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COORDINATION OF COMMUNITY LONG TERM CARE: AN EVALUATION OF CASE MANAGEMENT FOR THE FRAIL ELDERLY

Michigan State University PH.D. 1987

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COORDINATION OF COMMUNITY LONG TERM CARE: AN EVALUATION OF CASE MANAGEMENT FOR THE FRAIL ELDERLY

By

Joseph M. Bornstein

A DISSERTATION

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ABSTRACT

COORDINATION OF COMMUNITY LONG TERM CARE:
AN EVALUATION OF CASE MANAGEMENT FOR THE FRAIL EDLERLY

By

Joseph M. Bornstein

The efficacy and humanity of providing long term care to the frail elderly in their own homes has long been a central policy issue for health planners. The recognition that the present long term care system is comprised of a myriad of decentralized agencies has spurred the development of Case Management programs designed to coordinate and bring order to community long term care. Attempts made by both the Federal and State governments to evaluate various models of Case Management have primarily yielded equivocal results.

The study presented here involved a longitudinal experimental design in which 310 frail elderly clients (mean age=78) were randomly assigned to either a Case Management or an Information & Referral program. The Case Management clients received an in-home assessment, care plan, brokering of services, monitoring and reassessment. The Information & Referral clients received advice over the telephone about locally available services. Both treatments were delivered in five separate communities in a mid-western state.

Clients were determined eligible if they were over 60 and were at risk of institutionalization. Random assignment took place after the baseline interview. A six month follow up interview was also conducted. Dependent variables included, number and type of formal and informal

services, use of institutional acute and chronic care health care services, physical and emotional health, nutrition, ADL's, unmet needs, social support, and mortality.

The null hypotheses for the above variables were tested with repeated measures M/ANOVA using a two group (condition) by five site (location) design. The null hypotheses were not rejected. The two conditions were not differentiated on any variable. However, there were various significant time effects that indicated that the life situations of the clients in the sample were deteriorating. At the time of the follow up, 35% of the sample were either dead or in nursing homes.

The results of this study suggest that future evaluations of Case Management programs should augment the usual interview approach with more frequent observational measurement. The results also suggest that changes are needed at the State and Federal level in order to reform the long term care system.

To my wife Linda,

whose support and love

helped make this dissertation possible

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This study could never have been realized without the support of the Michigan Office of Services to the Aging and the various Area Agencies on Aging which cooperated with this research project. I also owe an unestimatable debt to the elderly clients who willingly gave their time and experience as participants.

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CHAPTER 1

INTRODUCTION

The effects of an aging population are being felt throughout society. Popular media has been devoting large amounts of time and space to the "aging problem". Professional journals have also focused attention on aging issues and front line service personnel are acutely aware of the growing need for age related programs. Older individuals and their families have turned to politics in order to secure resources. Their efforts have been widely successful (Callahan & Wallack, 1981).

The question of how the needs of the "old" old can be met has received considerable attention. Two major themes are most prevalent. The first issue is concerned with the provision of long term care for this population. The trend has been to test community based care models in opposition to traditional residential care approaches such as nursing homes. The second theme focuses on the allocation of responsibility for the elderly population. The discussion considers the relative responsibility of the elderly individual, their children and friends, and society for the provision of long term care. Both financial as well as hands on service contributions are considered.

This review examines the long term care needs posed by the rapidly aging population and the major approaches that have been directed at the problem. It then focuses on case management strategies as possible alternatives for coordinating services for the home bound elderly. Research and demonstration programs relevant to these strategies are

reviewed. The impact of case management programs on health, health costs, functional impairment, service utilization and the informal support of the "old" old is discussed and a research study is described that investigated the consequences of coordinating formal and informal care for the elderly who wished to remain living in the community.

Population Trends

The tremendous success of modern medicine and public health advances has changed the life cycle. Life expectancy at birth in the United States has increased 25 years since 1900 (U.S. Bureau of the Census, 1981). Today, the average person can expect to live until 74 years old. A combination of declining birth rates and increased longevity has led to an increase in the number of people over the age of 65. In 1776 one out of fifty Americans were over 65. In 1900 this improved to one out of 25. Depending on assumptions that are made predictions estimate that 11.9 to 16 percent of the population will be over 65 in the year 2000 (Palley & Otkay, 1983). This proportion is expected to approach 26 percent as the baby boom generation begins to retire around 2020.

The older population can be further sub-divided into the young-old and the old-old. This distinction is between the group 65 to 74 years and those over 75 years. The older group is the fastest growing portion of all age groups in the United States. The young-old are expected to grow 22.8 percent between 1976 and 2000 while the population between 75 and 84 is predicted to increase by 56.9 percent. The percentage over 85 years old is expected to increase by 91.1 percent. The number of women in this age group will increase by 100 percent (U.S. Congress, Senate, 1980). Due to differential life expectancies between men and women the old-old is largely made up of widows.

As the proportion of the population over 65 grows it is expected that lower birth rates will result in smaller numbers of young adults. The result will be a change in the ratio of 18-64 year olds to those over 65. "In 1930 there were 9.1 persons 65+ for every 100 persons 18-64 years of age. By 1980 there were 18.4 persons 65+ for every 100 18-64 year olds. By the year 2020, there are projected to be 26 older persons for every 100 younger adults" (Palley & Otkay, 1983, p.11).

The consequence of this shift in the ratio between the young and the old has been highlighted in the recent literature on the demise of the social security system. In long term care the concern arises regarding who will care for the aging population. Despite improvements in health and longevity the probability of acquiring a functional limitation as a result of illness increases with age (Kovar, 1977). The rate of functional impairment doubles between the 75-79 age group and the 80-84 age group. In 1978, older persons accounted for 29.4 percent of personal health care costs but, constituted only 11 percent of the population (Palley & Otkay, 1983).

The Long Term Care System

Interest in long term care has increased as the elderly population has risen. The long term care system in the United States has had to deal with an increasing number of chronically disabled elderly.

> Today, there are estimated to be between 3 and 6 million persons outside of institutions, and over 3 million family units provide major physical, personal, or financial help to their disabled elderly living outside of institutions. In addition, 20,185 nursing care institutions with 1,407,000 beds and over 2,350 home care agencies are directly involved in providing care, along with an estimated 25 percent of acute hospital care devoted to the acute episodes of illness encountered by the long term population (Morris & Youket, 1981 p. 11).

Informal Care

The largest amount of long term care is provided by the family. An estimated 70 to 80 percent of the elderly rely on family and friends for all of their personal and physical needs (Eustis, Greenberg & Patten, 1984; Morris & Youket, 1981; Palley & Otkay, 1983; and Sangl,1985).

A significant number of elderly live in a family setting. As age increases females are more likely to be in the home of a relative than with a spouse. Very often the old-old will reside with the young-old (Miller, 1981).

Even though the majority of the elderly do not live with their relatives they still maintain significant relations with them. Mahoney (1977) has documented that 75 percent of elderly parents live within a half hour drive of one child. Mahoney also found that 80 percent of the elderly respondents in one study reported having seen their children in the last two weeks. It is important to remember that the children of the old-old are often between 55 and 74 years old themselves.

Help exchanges between the elderly and their families are usually reciprocal. "The young-old often provide housing, financial aid, emotional support, child care, housework, and companionship to their children and grandchildren" (Palley & Otkay, 1983, p.21). They also provide these type of supports to their elderly parents. Eighty percent of home health care services are provided to older relatives by their family. Cantor (1975) found that 70 percent of elderly respondents who had been sick for one to two weeks indicated that they received assistance from their family. When friends who provide support are included that number rises to 85 percent.

Sussman (1977) found that 81 percent of families would take an elderly relative under appropriate circumstances. In young-old families

care is usually provided by the spouse. This is usually the female. When the old-old require support it is usually provided by their children. The caregiver role is usually assigned to daughters and daughter in laws. When children are not available then the elderly will seek out other relatives. According to Cantor (1980) there is a hierarchy of responsibility with preference for community or government aid at the bottom of the list.

While families attempt to provide care for their aging relatives there are circumstances that can make the caring task difficult if not impossible. The strain on informal caregivers of constant service has been documented (Cantor, 1975). Caring for the elderly parent is often shared with other responsibilities, including in some cases child rearing.

Formal long term care alternatives have been developed in order to meet the needs of the elderly who have no informal supports as well as to supplement family care. There is a concern that these formal services could supplant the informal supports already providing care (Zawadaski, 1983).

Formal Care

Despite the overwhelming importance of the family in the long term care of the elderly a substantial amount of long term care is still provided by the formal long term care system. The formal system consists of three levels each with its own functions. At the top there is the Systems-Management level which is responsible for planning, financing, system development, system control and evaluation. This level is usually associated with federal institutions such as Medicaid, Medicare, AoA and HCFA (Callahan, 1981).

Policies at the system level are largely responsible for the institutional bias present in the overall long term care system. Federal Medicare and Medicaid legislation led to the bias. Medicaid regulations allowed for reimbursement for nursing home care, but not for community care (Eustis, Greenberg, Patten, 1984; Lloyd & Greenspan, 1985; Palley & Otkay, 1983).

> In 1980, expenditures for nursing home care services totaled $20.7 billion. Medicaid governmental payments accounted for half of such expenditures" (Palley & Otkay, 1983, p.37).

Many of the impaired elderly who are in need of long term care have exhausted financial resources and therefore must rely on the services provided by Medicaid. Medicaid reimbursement policies favour the use of nursing homes.

The second part of the long term care system is the Operational-Management level. This level is responsible for advocacy, information systems, coordination, quality control and payment of bills (Callahan, 1981). This level is usually associated with state level institutions such as Michigan's Office Of Services To The Aging.

The lowest level of the system is called the Patient-Management level. This level is largely responsible for outreach, entry, assessment, eligibility certification, service provision, patient information and quality control (Callahan, 1981). The agencies responsible for activities at this level are usually local organizations such as Area Agencies on Aging (AAA), senior centers and poverty agencies. These organizations are responsible for the direct delivery of the long term care.

Inputs & outcomes. The three parts of the system share the same set of goals or desired outcomes that are intended to guide the direction of policies within the system. These outcomes include:

1. Maximum functional independence

    a. Rehabilitation
    b. Maintenance

2. Humane care

    a. Least restrictive environment
    b. Death with dignity

3. Prolonged longevity

4. Prevention of avoidable medical/social problems
    (Callahan, 1981 p. 222)

The inputs to this system include the characteristics of the population. As described above the long term population is made up of individuals that are considered functionally dependent. Factors such as age, sex, marital status, living arrangement, vision, hearing, communication abilities, activities of daily living (ADL), mobility, adaptive tasks, disruptive behaviour, orientation/memory impairment and disturbance of mood are all inputs into the long term care system (U.S. National Committee on Vital and Health Statistics, 1979).

It is the function of the system to address the inputs into it in a way that can yield the desired outcomes. However, problems with the current system have diminished its effectiveness (Eustis, Greenberg, & Patten, 1984; Morris & Youket, 1981; Vogel and Palmer, 1985; and Zawadaski, 1983). Some of these problems have included, persistence of unmet needs in the population, low quality levels, rapidly rising public expenditures, excessive burden on families, bias toward institutionalization, and fragmentation among services and financing (Morris & Youket, 1985).

Eustis, Greenberg, and Patten (1984) have argued that fragmentation of services is the keystone problem that contributes to the other concerns. From a system perspective the long term care system suffers

from a lack of communication. This occurs between the three levels of the system as well as within each of the levels (Callahan, 1981). The system is not able to deal effectively with the other problems because of the fragmentation of responsibilities. The proposed solution to this fragmentation has been an increased emphasis on coordination both within and between levels of the system (Morris & Youket, 1981).
The hypothesis has been that the system itself can be beneficial if it can be made to work more efficiently.

Two major approaches have been used to coordinate the different parts of the system required to provide quality care. The first and most dominant is the use of residential facilities to care for the impaired elderly. The nursing home as a total institution is able to coordinate all of the necessary functions needed to meet the needs of the long term population. This was and still is the major formal long term care modality. There are several problems associated with residential facilities. The three most outstanding are the high costs, uncertain quality of care, and strong consumer resistance (Eustis, Greenberg, & Patten, 1984; Lloyd & Greenspan, 1985; Moss & Halamandaris, 1977).

Perhaps the biggest disadvantage of relying on nursing homes to coordinate care is seen in the demographics of the long term care population. Despite the importance of nursing homes, the majority of the elderly with functional impairments reside in the community. Only 5 percent of those 65+ and 30 percent of those 85+ are in nursing homes (Palley and Otkay, 1983).

Community care. The second, newer trend has been the establishment of community based programs to care for the older person in his/her own home. This trend has been advocated because it is seen as meeting the needs of the large long term care population that resides in the

community (Zawadaski, 1983). It is also perceived as possibly providing a lower cost alternative to the nursing home (Seidl et al., 1983).

The focus on the third, Patient-Management level of the long term care system has increased along with the rising interest in community based long term care alternatives. Reform of the long term care system has been directed at the community or local level (Callahan & Wallack, 1981).

Services for the home bound, functionally impaired elderly have existed in most communities since the early part of the 20th century (Palmer, 1985). The first established home health program was developed by the Metropolitan Life Insurance Company in 1909 (Palmer, 1985). "In January 1981, there were 2908 Medicare/Medicaid-certified providers covering users" (Palmer, 1985 p.338). This does not include the many private home health agencies not eligible for reimbursement under Medicare and Medicaid. In addition to home health agencies there are also services that provide homemakers, meals, transportation, home repair, personal care and a wide variety of essential assistance (Eustis, Greenberg & Patten, 1984; Callahan & Wallack, 1981).

Despite the availability of community services there are still many elderly people who do not receive the formal help that they require. In some cases this may lead to early entry into a nursing home (Beatrice, 1981).

Anderson and Newman (1973) posited that three main determinants of health utilization can explain why some people have difficulty accessing community services. The first factor is the needs or presenting problems that the client is experiencing. These needs can include illness level, symptoms, disabilities etc.. The second determinant, predisposing factors, refers to those individual characteristics of the patient that

may affect need or service utilization, such as demographics, attitudes and beliefs. The third determinant, enabling factors, refers to those circumstances that either hinder or facilitate the access to care. For example, the ratio of health personnel and facilities to the population.

Therefore, clients with a need for community services may not receive them because of a lack of knowledge about the existence of the services (Wan & Odell, 1981), negative beliefs about "welfare" programs (Moen, 1978), lack of financial resources (Anderson & Newman, 1973), distance to available services (Scott & Roberto, 1985) and delays due to waiting lists for programs (Ward, 1984).

Another factor, fragmentation of the service delivery system at the local level, is as much a problem as it is for the entire long term care system. The trend in the United States has been for the government to financially back services delivered by decentralized private agencies (Ward, 1984).

> "In a typical community, long term care for dependent adults is available through a number of discrete service providers: acute care hospitals, skilled nursing facilities, home health agencies, day health programs, to name a few. This fragmentation produces service overlap, unnecessary duplication in administration, and discontinuity in service response, resulting in less than adequate care for the frail elderly and disabled and unnecessarily high long term care costs" (Zawadaski, 1983, p.8).

In local communities many services are run independently without any cooperation among agencies. There is no one organization that is responsible for coordinating care. This is what is meant by a lack of integrating mechanisms. The older person and their family often needs help in sorting out the myriad of services available in the community (Estes, 1979). By the time help is sought the older person may be seriously deteriorating and their informal supports strained (Shanas, 1979; Gourash, 1978). Cantor (1980) showed that the elderly prefer to rely on family and friends as long as possible before turning to formal

supports. When they finally do the task of sorting out care options is formidable (Auerbach et al., 1977).

Many service providers such as hospitals recognize the need for a mechanism to coordinate services. However, these attempts are usually parochial; limited to services that are provided by the agency doing the coordinating. There is a lack of incentives in the system to promote cooperation and coordination among agencies. There are three parties in most long term transactions: the service recipient; the service provider and the reimbursement agency. The individual will accept as much care as he/she can obtain. The provider receives more payment for more services. The reimbursement agency plays the role of policeman trying to control costs. In such a system coordination is a difficult task. There is a need for a central agency with the responsibility of bringing the various parts of the community's long term care system together for the benefit of the patient.

Case Management

In recognition of the fact that the structural fragmentation of long term care is a systems level problem, case management or case coordination was developed to provide an integrating mechanism in the community (Beatrice, 1981; Steinberg & Carter 1983). The origin of case management for the elderly in long term care was also a reaction to the outcry for better services (Palmer, 1985). In the 1970's a number of demonstration projects were funded by both Medicaid and Medicare to test the idea that the functionally impaired elderly could be maintained in their homes instead of in skilled nursing care facilities. Case management was to be a comprehensive coordinated community based system of long term care (Zawadaski, 1983).

Case management in the long term care system was seen as different from other case management activities going on in communities. The major difference was the single agency, single entry approach that was adopted for the elderly. Many organizations such as hospitals conduct case management, but their programs were usually parochial. Also most agencies doing case management were either medical or social oriented. Therefore the client was provided with narrow options. Case management, as described in the remainder of this document is targeted at coordinating both medical and social services for all of the functionally impaired elderly who live in a community and who are possibly at risk of losing their independence.

Before reviewing the demonstration research that has been conducted it was instructive to examine some conceptual views of case management. To begin let us describe the basic coordination model. There are several key components (Steinberg & Carter, 1983).

Casefinding. Case finding refers to the process of finding eligible clients from the larger population. This is usually a function of developing both formal and informal referral sources. Hospitals, physicians, families, and community agencies provide the bulk of referrals to case management.

Screening. After potential clients are recruited it is necessary to screen for eligibility. Case management is directed at serving individuals who are at risk of entry into a nursing home. Screening is used to identify individuals who meet these criteria.

Assessment. Assessment is an important component of case management. It usually relies on a combination of a standardized assessment tool with reliance on the professional judgement of the case manager. In most models the case managers are registered nurses and

social workers. Assessment "instruments typically assess functional abilities (i.e. ability to perform activities of daily living) cognitive ability, emotional and social well being, and strength of social support systems" (Kane, 1984, p.3). The assessment usually takes place in the home or in the hospital.

Care planning and arranging services. These activities are at the heart of case management. Care planning is the formulation of a specified strategy to meet the needs of the client. The objective is to coordinate a group of services so as to enable the client to remain independent and in the community. In some models the care plan is reviewed by a treatment team that includes the case managers as well as the patient's physician and other health professionals. After the care plan is finalized it is implemented by the case manager. It is their responsibility to arrange services and evaluate the quality of the services. A typical care plan might include, home delivered meals, a homemaker visit once a week, two weekly visits for personnel care such as bathing, and a daily check-in service to verify that the client is stable.

Monitoring and follow-up. These take place after the services have been installed. The case manager monitors the client's condition as well as monitoring the service package that he/she has put together. Weekly contact with the client and periodic home visits are used for monitoring.

Reassessment. The final step in case management is called reassessment. At a regular interval, usually sixty to ninety days, or whenever the patient's condition warrants, a formal reassessment is conducted to determine the client's need for case management. The service package is either readjusted or the coordination is terminated.

Austin (1983) posited that case management can be best understood as a model of resource allocation. She argued that case management as a systems level intervention has the potential to impact the entire service system bringing it into a more consolidated model. Beatrice (1981) asked the question whether rearranging the system, as case management attempts, accomplishes sufficient change. Several demonstration projects have attempted to assess the impact of the case management model on the long term system.

In the following section research pertaining to the efficacy of the case management model is reviewed. An analysis of program types as well as program outcomes is discussed.

Demonstration Projects

In response to the increasing push for more community based options for long term care patients the Health Care Financing Administration (HCFA) developed a series of model projects to evaluate the efficacy of the case management process. This initiative which began in the mid 1970s spawned fourteendemonstration projects, six which were directly evaluated and controlled by HCFA (Hill & Pinkerton, 1984; Horowitz, Brill & Dono, 1984; Blackman, Brown, & Leaner 1985; Ansak & Zawadaski 1983; Sklar & Weiss 1983; Kemper et al., 1986) and eight which were independent efforts sponsored by either HCFA or the states (Seidl, Applebaum, Austin & Mahoney, 1980; Birnbaum, Gaumer, Pratten & Burke, 1984; Eggert, Bowlyow & Nichols, 1980; Skellie, Mobley & Cohen, 1983; Quinn & Hicks, 1979; Miller, Clark, Williams & Clark, 1984; Markle, 1984; Donovan, 1984).

The main objective of all these projects was to test the hypothesis that comprehensive case management could have a positive impact on the community long term care system. The organizational structures that were

used to implement case management, the populations served, and the scope of control varied across projects but three basic assumptions were shared by all 14 models.

> 1. All projects assumed that by offering expanded case managed community long-term care services, use of traditionally covered Medicaid and Medicare covered services such as hospital care, nursing home care, and post-acute home health care could be changed. The type of changes sought may have differed but all projects assumed that reductions in costs associated with use of the traditionally covered services would more than offset costs associated with case management and the new services
>
> 2. All projects assumed the need among targeted long-term care users for paraprofessional home services meeting service needs associated with activities of daily living, and mental status disabilities. Such paraprofessional services were covered by waivers in [most] projects.
>
> 3. All projects assumed the need for case management as an administrative service that directs client movement through a series of involvements with the formal long-term care system, while integrating formal and informal service provision wherever possible. Case management, offered by all projects, included multi-dimensional functional assessment and re-assessment, care plan negotiation and periodic revision, and service arrangement and monitoring. Termination planning was offered by some projects.
> (Capitman, 1986 p. 389)

A fourth assumption that has been shared by all case management projects is that the home care services which they usually coordinate are effective. This may be a tenuous assumption since the home care literature presents an unclear picture of effectiveness (Doherty et al., 1978; Dunlop, 1980; Hedrick, 1982; Iglehart, 1978; Kane & Kane, 1980; Urban Institute, 1978). However, the argument is made by these projects that the problems associated with home care are a function of a disorganized system which case management will redress.

There are essentially three models that can categorize the fourteen demonstration projects. The first is referred to as the basic model of case management which relies on the core features of the case management process outlined above. The projects in this model helped clients to gain access to needed services and to coordinate the services of

multiple providers. These agencies had no fiscal control over expenditures and usually had limited resources to purchase services. Therefore, this model tests the premise that the major difficulties in the present long-term care system are problems of information and coordination. Demonstrations that fit this model include the basic treatment of the national Channeling project (Kemper et al., 1986), Detroit's Information Center (Donovan, 1984) and Western Michigan's case management project (Markle, 1984).

The second model includes the features of the basic case management program but expands the service coverage by establishing a means to control and purchase services for the clients. This upgraded model obtains its greater control through the use of Medicare and Medicaid waivers. These waivers, provided by the federal government, allow the projects to allocate Medicare and Medicaid funds for home care services. The case management team is responsible for the full package of community services. The assumed benefit of this upgraded model is increased access to services as well as cost containment by centralizing control of expenditures. The upgraded programs varied however, in the degree of control they had over the maximum spending level for each client. Triage I and II (Quinn & Hicks, 1979), Wisconsin Community Care (Seidl et al., 1980), New York City Home Care (Horowitz et. al., 1984), Long Term Care Project of San Diego (Hill & Pinkerton, 1984), and Project OPEN (Sklar & Weiss, 1983) all had no cost caps on the amount that they could spend on individual clients. This meant that they could broker services for clients but could not set maximum service levels on the service providers. For example, they could authorize payment for home health services but they could not set the frequency and duration

of the services. Nonetheless control of the allocation of funds did give them a certain degree of control over the service providers.

Other projects, including South Carolina Community Long Term Care (Blackman et al., 1984), Channeling's Financial Control Model (Kemper et al., 1986), ACCESS (Eggert et al., 1980), Georgia's Long Term Care (Skellie et al., 1983), New York's Nursing Home Without Walls (Birnbaum et al., 1984) and California's MSSP (Miller et al., 1984) had cost caps that both allowed and required them to restrict the maximum expenditure for any one client to between 70% and 85% of the average Medicaid or Medicare payment for the client's certified institutional level of care. In other words if a client was certified as eligible for skilled nursing home care they could receive home care services costing up to 70% to 85% of the cost of keeping them in a skilled nursing home. Therefore these projects had a great deal of control over the service package they could arrange for their clients.

A third model that was only implemented by On Lok in San Francisco (Ansak & Zawadaski, 1983) is called the Consolidated Service Model. Essentially, this version of case management is a health maintenance organization designed to provide long term care. Whereas all of the previous models have non-affiliated case management organizations brokering for services from community home health agencies, the Consolidated Service program provides all services using its own staff members. The On Lok project received a set fee for each client in return for which they contracted to provide all necessary long term care services. They still followed the basic case management model, but controlled all services by using their own personnel.

The three models differ on Kane's (1984) scope of control, gatekeeper functions, and degree of direct service dimensions. The scope

of control and the gatekeeper functions range from low control in the basic model to extremely high control in the consolidated model. Both the basic and upgraded models provide no direct services while the consolidated model provides all the direct services required by the client.

On dimensions such as the philosophy of the program toward informal caregivers (Kane, 1984), and primary mission (Austin, 1983) all of the demonstration projects agree with Callahan's (1981) ideas that case management should meet the needs of the client while promoting independence and assisting the informal social support system.

The programs vary widely on such factors as professionalization of staffing, task allocation, and the scale of the demonstrations. (Kane, 1984; Austin, 1983).

Professionalization of staffing refers to the educational level of the case management staff with a low level signifying bachelor degree in either a related or unrelated field and high levels indicating specialized graduate degrees. There were ten programs with low professionalization levels (Quinn & Hicks, 1979; Seidl et al., 1980; Horowitz et al., 1984; Blackman et al., 1984; Eggert et al., 1980; Skellie et al., 1983; Donovan, 1985; Markle, 1985; Kemper et al., 1986; Birnbaum et al., 1984) and six with high levels (Quinn & Hicks, 1979; Seidl et al., 1980; Hill & Pinkerton, 1984; Sklar & Weiss, 1983; Ansak & Zawadaski, 1983; Miller et al., 1984). The duplication in the above lists is because several programs had different units operating concurrently with varying levels of staffing.

Specific information on task allocation is only available on twelve projects. Task allocation refers to the degree to which the case management process was divided into specialized units or performed

casework style with one caseworker responsible for all facets of the process. Projects that adopted a case work style include Triage, Wisconsin, Project OPEN, On Lok, South Carolina, MSSP, Detroit's Information Center and Western Michigan's case management project. Specialized task allocation was implemented by New York City Home Care, Long Term Care of San Diego, ACCESS, and Georgia Long Term Care.

The scale of the demonstrations also varied across programs. The range included single agency projects which operated in one or two counties (Long Term Care of San Diego, On Lok, Project OPEN, Detroit's Information Center, Nursing Home Without Walls, ACCESS, Triage, and Western Michigan's case management program) to projects that covered multiple counties (Wisconsin Community Care Organization, New York City Home Care, and South Carolina Community Long Term Care) and ultimately the Channeling project that operated programs in ten states.

Research Findings

All of the demonstration projects had research components which were directed at assessing the potential impact of the case management treatment. As with most bodies of literature the level of methodological sophistication of these studies has improved over time, moving from non equivalent group comparisons (Ansak & Zawadaski, 1983) to tightly controlled randomized experiments (Kemper et al., 1986). As Table I indicates there were five quasi-experimental designs and eight randomized experiments. This table also shows that sample size ranged from 75 (Markle, 1985) to 6341 subjects (Kemper et al., 1986).

The results of these studies will now be discussed. The literature reviewed here represents the major research efforts targeted at case management which were published in journals or were available as reports. Many of the studies were only available as technical reports

Table 1

Summary of Previous Case Management Research

Project Reference	Study Design	Sample	Treatment
Ansak & Zawodski On-Lok, 1983	Quasi-experiment Matched pair	E-65 C-38 Nursing home level of care	Consolidated model
Applebaum, Seidl, & Austin Wisconsin, 1980	Experiment Random assignment of 1 person to control group for every 2 to experimental group	E-283 C-134 Medicaid eligible ADL/IADL disability	Upgraded care package
Birnbaum et al. Nursing home without walls, 1984	Quasi-experiment	E-700 C-700 ADL, nursing care requirements	Upgrade with cap
Blackman, Brown, & Leanet South Carolina, 1984	Experiment Random assignment before eligibility	E-403 C-460 Nursing home application	Upgraded care package contact client access to institutional care
Eggart et al. Access, 1980	Quasi-experiment Compared county level outcomes	N=4433 ADL's > 90 days	Upgraded package
Hill & Pinkerton San Diego, 1984	Experiment Random assignment after eligibility	E-555 C-328 ADL/IADL disability	Upgraded care package
Horowitz, Brill, & Dono New York City, 1984	Quasi-experiment Non-equivalent comparison	E-504 C-200 ADL/IADL 6-20 hours	Upgraded care package
Channeling, Kemper et al. 1986	Experiment Random assignment after eligibility 5 sites in each condition	N = 6341 ADL/IADL disability 6, 12, 18 followup	E1 = Basic CM E2 = upgraded package

(table continues)

Project Reference	Study Design	Sample	Treatment
Quinn & Hicks Triage I & II 1979	Quasi-experiment Matched	E-307 C-195 ADC+Age > 65=I High risk = II	Upgraded package
Skellie et al. Georgia, 1983	Experiment Random assignment	E-444 C-135 Certified NH eligible	Upgraded package
Sklar & Weiss 1983, Project open	Experiment Random assignment after eligibility	E-200 C-118 Needs help in personal care	Upgraded care package

and often specific means and effect sizes for significant variables were not reported. Therefore, the following review is somewhat dependent on the accuracy of the reported findings. This is not as problematic as it seems, since very few significant results were reported. It is also interesting that the quasi experimental designs found more significant outcomes than the randomized experiments.

