I. ESSAY

Hospital Case Management: Bridging Acute And Long-Term Care
by Jon B. Christianson, Louise H. Warrick, F. Ellen Netting, Frank G. Williams, William Read, and John Murphy

Since the early 1980s, policymakers and analysts have urged hospitals to be more active in managing the care of their patients beyond the hospital walls. In particular, hospitals have been criticized for failing to address the postdischarge needs of elderly patients with chronic health problems. An influential essay in The New England Journal of Medicine observed that “most of these institutions have no comprehensive geriatric program geared to the long-term medical, rehabilitative, and social needs that are linked to acute illness. To provide quality care, hospitals must make a commitment to long-term care for the chronically ill elderly patient. It is becoming apparent that no one else can.” As part of a strategy for addressing this perceived shortcoming, the authors argued, “Unlike other providers, hospitals could offer comprehensive case management of patients, from home care to acute care, thus ensuring continuity of services.” Under this approach, hospital-based case managers would identify clients, assess their needs, develop care plans, coordinate service delivery, and monitor results. Since many of these activities would take place after the patient left the hospital, hospital-based case management would be a considerable extension of hospitals’ typical discharge planning activities.

In part, it was expected that the costs of hospital-based case management programs would be covered through user fees. If the hospital also offered long-term care services, hospital-based case management could generate additional revenues through increased use of these services. If it facilitated the earlier discharge of Medicare patients and reduced Medi-
care readmissions and the retroactive denial of payments, case management could improve hospital profit margins. It could also increase hospital profits if it attracted new patients. Therefore, hospital-based case management was seen as a program with the potential to improve continuity of care while generating financial benefits for hospitals, as part of an overall hospital strategy to provide both acute and long-term care.

The theoretical attractiveness of hospital-based case management, as espoused by its supporters, was reinforced by the success of a few highly visible existing programs. One result was the commitment on the part of two foundations to test the concept on a broader scale. In 1983, The Robert Wood Johnson Foundation provided funding to twenty-four hospitals under its Program for Hospital Initiatives in Long-Term Care; ten of these hospitals incorporated community-oriented case management services in their initiatives. In 1985, the Flinn Foundation built on the Robert Wood Johnson (RWJ) initiative by launching a demonstration program, which specifically funded hospital-based case management efforts in six community hospitals. These demonstrations provided a unique opportunity to assess the strengths and weaknesses of hospital-based case management as a “bridge” between acute and long-term care.

In this essay, we summarize findings of the Flinn Foundation demonstration and contrast them with evaluation results of the RWJ initiative. We also propose foundation roles in funding future bridging efforts.

The Hospital-Based Coordinated Care Program

The Flinn Foundation’s Hospital-Based Coordinated Care (HBCC) demonstration was funded through grants to four Arizona and two New Mexico private, not-for-profit hospitals. The demonstration began in 1986 for the Arizona hospitals and in 1987 for the New Mexico hospitals, and ended 31 March 1990 for all participants. Hospitals were selected for the demonstration using a request-for-proposal process, with preference given to hospitals that had existing long-term care service delivery capabilities and had shown a commitment to the provision of services to elderly populations. The intent was to add hospital-based case management to organizational environments that were likely to nurture and support it. Program planners hoped that hospital-based case management would improve patients’ access to postacute care services that would enhance functioning and independence. Case managers were to coordinate posthospital services with community-based long-term care providers and the personal physicians of elderly patients. Through their efforts, continuity of care would be assured. The purposeful (rather than random) selection process for demonstration sites enhanced the likelihood that
these outcomes would be achieved. Less-than-satisfactory outcomes, from an organizational or client perspective, would certainly raise questions about the viability of the model in the average community hospital.

The participating hospitals ranged in size from 113 to 477 beds. Five were located in metropolitan areas, with the sixth serving a rural community. All five urban hospitals were part of multihospital systems. Each owned, or was affiliated with, a skilled nursing facility and a home health agency. Four of the five urban facilities offered rehabilitation services. In 1986, occupancy rates for acute care beds in all demonstration hospitals ranged from 47 to 78 percent.\textsuperscript{4}

During their first funded year, the Arizona hospitals engaged in a variety of planning activities, including the development, testing, and refinement of a common multidimensional client assessment instrument, the development of a training manual, and the selection of a computer software program for use in entering and updating client-level data. These data were later transferred to a central database for the evaluation of the demonstration. Comparison data on the clients of publicly funded, community-based case management programs in the hospitals’ service areas were assembled from data tapes and client records maintained by the states of Arizona and New Mexico. Cost data were collected for each project for its last complete operational year. In addition, two rounds of interviews with project staff, community long-term care providers, referral sources, and representatives of public programs were conducted six months after the projects began their operations and again thirty-two months after the projects started. They covered a broad range of issues relating to project implementation, operations, and financing and formed the basis for many of our findings.

