enrollment in Medicaid meant there was a pool of untapped financial resources to support services for the residents, as well as a pool of unmet needs. Services needed by residents were available; they "just" had to be made accessible. The DSS was immediately responsive to this problem because of the strong long-term partnership with the DSS director. The DSS also had a financial stake, as the county pays a portion of Medicaid patients' nursing home costs. The DSS social worker helped residents of the first four buildings gather their Medicaid documentation. DSS eligibility workers then "swept" the buildings, taking Medicaid applications. What had been an obstacle to program implementation—lack of coverage—became an opportunity, as Medicaid enrollment jumped to over 90%, according to DSS.

Results

The program's first concern is that residents receive quality care. Changes that Just for Us are making in clients' health care are already reflected in a substantial shift in the allocation of expenditures for patients covered by Medicaid. Table 1 illustrates this point with data on Medicaid expenditures for Medicaid patients enrolled in both Just for Us and Medicaid over a 2-year period from state fiscal year 2002–2003 to fiscal year 2003–2004; the table includes those expenditure categories that have shown substantial change.

Cost increases for pharmacy, outpatient visits, home health, and enrollment in the Community Alternatives Program for the Disabled reflect the program's intensive efforts to manage chronic disease and secure services for Just for Us patients to help them maintain

independence. Costs for emergency department use and inpatient care have dropped substantially, an indication that patients' health has improved. The program will continue to track these expenditures. During the next year, program impact on the Just for Us population will be further assessed through changes in clinical indicators of nutritional status, improvement in fall rates and mobility (based on the patient intake questionnaire and a follow-up survey), and an independent expert assessment of medication appropriateness.

The program's second concern is that, using evidence-based guidelines, chronic illnesses are appropriately managed. Disease management is continually assessed, using standard (e.g., Health Plan Employer Data and Information Set) indicators of care quality and disease control. The sentinel diseases for evaluation purposes are diabetes and hypertension, and a broad range of clinical and process indicators for these diseases are being collected. Preliminary trend data indicate that quality indicators have improved to impressive levels. As of June 2004, 97% of patients with hypertension had had their blood pressure taken in the prior year, and 79% of those had their blood pressure under control (<140/90). Seventy-six percent of the patients with diabetes had had their HgA1c taken in the year prior, and 84% of those were under control (<9.5). African American and White patients with these diagnoses were equally likely to be under control.

Table 1. Selected Medicaid Expenditures for Patients Continuously Enrolled in Both Just for Us and Medicaid From Fiscal Year 2002–2003 to Fiscal Year 2003–2004

Category	Fiscal Year ($)		Difference ($)	%
	2002–2003	2003–2004		
Ambulance	1,919.43	$974.82	−944.61	−49
Emergency department	32,242.40	18,912.69	−13,329.71	−41
Inpatient hospital	77,341.95	24,896.83	−52,445.12	−68
Outpatient hospital (general)	39,432.21	29,953.62	−9,478.59	−24
CAP-DA	7,757.84	107,616.67	+99,858.83	+1287
Prescribed drugs	274,488	342,755.60	+68,267.08	+25
Home health	23,520.34	35,797.63	+12,277.29	+52
Total	456,702.17	560,907.86	+104,205.69	+23

Notes: CAP-DA = Community Alternatives Program for Disabled Adults. For the table, N = 103. Table data are taken from Medicaid Claims Data, North Carolina Department of Health and Human Services.

Discussion: Supports and Challenges

Program Support

The easiest part of creating Just for Us was finding support from the people to be served. The initial presentation of the idea to the residents was interrupted within minutes by shouts of thanks. Durham providers and service agencies also welcomed the program. Two aspects of Just for Us distinguish it from other approaches to elder care and seem particularly important in explaining provider and client buy-in. First, the model is flexible—clients are not required to participate in an entire package of services and clients do not have to leave their homes. Second, the program enhances the existing capacity of service agencies, creating an incentive to participate.

Coordinating the Just for Us Team

One of the more daunting aspects of a collaborative enterprise like Just for Us is that staff must respond to both the program and their parent agencies. Working hours, vacation times, agency-specific reporting and training requirements, and daily accountability can be nagging problems when staff report to two organizations. Differences in the norms of partner organizations cause ripples in daily operations; the definition of *at risk*, for example, is different for DSS staff and medical center clinicians.

Parent agencies also must be mindful that administrative changes made without consideration for their impact on a program like Just for Us can create crises. The Duke administrator facilitates the smooth operation of the program by keeping all team members and their respective agencies focused on program goals.

The academic health center has been ideally suited to the role of lead agency in this collaborative endeavor because of the information systems, data support, and administrative and clinical resources it has been able to provide. However, a community agency with the resources to front-end this kind of service and willing to take the risk also could play this role.

Unresolved Challenges

Just for Us provides coordinated care within a fragmented health care delivery and financing environment. We have realized our goals, but only by establishing very specific arrangements. For example, contracting with the area mental health agency allowed Just for Us to offer mental health services through the sole source for Medicaid reimbursement in the county.

However, other realities limit our ability to realize the Just for Us concept fully. For example, intensive case-management services are currently available only to those receiving services through the Older Americans Act or a Medicaid-waiver program. In the course of a year, only 100 of the 281 Just for Us enrollees qualify for this case management; those who do not must receive more limited case management.

Similarly, although the program emphasizes primary care and preventive care, neither is adequately financed. Both Medicaid and Medicare use difficulties with ADLs such as bathing and toileting as their measures of need for home- and community-based services. However, deficiencies in performing IADLs, such as maintaining finances or shopping, are key reasons why frail elderly individuals are unable to remain independent. Just for Us is addressing deficiencies in IADLs through the inclusion of a part-time nutritionist and occupational therapist. These services are grant funded, because

neither Medicaid nor Medicare will reimburse them outside an acute episode or renal failure. This part of the program therefore is not self-sustaining.

The financial viability of Just for Us depends on some core elements: an electronic information system for scheduling and medical charts, minimal support staff, use of less costly NPs or PAs, and clustered housing sites to save travel time. If one element is missing, it increases the probability of lost revenue or higher costs and an inevitable deficit. Nevertheless, communities may find this model attractive and, with local modifications, feasible for providing care to their most vulnerable elderly individuals.

Conclusions

Programs to improve health care for low-income, frail seniors face significant challenges, particularly in achieving financial viability and interagency service coordination. Just for Us represents a unique, replicable model that appears poised to survive without external subsidy. However, the scope of the program is constrained by public reimbursement policies that do not reward assistance with IADLs that sustain independent living. The evaluation of this program may inform public policy by demonstrating the feasibility of maintaining the independence of a population largely eligible for institutionalization.

Despite such hurdles, Just for Us is offering quality care, enriched by the contributions of multiple partners. The program may be not only a new model for service delivery, but also a way to bring organizations together to help one of the more difficult patient populations. If the Just for Us model continues to be effective, incentives should be put in place to encourage similar programs to be instituted anywhere that academic health centers, community health centers, DSS agencies, and congregate housing are located, to make the nonsystem of care for our frail elderly persons a real health care system.

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