Physical health. All fourteen of the studies looked at the affect of case management on physical functioning, specifically on activities of daily living. These activities include bathing, toileting, meal preparation and other basic functions. Functional independence on these activities was usually measured on a three or four point scale ranging from "completely able to perform activity" to "totally dependent". Two studies found significant effects in favour of the treatment condition. The On Lok treatment group reduced its functional impairment in the area of homemaking skills from a mean of 10.8 to 8.5 while the comparison group changed from 11.4 to 11.10. While this change is significant ($p<.05$) it is important to note that a large portion of the comparison group were institutionalized reducing their freedom to practice homemaking skills. The second effect was found in the Horowitz et al.(1984) New York study with treatment group subjects improving over controls ($p<.05$) on overall activities of daily living.

Given that all fourteen studies examined physical health and only two found weak effects it appears that there is little support for an impact of case management on activities of daily living.

Longevity. Longevity, calculated as the number of days the person survives past intake into the program, was significantly ($p<.05$) longer for treatment clients in the Nursing Home Without Walls project (Birnbaum et al., 1984) and in the Georgia Alternative Health Services

project (Skellie et al., 1983). In the latter study 22% of the controls versus 14% of the experimentals were deceased by one year follow-up. These differences disappeared by the 24 month assessment.

It appears that any affect on longevity is brief, which is not surprising, since case management programs are targeted more at quality of life and coordination issues. Again, only two significant effects were reported out of ten studies that examined this variable.

Life satisfaction. Three studies (Hill & Pinkerton, 1984; Horowitz et al., 1984; Kemper et al., 1986) out of fourteen found significant improvement in overall contentment or life satisfaction for case management clients. The Channeling project (Kemper et al., 1986) also found significantly ($p<.01$) increased satisfaction with life and with services for informal caregivers whose friend or relative was receiving channeling services.

These three studies suggest that case management may have an impact on life satisfaction. However, it is possible that these results represent social desirability since case management clients were in a more highly visible treatment.

Cognitive skills. Cognitive functioning as measured by the Mental Status Questionnaire (MSQ) improved for treatment groups in four out of nine studies (Hill & Pinkerton, 1984; Horowitz et al., 1984; Birnbaum et al., 1984; Quinn & Hicks, 1979). The MSQ measures memory, asking such questions as who is the current president of the United States, and also cognitive abilities like counting backwards from 100. Improvement in most cases indicates better memory. These results suggest that case management may have an impact on cognitive functioning.

Use of medical services. Only one study out of fourteen reported lower use of acute medical services (Horowitz et al., 1984) and it was a

non equivalent groups design. The case management group used an average of 6.3 less in patient days than the controls ($p<.05$). A more typical result was that reported by the Channeling project;

> Use of hospitals was considerable--45 to 46 percent of the control group had a hospital admission during the first six months after enrollment. During the first year of channeling the control group in the basic sites spent 19.8 days in the hospital and 26.8 days in the financial sites. Hospital use by the treatment group was virtually the same (Kemper et al., 1986 p.13).

Nursing home use. An important dependent measures for all of the studies was the rate of nursing home use. Only the South Carolina project found significant results (Blackman et al., 1984). The averaged monthly use of medicaid reimbursed nursing home days was 7.53 for the treatment group as compared to 10.35 for the controls ($P<.05$).

The findings of the South Carolina project are particularly important in that they highlight the need to select subjects on their potential risk of institutionalization. As Capitman (1986) suggests, "The lack of program impacts on nursing home use reimbursed by Medicare or Medicaid in projects other than South Carolina may be attributable to the low rates of nursing home use" (p.395). In other words if projects have been unable to select subjects actually at risk of going into a nursing home they are not going to impact institutionalization. The unique selection process of the South Carolina project was that they had a state mandated pre-admission screening for individuals that wanted to enter a nursing home . Therefore, they were able to identify clients that had a serious intent to enter a nursing home. The purpose of their case management program was to divert these people into the community. The absence of significant findings in all of the other studies may be because they selected from a population of elderly who were not initially at risk of nursing home admission.

Formal home service use. One study (Hill & Pinkerton, 1984) out of six presenting data on formal service utilization, reports reducing the number of Medicare reimbursed home health visits for case management clients. The averaged monthly use of home health visits for experimentals was .30 and for controls was 1.48 visits ($p<.01$). The importance of this finding is that the case management treatment was able to control the use of services and therefore costs.

A more typical finding was that presented for the Channeling project (Kemper et al., 1986). Formal service visits per week were significantly higher in the treatment groups as compared to the controls (4.95 visits/week vs 2.75 visits/week $p<.01$). However, ten to twenty percent of the controls reported receiving case management from outside agencies and sixty to sixty-nine percent received in-home care visits in the week six months after randomization. In summary, the results on formal service use suggest that although case management may have an impact on service use the direction of that impact is uncertain. Further, the availability of similar services to the controls may be confounding the outcomes.

Unmet needs. The Channeling project found that the number of unmet needs mentioned by respondents at the end of the first year was 0.8 for the treatment groups and 1.0 for the controls ($p<.01$). This difference is the equivalent to removing an unmet need for one out five sample members (Kemper et al., 1986). It is important to note that this small difference may have been significant partially because this study had a sample size of 6,341 subjects. No other studies reported data on unmet needs.

Summary. The majority of the fourteen studies reviewed measured all of the above mentioned dependent measures. Out of eight categories

of variables a total of sixteen significant effects were found out of a possible total of 82. Several methodological issues were discussed that may have obfuscated the true effects of the case management treatment. In summary, the results of the demonstration programs are suggestive that more experimental research is needed to clarify the potential effects of this treatment.

An Experimental Evaluation of Case Management

Despite the equivocal findings reported on the effectiveness of case management there has been a marked increase in the number of coordination programs across the country (Steinberg & Carter, 1983). The objective of bringing some control and integration to the long term care system at the local level remains a prime concern (Austin, 1983). However, it is apparent from the literature that little is known about how case management works or about which models are most appropriate for different environments (Beatrice, 1981; Steinberg & Carter, 1983).

One of the major problems with the literature is the overabundance of methodologically weak designs. It is difficult to attribute any causal properties to the outcomes of these studies because of the research designs. It is equally difficult to understand the many non-significant findings.

Although eight of the studies reviewed involved randomization some had potential problems associated with high differential attrition (Kemper, 1986; Markle, 1985; Blackman, 1984), and use of differentially skilled interviewers for treatment and control groups (Kemper, 1986; Markle, 1985; Seidl et al., 1980). A problem encountered by many of the projects was that high attrition reduced statistical power below sensitive levels.

The quasi-experimental designs had the common problem of non-equivalent comparison groups. The most striking of example of this is found in the On Lok project (Yordi & Waldman, 1985) where 22.9% of the treatment group were caucasian versus 67.1% of the control group. The other participants were primarily asian.Therefore they had a treatment condition that was mostly asianand a control that was mostly white. To further complicate matters 92.9% of the treatment participants were living in the community compared to only 55.7% of the controls. The remaining subjects were institutionalized.

In a similar manner to the On Lok project the other quasi designs took their comparison groups from other counties or in the case of the New York projects from other regions of the city. Project ACCESS (Eggart et al., 1980) used county level aggregate statistics as its unit of analysis comparing the treatment county to several surrounding counties. Data at the individual subject level were not analyzed.

In 1983 the Michigan State Office of Services To The Aging made a decision to implement the case management concept for the state's long term care population. Aware of the weaknesses of the prior studies the office commissioned two single site evaluation studies to assess the efficacy of case management within Michigan. The two studies (Markle, 1985; Donovan, 1985), which were reviewed in the previous section, were randomized experiments. Unfortunately, the small sample sizes became even smaller due to rampant attrition. The final samples were too small to analyze.

In order to redress the sample size problems a larger multi-site project was contracted to the Department of Psychology at Michigan State University. This research, presented in the following chapters, attempted to address many of the design flaws associated with the case

management literature. The study maintained close supervision of the integrity of the treatment process, as well as the randomization and data collection. Special efforts to reduce attrition due to lost cases and refusals were taken.

Major outcome measures included physical health, psychosocial health status, use of acute medical care and home care services, unmet needs, mortality, and formal and informal social supports. The distinction between the latter was examined in more detail than has been the case in previous studies.

The need for more research on case management at this time goes beyond the need to test the model within a sound design or a specific state. A major change in the structure of the health care funding system has occurred since the major case management studies were conducted. The introduction of Diagnostic Rate Groups (DRGs) has altered the behaviour of acute care facilities and other medical establishments toward the long term care patient. There is increasing pressure on hospitals and physicians to discharge patients into the community before they are medically ready. It is common practice for hospital discharge planners to receive short notice of perhaps one to two hours prior to the discharge of an elderly patient. Under such circumstances most discharge planners can do little to prepare a service package for a patient who will require extensive home care. The need for community based case management programs in such an environment seems great. As states continue to implement the basic case management models on an ever increasing basis more efforts to evaluate and understand this program are needed.

In order to assess the impact of the Michigan case management programs a randomized field experiment was conducted across five sites

comparing a basic case management treatment model to a control group receiving information & referral services.

The basic model of case management assumes that coordination and advocacy activities on behalf of the client will in the short term result in increased formal health and social services in the home. These services will in turn ultimately lead to increased physical functioning, lower use of acute medical services, lower nursing home admissions, lower mortality, less unmet needs and possible shifts in the amount of informal support available to the client.

The following null hypotheses were tested in this study using multivariate techniques with a minimum significance level of $p<.05$. The first set of hypotheses address the short term process objectives of case management, i.e. the impact of the treatment on formal home services.

1. The average number of formal services, as measured by the baseline and follow-up interviews, will not be different for the recipients of the case management condition as compared to those in the control group.
2. The average number of informal services, as measured by the baseline and follow-up interviews, will not be different for the recipients of the case management condition as compared to those in the control group.

The remaining hypotheses address the outcomes associated with case management.

3. The physical health of the case management recipients will not be different, as measured by the health rating scale, nutrition scale and activities of daily living scale, from the recipients of the control condition.

4. The average number of acute medical services per month, i.e. in-patient hospital days, emergency room visits, and physician office visits, as measured at the six month follow-up interview, will not be different in the case management group as compared to the control condition.
5. The psychosocial health status of the case management recipients will not be different, as measured by the life satisfaction scale, mood/depression scale and the decision making scale, than the recipients of the control condition.
6. The proportion of emotional social support constituted by formal providers, as measured by the ratio of formal to informal support, will not be different in the case management condition as compared to the control group.
7. The type of social support provided by informal caregivers will not be different in each condition. Specifically, the proportions of total practical and emotional social support, provided by informal caregivers, will demonstrate the same account of change between the baseline and follow-up interviews for recipients of the case management treatment as for control participants.
8. The average number of nursing home admissions between baseline and follow-up, as reported at follow-up, will not be different in the control group as compared to the treatment condition.
9. The average number of deaths between the baseline and six month interviews will not be different in the case management condition as compared to the control group.
10. The average number of unmet needs, as measured by the unmet needs scale, will not be different in the case management condition as compared to the control group.

CHAPTER II

METHODS

Sample Selection

In 1982 the Michigan Office of Services to the Aging set as a priority the evaluation of long term care options for the state's frail elderly population. After two single site studies were completed (Donovan, 1984; Markle, 1984) the state, in May of 1985, commissioned a five site evaluation comparing case management services to standard information and referral services. This evaluation study has been operating for 16 months. This study included the first 310 subjects across the project's five sites. The five sites included four agencies in urban areas in Michigan's lower peninsula, and one in the rural Upper Peninsula.

Attrition

Of these, a small percentage of the treatment group 4.8% (N=15) refused their initial assessment by the nurse and social worker team and were therefore not included in the sample. These cases were replaced using the random assignment procedures discussed later. These individuals typically refused the assessment because they didn't really want any assistance from an agency. Usually someone besides the client had pushed for the case management project to get involved in the case. After clients received the full explanation of the services during the baseline interview they realized that they didn't want to be involved.

The form of attrition that was not controllable by usual research methods was subject mortality. In this study mortality is considered a dependent measure. At the six month follow-up 19.7% (N= 61) of the sample were deceased.

Of the remaining 234 subjects 5.6% (N=13) refused to participate in the six month interview. Unfortunately, almost all of these subjects were in the control group. The most common reason for refusals was the client's frustration in getting their needs met by the information and referral service. There was also some anger directed at the research project for not "helping" the client get better service.

It would be convenient if the type of individual who refused to participate in the treatment group was similar to those who declined in the control condition, however, the reasons for refusing to participate were different between the two groups. It is probable that the control group refusals were sicker than those in the treatment group. Fortunately, the small numbers involved should minimize any threat from this attrition.

The sample for this study consisted of the 221 eligible clients who completed a six month follow-up interview by October 1986.

Eligibility

The population of interest was those older individuals who because of either health or functional disabilities were at risk of having to enter a long-term care facility (Capitman, 1981). These individuals were identified by contacts with traditional referral sources that sought alternative care arrangements for them. Referrals originating from hospital discharge planners, visiting nurse services, physicians, other home care agencies accounted for 27.7% of all intake. In addition, nursing homes accounted for 4.5%, friends, neighbours, family and the

elderly individuals themselves for 29.1% and community social service agencies for 37.8%.

Eligibility for the program was completely determined by the degree of risk of institutionalization demonstrated by the prospective client. A pre-screening instrument was used to assess risk levels. This instrument was originally developed for an earlier case management project (Markle, 1984) conducted in southwest Michigan. The instrument (Appendix 5) consists of sixteen questions that pertain to factors that have been shown to consistently relate to movement toward placement in a nursing home (Phillips, Baxter & Stephens, 1981). These include functional disabilities, lack of informal supports, mental confusion, and intentions of entering a nursing home. An eligible client could have various combinations of impairments that put him/her into the high risk category. The assignment of risk points was primarily dependent on the clinical judgement of the nurse or social worker conducting the prescreening. A score of twenty or more risk points was necessary to be eligible for the case management program. Clients also had to be over 60 years old and live in the case management program's catchment area. All eligible clients were asked to participate in the research.

Stratification

Previous research with this population in Michigan (Donovan, 1984; Markle, 1984) suggested that potential sex and order effects needed to be controlled for through stratification procedures. Stratification on sex was used to ensure that a proportional number of males and females were assigned to both conditions. A comparison of the proportion of males to females in the two conditions indicated that the stratification resulted in a similar number of males and females in both groups (Table 2). Overall the sample consisted of 31.4% males and 68.6% females.

Table 2

Demographics

Demographic	Condition: Treatment	Condition: Control
Age	$\bar{x}$=78 SD=8.23	$\bar{x}$=78 SD=8.20
Sex X =1.94, df=1, p=.16	M = 27% F = 73%	M = 36.7% F = 63.3%
Marital X =2.34, df=5, p=.80	Married = 36.1 Widowed = 52.5 Divorced = 5.7 Separated = 1.6 Never Mar = 4.1	Married = 31.3 Widowed = 53.5 Divorced = 7.1 Separated = 1.0 Never mar = 6.1
Did you have children X =.66, df=1, p=.42	Yes = 69.7 No = 30.3	Yes = 75.5 No = 24.5
Number of children	$\bar{x}$=2.9 SD=2.10	$\bar{x}$=2.6 SD=1.77
Education X =2.78, df=4, p=.60	Elementary = 48.8 High school = 30.6 2 Yr college = 7.4 4 Yr univ = 3.3 Other = 9.9	Elementary =58.3 High school =27.1 2 Yr college = 6.3 4 Yr Univ = 3.1 Other = 5.2
Do you live with someone? X =3.02, df=2, p=.22	Yes = 41.0% No = 58.2%	Yes = 52.5% No = 46.5
Income X = 8.61, df=10 p=.57	0-$499 = 0.9 500-999 = 0.9 1000-1999 = 0.0 2000-2999 = 3.4 3000-3999 = 6.0 4000-4999 =12.8 5000-6999 =27.4 7000-9999 =17.9 10000-14999=14.5 15000-19999= 9.4 20000-29999= 6.0 30000-39999= 0.0 40000 + = 0.8	0-$499 = 0.0 500-999 = 1.1 1000-1999 = 0.0 2000-2999 = 4.3 3000-3999 = 6.5 4000-4999 =16.1 5000-6999 =25.8 7000-9999 =17.2 10000-14999=21.5 15000-19999= 4.3 20000-29999= 1.1 30000-39999= 0.0 40000 + = 2.2
Number of formal services T=.25, df=2.2, p=.80	$\bar{x}$=1.19 SD=1.21	$\bar{x}$=1.15 SD=1.11

(table continues)

Demographic	Condition	
	Treatment	Control
Number of informal services T=.31. df=2.3, p=.76	$\bar{x}$=1.43 SD=1.23	$\bar{x}$=1.38 SD=1.30
Referral source X =.36, df=3, p=.95	Hospital =26.2% Community org=39.3% Nursing home = 4.9% Family/friend=29.5%	Hospital =29.6% Comm. org =37.8% Nursing home= 4.1% Fam./friend =28.6%
Respondent X =1.44, df=2, p=.49	Client = 51.6% Proxy = 20.5% Combo = 27.9%	Client = 55.1% Proxy = 14.3% Combo = 30.6%

Order effects were also seen as a potential problem. National (Applebaum, Note1) as well as local studies (Donovan, 1984; Markle, 1984) found that intake of samples could range from three months to one year. Intake in the current study took approximately 4 months. In order to to control for possible order effects blocks of six were used when randomly assigning subjects to condition.

Assignment to condition

Stratification and randomization were performed using standard methods. The results of these procedures were recorded on a master list and on cards that were numbered and placed in corresponding numbered envelopes. Each interviewer had two sets of envelopes, one for males and one for females. Order was controlled within each set of envelopes.

As indicated above clients were prescreened for eligibility over the telephone. After clients were determined eligible they were given a brief explanation of the two services that were available and of the research aspect of the program. If they were initially interested the project coordinator arranged for a research interviewer to visit the individuals domicile. The project coordinator supervised daily distribution of the randomized envelopes by reference to a master distribution list. The interviewer would take the appropriate envelope with them to the interview appointment.

After greeting the subject the interviewer explained the research in more detail and obtained informed consent (see Appendix 1). Once consent was obtained the interview was conducted. When the interview was completed assignment to condition was initiated. The interviewer opened the envelope, read the enclosed card and informed the client about the service he/she would be receiving. The assignment envelope was then returned to the research staff for audit purposes. Two errors occurred

out of 221 assignments. These errors involved the accidental selection of envelopes out of sequence. Since there was no prior knowledge of the envelopes' contents these assignments were still considered to be random.

An examination of the major demographic variables indicatedthat the random assignment was successful. There were no significant differences between the two manipulated conditions. This data is presented in Table 2 along with the appropriate tests of significance.

Design

Two methods of arranging community services for elderly people at risk of institutionalization were compared in this study (care management and information & referral). The research design was a two group (condition) by five site (location) randomized experiment with repeated measures. Subjects were randomly assigned to one of the two conditions within each of the five sites. Therefore, the two group condition is actually replicated in each of the five sites. The number of subjects assigned to each of the ten cells is presented in Table 3. Measurement included a baseline assessment conducted prior to random assignment and a six month follow-up interview.

Power

Power tables indicate that the present design has sufficient power to detect even a small difference (standard deviation=.10) with greater than 75% assurance at the $p<.05$ level (Cohen, 1969). If the effect size was any larger than a .10 standard deviation the power quickly exceeds 99.5%.

Table 3

Design*

Site	Condition	
	Case Management	Information and Referral
Upper Peninsula	21	16
Lansing	27	24
Grand Rapids	17	13
Flint	15	11
Southfield	42	35

*Number of subjects per cell.

Independent Variables

Site

The five agencies in which this project was implemented vary in terms of their urban or rural locations, their access to home care resources, the quality of their information & referral services, their ability to generate additional funding for their programs, their host organizations and their staffing patterns. In order to control for these differences "site" was included in the design statement. These differences are highlighted in the following discussion of the treatment and control conditions. The delivery of the actual case management treatment was consistent across sites.

There were two methods of arranging community services for the elderly examined in this study. Case management was considered the experimental treatment and was not normally available in the community. Information and referral is the standard treatment in the community and for this study is considered the control group.

Case Management

The definition of case management as operationalized in this study is the provision of a comprehensive, functional assessment of persons aged 60 and older at "high risk" of institutionalization, with a complementary role of brokering existing community-based health and social services, and bolstering informal support systems wherever feasible. The primary goal of this treatment is to avoid costly and premature or inappropriate institutionalization of the high risk elderly and provide sufficient supports to maintain maximum independent functioning in the home environment.

Case management functions by providing a single access point for the target population into the community based service programs on an

ongoing basis, and serves as a gatekeeper to appropriate services and consistently monitors services that it brokers. The case management services are delivered by a team consisting of a nurse and a social worker. There are five major steps involved in the case coordination process that define the treatment. These are discussed in the order in which they are normally conducted.

Assessment. The assessment is a key feature of this treatment. The quality of the assessment to a large extent determines the quality of the services that are arranged for the client. If the assessment is inadequate, then the case management team will probably fail to identify areas of unmet needs.

The assessment was usually carried out in the clients home by the nurse and the social worker. These professionals complement each other in their respective attention to the physical and social needs of the individual. In addition to their clinical skills the case managers use a standard comprehensive assessment instrument. The latter provides a uniform source of data for reporting purposes and helps to standardize the assessment process across clients, assessors and sites. The assessment instrument included sections on mental status, mental health, physical health, activities of daily living, instrumental activities of daily living, social supports, finances, and a home assessment (Appendix 5).

The purpose of the assessment was to determine the patient's needs for both medical and social services. It also focused on assessing the feasibility of maintaining the client in his/her own home rather than a nursing home. The assessment process wasconsidered essential to the treatment. Therefore no clients were included in the sample if they refused or were unable to receive an assessment.

Care planning. After the assessment the next step was the care plan. The case managers used a summary sheet to compile the data provided in the assessment (Appendix 5). They then used the summary to identify the client's needs and plan services accordingly. The care plan included sections on all of the major areas addressed in the assessment regardless of the patient's needs. If no services were required in one area the reason for that was described in the care plan. The case management team consulted with the case coordinator as well as with the patient's physician. When the care plan was completed it was shared with the client. Any adjustments were made and then clients were asked to sign the plan. When this was completed the case managers proceeded to implement the plan.

Arranging for services. Once the care plan was approved the case managers began to arrange services for the individual. These services could include meals on wheels, lawn care, skilled nursing care, homemakers, friendly visitors, telephone reassurance contacts, snow shoveling, travel assistance, grocery shopping assistance etc. Whenever appropriate and feasible informal supports were relied upon. When this was not possible formal services were sought. The case management programs because of being under contract with the Area Agencies on Aging were able to receive priority for their clients from various agencies in the community.

The services were paid from various sources. Clients were required to pay for direct services whenever they could. When the client was eligible, poverty programs were accessed. When the client could not access subsidized services or pay for the service themself the agencies could requisition funds from their small gap filling reserve. This

reserve was also used when the client needed a service that was not normally available in the community.

Follow-up and monitoring. By the time the services were arranged the case managers had spent approximately four to five hours with the client and an additional ten to fifteen hours planning and arranging services. Once services were in place clients were normally contacted by telephone once a week or more as needed. Home visits were conducted periodically to ascertain that services were being delivered appropriately. Monitoring continued weekly unless there was a significant change in the client's situation. Monitoring included verifying that the services were being delivered as planned as well as checking that the patient's needs had not changed significantly. During this period the progress of the case was supervised by the case coordinator and the research site supervisor.

Reassessment. A complete reassessment was conducted every 90 days or sooner if a change warranted it. The reassessment was an abbreviated version of the initial assessment (Appendix 5). If the client still required case management the care plan was updated. If not, the client was terminated or put into an inactive mode and recontacted periodically.

Case management staff. The staff for this project consisted of a project coordinator responsible for the administration of the program. This individual was the primary liaison for the research staff and provided daily supervision for the research interviewers. This individual was also the person primarily responsible for pre-screening potential clients and for supervising the clinical activities of the case managers. The number of case management teams varied across sites. The Southfield site had two case management teams that each included a

registered nurse and a MSW. The Flint site had five part-time teams distributed among four local agencies. Lansing and Grand rapids each had one team while the Upper Peninsula site had four nurses each working in separate communities. Each team carried its own case load and provided all facets of the case management treatment. All personnel attended several case management workshops conducted by the Michigan Office of Services to the Aging. All teams used the procedures outlined above.

Information and Referral

The information and referral (I & R) treatment served as the control group. This service which has been available in the community for many years is also administered by the local Area Agencies on Aging in the Southfield, Lansing and Upper Peninsula sites. In Flint and Grand Rapids these services are provided by local government agencies. During this study communication between the I & R service and the case management team was limited. I & R is essentially a central location which an individual can telephone or visit to receive information pertinent to their specific needs. It is most different from case management in that it provides no systematic assessment or follow-up.

Just like case management the client must somehow learn about the existence of the information and referral service. In this study clients in the control group were told about this service at the end of the baseline interview. They were also given a brochure with the telephone number for the I & R service as well as a list of widely used local home care service agencies (Appendix 6). The interviewer also explained the differences between categories of services and explained how to contact and use the information and referral program.

When a client initially contacted the I & R program they talked to an information and referral specialist. Essentially this was a clerk who

had been trained to put people in touch with service agencies. In some cases the specialist would also make the initial contact with the agency. In the Upper Peninsula the I & R staff often went out to client homes and took initiatives beyond their job description to help arrange services for clients.

Follow-up and arranging services in all sites was the responsibility of the client. No reassessment was conducted. This was a one shot intervention unless the client chose to re-contact the service.

Procedures

Post Assignment Follow-Up

As explained above, assignment to condition occurred following the baseline interview. After randomization to condition clients in the case management group received information regarding when and how the case managers would contact them.

Individuals in the information and referral condition received a packet of information materials describing the services available to them along with a brief explanation by the interviewer about information and referral. It was then the client's responsibility to initiate the services.

In both conditions the project coordinator telephoned the original referral source to inform them of the services that would be provided. This enabled the information and referral group to receive normally available assistance.

Before terminating each interview the interviewer arranged to telephone the participant in three months in order to " see how you are doing and to check if you are still living here". He/she also reminded the subject of the six month interview that would be conducted. Six months after the baseline interview the interviewer called back the

client to arrange the follow-up and would then go the subject's domicile to conduct the interview.

Interviewers

A large number of interviewers were required to adequately conduct interviews across the entire state. Of the 45 interviewers originally selected to work for this study 22 remained through to the end of the six month data collection period. The hiring of the interviewers was a joint decision between the case management coordinator and the research supervisor. The majority of the interviewers were middle aged females with a strong interest in geriatrics.

The interviewers received training and supervision from the research staff on a weekly basis. The baseline period assignments were distributed by the site case management coordinator, while the six month interviews were assigned by the research staff.

Two training sessions were held during the two data collection periods. The first training consisted of a two day session during which the following topics were discussed followed by extensive role playing. The actual training materials and training agenda can be found in Appendix 4.

1) Overview of the research.
2) Establishing rapport and obtaining informed consent.
3) Characteristics of the client population.
4) Techniques for handling a distressed client.
5) Using the interview schedule.
6) Using probes.
7) Keeping the respondent on topic.
8) Closing the interview.
9) Assignment to group.
10) Information and referral sources.
11) Coding the data.
12) Procedures for re-contacting client.

In addition to role playing for the purpose of training, interviews with actual members of the target population were used to obtain an

initial assessment of inter-rater reliability. A minimum standard of 90 percent agreement was required before interviewers could conduct actual interviews. On going supervision was used to ensure that the quality of the interviews was maintained.

The second training session took place five months into the project and was primarily focused on the six month interview. The same general topics outlined above were covered with additional sections on problems encountered by the interviewers themselves. The training materials for this one day session can be found in Appendix 4.

Inter-Rater Reliability. An assessment of inter-rater agreement was obtained for 10% of all of the cases for both baseline and six month interviews. This was achieved by sending a second interviewer to code responses while the first interviewer conducted the session. Agreement was high with an average agreement of 97% at baseline and 98% at the six month follow-up.

Measurement

The objective of measurement in this study was to document the equivalence of the two groups at baseline and to then measure any changes that occurred as a result of the treatments. As specified earlier there were two treatment conditions replicated in five sites. Data was collected using baseline and six month interviews. The two interview forms can be found in Appendices 1 and 2.