We have addressed different aspects of the experience of the demonstration sites in detail elsewhere.\textsuperscript{5} Our purpose here is to synthesize demonstration research findings related to key policy questions. To do this economically, we have no doubt oversimplified some issues and given too little attention to others. Consequently, the discussion should be viewed as generally representative of the experience of all participating programs, while not necessarily reflecting the experience of any one program exactly.

**Characteristics of clients.** One intent of hospital-based case management is to make a contribution of value to the existing continuum of long-term care services. Whether this was accomplished in the demonstration depends in part on the nature of the individuals who received case management. In its request for proposals, the Flinn Foundation suggested that the programs focus their efforts on serving “at-risk” elderly patients discharged from their hospitals. In developing eligibility criteria,
the programs focused on four general dimensions believed to influence the likelihood that a patient would be rehospitalized: age; availability and quality of personal support; functional impairments and expected level of unmet need; and financing available to purchase in-home services. At the beginning of the demonstration, three programs planned to restrict their caseloads to patients discharged from their institutions, while three planned to seek referrals from other sources as well.

Over the course of the demonstration, all of the programs together served approximately 2,350 clients; 52 percent were hospital referrals, while the remainder were referrals from community agencies and health professionals. The large proportion of nonhospital referrals was the result of directed outreach efforts instituted by some programs, for reasons discussed below. Clearly, it represented a departure from the original concepts underlying the demonstration. Of the hospital-originated referrals, 11 percent were from physicians, compared with 20 percent of nonhospital referrals. The largest percentage of physician referrals occurred at a hospital where a physician geriatrician supervised long-term care programs and a nurse case management program was already functioning at the time the demonstration began.

The average age of all clients, irrespective of referral source, was seventy-nine years. Overall, 45 percent of clients lived alone, and 33 percent had no informal caregiver. Hospital-originated clients were slightly younger, more likely to identify an informal caregiver, and more likely to have help with personal care and household tasks. Two-thirds of clients were female, 82 percent were white non-Hispanic, 38 percent were married, and 89 percent reported their legal status as independent, with significantly more hospital-originated clients classified as legally independent. The clients served by the programs were relatively poor, with an average income of about $800 per month. Thus, the programs had limited potential to collect user fees for the services they provided.

Data were collected at entry on clients’ ability to perform seven activities of daily living (ADLs) (mobility, grooming, bathing, dressing, using the toilet, transferring from bed to chair, and eating) and eight instrumental activities of daily living (IADLs) (housekeeping, laundry, shopping, meal preparation, taking medicine, transportation, telephoning, and managing finances). Overall, as rated by case managers using a four-point scale ranging from independent to dependent, the average ADL score was 1.6, indicating less than minimal assistance required. The reported level of IADL impairment was 2.5, slightly more than minimal assistance required. Thirty-eight percent of clients reported that they were in poor health, with hospital-originated clients more likely to report that they were in poor health. Seventy-three percent of clients received
some help from an informal caregiver in the two weeks before they entered case management.

There were some differences between the characteristics of the average program client and the characteristics of the clients of publicly funded, community-based case management programs located in the same areas as the hospitals. However, these differences were not dramatic, at least with respect to measures for which comparable data were available, nor was there any consistent pattern of differences across sites. This is not surprising, since about half of hospital clients were recruited from the community using eligibility criteria similar to those for public programs.

The relationship between the hospital-based case management programs and the public programs varied by demonstration site. At different points in the demonstration, three of the hospital programs successfully contracted to provide case management services to those eligible for public programs. In effect, they operated parallel case management efforts for public and private clients. At other times and sites, the hospital-based programs provided case management to clients until they could qualify for public programs or make their way to the top of public program waiting lists. In some cases, the hospital case managers continued to serve clients after they were enrolled in public programs, coordinating their efforts with those of public program case managers. At one site, however, the hospital-based program specifically excluded individuals who could qualify for Title XX assistance. Overall, the hospital-based case management programs provided more intensive case management than was available in public programs. Typically, they supplemented, rather than duplicated, public case management activities.

