constant or decreased slightly in 1988 despite continued foreclosure activity.

Although final 1988 figures will not be available until April, preliminary totals indicate that the insurance industry has foreclosed on 800 farm properties during 1988. The number is down significantly from the 1,500 in 1987 and 1,600 in 1986. Insurance companies held 3,000 troubled farm mortgages at the end of 1987, compared with the 6,000 held in the middle of 1986, another vast improvement. If the drought of 1988 turns around this year, foreclosures will continue to fall over the next few years. Continued sales of forfeited farmland combined with fewer foreclosures will gradually reduce agricultural holdings in the insurance industry. If present conditions hold, insurance holdings could be as low as one million acres within the next five years.

Looking Back

The build-up of agricultural lands among farm lenders resembles a similar development during the 1920s and 1930s, but on a smaller scale. Fifty years ago insurance companies, as the leading group of farm mortgage lenders, were the most visible holders of repossessed farmland. Farm acreage acquired by insurance companies during the depression greatly exceeded current holdings. During the 1930s insurance companies foreclosed on approximately 40 percent of their farm mortgages. In the 1980s only about 15 percent have been foreclosed. Depression foreclosures peaked in 1938, with the insurance industry holding $738 million in farm real estate. Based on the national average value of farmland in 1938 ($30 per acre), this translates into more than 24 million acres held that year by insurance companies. Twenty-four million acres, however, underestimates the total acreage that passed through insurance companies' ownership during the 1920s and 1930s. The total was more likely around 35 million acres when sales, occurring during the peak years, are added in. This compares to only 5.2 million acres held by insurance companies at the end of 1987. It took the industry almost ten years to sell off all of the farmland inventory they had built up during the depression.

The current situation differs from the depression years in several other ways. First, life insurance companies hold a much smaller share of outstanding farm mortgage debt now than fifty years ago. Second, farm mortgages as a percent of insurance companies' assets, were about 10 percent fifty years ago compared to 2 percent today. Finally, the most significant difference is the extent of the farm credit crisis. Fifty years ago all farms, as well as the rest of the national economy, were facing depressed conditions. During the recent farm credit crisis, about one-third of all farmers were seriously financially stressed.

While the amount of acreage acquired by insurance companies and other lenders during the 1980s has not matched the depression levels, the eventual redistribution of farmland will probably be the same. Little of the foreclosed farmland was reclaimed by its original owners during the years of the depression. Current research at CURA is continuing to track the activity of insurance companies in acquiring and selling farmlands, and is also gathering data on who purchases repossessed farmland. Results of this research will help answer questions about whether or not farmland will become more concentrated in the hands of a few owners as a result of the foreclosure activity of lenders during the 1980s.

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Home Care in Three Twin Cities Agencies

by Sandra R. Edwardson and Patricia Nardone

Until recently, home health care services have been a poorly funded and underdeveloped alternative to institutional care. Public policy decisions since 1980, however, reflect a major change in expectations and support for home care. Beginning with the 1980 Omnibus Reconciliation Act, a series of legislative changes have relaxed the restrictions on Medicare and Medicaid. In an effort to contain rising health costs, reimbursement for home care services has been increased so that home care may be substituted for care in hospitals and nursing homes.

In addition, since October 1983, with the implementation of the prospective payment system for hospital care, there have been dramatic declines in the length of hospital stays and continued increases in the use of home care services. The Minnesota Department of Health has registered 442 home health agencies (200 of which are certified by Medicare). An unknown number of providers are not registered. In 1987 legislation was passed that will eventually license home care agencies.

These changes suggest that policy makers believe home care can and should be substituted for hospital and nursing home services whenever possible. At the same time policy makers fear that loosening the purse strings may lead to spiraling inflation in yet another health care service. Therefore, significant reimbursement restrictions persist and competition is being encouraged in an attempt to control total health care costs.

Types of Home Care

Two distinct forms of home care have emerged—skilled and chronic care. Skilled home care is usually short-term and likely to follow discharge from the hospital after a short stay there. It helps people remain at home and regain their strength and ability to perform the activities of daily living such as bathing, toileting, and moving about. Chronic care, on the other hand, is a long term matter and people receiving it may actually decline in their ability to take care of their basic needs as their disease progresses. Appropriate home care tries to leave them satisfied with their situation and to prevent unnecessary decline. Obviously, the costs of chronic care will be greater and may even exceed the reimbursement limits of most third party payers.

Services in the home are usually offered by nurses, home health aides, and homemakers. Nursing services include monitoring signs and symptoms, giving intravenous medications, dressing wounds, teaching patients how to care for themselves, teaching safety measures, and supervising home health aides. The home health aides will bathe and groom patients, assist them with walking, clean or change catheters, clean wounds, feed patients, and change beds, while homemakers complete other household chores. Services may also be offered by physical therapists, occupational therapists, speech therapists, or social workers.