The length of the interview protocol was an important consideration in the the design of the interviews since the frail population being studied can tire quickly. Piloting of the interview forms indicated that the original drafts overshot the goal of one hour. Therefore, the decision was made to assess some dependent variables only during the six month follow-up. This was made possible by the reduction in time needed

to explain the study and obtain informed consent. The final forms averaged 60 and 45 minutes respectively. Tables 4, 5 & 6 indicate when each measure was collected. Variables that were only collected at the follow-up were analyzed using a post-test only design.

The nature of this population also presented problems concerning missing data. A significant portion of the sample (17.7%) was unable to respond in a meaningful way to the interview questions. In these cases proxies, usually family members, were used as respondents for the objective items. For example, proxies were able to discuss the client's eating habits, use of medical and in home services and daily functioning. They were not however able to provide information of a subjective or psychological nature such as life satisfaction or social support. In those cases where data was missing the mean or median value of the items was substituted for any missing values as the most conservative procedure.

There were six major categories of dependent measures assessed in this study. These included; physical health, psychosocial health, medical services, in home assistance, emotional social support and living situation. The scales that are included in each of these categories are briefly described in Tables 4, 5 & 6. The grouping of scales into these categories is primarily for labeling purposes and is not intended to obscure the relationship between scales that are grouped under different headings.

The original research plan also proposed several process measures using archival data from each of the sites. This plan was implemented, but periodic reviews of the data quality indicated that there were major problems in the way that this data was recorded. Preliminary analysis indicated extreme unreliability across all

Table 4

Dependent Measures by Collection Period
(Physical Health, Medical Services, Psychosocial Health Status)

Measure	Description	Pre	Post
Physical Health			
Health Rating Scale (Phillips et al, 1981) (Duke University, 1978)	Rate your health Health better/worse Health stands in way	X	X
Nutrition (Rosander & Sims, 1981)	Frequency of consumption 7 food groups - dairy, protein, fruit...		X
Activities of Daily Living (Duke University, 1978)	Ability to perform 6 daily activities-bathing,dressing, meal preparation		X
Mortality	Number of deaths		X
Medical Services (Kane & Kane, 1981)			
Hospital Days	Days in hospital during last month		X
Emergency Room Visits	Number of visits last month		X
Doctor Office Visits	Number of visits last month		X
Psychosocial Health Status			
Life Satisfaction (Duke University, 1978)	Overall rating of life satisfaction very satisfied to very dissatisfied	X	X
Mood/Depression Scale (Zung, 1965)	Frequency of 9 depression related emotional states, lonely with other people, feel useful and needed...		X
Decision Making Scale	Perception of control over major decisions-doctors, visitors, home help...	X	X

categories of items. The case management staff recorded information differently both within and across sites. Therefore it was decided to drop these measures from the study. However, weekly supervision meetings were held with the case management staff to discuss treatment procedures, case histories, and the overall integrity of the treatment.

The strength and integrity of the treatment can still be assessed by using the self report data of the clients on the number of services they receive in their homes. The rest of this section will discuss in some detail each of the scales used in this study.

Physical Health Outcome Measures

Physical health is an important category of measures because it effects most other factors that influence the patient's ability to live independently (Liu et al, 1985). Physical health was assessed by four scales; health rating, nutrition activities of daily (ADL) and mortality.

Health Rating Scale. Self-perceived health status has been widely used in many studies of long term care (Phillips, Baxter & Stephens, 1981; Zawadaski, 1983; Duke University, 1978; Seidl et al, 1983; and Tissue, 1972). Phillips et al (1981) recommend self-perceived health status because it is a useful indicator of the severity of illnesses. Self-perceived health can provide a good estimate of the individual's overall health (Ferraro, 1980 and Linn & Linn, 1980)

The three items, B1-B3 (Appendices 1 & 2) are adopted from Phillips et al (1981) and from the OARS instrument (Duke University, 1978). The items in this scale ask the respondents to rate their overall health, any change in their health and any effect that their health has on their activity level. A high score on this scale indicates poor health. Table 7 presents the corrected item total correlations for this scale at pre

and post. The respective standardized item alphas for each time period are .69 and .80.

Nutrition. Nutrition is an essential component of good health. The elderly are often identified as a population at risk of nutritional deficits. The six item scale (12Ga-12Gg, Appendix 2) used to assess nutritional status was first developed by Rosander and Sims (1981). The items ask the respondent to indicate the frequency of consumption for foods from the major food groups. Responses for each group range from "Hardly ever" to "More than 3 times a day". A high score on this measure indicates adequate to good nutrition. The corrected item total correlations are presented in Table 7. The alpha is .63.

Activities of daily living. The functional impairment of an older individual is reflected by his/her ability to perform simple activities of daily living. One hypothesis is that case management will improve the client's functioning so that s/he will be able to perform more activities of daily living (Phillips et al 1981).

The six items in this scale (B13-B24, Appendix 2) were adopted from the OARS (Duke University, 1978) and have been widely used in long term care research (Kane & Kane 1981). The items ask the respondents to rate their ability to independently perform basic ADL's such as bathing, dressing and light housework. These ratings are on a three point scale ranging from performing an activity without any help to needing total help. A high score on this scale indicates greater functional impairment.

Previous research (Applebaum, Note 1) suggested that ADL scales yielded significantly different responses when the questions were presented as either "can you do this activity" versus "do you perform this activity". Both forms of the question were presented to

respondents. The corrected item total correlations for both sets of items are presented in Table 7. The alpha for the can and do scales are respectively .89 and .87. The two scales are correlated r=.97, (p=.001) and therefore were used interchangeably in analyses.

Mortality. The relationship between mortality and physical health is clear. Notification of deaths were received from various sources including; case management staff, research interviewers, family members and obituaries. The mortality index includes all subjects that were not available for a six month interview because of death.

Medical Services

Case Management has been hypothesized to have an impact on the use of acute care medical services (Beatrice, 1981; Capitman 1986; Kane & Kane, 1981). These medical services include in-patient hospital procedures, the use of emergency rooms and office visits with a physician. The use of medical services has been found to be highly correlated to physical health (Kane & Kane, 1981) and could therefore be included with the physical health measures. However, they are treated here as a separate category because of this study's interest in the possible impact of the treatment on the use of these services.

Respondents were ask to indicate the number of days they spent in the hospital during the last month, the number of times they used an emergency room during the same period, as well as the number of visits they made to doctors' offices (B6, B7, B8, Appendix 2). A high score on these three scales indicated high use of medical services. The three scales were treated separately in order to preserve the distinction between the three types of medical services. Inter-rater reliability was (98%).

Table 5

Dependent Measures by Collection Period
(In-Home Assistance)

Measure	Description	Pre	Post
In-Home Assistance			
Number of Formal Service Providers	Number of paid individuals providing home services	X	X
Number of Informal Helpers	Number of friends and/or relatives providing home services	X	X
Total Formal Services (also considered as practical social support)	Number of services provided added across all formal service providers. 9 service categories per provider nursing case, chores...	X	X
Total Informal Services (also considered as practical social support)	Number of services provided added across all informal service providers. 9 service categories per provider nursing care, chores...	X	X
Total Formal Service Time	Total number of minutes of formal service provided in last month	X	X
Total Informal Service Time	Total number of minutes of informal service provided inlast month	X	X
Unmet Needs	Number of service areas that respondent indicates as requiring additional assistance-9 categories	X	X

Table 6

Dependent Measures by Collection Period
(Emotional Social Support, Living Situation)

Measure	Description	Pre	Post
Emotional Social Support			
Formal Social Support	Total number of times formal helpers are nominated across four types of emotional social support behaviors - who cares about you...	X	X
Informal Social Support	Total number of times informal helpers are nominated across four types of emotional social support behaviors - who cares about you...	X	X
Ratio of Formal to Informal Social Support	Ratio of the two measures described above	X	X
Ratio of Emotional Social Support to Practical Social Support - Informal Providers	Ratio of total informal support to total informal services - do caregivers change the type of help they provide?	X	X
Living Situation			
Domicile	Nursing home admissions vs all other living situations	X	X

The three scales had low intercorrelations. The number of days in hospital correlated r=.28 (p=.001) with emergency room visits. Neither of these two correlated with doctor visits. As predicted days in hospital and emergency room visits correlated r=.18 (p=.02) and r=.19 (p=.01) with the health rating scale. Further evidence of validity is the intercorrelation between days in hospital and the ADL scale (r=.18, p=.009) indicating that the more days spent in the hospital the more functional impairment reported. Emergency room visits is negatively correlated (r=-.19, p=.006) with nutritional status indicating that higher nutritional status is associated with low usage of emergency rooms.

Psychosocial Health Status

Psychosocial health status consists of three scales; life satisfaction, a mood/depression scale and a decision making scale. These scales represent measures of overall mental well being and independence.

Life satisfaction. A simple approach to the assessment of life satisfaction was adopted from the OARS instrument developed by Duke University (1978). This consisted of a single item (B5, Appendices 1 & 2) rating overall life satisfaction scored from very satisfied to very dissatisfied. Inter-rater agreement was between 97% and 98% for both interviews.

Mood/Depression Scale. This scale was adapted from Zung (1965) and Neugen et al (1983). The 8 items in this scale (G1-G9, Appendix 2) assess depressive mood. The items consist of both negatively worded, "I feel lonely even when I am with other people" and positively worded statements, "I feel useful and needed". Respondents are asked to rate how often they experience the feeling described by the statement. The

corrected item total correlations for this scale are presented in Table 7. The alpha was .83.

Decision making scale. It has been hypothesized that community based long term care programs could end up institionalizing their clients in their own homes. This would be characterized by a loss of control by the individual over the decisions that effect his/her life. In order to assess this a five item scale was developed (F1-F5, Appendices 1 & 2) to measure perceived control over basic decisions. This consists of four items that ask the respondents to indicate whether they make a decision by themselves, share the decision with another person or allow another person to make the decision. The fifth item asks the respondents to rate how much control they have over their life with responses ranging from a great deal of control to no control at all. The corrected item total correlations for the scale at pre and at post are presented in Table 7. The alphas for both pre and post are .62 and .76 respectively.

In Home Assistance

The scales in the category of in home assistance serve two purposes in this study. On one level they provide a manipulation check and on another level they are dependent measures of case management's ability to coordinate and arrange services. In order to be effective case management needs to broker services for the client. On the other hand it has yet to be proven whether the case management team can arrange any more services than information and referral agencies.

The scales in this section have been calculated for both formal and informal providers.

Number of formal service providers. This is the total number of formal service providers who come to the client's home at least once a

Table 7

Scale Reliability Estimates

Item		Corrected r
Health Rating Scale		
B1. Rate your health		.58
B2. Health better/worse		.41
B3. Health stands in way		.51
Standardized Item Alpha	.68	
Health Rating Scale - Post		
B1. Rate your health		.66
B2. Health better/worse		.62
B3. Health stands in way		.64
Standardized Item Alpha	.80	
Nutrition - Post		
B12a. Dairy		.28
B12b. Animal Protein		.41
B12d. Fruit or Juice		.32
B12e. Green Vegetables		.44
B12f. Other Fruits		.39
B12g. Grains		.39
Standardized Item Alpha	.63	
Activities of Daily Living - Can Perform - Post		
B13. Dress yourself		.79
B15. Bath yourself		.77
B17. Get in/out bed		.69
B19. Prepare own meals		.73
B21. Light housework		.67
B23. Go shopping		.57
Standardized Item Alpha	.89	

(table continues)

Item		Corrected r
Activities of Daily Living - Do Perform - Post		
B14. Dress yourself		.78
B16. Bath yourself		.74
B18. Get in/out bed		.69
B20. Prepare own meals		.65
B22. Light housework		.59
B24. Go shopping		.57
Standardized Item Alpha	.87	
Mood/Depression Scale - Post		
G1. Feel lonely		.47
G2. Feel useful		.46
G4. Life is full		.54
G5. Feel blue		.70
G6. Feel tense		.60
G7. Have crying spells		.57
G8. Still enjoy things		.41
G9. I am depressed		.70
Standardize Item Alpha	.83	
Unmet Needs - Pre		
D51. Skilled nursing		.70
D52. Chore services		.73
D53. Meals		.77
D54. Personal care		.72
D55. Transportation		.73
D56. Home upkeep		.70
D57. Managing money		.84
D58. Taking medication		.76
Standardized Item Alpha	.92	
Unmet Needs - Post		
D51. Skilled nursing		.38
D52. Chore services		.56
D53. Meals		.42
D54. Personal care		.43
D55. Transportation		.49
D56. Home upkeep		.36
D57. Managing money		.33
D58. Taking medication		.43
Standardized Item Alpha	.72	

(table continues)

Item		Corrected r
Decision Making - Pre		
F1. Health		.42
F2. Doctors		.41
F3. How you spend time		.36
F4. Who visits you		.44
F5. How much control		.31
Standardized Item Alpha	.62	
Decision Making - Post		
F1. Health		.67
F2. Doctors		.49
F3. How you spend time		.52
F4. Who visits you		.58
F5. How much control		.44
Standardized Item Alpha	.76	
Total Formal Services - Pre		
1. Nursing services		.28
2. Chore services		.52
3. Meals		.46
4. Personal care		.61
5. Transportation		.23
6. Home repairs		.15
7. Money management		.15
8. Medications		.59
9. Other		.11
Standardized Item Alpha	.65	
Total Formal Services - Post		
1. Nursing services		.40
2. Chore services		.51
3. Meals		.60
4. Personal care		.59
5. Transportation		.32
6. Home repairs		.19
7. Money management		.--
8. Medications		.61
9. Other		.04
Standardized Item Alpha	.70	

(table continues)

Item		Corrected r
Total Informal Services - Pre		
1. Nursing services		.18
2. Chore services		.69
3. Meals		.70
4. Personal care		.56
5. Transportation		.63
6. Home repairs		.37
7. Money management		.60
8. Medications		.65
9. Other		.14
Standardized Item Alpha	.79	
Total Informal Services - Post		
1. Nursing services		.26
2. Chore services		.74
3. Meals		.78
4. Personal care		.68
5. Transportation		.64
6. Home repairs		.55
7. Money management		.65
8. Medications		.66
9. Other		.11
Standardized Item Alpha	.84	

month to perform activities ranging from skilled nursing care to meal preparation and money management (C4, Appendices 1 & 2). Formal providers can include an individual who is paid for their service or someone who is connected with a formal volunteer agency like the Red Cross or a Woman's Auxiliary from a church. Inter-rater agreement on this item exceeded 97% at baseline and 98% at the six month follow=up.

Number of informal helpers. Essentially informal helpers can and do provide the same services as the formal providers (D4, Appendices 1 & 2). This scale is the total number of informal helpers who come to the client's home at least once a month to provide some practical assistance. Individuals who just drop by to chat are not counted in this item. Inter-rater agreement for pre and post was the same as for the formal providers.

Total formal services. This scale assesses the total number of services provided by up to 3 formal providers (C1i, C2i, C3i, Appendix 1 & 2). Nine service categories are scored yes/no for each formal provider. The yes responses are then totaled to obtain the scale score which represents the total number of formal service behaviours across all service providers. Therefore, if provider "A" delivers 2 services, provider "B" 3 services, and provider "C" 1 service, the scale score would be 6.

The corrected item total correlations are reported in Table 7. Although some items had low item total correlations they were still included in this scale because it was thought that an accurate assessment of the total number of services being provided was important. The alphas for both pre and post were .65 and .70 respectively.

Total informal services. This scale is identical to the one for formal services described above. The same rational was used in scaling

the items (D1h, D2h, D3h, Appendices 1 & 2). The corrected item total correlations are presented in Table 7. The alphas for pre and post were .79 and .84 respectively.

Total formal service time. This scale represents the total amount of time spent in the client's home during the last month by all formal providers (C1b+c, C2b+c, C3b+c, Appendices 1 & 2). The unit of time is in minutes. Inter-rater agreement for pre and post exceeded 97%.

Total informal service time. This scale represents the total amount of time spent in the client's home during the last month by all informal helpers (D1b+c, D2b+c, D3b+c, Appendices 1 & 2). The unit of time is in minutes. Inter-rater agreement for pre and post exceeded 97%.

Unmet needs. Clients were asked to indicate (yes/no) whether they had any needs that were not currently being met by either formal or informal service providers. A list of eight services were presented (D5, Appendices 1 & 2). The number of yes responses were added to obtain a total score for unmet needs. The corrected item total correlations are presented in Table 7. The alphas for pre and post were .92 and .72 respectively.

Emotional Social Support

Social Support. There are two types of social support assessed in this study. The first, practical assistance, is measured by the total service scales described above (i.e. the amount of practical help delivered by both formal and informal helpers). The second type, emotional supports, are the type of less tangible, psychological supports that people provide each other. These include behaviours such as chatting, caring, listening to problems and giving advice. Respondents were asked to name people who came to mind when they were asked each of four questions (E1-E4, Appendices 1 & 2). For example, "In

an average day who do you enjoy chatting with ?". The total number of nominations for each question were then summed to obtain a scale score. This was calculated separately for formal and informal caregivers. The scale score represents the total amount of emotional support available to the respondent. In social support terms the scale assesses both the size and breadth of the social support network. Inter-rater agreement exceeded 97% for both pre and post.

Ratio of formal to informal social support. One concern in the long term care policy literature (Callahan & Wallack 1983) is that case management might replace the informal support system with formal supports which by their nature are more expensive. In order to assess the impact of case management on the source of social support for respondents a ratio of formal to informal social support was calculated. The larger the ratio the higher the proportion of formal support. Conversely, the smaller the ratio the higher the proportion of informal support. Change in this ratio should reflect any changes in the source of the social support received by the client.

Ratio of practical social support to emotional social support. This ratio was calculated for informal helpers to determine if they change the type of social support that they provide. The ratio is formed by dividing total informal services by informal social support. This ratio was used to test the hypothesis that informal caregivers would change the type of support they provided. As the ratio gets larger it indicates that there is a higher proportion of practical assistance compared to emotional social support.

Living Situation

In order to assess the impact of the treatment conditions on nursing home admissions a dummy variable was calculated (0=Community,

1=Nursing Home) to indicate the respondents domicile. This was scored at both pre and at post interviews.

The results of the data analyses are reported in the following section.

CHAPTER III

RESULTS

The purpose of this study was to evaluate the effectiveness of the case management treatment by comparing a group of clients who received the treatment to a group that received the normally available information & referral services. The design for these analyses is 2 levels of condition by 2 time periods replicated in 5 sites. Site was included in the design statement to account for any condition by site interactions.

Data on both process and outcomes were collected for both the treatment and control conditions. The analyses for the process measures are presented first, followed by the results for the outcome measures.

The data analyses were organized in direct relation to the hypotheses. The general strategy for testing each null hypothesis was to first run a multivariate analysis of variance (MANOVA) entering all of the repeated dependent measures associated with the hypothesis. Then a MANOVA was run for all of the relevant dependent measures that were only assessed at follow-up. For all of these analyses a minimum alpha level of $p<.05$ was used to reject the null. The effects directly related to the hypotheses were condition, condition by time, condition by site, and condition by site by time.

If the results of the MANOVA were significant the univariate analysis for each dependent measure was examined to determine the source of the effect. In cases where the MANOVA was not significant, but several of the univariates were significant, the main effects were

examined by individual site in order to explore all possibilities. These latter analyses were treated with appropriate caution since they capitalized on chance.

Process Hypotheses

The first set of analyses focused on the two main hypotheses related to process. The first null hypothesis was, "The average number of formal services and formal providers, as measured by the baseline and follow-up interviews, will not be different for the recipients of the case management condition as compared to those in the control group".

The second null hypothesis was "the average number of informal services and providers, as measured by the baseline and follow-up interviews, will not be different for the recipients of the case management condition as compared to those in the control group".

One repeated MANOVA was calculated since, all of the dependent measures in this analysis were collected at both pre and post. The six variables entered into the analysis were the total number of formal and informal providers, total number of formal and informal services, and the total amount of time formal and informal providers spent in the client's home (Tables 8 thru 13).

The analysis found no significant multivariate F's related to the treatment condition. Therefore neither of the null hypotheses can be discarded.

Formal Services

The univariate analysis on total formal services indicated a significant condition by site by time interaction ($F=3.33$ $DF=4/211$ $P=.01$ Table 8). Further examination of the simple effects for each site found a significant difference in the number of formal services received by the treatment and control groups in the Southfield ($P<.02$) and Upper

Peninsula ($p<.03$) sites. Between assessments in Southfield the treatment group increased the number of formal services they were receiving, while the number of formal services received by the controls decreased. In the Upper Peninsula the opposite effect was observed. The number of formal services decreased in the treatment group and increased in the control condition.

A similar univariate three way interaction was found in Southfield for the total number of formal service providers ($F=3.01$ $DF=4,211$ $p<.02$ Table 9). Again, the simple effects indicated a significant F ($p<.005$), with the number of formal providers increasing in the treatment group and decreasing in the control condition. It is important to consider these univariates cautiously, since the MANOVA's that included these variables were not significant.

Informal Services

While there were no multivariate effects associated with the hypotheses, there were significant multivariate effects for time ($F=.84$ $DF=24,719.86$ $p<.05$). Examination of the univariate analyses indicated site by time effects for the total number of informal services ($F=4.83$ $DF=4,211$ $p<.001$ Table 11) and time effects for the total amount of time spent in the home by informal providers ($F=13.05$ $DF=1,211$ $p<.0004$ Table 12). The simple effects showed an increase in the number of informal services in Flint ($P<.03$) and decreases in Lansing ($p<.02$) and the Upper Peninsula ($p<.001$). Decreases in the amount of informal time spent in the home were found in Grand Rapids ($p<.02$) and Lansing ($p<.03$). It appears, with the exception of Flint, that over time the clients are receiving less informal assistance.

Summary

In summary, neither of the two hypotheses associated with the process were disconfirmed by the multivariate results. The three simple univariate effects for condition by time were inconsistent across sites. The multivariate analysis revealed a significant time effect which upon further examination indicates that over time the clients receive less informal assistance regardless of condition. The latter is suggestive of deteriorating social support.

Outcome Hypotheses

Physical Health

The next set of analyses addressed the following hypothesis; "The physical health of the case management recipients will not be different, as measured by the health rating scale, nutrition scale and activities of daily living scale, from the recipients of the control condition".

The first analysis was a repeated measures ANOVA with one dependent variable, the health rating scale, entered into the calculation. The multivariate F's for the interaction terms, which in this case were equivalent to the univariates, were not significant. There was however, a significant effect for condition ($F=4.07$ $DF=1,211$ $p<.04$ Table 14) which suggested that the treatment and control groups were different at baseline. At pre the experimental group means are higher than the controls in three sites and lower in two.

The next analysis was a post test only MANOVA with the nutrition and activities of daily living scales. There were no significant effects for condition or condition by site, but there was a significant effect ($F=2.26$ $DF=8,420$ $p<.02$) for site alone. The univariate analyses indicated a significant effect for site for the nutrition scale ($F=3.15$ $DF=4,205$ $p<.02$ Table 15) but none for the activities of daily living

scale (Table 16). In all of the sites, except for Southfield, the experimentals showed a higher nutrition score than the controls (NS).

In summary, none of the multivariate F's related to the hypothesis were significant. Therefore, the null hypothesis cannot be disconfirmed.

Medical Services

The next set of analyses tested the following hypothesis about medical services; "The average number of acute medical services per month, i.e. in-patient hospital days, emergency room visits, and physician office visits, as measured at the six month follow-up interview, will not be different in the case management group as compared to the control condition".

A post test only MANOVA was run with the following dependent measures, number of hospital days, emergency room visits and physician office visits during the month preceding the six month interview (Tables 17 thru 19). The results of the MANOVA for all possible effects were non significant. Therefore, the null hypothesis, that there would be no differences between conditions on the use of medical services, cannot be discarded.

Examination of the univariate analyses indicated a significant condition by site interaction ($F=2.5$ $DF=4,205$ $p<.04$ Table 18) for the emergency room visit measure. Further analysis of the simple effects showed only one significant difference ($p<.02$) in the Southfield site with the experimentals using the emergency room more than the controls. These results should be treated with appropriate caution since the multivariates were not significant. In summary, the null hypothesis was not disconfirmed.

Psychosocial Health

The next set of analyses examine the following hypothesis; "the psychosocial health status of the case management recipients will not be different, as measured by the life satisfaction scale, mood/depression scale and the decision making scale, as compared to the recipients of the control condition".

The first analysis for this hypothesis was a repeated measures MANOVA with life satisfaction and decision making as the dependent variables. There were no significant multivariate F's found for any of the relevant effects. Closer examination of the univariates showed a significant F ($F=3.90$ $DF=1,211$ $p<.05$ Table 20) for life satisfaction. The simple effects indicated a significant difference between conditions in the Southfield site with life satisfaction decreasing in the treatment group and increasing in the controls. This result should be viewed with appropriate caution.

The repeated MANOVA did find a significant multivariate F for time ($F=5.87$ $DF=2,210$ $p<.003$). Further analysis of the univariates indicated an effect for time on the decision making scale ($F=9.48$ $DF=1,211$ $p<.002$ Table 21). The simple effects showed increases in dependency across condition in both the Grand Rapids ($p<.03$) and Upper Peninsula sites ($p<.02$).

A second post test only analysis was conducted with the mood/depression scale as the dependent variable. No significant effects were found (Table 22).

In summary, the repeated measures MANOVA for psychosocial health found no significant treatment effects, but did find that dependency on others, as measured by the decision making scale, did increase as a function of time in two of the research sites. The latter is suggestive

of a deteriorating life situation. No treatment effects were found on the mood/depression scale. The null hypothesis cannot be discarded.

Emotional Social Support

The next hypothesis addressed emotional social support. "The proportion of emotional social support constituted by formal providers, as measured by the ratio of formal to informal support, will not be different in the case management condition as compared to the control group".

Emotional social support was assessed by summing the number of supporters nominated over five social support behaviours such as caring and listening. The question is whether formal service personnel provide more or less of this emotional social support as compared to the informal helpers as a function of condition.

A repeated MANOVA was run with the ratio of formal to informal social support as the dependent measure. There were no significant effects found related to the hypothesis, therefore, the null hypothesis cannot be disconfirmed.

A significant interaction was found for site by time ($F=3.20$ $DF=4,211$ $p<.01$ Table 23). Further analysis of the simple effects for each site revealed that the proportion of emotional social support constituted by formal providers increased over time in four of the five sites; Flint ($p<.003$), Grand Rapids ($p<.001$), Lansing ($p<.0002$) and the Upper Peninsula ($p<.0005$). This suggests that formal providers become increasingly important sources of emotional social support over time for this population.

In summary, the hypothesis was not disconfirmed, but the ratio of formal to informal social support was found to increase over time in four out of five sites.

Type of Informal Support

The following hypothesis addressed the question of change in the type of social support provided by informal caregivers; "The type of social support provided by informal caregivers will not be different in each condition. Specifically, the proportions of total practical and emotional social support, provided by informal caregivers, will demonstrate the same amount of change between the baseline and follow-up interviews for recipients of the case management treatment as for control participants".

A repeated measures analysis was conducted with the ratio of emotional to practical social support for informal caregivers as the dependent measure. No significant effects were found that would disconfirm the null hypothesis.

There were significant F's found for time ($F=20.58$ $DF=1,211$ $p<.00001$ Table 24) and for site ($F=6.92$ $DF=4,211$ $p<.00003$ Table 24). Further analysis of the simple effects showed that the ratio decreased over time in Flint ($p<.003$), Grand Rapids ($p<.05$) and Lansing ($p<.001$). This indicated that informal caregivers shifted their support from emotional to practical assistance as a function of time.

Nursing Home Admissions

The following hypothesis addressed the issue of nursing home utilization. "The average number of nursing home admissions between baseline and follow-up, as reported at follow-up, will not be different in the control group as compared to the treatment condition".

A repeated measures MANOVA was run with domicile used as the dependent measure. Domicile was a dummy variable scored (1) if the client was in a nursing home and (0) if the client lived in the

community. No significant effects were found to discard the null hypothesis.

There was however, a significant effect ($F=26.29$ $DF=1,211$ $p<.000001$ Table 25) for time. Analysis of the simple effects indicated an increase in nursing home admissions in Southfield ($p<.01$), Lansing ($p<.03$) and the Upper Peninsula ($p<.001$). It appears that a significant proportion of this sample is moving toward institutionalization.

Unmet Needs

The following hypothesis addressed the issue of unmet needs; "The average number of unmet needs, as measured by the unmet needs scale, will not be different in the case management condition as compared to the control group".

One repeated measures MANOVA was run with the unmet needs scale as the dependent variable. No significant treatment effects were discovered, therefore, the null hypothesis was not discarded. There was a significant time effect ($F=84.73$ $DF=1,211$ $p<.001$ Table 26) indicating a change in unmet needs. Analysis of the simple effects by site showed a decrease in unmet needs in all sites; Southfield ($p<.0001$), Flint ($p<.002$), Grand Rapids ($p<.001$), Lansing ($p<.001$), and the Upper Peninsula ($p<.00002$). It appears that unmet needs decrease as a function of time, suggesting that the help seeking behaviour that led the subjects to this study was successful despite condition.

Mortality

The final hypothesis addressed the issue of mortality; "The average number of deaths between the baseline and six month interviews will not be different in the case management condition as compared to the control group".