Quality of case management. While quality of case management was not systematically measured in the evaluation, there is evidence that the case management provided by the programs met or exceeded professional standards and community norms. The core case management functions that were expected to be present at each hospital program included comprehensive assessment and reassessment to determine individual clients’ problems, resources, and service needs; a care planning process to specify and arrange for the types and amounts of care to be provided to clients; and ongoing case management to assure that services were provided as planned and that modifications occurred as necessary. With the exception of the use of a common assessment instrument, the demonstration did not require that these activities be standardized.

Three projects chose to use both social workers and nurses as case managers; two others used social workers for case management (with a geriatric nurse practitioner as a consultant); and one used only nurse case managers. All of the programs believed that access to clinical nursing
skills was essential for case management; in the three programs with both nurse and social work case managers, the nurses usually served the clients with more acute medical needs, while providing consultation on other clients. Program directors typically had a case management background and were selected in part because of their clinical skills, with the expectation that this would assure that high-quality care would be provided.

At almost all demonstration sites, the quality of the case management services provided by program case managers was viewed very favorably by community long-term care professionals. Program case managers were accepted as knowledgeable peers who provided a valuable resource to their clients. The availability of nursing input into case management was rated a particularly strong feature of the programs. Program staff were active participants in the networks of long-term care service providers in their areas, serving on committees and task forces and offering educational programs for elderly community residents and their caregivers. Thus, the available evidence suggests that the programs were successful from a client and community perspective: they delivered case management services of acceptable quality to elderly individuals who met conventional eligibility criteria relating to need.

Integration into the hospital. In contrast to their acceptance by community long-term care providers, the case management programs encountered a number of serious obstacles to integration into their own hospitals. Because of the varied nature of these obstacles, no single explanation can fully reflect the experience of all the programs. However, several themes emerged in the evaluation that are useful in understanding the complexity of the issue.

One of these themes relates to the relationships between the programs and senior hospital administrators. Although the hospitals were chosen to participate in the demonstration because of their existing long-term care services and self-professed commitment to the development of their long-term care capabilities, top administrators often lacked a strategy for integrating long-term care with acute care service delivery in their organizations. This may have resulted from administrative turnover in the participating hospitals. Particularly in hospitals that were part of larger corporate structures, an identifiable administrative “champion” of long-term care was present at the time the demonstration began. In almost all cases, this individual soon left, was shifted to other responsibilities, or was terminated as part of corporate restructuring. The restructuring itself was usually a response to financial problems that led hospitals to refocus their energies on their “core” business of delivering acute inpatient care. As a result of these changes, case management program directors typically found themselves reporting to administrators who did
not have a hand in the conception of their programs and were not professionally invested in their success. While expected to “prove themselves” within the period of foundation funding, the program directors received relatively little administrative guidance or oversight.

As a consequence, with a great deal of latitude to implement their programs and grant funds to subsidize operations, the program directors focused their initial efforts on developing effective, high-quality case management services. The positive reinforcement that they received from clients and community long-term care networks provided programs with early and tangible evidence of success, although this evidence was not easily observable or quantifiable to other units within the hospital or to hospital administrators. In fact, internal conflicts with hospital social workers, discharge planners, and home health agency staff emerged during the implementation period and persisted throughout the demonstration. These conflicts were typically over “ownership” of the patient in the hospital. Hospital social workers and discharge planners were often unwilling, or did not feel they had sufficient time, to incorporate case managers into the planning activities surrounding patients’ discharge. To some degree, this reflected a lack of understanding on the part of discharge planners and social workers of the objectives of the case management programs, even though these individuals were involved in program planning and implementation to various degrees at each hospital. Ongoing efforts by the programs to achieve better integration with social work and discharge planning departments met with mixed success at most sites.

Without strong administrative support, and facing difficult relationships with existing hospital units that were potential sources of in-hospital referrals, the programs usually agreed to delay case management activities until after the patient was discharged from the hospital. This made it impossible for the case managers to facilitate earlier discharges of Medicare patients, even though in the early stages of programmatic development hospital administrators frequently identified this as a highly valued potential program outcome.

Because internal conflicts reduced the number of in-hospital referrals to case managers, the programs turned to nonhospital referral sources to achieve their target caseloads. While this increased the value of the programs as community resources, it also weakened their linkage to the hospitals’ central mission of delivering acute care inpatient services. This linkage was further weakened, at least symbolically, by the geographic location of the case management programs, which usually was not in the hospital with the social work, utilization review, quality assurance, or discharge planning departments. Instead, at four of the sites, the program was located in rented space or a temporary structure not physically
connected to the main hospital building.