Financial Limits for Home Care

Most major third party payers limit the nature and number of home care services they will reimburse. Medicare will pay for only a limited number of services for those with short-term rehabilitation needs. Health Maintenance Organizations (HMOs) usually require agencies to receive their authorization before services are provided and usually negotiate discounted payment rates. They also limit the number of services that will be provided. Insurance companies and Medicaid have less restrictive payment policies but also limit services.

It is widely believed that some home care agencies want to avoid chronic patients. Because of reimbursement restrictions, private home care agencies (both for-profit and nonprofit) are thought to enroll a disproportionately large number of patients requiring skilled home care while public agencies end up with the bulk of the chronic cases. There is concern that Medicare, HMO, and insurance coverage frequently expire before the needs of patients are fully met. Patients must then either pay for services themselves, forego further care, apply for financial assistance from their county, or seek services from public health nursing agencies.

To meet some of the gap in services, Minnesota has developed an alternative payment strategy for persons at risk for nursing home placement. The Alternative Care Grant Program finances some community services in lieu of nursing home placement or continued nursing home residence.

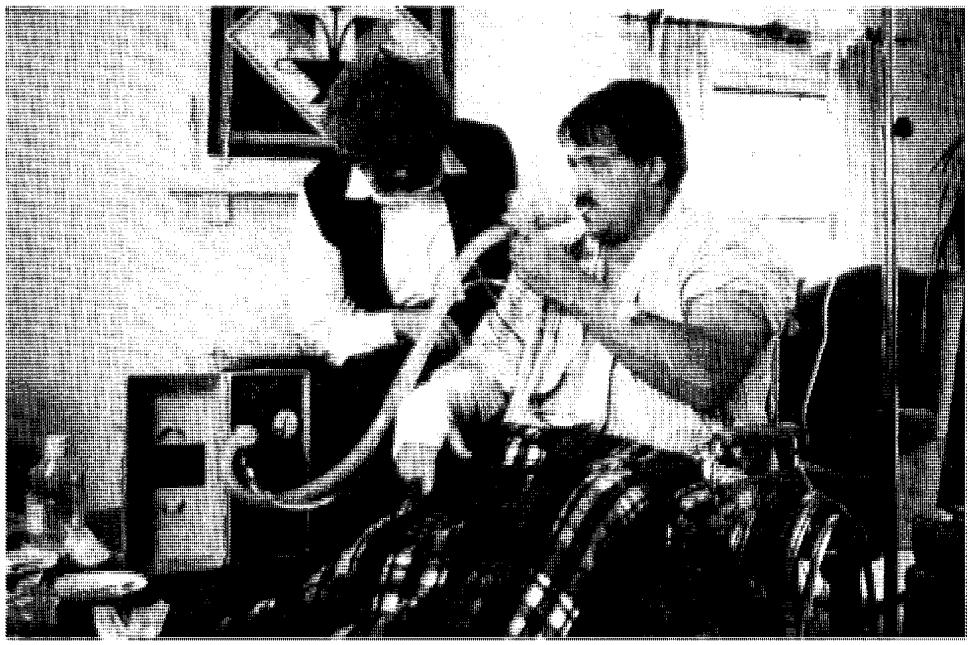
Home Care in the Twin Cities

There has been no systematic study of how Twin Cities home care agencies select their clients and how financing arrangements influence the services they provide. Do agencies differ in the clients they serve and in the services they provide? In 1987, we conducted a study designed to begin to answer these questions.

We compared three types of agencies in the Twin Cities: a nonprofit agency associated with a private hospital corporation, a public health nursing service, and an autonomous for-profit agency. These three types account for most of the home health care that is being delivered today. Because of the confidential and highly sensitive nature of the data we sought, we chose agencies where we had already developed a level of trust. A sample of patients was acquired from all patients admitted by up to ten nurse case managers at each of the three agencies. Consecutive admissions were enrolled in the study until the sample reached fifty at each site (150 subjects in all).

How the Agencies Compared

The agencies were similar in a number of ways (see Table 1). They were alike in serving an elderly population. Although clients were as young as 13, 80 percent were over 65. They were alike in that the majority of their clients lived with family or friends. They were alike in the overall medical diagnoses of their clients. Though primary diagnoses varied, the differences were not statistically significant.* Overall, heart problems, cancer, and neurologic conditions (such as multiple sclerosis and spinal cord injuries) were most common. And they were alike in the discharge disposition of their clients.



Skilled nursing services are needed when patients require help with complex procedures after discharge from the hospital.

The agencies differed, however, in a number of significant ways (see Table 2). They differed in who referred clients to them, how many clients had undergone surgery before admission, how long their clients were enrolled, the needs of their clients, the care they provided, who paid the bills, and how successful they were in recovering their charges.