A chi square analysis was calculated on the number of deaths in each condition by site. A total of 61 clients were deceased by the six month follow-up. The chi square indicated that there were no significant differences in mortality between conditions ($X=1.5$ $p>.10$ Table 27), therefore the null hypothesis cannot be discarded.

Summary of Outcomes

An overview of all of the analyses related to outcomes revealed that there were no significant treatment effects. None of the ten null hypotheses could be rejected. Various simple effects suggested possible treatment effects on number of formal providers, total number of formal services, life satisfaction, and use of emergency rooms. As would be expected these effects were inconsistent and likely the result of chance.

There were several significant time effects found in these analyses. They presented a picture of a frail population whose life situation was deteriorating. Clients were more likely to be in a nursing home, more dependent, receiving more emotional support from formal providers, and less emotional support from informal helpers. Informal helpers were providing more practical than emotional assistance at follow-up than at baseline, but there overall level of practical assistance decreased over time. On a more positive note, the unmet needs of these subjects decreased regardless of condition.

The following chapter presents a discussion of the results which were just presented.

Table 8

Total Formal Services
(cell entries are scored as raw number of services)

Site	N	Status	SD	Mean Pre	Post	SD
Upper Peninsula	21	E	2.20	2.52	1.10	1.73
	16	C	1.21	1.00	1.69	2.15
Lansing	27	E	2.26	1.89	1.74	2.10
	24	C	2.22	1.83	1.96	2.31
Grand Rapids	17	E	1.91	1.47	1.52	1.70
	13	C	2.81	1.69	1.00	1.41
Flint	15	E	2.26	2.47	2.60	2.41
	11	C	1.38	1.09	1.45	2.62
Southfield	42	E	2.69	1.95	2.38	2.93
	35	C	2.56	2.31	1.17	1.62

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	14.83	2.25	.14
Site	4/211	4.54	.69	.60
Condition X Site	4/211	4.05	.61	.65
S		6.60		
Time	1/211	4.38	1.28	.26
Condition X Time	1/211	1.17	.34	.56
Site X Time	4/211	1.36	.40	.81
Condition X Site X Time	4/211	11.36	3.33	.01
S X Time		3.41		

Table 9

Number of Formal Service Provider
(cell entries are scored as raw numbers of service providers)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	1.36	1.49	1.09	.69
	16	C	1.12	.94	1.29	.92
Lansing	27	E	1.23	1.30	1.77	1.06
	24	C	1.12	1.13	1.63	1.19
Grand Rapids	17	E	.84	.79	1.35	.90
	13	C	.76	.95	.79	.61
Flint	15	E	1.24	1.40	1.76	.84
	11	C	.98	.82	1.10	1.04
Southfield	42	E	1.14	1.05	1.42	1.16
	35	C	1.19	1.43	.91	.72

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	3.59	2.53	.11
Site	4/211	2.42	1.71	.15
Condition X Site	4/211	.74	.52	.72
S		1.42		
Time	1/211	2.88	3.52	.06
Condition X Time	1/211	2.16	2.64	.11
Site X Time	4/211	1.45	1.77	.14
Condition X Site X Time	4/211	2.46	3.01	.02
S X Time		.82		

Table 10

Total Formal Service Time
(cell entries are total number of service minutes in last month)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	5339	3382.29	500.79	1051
	16	C	2001	1153.86	2688.38	8742
Lansing	27	E	6985	2788.33	2468.61	3928
	24	C	11564	4092.44	3440.00	9486
Grand Rapids	17	E	4494	1930.71	2174.71	4013
	13	C	23858	7141.19	1143.85	3319
Flint	15	E	7846	3992.93	4018.13	4255
	11	C	1331	739.09	2624.91	6837
Southfield	42	E	12494	3678.38	3301.48	6086
	35	C	4407	2193.29	1582.29	4686

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	8212899	.09	.76
Site	4/211	18482610	.20	.94
Condition X Site	4/211	63696648	.71	.59
S		90188441		
Time	1/211	51014312	1.34	.25
Condition X Time	1/211	54750	.001	.97
Site X Time	4/211	20162443	.53	.71
Condition X Site X Time	4/211	61042154	1.6	.18
S X Time		38121560		

Table 11

Total Informal Services
(cell entries are scored as raw number of services)

Site	N	Status	SD	Mean Pre	Post	SD
Upper Peninsula	21	E	2.66	2.57	1.19	1.90
	16	C	3.93	5.63	2.31	3.50
Lansing	27	E	3.43	4.15	2.77	3.24
	24	C	4.00	3.83	2.33	3.58
Grand Rapids	17	E	4.55	5.7	4.00	4.64
	13	C	4.04	5.00	3.92	3.15
Flint	15	E	3.96	3.6	5.40	4.45
	11	C	2.09	4.18	7.00	4.60
Southfield	42	E	3.56	3.4	3.19	3.86
	35	C	3.62	2.74	2.34	3.37

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	.18	.01	.92
Site	4/211	70.91	4.16	.003
Condition X Site	4/211	30.36	1.78	.13
S		17.04		
Time	1/211	60.11	6.39	.01
Condition X Time	1/211	1.54	.16	.67
Site X Time	4/211	45.41	4.83	.001
Condition X Site X Time	4/211	5.22	.55	.70
S X Time		9.41		

Table 12

Number of Informal Service Provider
(cell entries are scored as raw number of providers)

Site	N	Status	SD	Mean Pre	Post	SD
Upper Peninsula	21	E	1.26	1.26	1.10	.55
	16	C	1.82	2.00	.94	1.04
Lansing	27	E	1.19	1.59	1.31	.79
	24	C	1.41	1.42	1.28	1.13
Grand Rapids	17	E	1.20	1.73	1.74	1.74
	13	C	.88	1.83	1.42	.75
Flint	15	E	1.28	1.27	1.74	.66
	11	C	.90	1.27	1.84	.85
Southfield	42	E	1.20	1.34	1.29	1.16
	35	C	.98	.93	1.10	1.16

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	1.01	.58	.46
Site	4/211	3.30	1.91	.11
Condition X Site	4/211	1.17	.68	.61
S		1.73		
Time	1/211	.85	.92	.38
Condition X Time	1/211	.20	.21	.64
Site X Time	4/211	2.49	2.71	.03
Condition X Site X Time	4/211	1.20	1.30	.27
S X Time		.92		

Table 13

Total Informal Service Time
(cell entries are scored as total service minutes in last month)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	4912	2478.02	364.64	604
	16	C	3110	1646.25	1057.73	3396
Lansing	27	E	8858	3998.27	1264.79	2813
	24	C	16510	5959.58	387.36	944
Grand Rapids	17	E	3117	1740.39	663.92	1663
	13	C	6143	3319.23	136.14	396
Flint	15	E	6417	2890.56	1062.94	2276
	11	C	1530	1607.58	648.74	915
Southfield	42	E	8262	3068.44	909.77	2432
	35	C	3281	1317.81	1662.44	7184

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	336832	.01	.93
Site	4/211	34811463	.83	.51
Condition X Site	4/211	7356917	.18	.95
S		41886877		
Time	1/211	433200687	13.05	.0004
Condition X Time	1/211	1547136	.05	.83
Site X Time	4/211	39011645	1.18	.32
Condition X Site X Time	4/211	34522917	1.04	.39
S X Time		33197132		

Table 14

Health Rating Scale
(cell entries are z scores)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	1.05	.10140	.08930	1.08
	16	C	1.30	-.24923	-.30839	1.19
Lansing	27	E	.67	.23394	.20321	.59
	24	C	1.09	-.18393	.18029	.70
Grand Rapids	17	E	1.03	-.05681	.00369	.87
	13	C	.24	.12485	-.46826	1.08
Flint	15	E	1.10	-.19117	-.10028	.86
	11	C	1.18	-.59482	-.39899	.90
Southfield	42	E	1.00	.13864	.07258	.87
	35	C	.91	.08245	-.14078	.78

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	4.96	4.07	.04495
Site	4/211	1.81	1.48	.21
Condition X Site	4/211	.25	.36	.93
S		1.22		
Time	1/211	.11	.21	.65
Condition X Time	1/211	.05	.10	.75
Site X Time	4/211	.56	1.03	.39
Condition X Site X Time	4/211	.70	1.28	.28
S X Time		.54		

Table 15

Nutrition
(cell entries are scale scores - high number = high nutrition)

Site	Status	SD	Post Means
Upper Peninsula	E	2.92	18.14
	C	3.28	17.97
Lansing	E	3.80	17.74
	C	4.38	17.33
Grand Rapids	E	3.48	19.35
	C	3.09	18.93
Flint	E	3.10	17.27
	C	3.96	15.64
Southfield	E	3.42	18.26
	C	3.87	19.64

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/205	.80	.06	.80
Site	4/205	38.70	3.15	.02
Condition X Site	4/205	13.81	1.12	.35
S		12.29		

Table 16

ADL
(cell entries are scale scores - high score = low functioning)

Site	Status	SD	Post Means
Upper Peninsula	E	3.22	12.35
	C	2.74	13.47
Lansing	E	3.70	13.28
	C	3.51	13.57
Grand Rapids	E	3.68	12.47
	C	3.97	11.54
Flint	E	2.81	14.69
	C	2.57	13.00
Southfield	E	3.90	13.53
	C	3.99	12.68

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/205	7.03	.54	.47
Site	4/205	15.07	1.15	.34
Condition X Site	4/205	10.50	.80	.53
S		13.14		

Table 17

Hospital Days
(cell entries are scored as raw number of days in last month)

Site	Status	SD	Post Means
Upper Peninsula	E	3.07	.95
	C	0.0	0.00
Lansing	E	3.50	1.16
	C	4.06	1.74
Grand Rapids	E	.24	.06
	C	0.0	0.00
Flint	E	3.69	1.20
	C	1.51	.45
Southfield	E	5.39	3.10
	C	3.07	.91

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/205	36.97	2.79	.10
Site	4/205	30.97	2.33	.06
Condition X Site	4/205	15.61	1.18	.32
S		13.26		

Table 18

Emergency Room Visits
(cell entries are scored as raw number of visits in last month)

Site	Status	SD	Post Means
Upper Peninsula	E	.22	.05
	C	1.13	.40
Lansing	E	.69	.20
	C	.81	.39
Grand Rapids	E	0.00	0.00
	C	0.00	0.00
Flint	E	.41	.20
	C	.30	.09
Southfield	E	.57	.35
	C	.29	.09

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/205	.00005	.0002	.99
Site	4/205	.43	1.48	.21
Condition X Site	4/205	.73	2.5	.04
S		.29		

Table 19

Doctor's Office Visits
(cell entries are scored as raw number of visits in last month)

Site	Status	SD	Post Means
Upper Peninsula	E	1.47	.95
	C	1.92	1.80
Lansing	E	.94	.80
	C	1.04	.83
Grand Rapids	E	1.22	.65
	C	.66	.46
Flint	E	7.84	2.93
	C	.69	.45
Southfield	E	1.09	1.08
	C	1.99	1.46

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/205	.17	.03	.87
Site	4/205	7.82	1.32	.26
Condition X Site	4/205	12.04	2.04	.09
S		5.92		

Table 20

Life Satisfaction
(cell entries are scale score - high score = low life satisfaction)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	.91	2.66	2.61	.86
	16	C	1.02	2.63	2.48	.87
Lansing	27	E	.76	2.89	2.80	.59
	24	C	.54	2.55	2.50	.72
Grand Rapids	17	E	.92	2.69	2.74	.75
	13	C	.74	2.65	2.24	.70
Flint	15	E	.79	2.69	2.77	.77
	11	C	.67	2.64	2.46	.47
Southfield	42	E	.78	2.78	2.94	.74
	35	C	.69	2.86	2.64	.58

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	3.48	4.64	.03
Site	4/211	.90	1.20	.31
Condition X Site	4/211	.25	.34	.85
S		.75		
Time	1/211	.41	1.14	.29
Condition X Time	1/211	1.40	3.90	.0495
Site X Time	4/211	.06	.17	.95
Condition X Site X Time	4/211	.23	.65	.63
S X Time		.36		

Table 21

Decision Making Scale
(cell entries are scale scores - high score = high dependence)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	1.83	7.380	7.48	2.09
	16	C	1.65	6.75	8.89	3.09
Lansing	27	E	1.59	7.86	8.33	1.88
	24	C	3.17	7.68	8.27	1.97
Grand Rapids	17	E	2.08	7.48	9.03	3.01
	13	C	1.24	8.29	8.73	1.42
Flint	15	E	2.56	8.09	8.46	1.83
	11	C	1.90	7.05	8.24	1.77
Southfield	42	E	1.92	7.68	7.99	1.92
	35	C	2.03	7.79	7.52	1.68

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	1.16	.20	.68
Site	4/211	5.73	.98	.42
Condition X Site	4/211	2.76	.47	.76
S		5.85		
Time	1/211	26.40	9.48	.002
Condition X Time	1/211	.81	.29	.59
Site X Time	4/211	5.78	2.07	.09
Condition X Site X Time	4/211	6.42	2.3	.06
S X Time		2.79		

Table 22

Mood/Depression Scale
(cell entries are scale scores - high score = high depression)

Site	Status	SD	Post Means
Upper Peninsula	E	4.63	18.60
	C	7.90	17.70
Lansing	E	5.52	18.79
	C	5.73	20.05
Grand Rapids	E	5.99	17.83
	C	4.88	15.26
Flint	E	5.90	17.34
	C	4.98	16.32
Southfield	E	3.86	17.91
	C	4.32	17.06

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/205	18.46	.70	.40
Site	4/205	48.00	1.83	.12
Condition X Site	4/205	18.24	.70	.60
S		26.21		

Table 23

Ratio of Formal/Informal Social Support
(cell entries are ratios - high values = higher formal support)

Site	N	Status	SD	Mean Pre	Post	SD
Upper Peninsula	21	E	.28	.33	1.14	1.36
	16	C	.16	.25	1.18	1.28
Lansing	27	E	.36	.42	1.06	1.13
	24	C	.48	.43	.86	.49
Grand Rapids	17	E	.31	.30	.82	.46
	13	C	.35	.34	.51	.35
Flint	15	E	.35	.40	1.17	1.14
	11	C	.29	.31	.75	.32
Southfield	42	E	.46	.54	.73	.49
	35	C	1.35	.71	.79	.69

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	.11	.21	.65
Site	4/211	.53	.98	.42
Condition X Site	4/211	.43	.81	.52
S		.54		
Time	1/211	21.74	36.86	.00
Condition X Time	1/211	.71	1.20	.28
Site X Time	4/211	1.89	3.20	.01
Condition X Site X Time	4/211	.16	.26	.90
S X Time		.59		

Table 24

Ratio of Informal Emotional/Practical Social Support
(cell entries are ratios - high value = higher emotional support)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	.42	1.03	.91	.49
	16	C	.44	.78	.76	.50
Lansing	27	E	.66	1.09	.66	.47
	24	C	.59	1.03	.77	.43
Grand Rapids	17	E	.42	.66	.59	.43
	13	C	.28	.80	.52	.37
Flint	15	E	.40	.75	.32	.35
	11	C	.34	.53	.28	.36
Southfield	42	E	.87	.91	.68	.46
	35	C	.40	.87	.78	.48

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	.05	.19	.67
Site	4/211	1.96	6.92	.00003
Condition X Site	4/211	.24	.84	.50
S		.28		
Time	1/211	5.09	20.58	.00001
Condition X Time	1/211	.24	.97	.33
Site X Time	4/211	.32	1.31	.27
Condition X Site X Time	4/211	.10	.41	.80
S X Time		.25		

Table 25

Domicile (Nursing Home)
(cell entries scored as dummy variables -
0 = community, 1 = nursing home)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	0.0	0.00	0.24	.44
	16	C	0.0	0.00	0.31	.48
Lansing	27	E	.32	0.11	0.15	.36
	24	C	0.0	0.00	0.25	.44
Grand Rapids	17	E	.24	0.06	0.24	.44
	13	C	.28	0.08	0.00	0.0
Flint	15	E	0.0	0.00	0.20	.41
	11	C	.30	0.09	0.09	.30
Southfield	42	E	.15	0.02	0.17	.38
	35	C	.24	0.06	0.17	.38

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	.001	.01	.91
Site	4/211	.02	.23	.92
Condition X Site	4/211	.05	.51	.73
S		.10		
Time	1/211	2.32	26.29	6.63770E-007
Condition X Time	1/211	.001	.01	.91
Site X Time	4/211	.10	1.15	.34
Condition X Site X Time	4/211	.17	1.94	.11
S X Time		.09		

Table 26

Unmet Needs
(cell entries scored as raw number of unmet needs)

Site	N	Status	SD	Mean Pre	Mean Post	SD
Upper Peninsula	21	E	1.78	2.80	1.21	1.44
	16	C	1.86	2.54	.82	1.47
Lansing	27	E	2.01	3.04	1.93	1.41
	24	C	2.32	3.06	1.42	2.08
Grand Rapids	17	E	2.32	2.88	.94	1.98
	13	C	1.57	2.15	.62	1.04
Flint	15	E	2.39	2.87	1.00	1.25
	11	C	2.53	2.70	1.18	1.54
Southfield	42	E	1.89	2.86	1.36	1.87
	35	C	1.76	2.68	1.38	1.59

Univariate ANOVA Summary

Source of Variation	DF	MS	F	Sig. of F
Condition	1/211	4.18	1.11	.29
Site	4/211	5.52	1.47	.21
Condition X Site	4/211	.74	.20	.95
S		3.77		
Time	1/211	256.16	84.73	.00
Condition X Time	1/211	.03	.01	.93
Site X Time	4/211	.71	.23	.92
Condition X Site X Time	4/211	.80	.26	.90
S X Time		3.02		

Table 27

Mortality

Site	Condition	
	Case Management	Information & Referral
Upper Peninsula	3	2
Lansing	6	2
Grand Rapids	5	3
Flint	4	4
Southfield	17	15
Total	35	26

$X = 1.525$
Critical value = 9.49, Df = 4, $p < .05$.

CHAPTER IV

DISCUSSION

The present study is seen as one contribution to the task of evaluating the effectiveness of case management services, one of the major programs currently advocated as a solution to the problems associated with community long term care for the frail elderly (Beatrice, 1981). There have been several quasi-experimental research efforts focused on the impact of case management programs but none have demonstrated conclusive evidence of treatment effects (Capitman, 1986). One impetus for the present study was that there have been few rigorously designed experiments to test case management.

The study was designed to compare the impact of case management to a less intensive service, information & referral, that is normally available in most communities. The relationship between the treatment and client outcomes such as physical and psychosocial health, the use of acute and chronic care medical and social services, and overall social support were of primary interest. In the experimental analyses used to examine these relationships there was no evidence found of any treatment effects. The multivariate tests for all effects related to the treatment were non-significant. Several univariates presented inconsistent patterns and were thought to be reflecting chance rather than meaningful effects. Examination of the dependent means for each site revealed no significant trends. Some time effects, unrelated to the treatment, demonstrated that the frail elderly clients that comprised

the sample were going through periods of transition. This is consistent with the objectives of the sampling strategy which were to find individuals at risk of losing their ability to remain independent in their home communities. These are discussed later under prescreening.

Methodological Considerations

That the results of this study find no support for the effectiveness of case management is consistent with most of the previous research conducted in this area. The advantages of this study over many others is the rigorous experimental design that was adhered to throughout the project. It is important to note that in failing to reject the null hypothesis we do not prove it. Despite the rigor of the design there are several possible explanations for why this study did not find evidence of case management's effectiveness.

Screening Process

The screening process used in this study has important implications for the lack of significant outcomes. An ongoing discussion in the long term care literature has focused on the appropriateness of the samples used in previous community based case management research (Capitman, 1983). It is argued that significant effects will only be found when the treatment is applied to patients who are seriously at risk of institutionalization (Capitman, 1986). This assertion has been supported by the significant findings of the South Carolina case management project which used a mandatory pre-admission process to screen potential clients (Blackman et al., 1985).

The main objective of sampling in this study was to find those individuals that were truly at risk of entering a nursing home. In order to facilitate this process a pre-screening instrument was designed and implemented to screen referrals over the telephone. The criteria used to

assign risk points were factors that are strongly associated with nursing home admission (Capitman, 1983).

The problem with the instrument lies in its unknown reliability and validity properties. It is not clear that this pre-screening tool actually selects the at risk population that we are targeting. Observation of the personnel conducting the screening interviews revealed a lack of consistency across raters as well as a high component of "clinical judgement". One client who was pre-screened twice by different experienced raters received scores ranging from 13 to 30.

It is possible that the inability to find significant relationships between the treatment and outcomes is partially attributable to the failure of the screening process. Yet, one result of the analyses suggests that, despite its drawbacks, the screening procedure did result in an appropriate sample. Several of the multivariate analyses revealed time effects. These suggest that the sample was going through significant changes during the relatively short span of six months. As a function of time clients were more likely to be in a nursing home by follow-up regardless of condition (Table 25). This is consistent with the screening objectives that were to find people at risk of institutionalization. Clients were also more likely to have less informal services (Table 12) and to be more dependent as a function of time (Table 21), thus presenting the picture of a frail population deteriorating over time. Closer examination of the nursing home admissions indicated that only 20% of the clients were admitted to a nursing home. In addition, 15% of the clients were deceased at follow-up. This means that 35% of the sample were either deceased or in a nursing home at follow-up. Although the numbers in nursing homes and deceased were significant, we must consider that the remaining 65% were

still living in the community. Given these results it appears that sample selection may be considered as an explanation of this study's findings. It is unclear whether or not the prescreening instrument was effective. An effort to examine the psychometric properties of this screening instrument would be worthwhile.

Strength of Treatments

Another set of possible explanations why this study failed to demonstrate effects of case management services on the outcome measures are because of possible problems with the implementation of the treatments. It appears that the control condition, information & referral, may have been more powerful than expected.

Information & referral services as defined in the State of Michigan are supposed to provide a linkage between "needy" individuals and the services available in the communities. This is commonly accomplished completely over the telephone with an information & referral "specialist" providing lists of resources to the client. The expectation is that the client will then initiate contact with whichever agencies s/he deems appropriate. The responsibility of the information & referral "specialist" ends with the telephone conversation.

There is some evidence to suggest that this was not the case in several of the communities where this study took place. Interviews with agency personnel revealed that information & referral staff in the upper peninsula routinely visited clients in their own homes and actively advocated on their behalf with local service providers. This was found to be true to some extent in all of the sites across the state. This type of activity would seem to blur the distinction between the treatment and the control conditions. However, there are still important distinctions between the conditions. The involvement of the information

& referral staff in a case was always brief even when they advocated for the client. Also, the information & referral "specialists" were usually untrained clerks while the case management staff consisted of nurses and social workers.

In contrast to the control condition the strength of the treatment may have been insufficient to produce the expected outcomes. The treatment teams performed all the appropriate steps in the case management process but were restricted in their ability to broker services into the client's home. The teams had to match their clients with the existing service networks and rely on local funding arrangements to obtain services. There was little financial freedom to allow for innovative service packages for clients who had no personal resources, but who also were not eligible for subsidized assistance. This model of case management is different from the models discussed in the introduction where medicaid and medicare waivers were available to enable the treatment teams to purchase necessary services (Table 1). The case management projects had little leverage to use to enable them to gain sufficient control over the service delivery system.

The possibility of implementation problems is indicated further by the low formal service levels observed in the case management condition. Overall, the experimental group received only 1.9 services from 1.5 service providers by the follow-up interview (Tables 8 and 9). The fact that the treatment group did not differ significantly than the control indicates that the case management programs may have been unsuccessful at coordinating the service delivery system. It also raises the question of whether there was an actual experimental manipulation. It appears that the treatment and control activities may not have been significantly different.

A problem that is inherent in all of the studies conducted to evaluate case management is the assumption that the services that are arranged and delivered to the client are themselves effective. Many authors have agreed that the outcomes of home care studies have not provided any conclusive evidence of effectiveness (Doherty et al., 1978; Dunlop, 1980; Hedrick, 1982; Iglehart, 1978; Kane & Kane, 1980; Urban Institute, 1978). If this is truly the case then the impact of case management may be severely limited. This of course would also be true for the control condition which might mean that our findings accurately reflect the lack of impact of both conditions.

Another possible explanation is that the status of the client is determined more by the informal support system available to them than by any combination of formal services. The amount of practical and emotional help provided by informal helpers was consistently greater than that provided by formal service agencies (Tables 8 thru 13). For example, the case management group received twice as many informal than formal services (3.31 informal vs 1.9 formal). This was true across both time, condition and site. Given the tight resources of the case management teams it is likely that the amount of services they were able to implement were insufficient to have significant impact in the face of existing social support.

Summary

In summary, it appears that there is sufficient rationale to support that the finding of no differences between the conditions is valid. Although we cannot affirm the null hypothesis these findings are consistent with the growing body of literature that also finds inconclusive relationships between case management and relevant outcomes (Capitman, 1986; Kemper et al., Zawadaski, 1983). The problems that

this study had with the strength of treatment were not encountered in several other well designed projects that nonetheless found no effects (Kemper et al., 1986). For example, Kemper et al. (1986) found that their case management groups received significantly more formal services than did the controls, but found no effects for critical outcomes such as use of medical services, and nursing homes. The accumulation of evidence over several studies seems to suggest that the case management model of community long term care should be submitted to serious scrutiny.

Future Research

There are several areas that should receive more attention by researchers interested in improving case management research. First, there is a need for more rigorously controlled longitudinal studies. The study reported here will continue to collect longitudinal data on each subject up to 12 months after intake. It is possible that the impact of case management will not become evident until some time after the initial intervention.

Second, there is a need for a more intensive methodology to study these programs. To date, the approach to studying these projects has been to field increasingly larger studies with more research sites, more subjects and longer data collection periods (Kemper et al., 1986). These extensive research models all have to rely on structured interviews and questionnaires to measure outcomes (Phillips et al., 1981). The problem with this approach is that it only produces a few snapshots of the client's life situation. Additionally, the reliability of these snapshots can be called into question because many of the respondents in this population are either clinically confused or concerned that their answers will affect the few services that they might receive.

An intensive methodology that involved fewer subjects but used observational methods to collect data on a frequent basis could reveal a more accurate assessment of treatment effects. Frequent observations could supply more objective data by providing actual documentation of services rendered. Another advantage would be that the observer could learn how the treatment impacts the client on a regular basis. This approach would combine both qualitative as well as traditional quantitative measures. It would also provide an opportunity to validate many of the interview measures that are widely used in gerontology, but that have no reported validity data.

A third direction for future research must be linked with long term care policy. The case management studies that have been reviewed in the introduction are all variations on the same theme. New models are needed to address the community care problems that case management was supposed to ameliorate. Future research should assist policymakers in developing new options.

Policy Implications

An important implication of this study is that there is a need to re-think long term care policy vis-a-vis case management. The original impetus for creating case management was the disorganized state of community services. The intention was that case management would organize these services, thus improving the impact that they had on the community. It was also thought that a single identifiable entry point into the care system would assist clients in obtaining services as well as enable structures to control costs. None of these objectives have been supported by this study, nor by most of the earlier research (Capitman et al., 1986).

One explanation for the apparent ineffectiveness of case management is that it is an intervention targeted at the wrong level of the system. As Callahan (1981) points out long term care is a system with many levels, including federal, state and local entities. He also asserts that case management may be a necessary part of the system but not a total solution for the systems problems.

Case management is targeted at the local level where direct service occurs. The problem is that the agencies that case management is supposed to coordinate all report to state and federal level organizations that set policy for the locals. Therefore, case management is trying to implement change in agencies that don't have the power to change their own policies.

To make matters worse the state and federal organizations responsible for the local agencies tend not to communicate with each other about long term care issues. Therefore, we are asking case management to solve problems at the local level that originate at other levels in the system. The need to address all levels of the system can be seen even more clearly when we examine the relationship between the state and the federal levels of government. While the state could decide to implement a new service strategy it could not proceed without involving the federal government because the existing funding structures for long term care are controlled at the national level. Therefore any change in the system at the state level is dependent on change at the federal level. What is needed are interventions that target multiple levels of the system concurrently in order to create positive change.

In addition to looking at levels of intervention it is also necessary to look at the target population at which these policies have been aimed. Case management has been target directly at the frail

elderly client population. The treatment team takes on a caregiver role acting to coordinate and control the life situation of the client. However, the findings in this study as well as many others (Kemper et al., 1986) suggests that informal caregivers already play a major role in providing the caregiving function. Perhaps interventions that would provide relief to the caregivers would have more impact than case management. There is a growing literature (Miller, Gulle & McCue, 1986) that indicates the need for more respite services for the caregivers of the frail elderly.

Finally, what do the findings of this study mean for the five programs that were evaluated? On one level it can be argued that these programs are no more and no less effective than the information & referral services that already operate in these communities. If this is true the communities might consider whether it is cost efficient to have two similar services operating in one region. Perhaps more elderly receive assistance because of the presence of multiple entry points into the system. On the other hand, a theme common to all of these programs is that there are not sufficient home care services available to the elderly of these communities. Easier access into a system that is devoid of resources surely isn't a solution.