Some of these difficulties might have been overcome if physicians affiliated with the hospitals had formed strong interest groups in support of the programs. Individual physicians at each site were strong supporters of hospital-based case management and generated significant numbers of referrals. However, most physicians on the medical staffs of the participating hospitals had limited contact with program case managers and were not frequent users of, nor effective advocates for, the programs.

As the end of the demonstration approached, hospital administrators increased their scrutiny of the case management programs to decide if the hospitals would continue them without grant support and, if so, in what form. Some top hospital administrators expressed surprise, at this point, to learn that the projects were not working more closely with hospital discharge planners and utilization review programs and were not focusing primarily on serving clients discharged from their hospitals. Hospitals’ tight financial climate made it difficult for administrators to extend the programs based solely on the quality of their services or their acceptance in the community. Furthermore, no powerful advocates for the programs emerged from the medical or administrative staffs at most of the hospitals. Thus, it is not surprising that these administrators responded by scaling back their case management programs, merging them with other hospital units, or terminating them. At the end of the demonstration, two projects were terminated, two were integrated into the parent hospital’s utilization review/quality assurance unit, and one was merged with an existing nurse case management project. Only one continued as a separate program within the organization.

**Financing hospital-based case management.** Data on costs were collected for the last complete fiscal year of each program’s operations. The costs incurred by the programs during this period are most likely to reflect the costs of an ongoing hospital case management unit. The average annual program operating costs were approximately $200,000 and ranged from $150,000 to $280,000. Approximately 95 percent of these costs represented direct or indirect hospital expenditures, with the remaining 5 percent reflecting the estimated value of donated volunteer time. Of the hospital expenditures, 88 percent were directly associated with program operations and consisted largely of salaries and fringe benefits. The remainder were support costs, including rent or depreciation, the value of accounting and administrative time, and equipment. Although the hospitals operated their case management programs within a common demonstration framework, there was clearly a considerable range in their reported costs, reflecting variation in the ways that they were organized and staffed, as well as in the number of clients they served. The actual
scale of the programs at any point in time, as measured by number of clients, is difficult to estimate accurately since many programs served both demonstration clients and other clients under contractual arrangements.

One explanation offered by hospital administrators for not continuing programs after grant funding ended was the inability of case management to “pay for itself” in an environment of tightly constrained hospital revenues. Of the variety of ways in which case management can benefit hospitals financially, two are clearly the most amenable to measurement: direct revenues generated through case management activities, and avoided personnel costs (through reduced staffing of other hospital units). Case management could also generate indirect revenues through increased hospital admissions or use of hospital long-term care resources. The programs could also benefit hospitals through avoided medical costs if, for example, Medicare clients were discharged from the hospital earlier than would otherwise have been possible or nonreimbursable readmissions were reduced. Since the financial benefits associated with indirect revenues produced by the programs, or avoided medical costs, are difficult to measure with precision, these factors are more likely to enter into administrative decision making when the difference between direct revenues and operating costs is relatively small. Then, hospital administrators may be willing to assume that the “unmeasured financial benefits” of case management are sufficient to justify continuation of the program.

In practice, the decisions made to discontinue or merge the programs at the end of the demonstration were based almost exclusively on data relating to direct revenues generated by the programs, and even these data were limited. Little or no reliable data were available concerning indirect revenues or costs avoided. However, because of the large proportion of program clients originating from outside of the hospital, and the limited number of clients served by some programs, even very optimistic assumptions about indirect benefits and avoided costs would not have yielded estimates of financial benefits sufficient to cover operating deficits. The single program that was continued intact approached financial self-sufficiency largely because it secured a major contract to provide case management services to public program beneficiaries. Three of the programs instituted fees for case management during the latter stages of the demonstration, but this generated only small amounts of revenue. In most cases, the programs showed little promise of covering more than a fraction of their operating costs through direct revenues.

Summary. To be judged successful, hospital-based case management programs must demonstrate that they can provide case management services that conform to, or exceed, professional norms and benefit the individuals receiving these services. They must also complement existing
hospital services while generating sufficient direct and indirect revenues to justify their ongoing operations. The evaluation of the Flinn Foundation demonstration provides support for the premise that hospitals can provide case management services of acceptable quality to frail elderly clients, while enhancing the continuum of long-term care services in their communities. However, as described above, the case management programs in the demonstration were confronted with a variety of problems that made it difficult, if not impossible, for them to be integrated into their hospitals and achieve financial self-sufficiency.