The nonprofit agency received most of its referrals (76 percent) from its hospital affiliates. More than half of the clients came shortly after surgery. Most were seriously dysfunctional but needed skilled care for a relatively short period of time. The average enrollment was considerably shorter than in the other agencies. And more than with the other agencies, these patients needed assistance with complex procedures. They needed monitoring and they needed surgical wound care. Nurses were used for treatment twice as often as home health aides and homemakers.

Most of these patients were covered by HMOs or Medicare. None paid their own bills and none were covered under the Alternative Care Grant Program. The nonprofit agency was the second most successful in being reimbursed for its charges. Its greatest losses ($340 a case) came from its few Medicaid patients (8 percent).

The mission of this agency is to support its affiliated hospitals. This limits its ability to select patients. In some cases home care services are part of a negotiated agreement between hospital and third party payer and the agency must provide services regardless of financial risk. In other cases the agency feels compelled to accept clients with inadequate finances because of its duty to meet the needs of the hospitals. The hospital-affiliated nonprofit agency has less discretion in selecting clients than is frequently assumed.

The public health agency received clients referred from hospitals (68 percent), and from a wide variety of other sources. Less than one-third of these patients had had surgery before admission. The average length of enrollment was the longest of the three agencies (156 days). The need for skilled nursing care was relatively low. Despite this, nurses treated these patients twice as often as home health aides. The agency has a policy of not providing homemaker services (such as meal preparation, grocery shopping, and housekeeping) which may help explain the low use of home health aides and homemakers for clients with a relatively high need for services of this type.

Clients' bills were paid by the widest variety of third party payers among the agencies. One-third were paid by the Veterans Adminstration, which routinely refers most patients to public health agencies. And Medicare covered about one-fourth of the clients.

* The Chi Square test was use to determine statistical significance.

Table 1. VARIABLES ON WHICH THE AGENCIES DID NOT DIFFER

Variables	Non-Profit	Public Health	For-Profit
Age (mean years)	74.7	72.2	68.9
Living Arrangements (percents)			
Alone	42	28	46
Single with family	14	14	22
Married with family	44	52	28
With friend	0	6	4
Primary Diagnosis (percents)			
Heart and vessel diseases	34	36	20
Cancer	16	10	12
Neurologic diseases	12	14	8
Respiratory diseases	6	4	12
Fractures	2	14	2
All other diagnoses	30	22	46
Discharge Disposition (percents)			
To self-care	70	60	62
To hospital	8	10	4
To nursing home	4	10	8
To other health agencies	4	2	4
Death	10	8	6
Still enrolled at the end of six months	4	10	16

Table 2. VARIABLES ON WHICH THE AGENCIES DIFFERED SIGNIFICANTLY*

Variables	Non-Profit	Public Health	For-Profit
Source of Referral (percents)			
Hospital	76	68	38
Physician or HMO	16	4	24
Self/friend/relative	0	20	8
Nursing home	0	2	6
Other	8	6	24
Had Surgery (percents)	52	30	32
Length of Stay (mean days)	77	156	134
Need for Skilled Nursing Services (means)**	6.1	4.0	5.0
Type of Care Received During Enrollment (means)			
Nursing visits	6.8	7.1	2.8
Home health aide and homemaker visits	3.2	3.9	9.8
Payment Sources (percents)			
Medicare	48	24	8
Medicaid	8	14	6
HMO	36	10	50
Insurance	8	6	14
Veterans Administration	0	34	0
Self paid	0	8	8
Alternative Grant Care and other grant programs	0	4	14
Financial Losses ($) Per Client (mean)	94	189	46

* $p \leq .02$

** Based on the Dependency of Discharge instrument, that measures need for assistance at hospital discharge. There was no significant difference in scores on need for home health aide and homemaker services.

This agency was the least successful of the three in recovering its charges. Although there were only a few patients paying their own bills or covered under special grant programs, losses were particularly large for these patients. There is little evidence, however, to suggest that other agencies were dumping on this public agency after third party coverage had expired. Only one client was referred by another home health agency.

Large losses were also sustained for patients with insurance, HMO, and Medicare coverage. According to the director, at least a part of the problem is that patients don't know enough about their coverage. Some members of HMOs, for example, did not know that they were members and the agency learned only after the fact that it had provided service for an HMO with which it had no contract.

It is unclear, however, whether prior knowledge of ability to pay would have changed the care decisions made by the public health agency. The mission of the agency is to concentrate on high risk populations and to provide needed care without regard for ability to pay. Costs that are not recovered from third parties are paid by tax dollars.* The agency refuses cases only when it lacks adequate staff or when the client requires services they can't provide, such as extended home care, homemaker services, and physical therapy.

The for-profit agency received referrals from more sources than either of the other agencies. Clients most often came from hospitals and from HMOs or physicians. A third had undergone surgery before admission.