The most likely route that will be taken regarding these programs is that which was taken by almost all of the preceding demonstration projects on which previous case management research was conducted. The programs continue to operate and receive funds despite the growing evidence that suggests that these programs have no effect. The nurses and social workers who staff these projects are sincere individuals who truly want to help their elderly clients. The hope for the future of community based long term care is that the staff of the growing number

of case management programs becomes advocates for changes in the system that enable them to help their clients.

APPENDICES

APPENDIX 1

RESEARCH CLIENT IDENTIFICATION SHEET

RETURN THIS SHEET TO YOUR SUPERVISOR WITH YOUR COMPLETED INTERVIEW

****

Client ID Number: _____ RECORD THIS NUMBER ON REFERRAL LOG

Interviewer ID Number:___ Interviewer Name:_____

Site ID Number:_____ Referral Date: _____ m/d/yr

Referral Source: Interview Date: _____ m/d/yr

****

Client Full Name:_____

Home Address: _____ (number, street, apt#)

_____ (city, state if not MI, zip)

Home Telephone: ( ) ___-____

****

Interview Location (Fill in only if not conducted in residence)

Temporary Address: _____ (number, street, apt#)

_____ (city, state if not MI, zip)

Temporary Telephone: ( ) ___-____

****

Proxy Name: _____ (name, agency or relationship)

Proxy Address: _____ (number, street, apt#)

_____ (city, state if not MI, zip)

Telephone: ( ) ___-____

[OBTAIN THIS INFORMATION FROM THE CASE MANAGEMENT SUPERVISOR BEFORE THE INTERVIEW. ASK THE CLIENT THIS QUESTION ONLY IF THE SUPERVISOR DID NOT HAVE COMPLETE INFORMATION. ASK AT END OF INTERVIEW]

[KEEP THIS FORM WITH THE IDENTIFICATION SHEET]

Could you please give me the names, addresses, and telphone numbers of two people that we might contact in case we have trouble getting in touch with you at a later date? [CHECK TELEPHONE BOOK BEFORE LEAVING IF NUMBERS IN DOUBT]

_____ (NAME)	_____ (ADDRESS)
_____ (TELEPHONE NUMBER)	_____
_____ (NAME)	_____ (ADDRESS)
_____ (TELEPHONE NUMBER)	_____

INTERVIEW FACT SHEET

Wave Number: 1 (01)1

Site ID Number:_____ (02-03)__ __

Client ID Number: _____ (04-06)__ __ __

Interviewer ID Number:_____ (07-09)__ __ __

Interviewer Name:_____

Referral Date: _____ (10-15)__ __ __ __ __ __
m/d/yr

Interview Date: _____ (16-21)__ __ __ __ __ __
m/d/yr

Start Time: _____ AM=1 PM=2 (22-26)__ __ __ __ __

Finish Time: _____ AM=1 PM=2 (27-31)__ __ __ __ __
(EXAMPLE - 10:45 PM = 10452)

Referral Source:

1=HOSPITAL/PHYSICIAN
2=COMMUNITY ORGANIZATION
3=NURSING HOME
4=FAMILY/FRIEND/SELF (32)__

Information was obtained from:

1. Client
2. Proxy
3. Combination (33)__

Program Status

1. Information & Referral
2. Case Management (34)__

Age:_____ (35-37)__ __ __

Sex: 1=MALE 2=FEMALE (38)__

Marital Status:

1=MARRIED
2=WIDOWED
3=DIVORCED
4=SEPARATED
5=NEVER MARRIED (39)__

SOCIAL SECURITY NUMBER (40-48)__ __ __-__ __-__ __ __ __
SOCIAL SECURITY LETTER (BLANK IF NONE) (49)__

Participant Agreement

The Michigan Office on Aging is interested in looking at different ways of providing services to older persons who wish to remain living in their own homes. In order to do this they are conducting a study along with Michigan State University in five areas of the state. In this area we are working with _____ _____. We are interested in getting your feedback on which type of services provide the best care for older people in different situations. We are also interested in how much these services cost.

The two programs that are provided in this project are called information and referral and case management. Both programs have the goal of helping people to live in the community instead of nursing homes. To do this both programs help people to assess their needs. If you participate the programs will help you to assess your needs and help you to arrange any services you might need in your home. The programs do not provide any of the services directly themselves.

INFORMATION AND REFERRAL helps people to find agencies in the community that can help them with things like housekeeping, nursing care, shopping and things like that. This information is provided over the telephone and in written materials.

CASE MANAGEMENT also helps people to obtain services that they need like housekeeping and nursing care. Staff will visit the person in their home and talk with them about their needs. The staff will conduct an assessment, create a care plan, and help arrange services.

People who participate in this study will receive either the information and referral program or the case management program. If you decide to participate the program that you receive will be determined by lottery. We do it this way because it is the fairest way we know to make sure that both programs have a equal number of participants. We cannot guarantee the benefits of either program. However, they have both been widely used before in other parts of the country.

In order to determine how well these programs work we want your feedback three times over the next year. These interviews usually only take about an hour. If you decide to participate an interviewer will talk with you today, and then again in six months and finally in 12 months (One year) from now. If you decide to participate I will be the person interviewing you today. We will also call you once in three months from now and once nine months from now. These calls are just to see how you are and to check that you are still living here.

All information that you provide during the interviews will be kept strictly confidential. No one but the project staff will have access to what you tell us. In addition, all of the information will be stored without your name on it to make sure that your privacy is protected. Your participation in the project will remain anonymous. If you wish when the study is over we will send you a copy of the results.

By participating in this project you will help us to find out how to improve services for all older people in Michigan. However, you are under no obligation to participate. If you decide that you do not want to participate we will still provide you with some information about services available in this community. If you decide to participate, but later want to change your mind you are free to stop at any time.

In addition to talking with you we would also like to obtain some information about your health and your health care costs. In order to do this we will be asking you for your permission to contact your health insurance provider. We will only be requesting information about health care costs and the health services associated with the costs. We will not give them any information about you. Your permission will in no way affect the health insurance that you receive.

We think this project is important because it will help us to improve programs for the elderly. We would like to encourage you to participate. Everyone who participates will receive one of the programs that we discussed.

Any questions ? Will you participate ?

INTERVIEWER NAME: _____

LOCAL AGENCY: _____

AGENCY TELEPHONE: _____

1. I understand that I will either receive the Information & Referral program or the Case Management program. I also understand that the program I receive will be determined by chance.

2. I understand that my participation in this study is voluntary and that I may discontinue my involvement at any time without penalty.

3. I understand that I will be interviewed three times in the next year; once today, about 6 months from today, and about 12 months from today. Each of these interviews will take about an hour. All of these interviews will take place wherever I may be living at the time.

4. I understand that I will be contacted by telephone in 3 months and in 9 months to see how I'm doing and to check that I am still living here.

5. I understand that all of the information from the interview will be handled CONFIDENTIALLY by the project staff and that this information will only be released anonymously (without names attached).

6. I understand that the following kinds of information will be gathered during the interviews:

   a. Background information, such as information about family, employment, education, etc.

   b. Information about how I feel about such things as my health, social services, social relations, family and friends, etc.

   c. Information about how I spend my day and about my activities of daily living.

7. I understand that I can skip any questions I don't want to answer.

8. I understand that there is no guarantee that the program I receive will be able to provide assistance.

9. I understand that I have had an opportunity to ask any questions about the study and have them answered. If I have additional questions about the study, I may contact Joseph Bornstein, Department of Psychology, Michigan State University (517) 353-9673.

10. I understand that if I am no longer living here when the project interviewer tries to contact me that he/she will try to find out where I have moved by contacting friends or relatives that I designate during the interview. I also understand that the interviewer will not reveal my participation in this study to my friends or relatives. I agree to try and inform the project staff about my new address if I move.

11. I authorize release of all medical records and relevant information to Michigan State University pertaining to the cost of health care services I have received including a description of the services obtained. This authorization is in effect from the date this release is signed until 14 months from that date.

12. I understand that I have had this study explained to me and I have had the chance to talk about the research and to ask questions, and hereby consent to participate in the project as described. I understand that I am free to withdraw at any time without penalty.

_____ _____

Participant's Signature (Please print full name on this line)

_____

Witness

_____

Date

CLIENT COPY

1. I understand that I will either receive the Information & Referral program or the Case Management program. I also understand that the program I receive will be determined by chance.

2. I understand that my participation in this study is voluntary and that I may discontinue my involvement at any time without penalty.

3. I understand that I will be interviewed three times in the next year; once today, about 6 months from today, and about 12 months from today. Each of these interviews will take about an hour. All of these interviews will take place wherever I may be living at the time.

4. I understand that I will be contacted by telephone in 3 months and in 9 months to see how I'm doing and to check that I am still living here.

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   b. Information about how I feel about such things as my health, social services, social relations, family and friends, etc.

   c. Information about how I spend my day and about my activities of daily living.

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8. I understand that there is no guarantee that the program I receive will be able to provide assistance.

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12. I understand that I have had this study explained to me and I have had the chance to talk about the research and to ask questions, and hereby consent to participate in the project as described. I understand that I am free to withdraw at any time without penalty.

_____ _____

Participant's Signature (Please print full name on this line)

_____

Witness

_____

Date

A. CLIENT PROFILE

First I'd like to find out a little about you and your living situation. You may have recently answered a few questions similar to the ones I am going to ask now. But it is important that I ask them again so that we will have the same information on everyone.

(50)=BLANK

A1. Do you have any children?

1= YES

2= NO (51)__

IF YES: A1a. How many children do you have? _____(52-53)__ __

(NOTE: REFERS ONLY TO LIVING CHILDREN.)

A2. What was the highest grade level that you completed in school?

1= ELEMENTARY

2= HIGH SCHOOL

3= 2 YEAR COLLEGE (TECHNICAL, COMMUNITY, 2 YRS UNIVERSITY)

4= 4 YEAR UNIVERSITY (OR BEYOND)

5= OTHER (SPECIFY: _____) (54)__

A3. What was your occupation or major area of work?

_____ (55-56)__ __

(57-79)=BLANK

CARD# (80)= 1

SITE# (01-02)__ __

CLIENT# (03-05)__ __ __

(06)=BLANK)

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 1

A4. Does anyone else live with you?

1= YES

2= NO (07)__

(IF YES)

A5. Will you please give me the names of all household members.

NAMES:

1._____ (08-11) __ __ __ __

2._____ (12-15) __ __ __ __

3._____ (16-19) __ __ __ __

4._____ (20-23) __ __ __ __

5._____ (24-27) __ __ __ __

6._____ (28-31) __ __ __ __

7._____ (32-35) __ __ __ __

8._____ (36-39) __ __ __ __

9._____ (40-43) __ __ __ __

10._____ (44-47) __ __ __ __

[REMEMBER TO CODE NAMES ON SOCIAL SUPPORT SHEET]

B. HEALTH PROFILE

Let's talk about your health now.

*B1. How would you rate your overall health at the present time--would you say it was excellent, good, fair, or poor?

1= EXCELLENT

2= GOOD

3= FAIR

4= POOR (48) __

*B2. Is your health now better, about the same, or worse than it was 6 months ago?

1= BETTER

2= ABOUT THE SAME

3= WORSE (49) __

*B3. How much do your health troubles stand in the way of your doing things you want to do--not at all, a little (some) or a great deal? [e.g Recreational or social things]

1= NOT AT ALL

2= A LITTLE

3= A GREAT DEAL (50) __

B4. During this last month how many days did you stay in bed most or all of the day either because you were too ill to get up or because you just didn't feel like getting up (either at home or in the nursing home)?
[MOST OF DAY = MORE THAN HALF OF DAY]

(# DAYS) (51-52)__ __

(NOTE: EXCLUDES HOSPITAL DAYS)

*B5. Considering all parts of your life right now. How satisfied would you say you are with your life.

Would you say you are...

1=Very Satisfied
2=Satisfied
3=Dissatisfied
4=Very Dissatisfied (53)__

Now I'd like to talk about your eating habits.

B6. Could you please tell me what you ate yesterday?

PROBE: It may help to start with what you ate for breakfast.

(NOTE: RECORD FOOD ITEMS NOW--CIRCLE LATER)

BREAKFAST_____

LUNCH_____

SUPPER_____

SNACKS_____

(CIRCLE ALL THAT APPLY)

1=YES
2=NO

1= DAIRY PRODUCTS, SUCH AS MILK, CHEESE, OR YOGURT (54)__

2= PROTEIN FOODS SUCH AS MEAT, POULTRY, FISH, EGGS, OR DRIED BEANS (55)__

3= FRUITS OR VEGETABLES-EITHER RAW,COOKED OR CANNED (56)__

4= FOODS MADE FROM GRAINS, SUCH AS BREAD, CEREAL, NOODLES OR RICE (57)__

5= DID NOT EAT YESTERDAY [1=TRUE 2=FALSE] (58)__

6= DOES NOT EAT AT ALL (IV TUBES) [1=TRUE 2=FALSE] (59)__

(60-79)=BLANK

CARD# (80)= 2

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 4

C. FORMAL SERVICES UTILIZATION

Now please tell me the names of people who regularly come to help you as part of their paid or volunteer work. These could be people who come from an agency or organization or people you hired. [IF NONE, GO TO C4]

SITE# (01-02)__ __
CLIENT# (03-05)__ __ __

REGULARLY = AT LEAST ONCE A MONTH.

SPACE (C1-C3) IS PROVIDED FOR 3 FORMAL CAREGIVERS. (06)=BLANK

C1. _____ (07-10)__ __ __ __
(NAME #1)

a. What agency or organization was NAME from?

_____ (11-14)__ __ __ __
(AGENCY/ORGANIZATION)

b. How often does NAME come to help you?

_____ (15-16)__ __
(# OF TIMES EACH MONTH)

c. How long does NAME usually stay each visit?

_____ (17-19)__ __ __
(MINUTES)

d. When did NAME first begin coming to help you ?

_____/_____ (20-23)__ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (24) __

IF NO: When will NAME stop providing services ?

_____/_____ (25-28) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S provision of this service?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (29) __

g. How did you arrange for NAME to provide this service?

1= SELF
2= FRIEND/RELATIVE
3= INFORMATION & REFERRAL
4= CASE MANAGEMENT
5= DSS
6= PUBLIC HEALTH
7= DISCHARGE COORDINATOR/PHYSICIAN
8= OTHER (_____) (30) __

h. How are these services paid for?

1= SELF

2= FRIEND/RELATIVE

3= VOLUNTEER

4= GOVERNMENT

5= INSURANCE

6= SELF & OTHER (SPECIFY _____) (31) __

i. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (32) __
2= Chore services/homemaker (housework, laundry, shopping) (33) __
3= Meals (34) __
4= Personal care-unskilled (Bathing, dressing) (35) __
5= Transportation (36) __
6= Home upkeep (repairs, lawn care, snow removal) (37) __
7= Managing money (38) __
8= Taking medication (39) __
9= Other (SPECIFY) _____ (40) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

FORMAL SERVICES (NAME #2) Are there any other paid helpers?

[IF NO ADDITIONAL SERVICES GO TO C4]

C2. _____ (41-44) __ __ __ __
(NAME #2)

a. What agency or organization was NAME from?

_____ (45-48) __ __ __ __
(AGENCY/ORGANIZATION)

b. How often does NAME come to help you?

_____ (49-50) __ __
(# OF TIMES EACH MONTH)

c. How long does NAME usually stay each visit?

_____ (51-53) __ __ __
(MINUTES)

d. When did NAME first begin coming to help you ?

_____/_____ (54-57) __ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (58) __

IF NO: When will NAME stop providing services ?

_____/_____ (59-62) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S provision of this service?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (63) __

g. How did you arrange for NAME to provide this service?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (64) __

h. How are these services paid for?

1= SELF

2= FRIEND/RELATIVE

3= VOLUNTEER

4= GOVERNMENT

5= INSURANCE

6= SELF & OTHER (65) __

i. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (66) __
2= Chore services/homemaker (housework, laundry, shopping) (67) __
3= Meals (68) __
4= Personal care-unskilled (Bathing, dressing) (69) __
5= Transportation (70) __
6= Home upkeep (repairs, lawn care, snow removal) (71) __
7= Managing money (72) __
8= Taking medication (73) __
9= Other (SPECIFY) _____ (74) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

(75-79)=BLANK

(80)= 3

FORMAL SERVICES (NAME #3) Are there any other paid helpers?

SITE# (01-02)__ __
CLIENT# (03-05)__ __ __

[IF NO ADDITIONAL FORMAL SERVICES GO TO C4]

(06)=BLANK

C3. _____ (07-10) __ __ __ __
(NAME #3)

a. What agency or organization was NAME from?

_____ (11-14) __ __ __ __
(AGENCY/ORGANIZATION)

b. How often does NAME come to help you?

_____ (15-17) __ __ __
(# OF TIMES EACH MONTH)

c. How long does NAME usually stay each visit?

_____ (18-20) __ __ __
(MINUTES)

d. When did NAME first begin coming to help you ?

---------/----- (21-24) __ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (25) __

IF NO: When will NAME stop providing services ?

_____/_____ (26-29) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S provision of this service?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (30) __

g. How did you arrange for NAME to provide this service?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (31) __

h. How are these services paid for?

1= SELF

2= FRIEND/RELATIVE

3= VOLUNTEER

4= GOVERNMENT

5= INSURANCE

6= SELF & OTHER (SPECIFY _____) (32) __

i. What does NAME help you with ? [PROBE]
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1=	Skilled nursing and therapies	(33) __
2=	Chore services/homemaker (housework, laundry, shopping)	(34) __
3=	Meals	(35) __
4=	Personal care-unskilled (Bathing, dressing)	(36) __
5=	Transportation	(37) __
6=	Home upkeep (repairs, lawn care, snow removal)	(38) __
7=	Managing money	(39) __
8=	Taking medication	(40) __
9=	Other (SPECIFY) _____	(41) __

C4. Do you have any other people or organizations that come into your home at least once a month as part of their paid or volunteer work? YES: How many others? ___
NO

TOTAL NUMBER OF FORMAL SERVICES (42-43) __ __

D. INFORMAL SERVICES UTILIZATION

Next, please tell me the names of friends, neighbors, or family members who regularly come to help you. Please do not include people who help you as part of their paid or volunteer work.

REGULARLY = AT LEAST ONCE A MONTH. [IF NONE GO TO D4]

SPACE (D1-D3) IS PROVIDED FOR 3 INFORMAL CAREGIVERS.

[MUST PROVIDE PRACTICAL ASSISTANCE] (44)= BLANK

D1. a._____ (45-48) __ __ __ __
(NAME #1)

b. How often does NAME come to help you?

_____ (49-50)__ __
(# OF TIMES EACH MONTH)
[44=LIVE IN]

c. How long does NAME usually stay each visit?

_____ (51-53)__ __ __
(MINUTES) [444=LIVE IN]

d. When did NAME first begin helping you ?

---------/----- (54-57)__ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (58)__

IF NO: When will NAME stop providing services ?

_____/_____ (59-62)__ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S help?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (63)__

g. How did you arrange for NAME to help you?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (64)__

h. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (65)__
2= Chore services/homemaker (housework, laundry, shopping) (66)__
3= Meals (67)__
4= Personal care-unskilled (Bathing, dressing) (68)__
5= Transportation (69)__
6= Home upkeep (repairs, lawn care, snow removal) (70)__
7= Managing money (71)__
8= Taking medication (72)__
9= Other (SPECIFY) _____ (73)__

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

(74-79)= BLANK
(80)= 4

SITE# (01-02)__ __

CLIENT# (03-05)__ __ __

(06)=BLANK

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 13

INFORMAL SERVICES UTILIZATION (NAME 2)

Are there any other people who come to help you?

[IF NONE GO TO D4]

D2. a. _____ (07-10) __ __ __ __
(NAME #2)

b. How often does NAME come to help you?

(11-12) __ __

(# OF TIMES EACH MONTH)
[44=LIVE IN]

c. How long does NAME usually stay each visit?

(13-15) __ __ __

(MINUTES) [444=LIVE IN]

d. When did NAME first begin helping you ?

---------/----- (16-19) __ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (20) __

IF NO: When will NAME stop providing services ?

_____/_____ (21-24) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S help?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (25) __

g. How did you arrange for NAME to help you?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (26) __

h. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (27) __
2= Chore services/homemaker (housework, laundry, shopping) (28) __
3= Meals (29) __
4= Personal care-unskilled (Bathing, dressing) (30) __
5= Transportation (31) __
6= Home upkeep (repairs, lawn care, snow removal) (32) __
7= Managing money (33) __
8= Taking medication (34) __
9= Other (SPECIFY) _____ (35) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

INFORMAL SERVICES UTILIZATION (NAME 3)

Are there any other people that come to help you?

[IF NONE GO TO D4]

D3. a._____ (36-39)__ __ __ __
(NAME #3)

b. How often does NAME come to help you?

_____ (40-41)__ __
(# OF TIMES EACH MONTH)
[44=LIVE IN]

c. How long does NAME usually stay each visit?

_____ (42-44)__ __ __
(MINUTES) [444=LIVE IN]

d. When did NAME first begin helping you?

---------/----- (45-48)__ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (49) __

IF NO: When will NAME stop providing services ?

_____/_____ (50-53) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S help?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (54) __

g. How did you arrange for NAME to help you?

1= SELF
2= FRIEND/RELATIVE
3= INFORMATION & REFERRAL
4= CASE MANAGEMENT
5= DSS
6= PUBLIC HEALTH
7= DISCHARGE PLANNER/PHYSICIAN
8= OTHER (_____) (55) __

h. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (56) __
2= Chore services/homemaker (housework, laundry, shopping) (57) __
3= Meals (58) __
4= Personal care-unskilled (Bathing, dressing) (59) __
5= Transportation (60) __
6= Home upkeep (repairs, lawn care, snow removal) (61) __
7= Managing money (62) __
8= Taking medication (63) __
9= Other (SPECIFY) _____ (64) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE ?]

D4. Do you have any other family, friends or neighbours that regularly come into your home to help you? YES/NO
IF YES: how many others? _____

TOTAL NUMBER INFORMAL CAREGIVERS (65-66) __ __

D5. Do you feel that you need more help than you are receiving now in any of the following areas?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (67) __
2= Chore services/homemaker (housework, laundry, shopping) (68) __
3= Meals (69) __
4= Personal care-unskilled (Bathing, dressing) (70) __
5= Transportation (71) __
6= Home upkeep (repairs, lawn care, snow removal) (72) __
7= Managing money (73) __
8= Taking medication (74) __
9= Other (SPECIFY) _____ (75) __

(76-79)= BLANK

CARD# (80)= 5

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 17

E. SOCIAL SUPPORT

SOCIAL SUPPORT INTERVIEW QUESTIONS (CODE ON SUPPORT CODE SHEET)

[USE THESE QUESTIONS ALONG WITH THE SOCIAL SUPPORT CODING SHEET. IF THE "NAMED PERSON" IS ALREADY ON THE SHEET CIRCLE 1=YES IF THEY ARE NOT ON THE SHEET ADD THEIR NAME IN THE NEXT AVAILABLE SPACE AND ALSO CIRCLE 1=YES. IF A NAME THAT IS ALREADY ON THE SHEET IS NOT MENTIONED THEN CIRCLE 2=NO. YOU CAN CIRCLE THE "NO" ANSWERS AFTER THE INTERVIEW IS COMPLETED]

* * *

Now I'm going to ask you some questions about people who are part of your life who provide you with help or social support. As I ask each question, I want you to name only those people who come to mind quickly.

*E1. In an average week who do you enjoy chatting with?

*E2. Who can you rely on for advice about resources? - e.g. advice about services available in the community?

*E3. Who can you count on to listen to you when you want to talk about something personal? - e.g. someone who will listen to your feelings.

*E4. Who cares about you?

*E5. Who makes your life difficult; such as someone who expects too much from you or makes too many demands on you, someone who you wish would leave you alone or someone you would like to avoid?

* ASK THE FOLLOWING QUESTIONS (E6-E9) FOR EACH PERSON THAT HAS BEEN MENTIONED AND WHO'S NAME YOU MARKED ON THE SUPPORT CODING SHEET. THIS INCLUDES ALL NAMES THAT HAVE BEEN MARKED ON THE CODING SHEET. ALL NAMES THAT WERE MENTIONED IN QUESTION A5 AND IN SECTIONS C AND D (SERVICES) SHOULD BE CODED HERE.

ASK ITEMS E6-E9 ACROSS SUPPORT SHEET FOR EACH NAME BEFORE MOVING TO NAME ON NEXT LINE

E6. What is the SEX of the caregiver? (ASK ONLY IF GENDER IS NOT CLEAR)

1=MALE 2= Female

E7. What is the AGE of the caregiver? (If respondent does not know ask them to guess)

E8. What is your main relationship with this person? (Enter the appropriate code number on the code sheet.)

01 = ROMANTIC
02 = SPOUSE
03 = CHILD (INCLUDE SON & DAUGHTER IN-LAW)
04 = GRANDCHILD
05 = SIBLING
06 = PARENT
07 = OTHER RELATIVE
08 = FRIEND
09 = NEIGHBOUR
10 = PROFESSIONAL (doctor, nurse, case manager)
11 = FORMAL VOLUNTEER
12 = PAID HELP (homemaker, personal care)
13 = PAID COMMUNITY SERVICE (taxi, bus, grocery clerk)
14 = PAID LIVE IN COMPANION
15 = OTHER (SPECIFY)

*E9. All of the names you have mentioned may have some importance to you. Think about how important your relationship with (NAME) is to you. Compared to the other names that you have given me would you say the relationship was important or unimportant?

IF IMPORTANT - READ 5,6,7

IF UNIMPORTANT - READ 1,2,3

Would you say it was...

1 = Extremely Unimportant
2 = Very unimportant
3 = Unimportant
4 = EQUALLY IMPORTANT AND UNIMPORTANT
5 = Important
6 = Very Important
7 = Extremely Important

[FOR THIS ITEM ONLY]
[REFUSAL=0...NOT APPLICABLE=8...MISSING=9]

INSERT SOCIAL SUPPORT CODING SHEET HERE

SITE/CLIENT ID __ __-__ __ __

SOCIAL SUPPORT

(QUESTIONS E1-E9 ARE ON PAGE 18-19)

1=YES 2=NO

NAME	E1. CHAT WITH	E2. ADVICE RESOURCES	E3. LISTEN PERSONAL	E4. WHO CARES	E5. TAKES LIFE	E6. SEX	ASK THESE ITEMS ACROSS EACH LINE E7. AGE	E8. MAIN RELATION	E9. RELATION IMPORTANCE
SITE# (01-02) __ __ CLIENT# (03-05) __ __ __ (06)= BLANK									
(07-20) Ea.(01)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(21-34) Eb.(02)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(35-48) Ec.(03)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(49-62) Ed.(04)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(63-76) Ee.(05)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(77-79)= BLANK (80)= 6 SITE# (01-02) __ __ CLIENT#(03-05) __ __ __ (06)= BLANK									
(07-20) Ef.(06)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(21-34) Eg.(07)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(35-48) Eh.(08)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(49-62) Ei.(09)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(63-76) Ej.(10)_____	1 2	1 2	1 2	1 2	1 2	1 2	__ __ __	__ __	__
(77-79)= BLANK (80)= 7									

F.AUTONOMY

Now I'd like to ask you some questions about daily decisions.

F1. Would you say that: "The decision about the type of help you receive is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION

SITE# (01-02) __ __
CLIENT# (03-05) __ __ __
(06)=BLANK

(07)__

F2. "The decision about the doctors you see is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (08)__

F3. "The decision about how you spend time during the day is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (09)__

F4. "The decision about who visits you is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (10)__

AUTONOMY cont.

F5. Overall, how much control do you have over things that happen to you in your life--would you say that you have a great deal of control, a fair amount of control, little control, or no control?

1= GREAT DEAL

2= FAIR AMOUNT

3= LITTLE

4= NONE (11)__

G. FINANCIAL RESOURCES

The next questions are about your insurance.

G1. Are you covered by Medicare

1= YES
[RED WHITE & BLUE CARD]
2= NO (12)__

PROBE: Is something deducted from your Social Security check?

G2. Are you covered by Medicaid?

1= YES
[BLUE CARD]
2= NO (13)__

G3. What about the following kinds of medical or health plans? Are you covered by any of these?

	YES	NO	
a. Private insurance which supplements Medicare, and covers hospitalization?	1	2	(14)__
b. Private insurance which supplements Medicare and covers doctors' bills?	1	2	(15)__
c. Membership in an HMO (Health Maintenance Organization)	1	2	(16)__
d. Veterans medical insurance?	1	2	(17)__
e. Any other medical or health insurance?	1	2	(18)__

SPECIFY ALL HEALTH INSURANCE: _____

G4. What are your sources of income?

	YES	NO	
a. WAGES (OWN OR SPOUSE)	1	2	(19)__
b. CHILDREN OR RELATIVES	1	2	(20)__
c. SOCIAL SECURITY	1	2	(21)__
d. ANNUITIES, SAVINGS, ETC.	1	2	(22)__
e. OLD AGE ASSISTANCE [GOLD CHECK]	1	2	(23)__
f. PENSIONS	1	2	(24)__
g. OTHER (SPECIFY _____)	1	2	(25)__

[PROBE: Do you have any savings?]