Of course, the generalizability of this conclusion, as with any demonstration, must be judged in the context of possible “demonstration effects.” By involving case managers in the development of a formal, structured assessment instrument for use in the demonstration, and providing support and technical assistance for case management, the HBCC demonstration helped to create an environment in which clinical skills were highly valued. At the same time, project directors were left to rely primarily on their own institutions for assistance with management and financial issues. In a nondemonstration environment, without the “cushion” provided by grant funding and the technical support provided by foundation staff and consultants, hospital administrators and program directors would have had to devote resources and attention to these latter issues from the inception of their programs. Instead, grant funding permitted hospital administrators to operate their programs on a scale, and with a degree of independence, that they might not have considered in a nondemonstration setting.

**Comparison Of Findings**

We believe that the critical issues uncovered by the demonstration—lack of management attention and understanding, conflict with other hospital units, and an inability to generate stable and significant direct revenues from case management activities—would be present to some degree in other hospitals as well. The evaluation results of the Robert Wood Johnson Foundation Program for Hospital Initiatives in Long Term Care support this conclusion.

The RWJ initiative required a case management component at all of its twenty-four hospital sites, but each hospital was permitted to implement its own model of case management. Some of these models focused on relatively short-term management of patients discharged from the hospital, while others established case management programs with a longer-term community orientation. Most of the sites were large, metropolitan medical centers, often with university affiliations. In contrast,
hospitals in the Flinn Foundation HBCC program were smaller community hospitals. Also, the HBCC sites focused solely on a long-term, intensive model of case management. Unlike the RWJ initiative, the HBCC program required that a common assessment tool and accompanying computer program for data entry be used by all sites. Finally, the Flinn evaluation collected data on the costs of program operations, while similar data were not available for the RWJ initiative.\(^6\)

Despite these differences in program and evaluation design, the evaluation findings were similar in many respects. For instance, Margaret MacAdam and colleagues reported that “communications between discharge planners and project case management staff were...problematic at many projects.... [M]ost discharge planners had a limited understanding of project-provided case management,” and “hospital medical staff or community physicians did not understand the purpose of case management or its value in linking patients to needed community-based non-medical services.”\(^7\) At the end of the initiative, eleven of the projects expected to rely on hospital discretionary funds for over half of their budgets.\(^8\) Only three projects implemented fee-for-service case management during the course of the initiative, and none of these was able to generate fee income sufficient to cover the cost of services. Many RWJ projects reported reductions in staffing, as well as expansions in service areas and eligibility criteria in the postgrant period, in an effort to attract more clients. The evaluators summarized the participating hospitals’ view of case management as follows:

> Although most hospitals seemed to view case management as a valuable, relatively low-cost addition to an ever-widening range of hospital services for elderly people, a rather substantial group of hospitals, particularly those that implemented projects of the community care coordination model, found that case management, at least in the form developed during the demonstration, was not a service they wished to continue.\(^9\)

---

**Role Of Grantmakers**

The findings of the Flinn Foundation demonstration and, to some extent, the RWJ initiative cast doubt on the feasibility of successfully transplanting to the hospital the typical community-based case management model, with its emphasis on long-term, resource-intensive service coordination for frail elderly individuals; The viability of this model certainly appears questionable, given the current financial pressures on hospitals, entrenched hospital organizational structures, the acute care orientation of most hospital administrators, and the absence of widespread third-party reimbursement for case management. While some
hospitals will find the administrative support and financial resources necessary to offer this alternative as part of their continuum of long-term care services, most community hospitals will not.\textsuperscript{10} If foundations wish to continue funding alternative approaches to bridging acute and long-term care through hospital-based programs, our experience suggests that they focus on more medically oriented models that begin case management prior to the patient’s discharge from the hospital, provide short-term support of discharged patients in the community, and facilitate the transition of the patient to community services. However, for even this more limited model to be worthy of support, several program design issues must be addressed. Innovative approaches need to be developed for securing the cooperation of discharge planners and social workers, mobilizing physicians’ involvement and support, and generating reimbursement for case management services. Without specific attention to these issues, hospital-based case management is unlikely to succeed in most hospitals, even with foundation support.

\textit{Funding for this research was provided by the Flinn Foundation in Phoenix, Arizona. We are grateful for the cooperation of the hospitals participating in the demonstration and the staffs of their case management programs.}

\textbf{NOTES}

7. Ibid., 741.
8. Ibid., 742.
9. Ibid., 743.
10. White and Simmons, “Case Management in Hospitals.”