Patients enrolled for a relatively long time. Treatment was provided by nurses considerably less often than in the other agencies, while home health aides were used about three times as often. Home health aide and homemaker services included many homemaking activites, such as meal preparation, grocery shopping, and housekeeping. These were most often provided to Alternative Care Grant patients and least often to private insurance or HMO patients—a pattern that directly reflects the payment policies of those third parties.

HMOs paid the bills most often in this agency. At the time of the study, the agency was consciously limiting the number of Medicare patients it accepted, but it served all of the Alternative Care Grant recipients in the sample. The agency was able to recover all of the charges for Alternative Care Grant clients and all but $20 per case on the insurance and HMO clients.

Overall, the for-profit agency was the most successful of the three agencies in obtaining reimbursement. It recovered all charges on its fully paying clients and lost a modest $74 on each Medicaid client. While $361 per case was lost for its few Medicare clients, the director believes this was because they were less experienced in responding to Medicare reimbursement policies.

Why Do Agencies Differ?

In an attempt to understand why agencies with similar clientele provided such different services, a number of possible explanations were explored. These include possible differences in living arrangements, medical diagnosis, and third party payer.

* This agency was not authorized to provide Alternative Care Grant services at the time of the study.

Living arrangements. One would expect that patients who live alone would require more services overall than those who do not. This was indeed the case. Both the public and for-profit agencies provided more home health aide and homemaker visits and the nonprofit agency provided more nursing visits to those who lived alone.

Medical diagnosis. Although the distribution of diagnoses did not differ significantly among the three agencies, there could have been differences in the use of nursing, home health aide, and homemaker services within the diagnostic categories. But this was not the case. The for-profit agency consistently provided more home health aides and fewer nurses than the other agencies, regardless of diagnosis. It was within a few dollars of breaking even on all charges, while the public health agency incurred the largest loss on all diagnoses except diabetes, where the nonprofit agency had the highest loss.

We concluded that: 1) clients with similar diagnoses may be more or less seriously ill, and the more seriously ill require more care, or 2) the services provided by agencies are determined by factors other than diagnosis, or 3) both of these factors are at work.

Third party payer. Another possible explanation for differences in the services provided among these agencies is differences in who pays the bills. Table 3 shows the distribution of services and reimbursements by primary payers for all 150 patients. While there appears to be a difference in the number of nursing visits made to clients with different types of coverage, this difference was not statistically significant. But there were significant differences in the length of enrollment, number of home health aide visits, and losses on each case. Patients covered by the Alternative Care Grant program were enrolled the longest and received the most home health aide visits. When considered together, agencies were able to recover all of their charges from the Veterans' Adminstration (VA) and from grant programs but suffered their greatest losses with patients under HMO and Medicaid coverage.

This analysis suggests one of two conclusions: either services are delivered according to the incentives provided by payers without regard to the actual needs of clients, or payers are responsible for segments of the home care population with significantly different needs. The fact that services for Alternative Care Grant clients are most likely to differ from the others suggests that they are being used as intended—to meet the needs of those at high risk for nursing home placement. The patterns that emerge for clients covered by insurance and Medicare are quite similar, showing moderate length of stay and a relative preference for nursing over other types of services. HMO patients are enrolled for the shortest time while Alternative Care Grant, Medicaid, self-paying, and VA patients are enrolled for longest periods.

Home health aides can assist patients in learning new household skills.

Table 3. HOME CARE SERVICES AND REIMBURSEMENTS BY PRIMARY PAYER

	Client Pays	Insurance	HMO	Medicare	Medicaid	Vet. Admin.	ACG*/ Other Grants
Number of Clients	8	14	48	40	14	17	9
Length of Enrollment (days)	155	123	93	107	159	148	207
Number of Nursing Visits per Client	4.8	8.7	4.3	7.1	6.9	3.5	3.0
Number of Home Health Aide and Homemaker Visits per Client	7.4	2.6	4.2	3.4	8.4	0	32.4
Total Loss ($) per Client	52	50	104	44	103	0	0

* Alternative Care Grants

In Conclusion

In recent years funding for home care has shifted dramatically in response to changes in health reimbursement policies and structure. It was hoped that the home care arena would offer not only a cost effective alternative to escalating health costs, but would also deliver quality, client-centered services. Although the nonprofit, public health, and for-profit agencies examined in this study were similar in the age and diagnosis of their clients, they differed in their sources of patients, the services they provided, and their reimbursement success. All three offered a mix of nursing, home health aide, and homemaking services.

The nonprofit agency enrolled clients for a short time, giving them many more nursing services than home health aide and homemaker services, and it was moderately successful in recovering its charges. Although many of its patients had chronic diseases, they received care for an acute condition or for an acute exacerbation of their chronic disease.

The public health agency enrolled clients for long periods, gave them twice as many nursing visits as home health aide visits, and had poor success in recovering

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