G5. Which of these [ABOVE] is your major source of income?

[MAJOR = PROVIDES MOST DOLLARS PER MONTH]

1= WAGES (OWN OR SPOUSE)

2= CHILDREN OR RELATIVES

3= SOCIAL SECURITY

4= ANNUITIES, SAVINGS, ETC.

5= OLD AGE ASSISTANCE

6= PENSIONS

7= OTHER (SPECIFY _____) (26)__

G6. How much income do you (and your husband/wife) have a year?

(NOTE: SHOW CARD)

a. 01=0-$499

b. 02=$500-$999

c. 03=$1,000-$1,999

d. 04=$2,000-$2,999

e. 05=$3,000-$3,999

f. 06=$4,000-$4,999

g. 07=$5,000-$6,999

h. 08=$7,000-$9,999

i. 09=$10,000-$14,999

j. 10=$15,000-$19,999

k. 11=$20,000-$29,999

l. 12=$30,000-$39,999

m. 13=$40,000 OR MORE (27-28) __ __

G6a How many people altogether live on this income (that is, it provides at least half of their income)?

_____ (29-30) __ __

G7. How would you describe the adequacy of your income? Would you say that is is very adequate, somewhat adequate, or not adequate?

1= VERY ADEQUATE

2= ADEQUATE

3= NOT ADEQUATE (31) __

Closing the Interview

Thank-you very much. Those are all the questions I have to ask you today. As I explained earlier I will be back again to talk with you in 6 months. I will phone you in 3 months to see how you are doing.

I'd like to tell you about the program that you will receive.

[OPEN UP ENVELOPE] [IF I & R THEN GO TO "A"]
[IF CASE MANAGEMENT THEN GO TO "B"]

A. INFORMATION & REFERRAL:

The program's name is called Information & Referral. Our community has one place where people can call for information about the services that are available for older individuals. You can call this number [POINT OUT NUMBER & CIRCLE IN RED PEN] and someone will help you to find the assistance that you may feel that you need. It is important that you call the Information & Referral program if you want more help than you are receiving now.

Before I leave I also want to give you a list of services that are commonly used by older individuals in our community. If you wish to contact any of these services their telephone numbers are printed on this list. [GIVE A BRIEF EXPLANATION OF EACH SERVICE CATEGORY]

Remember, if you feel that you would like to talk with someone about getting more help for yourself call the Information & Referral service. The number is on this sheet. I have circled it in red. Do you have any questions?

Thank you again for taking the time to talk with me and for answering my questions. I will call you in 3 months and I will be back to talk with you in 6 months. I hope you enjoy the rest of your day.

B. CASE MANAGEMENT:

The program's name is called Case Management. Someone from their office will call you either today or tomorrow to arrange to meet with you. A nurse and/or a social worker will visit you in your home to discuss any help that you feel you need. They will then assist you in receiving services. They want to help you to be comfortable in your own home. Do you have any questions?

Thank you again for taking the time to talk with me and for answering my questions. I will call you in 3 months and I will be back to talk with you in 6 months. I hope you enjoy the rest of your day.

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 26

H. OBSERVATIONS

H1. CLIENT'S RACE ?

1= BLACK

2= CAUCASIAN

3= HISPANIC

4= ORIENTAL

5= INDIAN

6= OTHER (SPECIFY:_____) (32)__

H2. TYPE OF COMMUNITY IN WHICH CLIENT LIVES:

LARGE CITY (250,000 OR MORE)	1	
SUBURB OF LARGE CITY	2	
MEDIUM-SIZED CITY (50,000-250,000) . .	3	
SUBURB OF MEDIUM CITY	4	
SMALL CITY (5,000-50,000)	5	
SMALL TOWN (LESS THAN 5000)	6	
RURAL	7	
OTHER (SPECIFY) _____	8	(33)__

H3. CLIENT'S CURRENT LIVING ARRANGEMENT:

PRIVATE HOME, ROOM OR APARTMENT	1	
ADULT FOSTER CARE/BOARDING HOUSE	2	
(NAME: _____)		
SENIOR CITIZEN APARTMENTS	3	
(NAME: _____)		
NURSING HOME	4	
(NAME: _____)		
OTHER (SPECIFY : _____). .	5	(34)__

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 27

OBSERVATIONS cont.

H4. DURING THE ASSESSMENT, DID THE CLIENT'S BEHAVIOR STRIKE YOU AS:

	YES	NO	CANNOT DETERMINE	
a. MENTALLY ALERT AND STIMULATING	1	2	3	(35)__
b. PLEASANT AND COOPERATIVE . .	1	2	3	(36)__
c. DEPRESSED AND/OR TEARFUL . .	1	2	3	(37)__
d. FEARFUL, ANXIOUS, OR EXTREMELY TENSE . . .	1	2	3	(38)__
e. FULL OF UNREALISTIC COMPLAINTS	1	2	3	(39)__
f. SUSPICIOUS (MORE THAN USUAL)	1	2	3	(40)__
g. BIZARRE OR INAPPROPRIATE (E.G., DISRUPTIVE, ABUSIVE, WANDERING)	1	2	3	(41)__
h. WITHDRAWN OR LETHARGIC . . .	1	2	3	(42)__
i. AGITATED, QUICK, LOUD, AND EMOTIONALLY OVERRESPONSIVE. .	1	2	3	(43)__

H5. WHICH OF THE FOLLOWING BEST DESCRIBES THE CLIENT'S SPEECH:

NO IMPAIRMENT. 1

PARTIALLY IMPAIRED (CAN USUALLY BE UNDERSTOOD BUT HAS DIFFICULTY WITH SOME WORDS) 2

SEVERELY IMPAIRED (CAN BE UNDERSTOOD ONLY WITH DIFFICULTY AND CANNOT CARRY ON A NORMAL CONVERSATION). . . . 3

COMPLETELY IMPAIRED (SPEECH IS UNINTELLIGIBLE OR CANNOT SPEAK) . . . . . 4 (44)__

OBSERVATIONS cont.

H6. THINKING ABOUT THE CLIENT'S UNDERSTANDING OF THE QUESTIONS, MENTAL FUNCTIONING AND ABILITY TO COMMUNICATE, WOULD YOU SAY THE RESPONSES TO THE QUESTIONS ASKED OF HIM/HER WERE:

COMPLETELY RELIABLE 1

RELIABLE ON MOST ITEMS. 2

RELIABLE ON SOME ITEMS. 3

COMPLETELY UNRELIABLE . . . . . 4 (45)__

H7. DID THE CLIENT HAVE ANY PETS?

1= YES

2= NO (46)__

(IF YES)

H8. INDICATE THE TYPE OF PETS.

1=YES 2= NO 6= N/A

1= DOG (47)__

2= CAT (48)__

3= BIRD (49)__

4= FISH (50)__

5= OTHER PLEASE SPECIFY _____ (51)__

MEDICARE NUMBER (52-61) __ __ __ __ __ __ __ __ __ __

MEDICAID NUMBER (62-71) __ __ __ __ __ __ __ __ __ __

(72-79) BLANK

(80)= 8

SITE/CLIENT ID __ __ - __ __ __ BASELINE (PINK) 29

APPENDIX 2

INTERVIEW FACT SHEET

Wave Number: 2=(6-MONTH) 3=(12-MONTH) (01)__

Site ID Number:_____ (02-03)__ __

Client ID Number: _____ (04-06)__ __ __

Interviewer ID Number:_____ (07-09)__ __ __

Interviewer Name:_____

Interview Date: _____ (10-15)__ __ __ __ __ __
m/d/yr

Start Time: _____ AM=1 PM=2 (16-20)__ __ __ __ __

Finish Time: _____ AM=1 PM=2 (21-25)__ __ __ __ __
(EXAMPLE - 10:45 PM = 10452)

Information was obtained from:

1. Client
2. Proxy
3. Combination (26)__

SOCIAL SUPPORT FOLLOW-UP

(QUESTIONS E1-E9 ARE ON PAGE 20-22)

1=YES 2=NO

IF NAME RECORDED AT BASELINE
CODE 555 OR 55 FOR E7 + E8

ASK THESE ITEMS ACROSS EACH LINE

NAME	E1. CHAT WITH	E2. ADVICE RESOURCES	E3. LISTEN PERSONAL	E4. WHO CARES	E5. MAKES LIFE	E6. SEX	E7. AGE	E8. MAIN RELATION	E9. RELATION IMPORTANCE
SITE# (01-02) __ __ CLIENT# (03-05) __ __ __ (06)= BLANK									
(07-20) Ea.(01)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(21-34) Eb.(02)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(35-48) Ec.(03)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(49-62) Ed.(04)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(63-76) Ee.(05)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(77-78)= BLANK (79-80)=__ __ [22=6-MONTH 30=12-MONTH] SITE# (01-02) __ __ CLIENT#(03-05) __ __ __ (06)= BLANK									
(07-20) Ef.(06)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(21-34) Eg.(07)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(35-48) Eh.(08)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(49-62) Ei.(09)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(63-76) Ej.(10)_____	1 2	1 2	1 2	1 2	1 2	1 2	___	___	___
(77-78)= BLANK (79-80)=__ __ [23=6-MONTH 31=12-MONTH]									

We would like to thank you for giving us this opportunity to talk with you again. The feedback that you have been providing us will help determine how services for older people in Michigan can be improved. The Michigan Office of Services to the Aging is conducting this study along with Michigan State University in five areas of the state. In this area we are working with _____. We are interested in getting your feedback on which type of services provide the best care for older people in different situations. After today we would like to talk with you again in six months.

All information that you provide during the interviews will be kept strictly confidential. No one but the project staff will have access to what you tell us. In addition, all of the information will be stored without your name on it to make sure that your privacy is protected. Your participation in the project will remain anonymous. If you wish when the study is over we will send you a copy of the results.

If you have any questions about this project please contact the Project Director, Joseph Bornstein at (517) 353-9673 or contact the local agency listed below.

THANK YOU FOR YOUR PARTICIPATION

INTERVIEWER NAME: _____

LOCAL AGENCY: _____

AGENCY TELEPHONE: _____

A. CLIENT PROFILE

First I'd like to find out a little about your living situation.

(27)=BLANK

A1. Does anyone else live with you?

1= YES

2= NO (28)__

(IF YES)

A2. Will you please give me the names of all household members.

NAMES:

1._____	(29-32) __ __ __ __
2._____	(33-36) __ __ __ __
3._____	(37-40) __ __ __ __
4._____	(41-44) __ __ __ __
5._____	(45-48) __ __ __ __
6._____	(49-52) __ __ __ __
7._____	(53-56) __ __ __ __
8._____	(57-60) __ __ __ __
9._____	(61-64) __ __ __ __
10._____	(65-68) __ __ __ __
	(69-78) BLANK
CARD # 17=6-MONTH 25=12-MONTH	(79-80) __ __

[REMEMBER TO CODE NAMES ON SOCIAL SUPPORT SHEET]

B. HEALTH PROFILE

SITE# (01-02)__ __

CLIENT# (03-05)__ __ __

Let's talk about your health now. (06)= BLANK

*B1. How would you rate your overall health at the present time--would you say it was excellent, good, fair, or poor?

1= EXCELLENT

2= GOOD

3= FAIR

4= POOR (07) __

*B2. Is your health now better, about the same, or worse than it was 6 months ago?

1= BETTER

2= ABOUT THE SAME

3= WORSE (08) __

*B3. How much do your health troubles stand in the way of your doing things you want to do--not at all, a little (some) or a great deal? [e.g Recreational or social things]

1= NOT AT ALL

2= A LITTLE

3= A GREAT DEAL (09) __

B4. During this last month how many days did you stay in bed most or all of the day either because you were too ill to get up or because you just didn't feel like getting up (either at home or in the nursing home)?
[MOST OF DAY = MORE THAN HALF OF DAY]

(# DAYS) (10-11)__ __

(NOTE: EXCLUDES HOSPITAL DAYS)

*B5. Considering all parts of your life right now, How satisfied would you say you are with your life.

Would you say you are...

1=Very Satisfied
2=Satisfied
3=Dissatisfied
4=Very Dissatisfied (12)__

The next questions are about the medical care you may have received in the last month

B6. How many days were you in the hospital during the last month? _____ (13-14)__ __

B7. How many times did you use an Emergency Room at a hospital during the last month? _____ (15-16)__ __

B8. How many times did you visit your doctors during the last month? _____ (EXCLUDE HOSPITAL DAYS) (17-18)__ __

B9. During the last month have you seen anyone besides a Doctor or a Nurse regarding your physical health?

1=YES 2=NO (19)__

IF YES:

B9a. Who did you see? (LIST TYPES OF PROVIDERS)

_____ (20-21)__ __

B10. How many days were you in a nursing home or Foster Care Home during the last month.? _____ (22-23)__ __

B11. During the last 6 months did you move into or leave a Nursing Home? YES=1 NO=2 (24)__

IF YES:

B11a. Did you:

1. Enter a Nursing Home and remain there?
2. Enter a Nursing Home and leave?
3. Leave a Nursing Home that you had been in for more than 6 months? (25)__

Now I'd like to talk about your eating habits.

B12. Please take a minute to think about your diet.

I'm going to read a list of food groups to you and for each group I'd like you to tell me how often you eat the foods that I mention. Please indicate whether you eat these foods:

(SHOW CARD)	Hardly Ever	Several Times A Week	Once A Day	Two Times A Day	3 or More Times A Day	CIRCLE CHOICE
a. DAIRY PRODUCTS Milk, Cheese, Yogurt, Pudding, Custard	1	2	3	4	5	(26)__
b. ANIMAL PROTEINS Beef, Chicken, Pork, Fish, Eggs	1	2	3	4	5	(27)__
c. VEGETABLE PROTEINS Beans, Nuts, Peas	1	2	3	4	5	(28)__
d. FRUIT or JUICE of Oranges, Grapefruits, Tangerines, Strawberries, Tomatoes	1	2	3	4	5	(29)__
e. GREEN VEGETABLES Broccoli, Lima Beans, Spinach, Lettuce, Other Greens	1	2	3	4	5	(30)__
f. ANY OTHER FRUIT or VEGETABLE	1	2	3	4	5	(31)__
g. GRAINS Cereal, Bread, Rolls, Rice, Crackers, Noodles, Macaroni, Spaghetti	1	2	3	4	5	(32)__

The following questions are about taking care of yourself and your home. I'm going to ask you whether you can and whether you do perform certain daily activities.

B13. Can you dress yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (33)__

B14. Do you dress yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (34)__

B15. Can you bath yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (35)__

B16. Do you bath yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (36)__

B17. Can you get in and out of bed yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (37)__

B18. Do you get in and out of bed yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (38)__

B19. Can you prepare your own meals

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (39)__

B20. Do you prepare your own meals

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (40)__

B21. Can you do light housework

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (41)__

B22. Do you do light housework

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (42)__

B23. Can you go shopping

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (43)__

B24. Do you go shopping

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (44)__

(45-78)BLANK

CARD# 18=(6-MONTH) 26=(12-MONTH) (79-80)__ __

SITE/CLIENT ID __ __ - __ __ __ 6

C. FORMAL SERVICES UTILIZATION

Now please tell me the names of people who regularly come to help you as part of their paid or volunteer work. These could be people who come from an agency or organization or people you hired. [IF NONE, GO TO C4]

SITE# (01-02)__ __
CLIENT# (03-05)__ __ __

REGULARLY = AT LEAST ONCE A MONTH.

SPACE (C1-C3) IS PROVIDED FOR 3 FORMAL CAREGIVERS. (06)=BLANK

C1. _____ (07-10)__ __ __ __
(NAME #1)

a. What agency or organization was NAME from?

_____ (11-14)__ __ __ __
(AGENCY/ORGANIZATION)

b. How often does NAME come to help you?

_____ (15-16)__ __
(# OF TIMES EACH MONTH)

c. How long does NAME usually stay each visit?

_____ (17-19)__ __ __
(MINUTES)

d. When did NAME first begin coming to help you ?

_____/_____ (20-23)__ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (24) __

IF NO: When will NAME stop providing services ?

_____/_____ (25-28) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S provision of this service?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (29) __

g. How did you arrange for NAME to provide this service?

1= SELF
2= FRIEND/RELATIVE
3= INFORMATION & REFERRAL
4= CASE MANAGEMENT
5= DSS
6= PUBLIC HEALTH
7= DISCHARGE COORDINATOR/PHYSICIAN
8= OTHER (_____) (30) __

h. How are these services paid for?

1= SELF

2= FRIEND/RELATIVE

3= VOLUNTEER

4= GOVERNMENT/PUBLIC AGENCY

5= HEALTH INSURANCE

6= SELF & OTHER (SPECIFY _____) (31) __

i. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (32) __
2= Chore services/homemaker (housework, laundry, shopping) (33) __
3= Meals (34) __
4= Personal care-unskilled (Bathing, dressing) (35) __
5= Transportation (36) __
6= Home upkeep (repairs, lawn care, snow removal) (37) __
7= Managing money (38) __
8= Taking medication (39) __
9= Other (SPECIFY) _____ (40) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

FORMAL SERVICES (NAME #2) Are there any other paid helpers?

[IF NO ADDITIONAL SERVICES GO TO C4]

C2. _____ (41-44) __ __ __ __
(NAME #2)

a. What agency or organization was NAME from?

_____ (45-48) __ __ __ __
(AGENCY/ORGANIZATION)

b. How often does NAME come to help you?

_____ (49-50) __ __
(# OF TIMES EACH MONTH)

c. How long does NAME usually stay each visit?

_____ (51-53) __ __ __
(MINUTES)

d. When did NAME first begin coming to help you ?

_____/_____ (54-57) __ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (58) __

IF NO: When will NAME stop providing services ?

_____/_____ (59-62) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S provision of this service?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (63) __

SITE/CLIENT ID __ __ - __ __ __ 9

g. How did you arrange for NAME to provide this service?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (64) __

h. How are these services paid for?

1= SELF

2= FRIEND/RELATIVE

3= VOLUNTEER

4= GOVERNMENT/PUBLIC AGENCY

5= HEALTH INSURANCE

6= SELF & OTHER (65) __

i. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (66) __
2= Chore services/homemaker (housework, laundry, shopping) (67) __
3= Meals (68) __
4= Personal care-unskilled (Bathing, dressing) (69) __
5= Transportation (70) __
6= Home upkeep (repairs, lawn care, snow removal) (71) __
7= Managing money (72) __
8= Taking medication (73) __
9= Other (SPECIFY) _____ (74) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

(75-78)=BLANK

CARD# 19=(6-MONTH) 27=(12-MONTH) (79-80)=__ __

FORMAL SERVICES (NAME #3) Are there any other paid helpers?

SITE# (01-02)__ __
CLIENT# (03-05)__ __ __

[IF NO ADDITIONAL FORMAL SERVICES GO TO C4]

(06)=BLANK

C3. _____ (07-10) __ __ __ __
(NAME #3)

a. What agency or organization was NAME from?

_____ (11-14) __ __ __ __
(AGENCY/ORGANIZATION)

b. How often does NAME come to help you?

_____ (15-17) __ __ __
(# OF TIMES EACH MONTH)

c. How long does NAME usually stay each visit?

(18-20) __ __ __
(MINUTES)

d. When did NAME first begin coming to help you ?

---------/----- (21-24) __ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (25) __

IF NO: When will NAME stop providing services ?

_____/_____ (26-29) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S provision of this service?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (30) __

g. How did you arrange for NAME to provide this service?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (31) __

h. How are these services paid for?

1= SELF

2= FRIEND/RELATIVE

3= VOLUNTEER

4= GOVERNMENT/PUBLIC AGENCY

5= HEALTH INSURANCE

6= SELF & OTHER (SPECIFY _____) (32) __

i. What does NAME help you with ? [PROBE]
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1=	Skilled nursing and therapies	(33) __
2=	Chore services/homemaker (housework, laundry, shopping)	(34) __
3=	Meals	(35) __
4=	Personal care-unskilled (Bathing, dressing)	(36) __
5=	Transportation	(37) __
6=	Home upkeep (repairs, lawn care, snow removal)	(38) __
7=	Managing money	(39) __
8=	Taking medication	(40) __
9=	Other (SPECIFY) _____	(41) __

C4. Do you have any other people or organizations that come into your home at least once a month as part of their paid or volunteer work? YES: How many others? ___
NO

TOTAL NUMBER OF FORMAL SERVICES (42-43) __ __

SITE/CLIENT ID __ __ - __ __ __ 12

D. INFORMAL SERVICES UTILIZATION

Next, please tell me the names of friends, neighbors, or family members who regularly come to help you. Please do not include people who help you as part of their paid or volunteer work.

REGULARLY = AT LEAST ONCE A MONTH. [IF NONE GO TO D4]

SPACE (D1-D3) IS PROVIDED FOR 3 INFORMAL CAREGIVERS.

[MUST PROVIDE PRACTICAL ASSISTANCE] (44)= BLANK

D1. a._____ (45-48) __ __ __ __
(NAME #1)

b. How often does NAME come to help you?

_____ (49-50)__ __
(# OF TIMES EACH MONTH)
[44=LIVE IN]

c. How long does NAME usually stay each visit?

_____ (51-53)__ __ __
(MINUTES) [444=LIVE IN]

d. When did NAME first begin helping you ?

---------/----- (54-57)__ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (58)__

IF NO: When will NAME stop providing services ?

_____/_____ (59-62)__ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S help?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (63)__

g. How did you arrange for NAME to help you?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (64)__

h. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (65)__
2= Chore services/homemaker (housework, laundry, shopping) (66)__
3= Meals (67)__
4= Personal care-unskilled (Bathing, dressing) (68)__
5= Transportation (69)__
6= Home upkeep (repairs, lawn care, snow removal) (70)__
7= Managing money (71)__
8= Taking medication (72)__
9= Other (SPECIFY) _____ (73)__

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

(74-78)= BLANK

CARD# 20=(6-MONTH) 28=(12-MONTH) (79-80)= __ __

SITE# (01-02)__ __

CLIENT# (03-05)__ __ __

(06)=BLANK

INFORMAL SERVICES UTILIZATION (NAME 2)

Are there any other people who come to help you?

[IF NONE GO TO D4]

D2. a._____ (07-10) __ __ __ __
(NAME #2)

b. How often does NAME come to help you?

_____ (11-12) __ __
(# OF TIMES EACH MONTH)
[44=LIVE IN]

c. How long does NAME usually stay each visit?

_____ (13-15) __ __ __
(MINUTES) [444=LIVE IN]

d. When did NAME first begin helping you ?

---------/----- (16-19) __ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (20) __

IF NO: When will NAME stop providing services ?

_____/_____ (21-24) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S help?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (25) __

g. How did you arrange for NAME to help you?

1= SELF

2= FRIEND/RELATIVE

3= INFORMATION & REFERRAL

4= CASE MANAGEMENT

5= DSS

6= PUBLIC HEALTH

7= DISCHARGE PLANNER/PHYSICIAN

8= OTHER (_____) (26) __

h. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (27) __
2= Chore services/homemaker (housework, laundry, shopping) (28) __
3= Meals (29) __
4= Personal care-unskilled (Bathing, dressing) (30) __
5= Transportation (31) __
6= Home upkeep (repairs, lawn care, snow removal) (32) __
7= Managing money (33) __
8= Taking medication (34) __
9= Other (SPECIFY) _____ (35) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE?]

INFORMAL SERVICES UTILIZATION (NAME 3)

Are there any other people that come to help you?

[IF NONE GO TO D4]

D3. a._____ (36-39)__ __ __ __
(NAME #3)

b. How often does NAME come to help you?

_____ (40-41)__ __
(# OF TIMES EACH MONTH)
[44=LIVE IN]

c. How long does NAME usually stay each visit?

_____ (42-44)__ __ __
(MINUTES) [444=LIVE IN]

d. When did NAME first begin helping you?

---------/----- (45-48)__ __ __ __
(MONTH) (YEAR)

e. Will NAME be able to continue coming to help you ?

1= YES

2= NO (49) __

IF NO: When will NAME stop providing services ?

_____/_____ (50-53) __ __ __ __
(MONTH) (YEAR)

* f. Would you say that you were very satisfied, satisfied, or not too satisfied with NAME'S help?

1= VERY SATISFIED

2= SATISFIED

3= NOT TOO SATISFIED (54) __

g. How did you arrange for NAME to help you?

1= SELF
2= FRIEND/RELATIVE
3= INFORMATION & REFERRAL
4= CASE MANAGEMENT
5= DSS
6= PUBLIC HEALTH
7= DISCHARGE PLANNER/PHYSICIAN
8= OTHER (_____) (55) __

h. What does NAME help you with ?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies (56) __
2= Chore services/homemaker (housework, laundry, shopping) (57) __
3= Meals (58) __
4= Personal care-unskilled (Bathing, dressing) (59) __
5= Transportation (60) __
6= Home upkeep (repairs, lawn care, snow removal) (61) __
7= Managing money (62) __
8= Taking medication (63) __
9= Other (SPECIFY) _____ (64) __

[PROBE: DOES NAME HELP YOU WITH ANYTHING ELSE ?]

D4. Do you have any other family, friends or neighbours that regularly come into your home to help you? YES/NO
IF YES: how many others? _____

TOTAL NUMBER INFORMAL CAREGIVERS (65-66) __ __

GO TO QUESTION D5

UNMET NEEDS

D5. Do you feel that you need more help than you are receiving now in any of the following areas?
(CIRCLE ALL THAT APPLY) 1=YES 2=NO

1= Skilled nursing and therapies	(67)	__
2= Chore services/homemaker (housework, laundry, shopping)	(68)	__
3= Meals	(69)	__
4= Personal care-unskilled (Bathing, dressing)	(70)	__
5= Transportation	(71)	__
6= Home upkeep (repairs, lawn care, snow removal)	(72)	__
7= Managing money	(73)	__
8= Taking medication	(74)	__
9= Other (SPECIFY) _____	(75)	__

D6. How much do you worry about not knowing who to turn to for help? Would you say you worry:

1. A LOT
2. SOME
3. NOT VERY MUCH (76) __

D7. How confident are you of getting services (help) when you need them? Would you say you feel:

1. VERY CONFIDENT
2. SOMEWHAT CONFIDENT
3. NOT VERY CONFIDENT (77) __

(78)= BLANK

CARD# 21=(6-MONTH) 29=(12-MONTH) (79-80)=__ __

REMEMBER TO CODE C4 AND D4

E. SOCIAL SUPPORT

SOCIAL SUPPORT INTERVIEW QUESTIONS (CODE ON SUPPORT CODE SHEET)

[USE THESE QUESTIONS ALONG WITH THE SOCIAL SUPPORT CODING SHEET. IF THE "NAMED PERSON" IS ALREADY ON THE SHEET CIRCLE 1=YES IF THEY ARE NOT ON THE SHEET ADD THEIR NAME IN THE NEXT AVAILABLE SPACE AND ALSO CIRCLE 1=YES. IF A NAME THAT IS ALREADY ON THE SHEET IS NOT MENTIONED THEN CIRCLE 2=NO. YOU CAN CIRCLE THE "NO" ANSWERS AFTER THE INTERVIEW IS COMPLETED]

* * *

Now I'm going to ask you some questions about people who are part of your life who provide you with help or social support. As I ask each question, I want you to name only those people who come to mind quickly.

*E1. In an average week who do you enjoy chatting with?

*E2. Who can you rely on for advice about resources? - e.g. advice about services available in the community?

*E3. Who can you count on to listen to you when you want to talk about something personal? - e.g. someone who will listen to your feelings.

*E4. Who cares about you?

*E5. Who makes your life difficult; such as someone who expects too much from you or makes too many demands on you, someone who you wish would leave you alone or someone you would like to avoid?

* ASK THE FOLLOWING QUESTIONS (E6-E9) FOR EACH PERSON THAT HAS BEEN MENTIONED AND WHO'S NAME YOU MARKED ON THE SUPPORT CODING SHEET. THIS INCLUDES ALL NAMES THAT HAVE BEEN MARKED ON THE CODING SHEET. ALL NAMES THAT WERE MENTIONED IN QUESTION A5 AND IN SECTIONS C AND D (SERVICES) SHOULD BE CODED HERE.

ASK ITEMS E6-E9 ACROSS SUPPORT SHEET FOR EACH NAME BEFORE MOVING TO NAME ON NEXT LINE

*** IF THE PERSON'S NAME WAS RECORDED AT THE BASELINE INTERVIEW THEN CODE 5, 55, OR 555 FOR ITEMS E6, E7, E8.

E6. What is the SEX of the caregiver? (ASK ONLY IF GENDER IS NOT CLEAR)

1=MALE 2= Female

E7. What is the AGE of the caregiver? (If respondent does not know ask them to guess)

E8. What is your main relationship with this person? (Enter the appropriate code number on the code sheet.)

01 = ROMANTIC
02 = SPOUSE
03 = CHILD (INCLUDE SON & DAUGHTER IN-LAW)
04 = GRANDCHILD
05 = SIBLING
06 = PARENT
07 = OTHER RELATIVE
08 = FRIEND
09 = NEIGHBOUR
10 = PROFESSIONAL (doctor, nurse, case manager)
11 = FORMAL VOLUNTEER
12 = PAID HELP (homemaker, personal care)
13 = PAID COMMUNITY SERVICE (taxi, bus, grocery clerk)
14 = PAID LIVE IN COMPANION
15 = OTHER (SPECIFY)

PLEASE READ THE FOLLOWING QUESTION, AS IT IS WRITTEN, FOR EACH NAME ON THE SOCIAL SUPPORT SHEET. (INCLUDING NAMES RECORDED AT BASELINE.

*E9. All of the names you have mentioned may have some importance to you. Think about how important your relationship with (NAME) is to you. Compared to the other names that you have given me would you say the relationship was important or unimportant?

IF IMPORTANT - READ 5,6,7

IF UNIMPORTANT - READ 1,2,3

Would you say it was...

1 = Extremely Unimportant
2 = Very unimportant
3 = Unimportant
4 = EQUALLY IMPORTANT AND UNIMPORTANT
5 = Important
6 = Very Important
7 = Extremely Important

[FOR THIS ITEM ONLY]
[REFUSAL=0...NOT APPLICABLE=8...MISSING=9]

GO TO QUESTION E10

INSERT SOCIAL SUPPORT CODING SHEET HERE

SITE# (01-02) __ __
CLIENT# (03-05) __ __ __
(06)=BLANK __

SOCIAL SUPPORT CONTINUED

E10. My next question is about talking to family and friends (who do not live with you).

During the past week, how many times did you talk to family or friends in person or over the telephone?

NUMBER OF CONTACTS _____ (07-08)__ __

F.AUTONOMY

Now I'd like to ask you some questions about daily decisions.

*F1. Would you say that: "The decision about the type of help you receive is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (09)__

*F2. "The decision about the doctors you see is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (10)__

*F3. "The decision about how you spend time during the day is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (11)__

*F4. "The decision about who visits you is totally your decision, is shared equally with another person, or is totally another person's decision."

1= TOTALLY YOUR DECISION

2= SHARED EQUALLY

3= TOTALLY ANOTHER PERSON'S DECISION (12)__

*F5. Overall, how much control do you have over things that happen to you in your life--would you say that you have a great deal of control, a fair amount of control, little control, or no control?

1= GREAT DEAL

2= FAIR AMOUNT

3= LITTLE

4= NONE (13)__

G. MENTAL HEALTH

I'm going to read you a list of feelings that people sometimes have. I want you to tell me how often you experience these feelings. SHOW CARD

1	2	3	4
A LITTLE OF THE TIME	SOME OF THE TIME	GOOD PART OF THE TIME	MOST OF THE TIME

G1.	I feel lonely even when I am with other people.	1	2	3	4	(14)__
G2.	I feel that I am useful and needed.	1	2	3	4	(15)__
G3.	I have no interest in things.	1	2	3	4	(16)__
G4.	My life is pretty full.	1	2	3	4	(17)__
G5.	I feel down-hearted and blue	1	2	3	4	(18)__
G6.	I feel tense and keyed up.	1	2	3	4	(19)__
G7.	I have crying spells or feel like it	1	2	3	4	(20)__
G8.	I still enjoy the things I used to do.	1	2	3	4	(21)__
G9.	I am depressed.	1	2	3	4	(22)__

CLOSING THE INTERVIEW

Thank-you very much. Those are all the questions I have to ask you today. By talking with me you are helping us to learn more about how to improve services for all older persons in Michigan. We appreciate your participation in this project and I look forward to talking with you again. As I explained earlier I will be back again to talk with you in 6 months. I will phone you in 3 months to see how you are doing. Do you have any questions.

H. OBSERVATIONS

H1. TYPE OF COMMUNITY IN WHICH CLIENT LIVES:

LARGE CITY (250,000 OR MORE)	1	
SUBURB OF LARGE CITY	2	
MEDIUM-SIZED CITY (50,000-250,000) . .	3	
SUBURB OF MEDIUM CITY	4	
SMALL CITY (5,000-50,000)	5	
SMALL TOWN (LESS THAN 5000)	6	
RURAL	7	
OTHER (SPECIFY) _____	8	(23)__

H2. CLIENT'S CURRENT LIVING ARRANGEMENT:

PRIVATE HOME, ROOM OR APARTMENT	1	
ADULT FOSTER CARE/BOARDING HOUSE	2	
(NAME: _____)		
SENIOR CITIZEN APARTMENTS	3	
(NAME: _____)		
NURSING HOME	4	
(NAME: _____)		
OTHER (SPECIFY : _____). .	5	(24)__

SITE/CLIENT ID __ __ - __ __ __ 26

OBSERVATIONS cont.

H3. DURING THE ASSESSMENT, DID THE CLIENT'S BEHAVIOR STRIKE YOU AS:

	YES	NO	CANNOT DETERMINE	
a. MENTALLY ALERT AND STIMULATING	1	2	3	(25)__
b. PLEASANT AND COOPERATIVE . .	1	2	3	(26)__
c. DEPRESSED AND/OR TEARFUL . .	1	2	3	(27)__
d. FEARFUL, ANXIOUS, OR EXTREMELY TENSE . . .	1	2	3	(28)__
e. FULL OF UNREALISTIC COMPLAINTS	1	2	3	(29)__
f. SUSPICIOUS (MORE THAN USUAL)	1	2	3	(30)__
g. BIZARRE OR INAPPROPRIATE (E.G., DISRUPTIVE, ABUSIVE, WANDERING)	1	2	3	(31)__
h. WITHDRAWN OR LETHARGIC . . .	1	2	3	(32)__
i. AGITATED, QUICK, LOUD, AND EMOTIONALLY OVERRESPONSIVE. .	1	2	3	(33)__

H4. WHICH OF THE FOLLOWING BEST DESCRIBES THE CLIENT'S SPEECH:

NO IMPAIRMENT. 1

PARTIALLY IMPAIRED (CAN USUALLY BE UNDERSTOOD BUT HAS DIFFICULTY WITH SOME WORDS) 2

SEVERELY IMPAIRED (CAN BE UNDERSTOOD ONLY WITH DIFFICULTY AND CANNOT CARRY ON A NORMAL CONVERSATION). . . . 3

COMPLETELY IMPAIRED (SPEECH IS UNINTELLIGIBLE OR CANNOT SPEAK) . . . . . 4 (34)__

OBSERVATIONS cont.

H5. THINKING ABOUT THE CLIENT'S UNDERSTANDING OF THE QUESTIONS, MENTAL FUNCTIONING AND ABILITY TO COMMUNICATE, WOULD YOU SAY THE RESPONSES TO THE QUESTIONS ASKED OF HIM/HER WERE:

COMPLETELY RELIABLE 1

RELIABLE ON MOST ITEMS. 2

RELIABLE ON SOME ITEMS. 3

COMPLETELY UNRELIABLE . . . . . 4 (35)__

H6. DID THE CLIENT HAVE ANY PETS?

1= YES

2= NO (36)__

(IF YES)

H7. INDICATE THE TYPE OF PETS.

1=YES 2= NO 6= N/A

1= DOG (37)__

2= CAT (38)__

3= BIRD (39)__

4= FISH (40)__

5= OTHER PLEASE SPECIFY _____ (41)__

(42-78)=BLANK

CARD# 24=(6-MONTH) 32=(12-MONTH) (79-80)=__ __

SITE/CLIENT ID __ __ - __ __ __ 28

APPENDIX 3

RESEARCH PROCEDURE MANUAL

TABLE OF CONTENTS

TABLE OF CONTENTS cont.

SITE VISITS

Purpose:

- To meet with site director/case co-ordinator to review status of program, and for discussion of research/project concerns.

- To meet with case management persons for program/ intervention process update (=case study).

- To meet with interviewers (either as a group or on a one-to-one basis) for educational/supportive reasons.

- To collect and review completed interview instruments (authorizing payment on those completed accurately).

- To collect copies of the pre-screening tools of project participants (this includes clients assigned to both case management and information and referral).

- To deliver any needed project materials (randomization envelopes, interview instruments).

Number:

*- Weekly visits are planned for the project 'start-up' period (approximately 6 months). After this period, visits will be reduced to bi-weekly.

- Special requests for additional visits (as a consequence of site-specific problems that arise) will be honored when circumstances permit.

*Visits to the Upper Peninsula region will differ due to travel distance.

RESEARCH RESPONSIBILITIES OF SITE DIRECTOR/CASE CO-ORDINATOR

- To determine eligibility of client referrals utilizing the Pre-Screening Tool in accordance with the guide provided by OSA.

- To adhere to randomization procedures (assignment of envelopes dictated by order, sex, and referral source), and to maintain accurate assignment records (documenting assignment information on Randomization Log sheets).

- To schedule interviewer appointments for first-wave interviews following the Interviewer Arrangement Guide--and to schedule pairs of interviewers for needed randomization checks throughout the study.

- To assist the research team in the supervision of interviewers (providing guidance/instruction and support when appropriate.

- To designate meeting time during site visits (sharing any information, feedback, or concerns related to the research or operation of the program with research team members).

- To notify research staff members of needed project materials 3 days prior to scheduled site visit.

- To utilize the Assessment Summary Worksheet, Client Care Plan, Case Manager/Client/Provider Contact Log, and Tracking Forms as specified in OSA's Instructions and Explanation of Form Use Guide.

INTERVIEW INSTRUMENT

Collection - Interviewers have been instructed to bring their completed interviews to the site director's office on a weekly basis. If site personnel wish to receive completed interviews of clients assigned to case management upon completion of the interview, they may request an immediate drop-off.

Interviewers are not to mail completed interviews (such action could result in lost questionnaires which jeopardizes the confidentiality guarantee).

Information - Site personnel are free to extract any needed/helpful information from the completed interviews of clients assigned to case management during the first-wave interview period.

Payment - Research team members will authorize payment for interviews during site visits.

A fee of $20.00 will be paid for each completed interview which has passed inspection. A fee of $10.00 will be paid to the interviewer who obtains a refusal response.

Transfer - Research team members will receive/collect completed interviews at time of site visits.

Mailing of materials is not permitted (rationale detailed in 'Collection' instructions above).

Supply - Interview instruments are provided by the research team. A 3-day advance notice (prior to scheduled site visit) is requested for additional copies.

RANDOM ASSIGNMENT

Purpose - Ensures that the treatment (Case Management) and control (Information & Referral) groups are equivalent prior to intervention--thus any differences found after the experiment can be attributed to the treatment condition (permitting causal inferences).

Ethics - There exists a need to evaluate the effectiveness of both programs. Based on evidence to date we cannot predetermine the utility of either program for specific clients.

A lack of resources forces choice of clients (i.e., we are in a position to serve a limited number of persons).

Random assignment is the fairest method devised to assign individuals to programs.

Stratification - Each interviewer has 8 separate groups of envelopes. These have been divided based on the sex of the client and the source of the referral.

Male	Female
Hospital & Physicians	Hospital & Physicians
Community Organizations	Community Organizations
Family, Friends, & Self	Family, Friends, & Self
Nursing Homes	Nursing Homes

Your Randomization Log sheets are titled according to these 8 categories. Envelope numbers are assigned sequentially within each category. (Client/Research ID numbers are assigned sequentially according to order on Referral Log.)

Example:

Client Jane Doe was referred to the program by her granddaughter. Mrs. Doe was screened, determined eligible, and agreed to participate in the study.On the Referral Log you document that she is the 18'th client in the study (thus her Client/ Research ID number is 018). On the Randomization Log you note that she is the 3'rd Female: Family, Friend, & Self client (thus the envelope assignment number is 003, which you instruct the interviewer to take to the scheduled appointment).

Integrity - Site personnel are required to maintain a Randomization Log (documenting Client ID and treatment condition corresponding to envelope assignment).

Site personnel are required to maintain a Referral Log that will indicate sex of client, referral source, and the order in which client eligibility was determined.

Errors - The research team will cross match the two lists to insure that no assignment errors occur. If errors are detected, those specific cases will be dropped from the research study and replaced by appropriately assigned subjects/clients.

Questions - If there are any problems (e.g., an error occurs and you are uncertain about how to proceed), please contact research personnel for instruction on what course of action to take.

INTERVIEWERS

Training -	A two-day training workshop prior to conducting first wave interviews (at 3 central locations). A one-day training workshop prior to both the second and third wave interviews. Group meetings will be held on a monthly basis for for educational/supportive purposes.
Rights/ Responsibilities -	Detailed in the Interviewer/Researcher Agreement signed by each interviewer and the Research Supervisor. Site Directors will be provided copies of these documents.
Tasks -	Refer to Interviewer Mechanics/Process sheet (included in training materials), and Interviewer Task Flow Chart. These detail/describe (in a step-by-step fashion) the research activities of the interviewer.
Supervision -	To be shared jointly with site and research personnel.

RELIABILITY CHECKS

Definition - Two interviewers are present--although only one person actually conducts the interview (asking the questions and interacting with the client)--but both are responsible for recording the responses and coding the completed instrument. They are to record and code independently. Research staff members will calculate the percent of agreement between the pair of interviewers.

Purpose - To verify the accuracy of the information collected by the interviewers. It is necessary to determine the 'reliability' of the data we will extract from the interview instrument. If the instrument is sound--and the interviewer well trained--information gathering should not be hindered by subjective interpretations.

Interviewer Arrangement - Research team members will determine the composition of the paired interviewers. Site personnel will be responsible for scheduling those persons.

Payment - Each interviewer will receive the full fee of $20.00.

Number - There will be a total of 2 per interviewer or 15 reliability checks per site during each interview wave (whichever is the greater number).

Frequency - There will be 3 reliability checks for every 30 interviews that are conducted.

IMPORTANT CONSIDERATIONS

* The welfare of the client is central to both service and research personnel's goals/objectives.

  In accordance with UCRIHS (University Committee on Research Involving Human Subjects), the following guidelines must be adhered to:

  - Informed consent must be acquired prior to conducting the research interview. (The primary purpose of this measure is to protect the client.)

  - Participation in the study is voluntary. A client may withdraw their consent at any time (without fear of reprisal).

  - The guarantee of confidentiality must be respected. (If a situation arises in which it is believed necessary to contact Protective Services--or any such outside agency--please, first consult with research personnel.)

* Random assignment is key to the experimental design.

  - Please follow randomization procedures carefully.

  - When there are problems/questions, seek immediate clarification from research personnel.

* Quality of data is dependent of the joint efforts of site and research personnel.

  - Accurate completion of forms is necessary.

  - Social Security numbers for clients are a must. If a client refuses to disclose this information, they have subsequently refused participation in the project.

  - Assistance in supervision and training of interviewers is necessary.

APPENDIX 4

TRAINING OUTLINE

Day One

Topic area/Subject material	Room #	Time
Introductions:	A	9:00 - 9:15
Presentation of project:	A	9:15 - 9:30
Interviewer role/responsibilities	A	9:30 - 10:00
Discussion	A	10:00 - 10:15
Empathy	A	10:15 - 10:30
* * * * * * * * (BREAK) * * * * * * *		10:30 - 10:45
Instrument component review:	A	10:45 - 11:15
Consent/Closure Exercise	A/B	11:15 - 12:00
* * * * * * * * (LUNCH) * * * * * *		12:00 - 1:00
Interviewing techniques/strategies	A	1:00 - 1:30
Probing Exercise	A/B	1:30 - 1:45
Practice session (first half)	A/B	1:45 - 3:15
* * * * * * * * (BREAK) * * * * * * *		3:15 - 3:30
Practice session (second half)	A/B	3:30 - 5:00
Instrument Coding	A	5:00 - 5:15

TASKS OF THE INTERVIEWER

1. Having a clear understanding of the purpose of the interview.

2. Clearly communicating specific questions in accordance with the purpose.

3. Detecting and correcting misunderstandings of the question by the respondent.

4. Distinguishing between the irrelevant, the potentially relevant and the clearly relevant.

5. Guiding the respondent to avoid the irrelevant and probing the potentially relevant to convert it into actually relevant information.

MECHANICS/PROCESS

Receive call

-Documentation (name, sex, phone, address, referral source, social security number, appointment time, & sense of client's situation/ability level)

Departure preparations

-Materials (notebook with blank questionairre, cards, pencils, group assignment envelope, identification)

-Location

Arrival

-Identify self

-Setting checks (controlling interference, comfort)

-Obtain consent (reminder: ALL consent forms must be signed)

Administration of Instrument

Closure

-Group assignment

-Inform client of 3-month contact

-Appreciation expression

Return

-Office contact

-Code instrument

RANDOMIZATION PROCEDURES

The following procedures must be followed exactly as they are outlined. The quality of the entire project is dependent on these procedures. The research supervisor will verify these procedures against a master list. The purpose of these randomization procedures is to assure that everyone has an equal chance of receiving either one of the two services.

There are eight separate groups of envelopes. These have been divided based on the sex of the client and the source of the referral. In order to select the correct envelope you must first determine whether the client is male or female, and then you must know the source of their referral. Using this information go to the group of envelopes designated for the sex of the client and the referral source. So for example, if the client is a male who was referred by a hospital you would go the male-hospital pile. The next step would be to select the envelope from the pile that has the lowest ID number. That is, you select the envelope that is next in line. AFTER THE ENVELOPE IS SELECTED PUT IT UNOPENED INTO YOUR RESEARCH BINDER. DO NOT OPEN THE ENVELOPE UNTIL THE FIRST INTERVIEW IS COMPLETED.

1. Determine the sex of the client & the source of their referral.
2. Select the envelope with the lowest ID number from the appropriate pile for the client's sex and referral source.
3. Place the envelope unopened in the research binder until the end of the interview.

Eight Group Assignment Piles

Male	Female
1= Hospitals & Physicians	5= Hospitals & Physicians
2= Community Organizations	6= Community Organizations
3= Family, Friends, or Self	7= Family, Friends, or Self
4= Nursing Homes	8= Nursing Homes

CHARACTERISTICS OF A GOOD INTERVIEWING RELATIONSHIP

-Warmth and responsiveness on the part of the interviewer.

-A permissive atmosphere in which the respondent feels completely free to express any feeling or viewpoint.

-Freedom from any kind of pressure or coercion.

GUIDELINES FOR EFFECTIVE INTERPERSONAL COMMUNICATION

I. Accurate Empathy

The ability to sense the other person's view of the world as if that view were your own.

An understanding or sensitivity to another's emotions or feelings.
(You need not share his/her feelings, but must demonstrate an awareness or appreciation of them.)

Descriptive rather than evaluative.

Message: "I understand."

II. Nonpossessive Warmth

Involves caring about another person without imposing conditions.

Communicating an attitude of acceptance without evaluation.
(No expression of dislike or disapproval.)

Message: "I care about you."

III. Genuineness

Consists of being open and frank.

Involves being yourself. True to yourself. Respectful to yourself.
(You need not disclose your total self, but whatever is shown must be real, not behavior growing out of defensiveness or an attempt to manipulate the other person.)

Message: "I am sincere."

EMPATHY EXERCISE

Interview Question	Participant's Response	Mood	Interviewer's Response
How would you rate your overall health at the present time--would you say it was excellent, good, fair, or poor?	My health has been terrible. Sometimes I think that I'll never feel good again.	Saddness	?
" "	Now why do you ask that question of someone who just got out of the hospital?	Anger	?
Overall, how much control do you have over things that happen to you in your life?	Well, I can't even get out of this bed without help. I need someone to help with just about everything.	Saddness	?
" "	My daughter and son-in-law have control. It doesn't matter much what I think.	Anger	?

EMPATHY EXERCISE cont.

Interview Question	Participant's Response	Mood	Interviewer's Response
How much income do you (and your husband) have a year?	Money is something we don't have enough of. We just get by.	Sadness	?
" "	I'm not going to answer any questions about money.	Anger	?
Do you have any children?	All of my children live out of state. I haven't seen them for so long.	Sadness	?
" "	I have washed my hands of my children. They don't want to see me and I don't want to see them.	Anger	?

EMPATHY EXERCISE cont.

Interview Question	Participant's Response	Mood	Interviewer's Response
How long does NAME usually stay each visit?	Not too long. I'd like her to stay and talk with me.	Saddness	?
" "	I wouldn't call her coming to me a 'visit'. She comes and goes without a word to me.	Anger	?

ASKING THE QUESTIONS

-Use the questionnaire, but use it informally.

-Ask each question exactly as it is worded.

-Ask questions in the same order as they appear on the questionnaire.

-Ask every question (unless directions on the questionnaire specify skipping certain ones).

XFOR GATHERING PERSONAL DATA INFORMATION:

-Utilize a matter-of-fact approach.

OBTAINING AN ADEQUATE RESPONSE

1. The silent probe (expectant pause)

2. Encouragement (a brief assertion of understanding and interest)

3. Elaboration (asking for additional information)

4. Clarification (specifies kind of additional information that is needed)

5. Repeating the question

6. Repeating the respondent's reply (reflective probe)

   -echo probe (simply repeats words)

   -interpretive probe (reflects meaning or feelings of words)

   -summary probe (combines elements from responses)

THE "I DON'T KNOW" RESPONSE

XA genuine lack of opinion/knowledge.

XA fear to speak one's mind/reluctance to focus on the issue.

XA stalling time while thoughts are marshaled.

XA lack of comprehension of the question.

RESPONSE

1. Confidentiality Reminder

   -All information is stored without names attached.

   -Only project staff have access to information.

2. Value of Participation

   -Will help us in learning how to improve services/ programs for all older people in Michigan.

   -Interested in their feelings/opinions (they are important).

3. Delay

   -Return to item at conclusion of interview.

ANSWERING THE RESPONDENT'S QUESTIONS

-Be prepared.

-Be accepting.

-Answer honestly.

-Answer only what he/she has asked.

INCREASING RESPONDENT'S RECEPTIVENESS

The respondent needs to feel that his/her acquaintance with the interviewer will be pleasant and satisfying.

> The interviewer needs to establish a supportive, trusting climate.

The respondent needs to see the interview as being important and worthwhile.

> The interviewer must project a professional image.

WHAT IS PROBING?

PROBING IS THE TECHNIQUE USED BY THE INTERVIEWER TO STIMULATE DISCUSSION AND OBTAIN MORE INFORMATION.

TWO MAJOR FUNCTIONS:

-To motivate the respondent to communicate more fully so that he/she enlarges on what was said, or clarifies what was said, or explains the reasons behind what was said.

-To focus the discussion on the specific content of the interview so that irrelevant and unnecessary information can be eliminated.

XPROBING MUST PERFORM THESE TWO FUNCTIONS WITHOUT INTRODUCING BIAS BY AVOIDING THE INTRODUCTION OF UNPLANNED AND UNWANTED INFLUENCES.

=PROBING METHODS MUST BE NEUTRAL!

WHY IS PROBING NECESSARY?

TO OBTAIN SPECIFIC, COMPLETE RESPONSES WHICH SATISFY THE QUESTION OBJECTIVES.

-An answer may be incomplete (a partial answer).

-An answer may be irrelevant (about something besides the subject of the question).

-An answer may be unclear (meaning any one of several things).

-An answer may be inconsistent (in conflict with other information).

MOST COMMONLY USED PROBES

-How do you mean?

-Could you tell me more about your thinking on that?

-Will you tell me what you have in mind?

-I'm not sure I understand what you have in mind.

-Why do you think that is so?

-Could you tell my why you feel that way?

-Which figure do you think comes closest?

-Anything else?

PROBING EXERCISE

Interview Question	Participant's Response	Probe
Is your health now better, about the same, or worse than it was 6 months ago?	Somedays it's better and somedays it's worse.	?
Who is providing the assistance?	Oh, I don't know her name.	?
Can you prepare your own meals without help, with some help, or are you completely unable to prepare any meals?	I don't enjoy cooking. I don't like eating by myself.	?
What was your occupation or major area of work?	I've worked a lot of jobs.	?
How many people live on this income (that is, it provides at least half of their income)?	My sister lives with me, but she has a little money she receives from her son.	?
How often does HHME come to help you?	It varies from week to week.	?
Do you ever have trouble getting to the bathroom on time?	No, I'm always in bed by ten o'clock.	?

PROBING EXERCISE cont.

Interview Question	Participant's Response	Probe
What does NAME regularly help you with?	She does so many things for me. When I need her, she's there.	?
Will you please give me the names of all household members, and tell me how they are related to you?	Mary is my oldest daughter. She lives in California now.	?
In the past 6 months, has anyone in your family (not counting your husband/wife) paid medical or nursing home bills for you with their money?	Both my daughter and son help me out when they can.	?
When did NAME first begin coming to your home?	It's been a long time now.	?
How are these services paid for?	I don't really know.	?
Please complete this sentence. The decision about how I spend time during the day is totally my decision, shared equally with another person, or is totally another person's decision..	My days are fairly routine.	?

PRACTICE SESSION INSTRUCTION SHEET

- Health Profile
  Part 2 (Functional ADL):

  Select only 2 of the categories (from the total of 13) as an area in which you need/require assistance.

- Service Utilization
  Formal/Informal Services:

  Provide names for only 1 formal and 1 informal caregiver who perform a service.

- Social Support:

  List only 1 additional person for support items (the formal and informal caregivers will already be recorded in this section).

Coding Instructions

Coding is as important a task as the interview itself. Accuracy and consistency are essential components of coding. The coding process allows the information you collect in the interview to be translated into a format the computer can understand.

At the far right of each question you will find a space allocated for the coding. This space is designated by (__). Basically we want you to write the number you circled during the interview in this space. For example; in question D30 you ask the client if they can take a bath or shower. If they answer that they can take a bath or shower without any help you would circle 1=WITHOUT HELP. At the end of the interview you would write the number "1" in the coding space to the right of question #D30. (1)

You must be sure to code every coding blank on the form. There are only two exceptions to this rule.

Question A8. If question A7 is answered NO then omit question A8 and leave coding blanks empty. If A7 is answered YES then only fill in the coding blanks in A8 that correspond to information you wrote down for the question. So, if the client was living with only one other person you would only code one blank for question A8.

Questions E1-E6. If there are six caregivers that you receive information on during the interview then you need to code all items in E1-E6. If there are only five mentioned you only need to code five. If there are two formal caregivers and one informal caregiver then you would code all the items in E1 and E2 and E4. You would leave E3, E5 and E6 empty.

* A special coding case involves coding the names of people mentioned during the interview. Starting with question # A8 we want you to write down all names that are mentioned (just the first time they're mentioned) on the social support coding sheet. (That's the sheet that is printed sideways.) Each time a new name is mentioned in response to a specific question write it down for that question and on the social support coding sheet.

After the interview we want you to assign a code number to these names. If you look at the space in which you wrote down each name on the social support coding sheet you will notice a number in parantheses. These numbers range from (01) to (13). Therefore the first name that is mentioned will be written in the first place on the social support coding sheet and will receive the code number "01". Whenever that name is given as an answer in other parts of the interview you will code the number 1 in the coding blank on the right of the page. You will also add the relationship code from question F13. Therefore you would code both numbers in the same blank. If the caregiver was a friend you would code 0104. That is, first the "name number" and then the "relationship number".

So if the client told you that their neighbour John helped them in and out of bed everyday you would write John's name down for D29b (Who is providing help). You would also write John's name in the next available space on the social support coding sheet. Let us assume that the third space is available. John's name would be assigned 03 as a code number. Therefore for question 29b., you would code a 0305 in the coding blank to the right of John's name. If John's name was mentioned again for D30b., you would also code a 0305 next to his name.

OTHER SPECIAL CODES

A6. Use the occupation code sheet to determine the code number for the person's occupation. Select the category that best matches the job.

E4-E6. For item "a" use the same codes as listed in question F13.

ADL Mechanical Aids...If a mechanical aid is cited as the way that a client meets their need code "88". Do not put mechanical aids on the social support coding sheet.

RIGHT JUSTIFICATION

For each question space is made for the maximum number of digits that could be given for a specific answer. For most questions there are 9 or less choices so only one space/column is made available. Other items such as number of minutes, number of visits, dates, and name codes need more than one space/column to accomodate the maximum number of digits. Whenever more than one space is left for coding you need to fill all of the available space. For example, two spaces are available to code the number of visits made during a month. If there were 12 visits during the month you would simply write "12". If however there were 8 visits during the month you would have to "right justify". This means filling up all the unused spaces with zeroes. Therefore you would code the 8 visits as "08". You always fill up the spaces to the right. Similarly, "May 17th" would be coded as "0517". May 9th would be "0509". If three spaces are available for number of minutes then 10 minutes would be "010" while 120 minutes would be "120".

Missing Data

As was stated earlier we need to have answers for all questions. If you are unable to obtain an answer for a specific question you need to provide a written explanation next to the question. There are three cases in which you may not have an answer.

A) Refusals - After three attempts client refuses to give an answer.

Code 7, 77, 777, or 7777 (Put in enough 7's to fill up the coding blank)

B) Not Applicable - If a person is in a nursing home do not ask D6 - D7. However to indicate that the question was not applicable write in the reason and code multiples of six in the coding blank.

Code 6, 66, 666, 6666 (Put in enough 6's to fill in the coding blank)

C) Missing Data - If any other answers are missing write down an explanation and code multiples of nine in the coding blank.

Code 9, 99, 999, 9999 (Put in enough 9's to fill in the coding blank)

ADL CODING GUIDE
(Use with functional status section)

D18. Can you use the telephone ...

1= WITHOUT HELP, including looking up numbers & dialing

2= WITH SOME HELP, (can answer phone & dial operator in an emergency, but need a special phone or help in getting the number or dialing)

3= UNABLE TO USE

D19. Can you travel to places out of walking distance ...

1= WITHOUT HELP (can travel alone, on buses, taxis, or drive own car)

2= WITH SOME HELP (needs someone to help them, or go with them when traveling)

3= UNABLE TO TRAVEL (unless emergency arrangements are made for a specialized vehicle like an ambulance)

D20. Can you go shopping for groceries or clothes

1= WITHOUT HELP (taking care of all shopping needs, assuming they had transportation)

2= WITH SOME HELP (need someone to go with on all shopping trips)

3= UNABLE

D21. Can you prepare your own meals

1= WITHOUT HELP (plan and cook full meals themselves)

2= WITH SOME HELP (can prepare some things but unable to cook full meals themselves)

3= UNABLE TO PREPARE ANY MEALS

D22. Can you do your own housework

1= WITHOUT HELP (Can scrub floors, etc)

2= WITH SOME HELP (can do light housework but needs help with heavy work)

3= UNABLE

D23. Can you take your own medicine

1= WITHOUT HELP (in the right doses at the right time)

2= WITH SOME HELP (able to take medicine if someone prepares it for them and/or reminds them to take it)

3= UNABLE

D24. Can you handle your own money ...

1= WITHOUT HELP (write checks, pay bills, etc)

2= WITH SOME HELP (manage day to day buying but needs help managing check book and paying bills)

3= UNABLE

D25. Can you eat ...

1= WITHOUT HELP (able to feed self completely)

2= WITH SOME HELP (need help with cutting etc.)

3= UNABLE

D26. Can you dress and undress yourself

1= WITHOUT HELP (able to pick out clothes, dress and undress self)

2= WITH SOME HELP (need help with some but not all)

3= UNABLE

SIX-MONTH TRAINING

9:30 - 9:45 a.m.	Welcome and Update - introductions - site/project statistics
9:45 - 10:15 a.m.	Instrument Review - strengths - problem areas - important reminders
10:15 - 11:00 a.m.	Six-Month Instrument - goals/purposes - new items/sections
11:00 - 11:15 a.m.	Coffee Break
11:15 - 12:15 p.m.	Group Practice Session - interview conducted with trainer - feedback
12:15 - 1:00 p.m.	Lunch
1:00 - 2:00 p.m.	Partner Practice Session - interviews conducted in pairs - coding of completed instruments
2:00 - 2:15 p.m.	Discussion - feedback - question/answer
2:15 - 2:30 p.m.	Coffee Break
2:30 - 3:30 p.m.	Partner Practice Session - interviews conducted in pairs (reversal of roles) - coding of completed instruments

3:30 - 3:45 p.m.	Discussion - feedback - question/answer
3:45 - 4:00 p.m.	Conclusion - brief review - presentation of certificates

PROBLEM AREAS

- A3 (occupation codes - blank)

- A5 (relationship codes - incorrect)

- B6 (meal items - a need to probe)

- D (Informal Service Utilization - chatting or visiting is not regarded as a service)

- D5 (unmet needs - omission)

- E (Social Support - agencies should be listed)

- E9 (relationship importance - reversal of numbers)

- G3 (life or health insurance - probe)

- H2 (type of community - inconsistencies)

- H8 ("6" if no pets)

IMPORTANT REMINDERS

- must obtain informed consent
- complete contact information
- pencil for recording responses (ink for signatures)
- leave copy of consent form/Participant Agreement
- need Social Security, Medicare, and Medicaid numbers
- need site/client identification on pages/specified areas
- omit designated items when interviewing a proxy
- all blanks in a section must be completed
- never abandon "interviewer" role

SIX-MONTH INSTRUMENT REVISIONS

DELETIONS

- informed consent
- fact sheet (may need Social Security #)
- number of children
- education level
- occupation
- financial resources
- client's race

ADDITIONS

- medical care utilization (B6-B11)
- activities of daily living (B13-B24)
- mental health (G1-G9)

EXPANSION

- unmet needs (D6-D7)
- social support (E10)

SUBSTITUTIONS

- introduction
- nutrition (B12)
- closing

MEDICAL CARE UTILIZATION

The next questions are about the medical care you may have received in the last month

B6. How many days were you in the hospital during the last month? _____ (13-14)__ __

B7. How many times did you use an Emergency Room at a hospital during the last month? _____ (15-16)__ __

B8. How many times did you visit your doctors during the last month? _____ (EXCLUDE HOSPITAL DAYS) (17-18)__ __

B9. During the last month have you seen anyone besides a Doctor or a Nurse regarding your physical health?

1=YES 2=NO (19)__

IF YES:

B9a. Who did you see? (LIST TYPES OF PROVIDERS)

_____. (20-21)__ __

B10. How many days were you in a nursing home or Foster Care Home during the last month? _____ (22-23)__ __

B11. During the last 6 months did you move into or leave a Nursing Home? YES=1 NO=2 (24)__

IF YES:

B11a. Did you:

1. Enter a Nursing Home and remain there?
2. Enter a Nursing Home and leave?
3. Leave a Nursing Home that you had been in for more

Time Frame: B6-B10 Last Month
B11 6 Months

ACTIVITIES OF DAILY LIVING

The following questions are about taking care of yourself and your home. I'm going to ask you whether you <u>can</u> and whether you <u>do</u> perform certain daily activities.

B13. Can you dress yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (33)__

B14. Do you dress yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (34)__

B15. Can you bath yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (35)__

B16. Do you bath yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (36)__

B17. Can you get in and out of bed yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (37)__

B18. Do you get in and out of bed yourself

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (38)__

B19. Can you prepare your own meals

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (39)__

B20. Do you prepare your own meals

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (40)__

B21. Can you do light housework

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (41)__

B22. Do you do light housework

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (42)__

B23. Can you go shopping

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (43)__

B24. Do you go shopping

1. WITHOUT ANY HELP
2. WITH SOME HELP
3. WITH A LOT OF HELP (44)__

*Why is Probing Necessary

Purpose: To obtain specific, complete responses which satisfy the question objectives (=to obtain accurate information)

Answers may be incomplete, irrelevant, unclear, or inconsistent.

Without Any Help= independently
With Some Help= requires assistance
With a Lot of Help= unable to perform

ADDITIONS continued

G. MENTAL HEALTH

I'm going to read you a list of feelings that people sometimes have. I want you to tell me how often you experience these feelings. SHOW CARD

1	2	3	4
A LITTLE OF THE TIME	SOME OF THE TIME	GOOD PART OF THE TIME	MOST OF THE TIME

G1.	I feel lonely even when I am with other people.	1	2	3	4	(14)__
G2.	I feel that I am useful and needed.	1	2	3	4	(15)__
G3.	I have no interest in things.	1	2	3	4	(16)__
G4.	My life is pretty full.	1	2	3	4	(17)__
G5.	I feel down-hearted and blue	1	2	3	4	(18)__
G6.	I feel tense and keyed up.	1	2	3	4	(19)__
G7.	I have crying spells or feel like it	1	2	3	4	(20)__
G8.	I still enjoy the things I used to do.	1	2	3	4	(21)__
G9.	I am depressed.	1	2	3	4	(22)__

* Guidelines for Effective Interpersonal Communication

Empathy: Understanding/sensitivity to another's feelings
Communicating an attitude of acceptance without evaluation
(No expression of sympathy or disapproval.)

Little= infrequently
Some= occasionally
Good= often
Most= almost always

UNMET NEEDS

D6. How much do you worry about not knowing who to turn to for help? Would you say you worry:

1. A LOT
2. SOME
3. NOT VERY MUCH (76) __

D7. How confident are you of getting services (help) when you need them? Would you say you feel:

1. VERY CONFIDENT
2. SOMEWHAT CONFIDENT
3. NOT VERY CONFIDENT (77) __

Clarification of "help" (services):
- Medical care
- Paying bills
- Obtaining food, groceries
- Home upkeep
- Personal care
- Transportation

SOCIAL SUPPORT CONTINUED

E10. My next question is about talking to family and friends (who do not live with you).

During the past week, how many times did you talk to family or friends in person or over the telephone?

NUMBER OF CONTACTS _____ (07-08)__ __

- Length of contact and who initiated contact is unimportant.
- Professional people are excluded unless the client states that he/she considers that individual to be a friend.

INTRODUCTION

We would like to thank you for giving us this opportunity to talk with you again. The feedback that you have been providing us will help determine how services for older people in Michigan can be improved. The Michigan Office of Services to the Aging is conducting this study along with Michigan State University in five areas of the state. In this area we are working with _____. We are interested in getting your feedback on which type of services provide the best care for older people in different situations. After today we would like to talk with you again in six months.

All information that you provide during the interviews will be kept strictly confidential. No one but the project staff will have access to what you tell us. In addition, all of the information will be stored without your name on it to make sure that your privacy is protected. Your participation in the project will remain anonymous. If you wish when the study is over we will send you a copy of the results.

If you have any questions about this project please contact the Project Director, Joseph Bornstein at (517) 353-9673 or contact the local agency listed below.

CLOSING THE INTERVIEW

Thank-you very much. Those are all the questions I have to ask you today. By talking with me you are helping us to learn more about how to improve services for all older persons in Michigan. We appreciate your participation in this project and I look forward to talking with you again. As I explained earlier I will be back again to talk with you in 6 months. I will phone you in 3 months to see how you are doing. Do you have any questions.

Both the Introduction and the Closing are much shorter in length, yet you may still paraphrase these if you wish.

NUTRITION

Now I'd like to talk about your eating habits.

B12. Please take a minute to think about your diet.

I'm going to read a list of food groups to you and for each group I'd like you to tell me how often you eat the foods that I mention. Please indicate whether you eat these foods:

(SHOW CARD)	Hardly Ever	Several Times A Week	Once A Day	Two Times A Day	3 or More Times A Day	CIRCLE CHOICE
a. DAIRY PRODUCTS Milk, Cheese, Yogurt, Pudding, Custard	1	2	3	4	5	(26)__
b. ANIMAL PROTEINS Beef, Chicken, Pork, Fish, Eggs	1	2	3	4	5	(27)__
c. VEGETABLE PROTEINS Beans, Nuts, Peas	1	2	3	4	5	(28)__
d. FRUIT or JUICE of Oranges, Grapefruits, Tangerines, Strawberries, Tomatoes	1	2	3	4	5	(29)__
e. GREEN VEGETABLES Broccoli, Lima Beans, Spinach, Lettuce, Other Greens	1	2	3	4	5	(30)__
f. ANY OTHER FRUIT or VEGETABLE	1	2	3	4	5	(31)__
g. GRAINS Cereal, Bread, Rolls, Rice, Crackers, Noodles, Macaroni, Spaghetti	1	2	3	4	5	(32)__

Hardly Ever= Less than once a week
Several Times A Week= 1-6 times each week

MECHANICS/PROCESS
SIX-MONTH INTERVIEW

Collect instruments

(Research Client Identification Sheet will be completed -- Social Support Sheet will contain previous names.)

- Contact client 1-2 weeks prior to target date (Verify address information; set date/time)

Departure preparations

- Materials (notebook with appropriate questionairre, pencils, ink pen, identification)

- Location (plan travel route)

Arrival

- Identify self

- Setting checks (controlling interference, comfort)

Administration of Instrument

Closure

- Inform client of 9-month contact

- Appreciation expression

Return

- Office contact

- Code instrument

GROUP PRACTICE SESSION

* A member of the research team will pose as the client. The interview will be conducted in a 'group' fashion--with each interviewer asking assigned items. Although you will administer only those specific items, you will be responsible for recording all responses.

Groupings of questionnaire items:

- introduction, A1-A2, B1-B5

- B6-B12

- B13-B24

- C1a-i, C4

- D1a-h, D4-D7

- E1-E10

- F1-F5, G1-G9

PARTNER PRACTICE SESSION

* You will have an opportunity to adopt the role of both the client and the research interviewer.

* Research team members will circulate--adopting the 'observer' role. Feedback will be provided during the discussion period.

* When you are the client, please

- provide only 1 formal and 1 informal caregiver name/agency
- offer responses which require the interviewer to probe

APPENDIX 5

envelope ASSIGNMENT #	INTERVIEWER ID #	CLIENT ID #	GROUP #

INSTRUCTIONS AND EXPLANATION OF FORM USE

1. Assessment Summary Worksheet - This is a one page summary of presenting problems identified in each section of the assessment and a list of corresponding considerations to meet the needs of the client's problems.

   Instructions

   - Following completion of each assessment section, delineate the identified problems of that section on the summary worksheet.
   - Identify question # of each problem identified during assessment.
   - Review assessment with summary worksheet before writing the care plan to insure that all problems identified in the assessment form are recorded on the summary worksheet.
   - List considerations for each identified problem prior to care planning.
   - Write care plan from summary worksheet.

2. Client Care Plan - GLS-GAP Care Plan Instructions.

   Conference date and conference participants refers to meeting with client and/or family, friends, physicians to discuss, review or develop care plan.

   - Date refers to the date a client's problem/need is identified.
   - Problem/Need from summary worksheet and assessment. Carry forward the identified client problem or need.
   - Service Goal - State measureable objective if possible, or goal statement to remediate the problem/need.
   - Projected Date of Achievement - Estimated date objective/goal to remediate problem is expected to be achieved.
   - Approach/Service - Defines service or method that will be used to remediate problem and achieve objective. State the frequency of the service (hours per week) and the duration (how many days or weeks) the service will be in place.
   - Responsible Agent and Phone - Identify person responsible for implementing a particular objective and insuring that a particular service for the client is implemented. (Usually the agent is a case manager. However, during care planning sessions with family, someone other than the case manager may be assigned to insure that client is taken to a physician. This person is then considered the Agent.)
   - Provider Contact and Phone - Name of direct service provider agency, contact person's name at provider agency and contact person's telephone.

- Date Requested - Date service is requested by case management.
- Date Initiated - Date service provider begins delivering service to client.
- Date Problem Resolved/Revision Decided - Date identified problem is no longer a problem. Revision of the care plan is needed.

3. Referral Log - Agency Form

- Date referral is received.
- CNTY - County where referred person resides - abbreviation appropriate.
- Client NAME.
- Client I.D. Number.
- Sex - Check male or female.
- Age - Write age in years.
- Race - Cauc. = Caucasian, Black, Asian; Spanish/American/Latino = Span.; American Indian = Amer. Ind.; Other = Oth.
- Marital Status - M = Married, W = Widowed, D = Divorced, Sep = Separated, S = Single or UN = Unknown.
- Living Status - A = Alone, FAM = With Family, FR = With Friends, GRP = Group Home, or OTH = Other (Write in).
- NAME OF REF - Name of referral source.
- TYPE OF REF - TYPE OF REFERRAL- SEE Referral Key at bottom of page. Use number to designate type.
- Pre-Screen Score Eligible, Yes - No - Eligibility for case management following pre-screening. Designate by placing total pre-screening score in yes column if eligible and score in no column if not eligible.
- Research I.D. No. - Research identification number. Each eligible client will be assigned a research I.D. Number.
- Interviewer I.D. No. - Each research interviewer will be assigned an I.D.#.
- PROG. Assignment Status CM or IR or Pending or Refused Program - Client is eligible for case management and is selected to receive case management (CM) or information and referral (IR). Check one to designate which group client is in. Client is undecided about participating in project = Pending. Client Refuses to participate in project = Refused

- Intake worker - Initials of person conducting pre-screening.

- Totals - Bottom of Page - Total: The number of referrals by type on each page; the number of eligible (yes column) and not eligible (no column) for case management; marital status living status; race; male or female and program assignment status..

4. Case Manager/Client/Provider Contact Log - in every client file - every contact project has with client or direct service provider regarding an individual client will be recorded on this form.

   - Date of contact with direct service provider or client.

   - Time of initial contact.

   - Client or Provider Name - check client column if contact is with client.
     Name of agency providing formal care or person providing informal care.

   - Type of provider formal - agency service provider
     informal - volunteer agency or family/friend

     Check one: I for INFORMAL or F for FORMAL provider. Total contacts with each at bottom of column.

   - Minutes of contact with client - Approximate minutes in contact with client only. (Not for provider contact.)

   - Activity (see key) - Using number code, identify which function of case management the client contact pertains to. (Not for provider contact.)

   - Initiated by Client CM or P - Client case management or provider - check the one who initiated each contact. Total each at bottom of column.

   - Communication Phone/In Person - Check for type of contact: telephone or in person.

   - Service category (see key at bottom of page) - by code number identify which type of service the formal or informal caregiver is providing. Total number in each category at bottom of column.

   - Purpose of contact.

6. Tracking Form - Agency form to track client activity in project..

   - Dates functions of case management are performed. Disposition of case = outcome for client.

Case Management

PRE-SCREENING TOOL

DATE:_____ CASE MANAGER:_____

NAME:_____ DOB:_____ AGE:_____

ADDRESS_____ CITY_____ COUNTY_____ STATE_____ ZIP_____
STREET # APT #

TELEPHONE:_____ M__F__ MARITAL STATUS: S M W D LIVES: A Sp. Rel. Other_____

REFERRAL SOURCE: SOCIAL SECURITY NUMBER:_____

CALLER:_____ TITLE:_____ AGENCY:_____ PHONE:_____

PHYSICIAN'S NAME:_____

HOSPITAL:_____ ADMISSION DATE:_____ DIS. DATE:_____

FAMILY CONTACTS:

NAME:_____ ADDRESS:_____

RELATIONSHIP:_____ PHONE: (___)_____

NAME:_____ ADDRESS:_____

RELATIONSHIP:_____ PHONE: (___)_____

Mr./Mrs. _____, my name is _____ and I am with _____ (referral) has contacted me to ask that I talk to you to see if you might be eligible for our program.

Our program is designed to give assistance to people like yourself that want to remain at home, but may need some help to do so.

By talking with you today, I can better understand what services you need to stay at home, and will be able to determine if we can provide the help you need.

In order to do this, there are a few questions I need to ask you.

*A) What is your birth date?

B) Please tell me your marital status.

C) Please tell me your home address.

Primary Diagnoses: _____
_____
_____

* Indicates disorientation or impaired judgment (see #7, page 2).

Case Management
PRE-SCREENING TOOL GUIDE

I. Description

This is a guide to use in determining how to score each question on the Pre-Screening Tool. A score of 0, 1, 2 or 4 is given as a point value or score to each question. Definitions describing possible responses are presented below to determine a person's present situation or condition with corresponding point values for each. The tool is structured to be used for interviewing potential client's or referral sources.

II. Instructions

- Ask all questions on the pre-screening tool. Check yes or no for each question asked.
- Choose one answer (from the guide) for each question that best describes the client's present condition or situation.
- Record the corresponding point value or score for each response at the end of each question in the Comment and Score section on the right hand column of the page.
- Add comments as necessary to reflect client's situation more definatively for your own use on the pre-screening tool.
- Add the total points or scores for all questions at the end of the pre-screening tool.
- If the total score is 20 points or above, the client is eligible for case management.
- If the total score is below 20 points, the client is not eligible for case management.

III. Question Scoring/Answer Definitions by Client Response
(corresponds to questions on pre-screening tool)

A. Physical Functioning:

1. Do you or does person have an injury or illness that requires someone to help you? (such as a stroke or heart problems)

   - No . . . . . .Score = 0
   - Yes, has this problem, but is not serious or severe. Able to manage adequately . . . . . .Score = 0
   - Yes, has problem but receives assistance as needed. This assistance is expected to continue . . .Score = 0

- Yes, has a problem. Is presently receiving help, but the caregiver is wearing out or stressed. Care giver will continue but could use assistance . . . . . Score = 2

- Yes, has a problem. Receives assistance, but assistance is not sufficient to meet total need. (i.e., it is not frequent enough) . . . . . Score = 2

- Yes, has a problem and is presently not receiving assistance. . . . . .Score = 4

- Yes, has a problem, receives assistance but this assistance will not continue. . . . . .Score = 4

2, 3, 4 (Score 0, 2, 4)

2. Can you wash or bathe yourself?

3. Can you get out of the house to go shopping or see you physician? Determine: a) Is the client homebound?; b) What does the client do for transportation?

4. Can you do housework and prepare your own meals?

- Yes, fully capable or is able to manage adequately. No problem evident. . . . . Score = 0

- No, but receives help as needed and assistance will continue. . . . . Score = 0

- No, is receiving help but caregiver is stressed or assistance is not sufficient to meet total needs. . . . . Score = 2

- No, does not have assistance or has help that will not continue . . . . . .Score = 4

B. Social/Emotional

5. Do you have family or friends living nearby that are in contact with you on a regular basis?

- Yes, has contact on a regular basis . . . . . .Score = 0

- Yes, but relationships or contact is strained . . . . .Score = 2

- Yes, has contact but is limited or too infrequent . . .Score = 2

- Yes, but contact will not continue . . . . . Score = 4

- No. Isolation or loneliness is apparent and problematic . . . . . Score = 4

6. Have you experienced any major changes in your life that you are having difficulty coping with?

   - No. No problem is evident . . . . . Score = 0
   - Yes. A general answer; i.e., "my friends are always dying." . . . . . .Score = 1
   - Yes. A specific event is delineated; i.e., "I just lost my husband (or other significant person) . . . . .Score = 2

7. Disoriented/Impaired Judgment

   Self-Referral - Questions to person on page 1 of Pre-Screening Tool, A, B, and C, scoring is identical to Referral Source below:

   A. What is your birth date?

   B. Please tell me your marital status?

   C. Please tell me your home address.

   Referral Source - Question regarding person being referred. Is person confused or disoriented to time, date, or place?

   - Not confused or disoriented. . . . . Score = 0
   - Some confusion or forgetfulness, but the problem is not severe or serious or assistance is provided and will continue. . . . . Score = 2
   - Person is confused or disoriented which presents a severe problem; i.e., with medications or cooking. . . . . .Score = 4

C. Barriers:

8. Do you have adequate heating in your home?

   - Yes . . . . . .Score = 0
   - Yes, however, a non-specific or non-urgent problem exists (i.e., heating cost is too expensive and the person may not be able to continue paying for it. .Score = 1
   - Yes, adequate heating presently, but the person has to sacrifice on purchase of something else important to pay for it; (i.e., medicine, food). . . . . Score = 2
   - No. . . . . .Score = 2

9. A. Is your home environment safe?
If yes, go to 9-B.
If no, score question go to question 10. . . . . Score = 2

B. If yes, are there any stairs or other obstacles in the house that make it difficult for you to get around?

- No. . . . . .Score = 0
- Yes, but has sufficient assistance which will continue . . . . . Score = 0
- Yes, has help but the assistance is stressed or not sufficient to meet all needs. . . . . .Score = 1
- Yes, and no assistance is present or has help that will not continue. . . . . .Score = 2

10. Are you eating a well-balanced diet? (Probe if you have any doubt about the way the person responds to this question.

- Yes . . . . . .Score = 0
- No, person doesn't eat all meals with regard to good nutritional habits, but does eat one well-balanced meal daily and is not prescribed a special diet . . . . . Score = 1
- No, person consistently demonstrates poor nutritional habits or doesn't follow prescribed special diet (i.e., diabetic, low-salt). . . . . Score = 2

D. Medical

11. Have you been in a hospital in the last year?

- No. . . . . .Score = 0
- One time in the last year . . . . . .Score = 1
- Two or more times in the last year. . . . . .Score = 2

12. Have you been in a nursing home or other institutional facility in the last year? (Institutional facility in this question does not apply to hospitals.)

- No, hasn't been institutionalized within last two years . . . . . .Score = 0
- No, but has been institutionalized between 1-2 years ago. . . . . Score = 1
- Yes, currently or within the last year. . . . . .Score = 2

13. Has anyone discussed other living arrangements for you, such as a nursing home, or foster care home.

- No. . . . . .Score = 0
- Yes, discussed by physician, hospital or significant other as an option with no firm decision. Responses connotes lack of immediacy or urgency. . . . . .Score = 2
- Yes, has definitely been recommended by the physician or significant other. . . . . .Score = 4

14. Are you considering moving to a nursing home?

- No. . . . . .Score = 0
- Yes, considered by person or primary caregiver as an option with no firm decision. Response connotes lack of immediacy or urgency. . . . . Score = 2
- Yes, is seriously considering a move. Response does connote urgency. . . . . .Score = 4

15. Have you had to go to your physician for reasons other than regular check-up appointments within the last six months?

- No and no apparent need. . . . . Score = 0
- Yes. Has seen a physician unexpectedly at least once in the last six months . . . . . .Score = 1
- No. Has not seen a physician within the last three years (i.e., may need to see a physician but refuses to go). . . . . .Score = 1
- Yes, two or more unexpected visits in the last six months. . . . . .Score = 2

16. Do you need help taking your medications?

- No. . . . . .Score = 0
- Yes, but has assistance which will continue . . . . . Score = 0
- Yes, has assistance, but caregiver is wearing out or stressed . . . . . .Score = 1
- Yes, and lacks sufficient assistance or has assistance which will not continue. . . . . .Score = 2

TOTAL SCORE ON PRE-SCREENING FORM:

Developed by Tim McIntyre, Region IV Care Management, St. Joseph, Michigan.

Case Number 1. _____

CARE MANAGEMENT ASSESSMENT

SECTION I IDENTIFYING DATA

2. NAME	3. DATE OF BIRTH	4. DATE OF INTERVIEW	5. SEX a. ☐ Male b. ☐ Female
6. NAME OF SPOUSE	7. DATE OF BIRTH	8. PLACE OF INTERVIEW a. ☐ Home b. ☐ Hospital c. ☐ NH/Institution d. ☐ Other	
9. ADDRESS	10. PHONE	11. MARITAL STATUS a. ☐ M b. ☐ W c. ☐ D d. ☐ Sep. e. ☐ Single f. ☐ U	
DIRECTIONS TO HOME			
12. CITY/TOWN & STATE	13. RELIGIOUS AFFILIATION	14. CONTACT	15. RACE a. ☐ C b. ☐ B c. ☐ A d. ☐ AI e. ☐ HISP f. ☐ O
16. NEXT OF KIN/FRIEND	17. ADDRESS		18. PHONE
19. REFERRAL AGENCY/CONTACT PERSON		20. PHONE	

21. Guardianship a. ☐ Yes b. ☐ No c. ☐ Pending

22. Client Pay Status: a. ☐ Non-medicaid b. ☐ Medicaid Pending c. ☐ Medicaid Active d. ☐ Medicaid spend down

23. ☐ Client's Rights and Responsibilities Explained
24. Does Client Speak/Understand English? a. ☐ Yes b. ☐ Limited c. ☐ Not At All
25. Language Spoken/Understood _____
26. Release of Information From Physician a. ☐ Yes b. ☐ No c. ☐ Unable
27. Permission to Contact Family a. ☐ Yes b. ☐ No c. ☐ Unable
28. Family Conference Held a. ☐ Yes b. ☐ No c. ☐ Unable
29. USUAL LIVING ARRANGEMENT a. ☐ Alone b. ☐ With Spouse c. ☐ With Family d. ☐ Supervised Living e. ☐ Independent f. ☐ NH 1. Contact Person: _____ 2. Phone: _____ g. ☐ With Others — 1. Relationship _____ 2. Birthdate _____ h. ☐ Senior Housing i. ☐ Other-Specify

CLIENT'S ID INFORMATION

30. SOCIAL SECURITY #	31. DSS WORKER/PHONE
32. SSI	33. MEDICAID RECIPIENT ID # a. ☐ Case #
34. VETERANS ID #	35. MEDICARE ID a. ☐ Part A b. ☐ Part B
36. INSURANCE & GROUP #	37. OTHER

38. PRIMARY PHYSICIAN ADDRESS	39. PHONE	40. DATE LAST SEEN
41. SPECIALIST ADDRESS	42. PHONE	43. DATE LAST SEEN
44. MOST RECENT HOSPITALIZATION	45. ADMISSION DATE	46. DISCHARGE DATE

47. Date Case Closed _____
Reason: a. ☐ Death b. ☐ Moved c. ☐ Rehab d. ☐ Institution e. ☐ Refused f. ☐ Other

48. ☐ Case Not Opened
Reason: a. ☐ Death b. ☐ Moved c. ☐ Not CM d. ☐ Waiting List e. ☐ Refused f. ☐ Other

49. Date Inactive _____
a. ☐ Maintenance b. ☐ Temporary Institution c. ☐ Refused Service

SECTION II ECONOMIC INFORMATION

	CLIENT	SPOUSE	EXPENSES
Savings	50. $ _____	60. $ _____	71. Rent/House Pmt. $ _____
Pension	51. $ _____	61. $ _____	72. Utilities-Gas $ _____
Social Security	52. $ _____	62. $ _____	-Electricity $ _____
SSI	53. $ _____	63. $ _____	-Telephone $ _____
Stocks/Bonds	54. $ _____	64. $ _____	73. Food $ _____
VA Benefits	55. $ _____	65. $ _____	74. Medical $ _____
Food Stamps	56. $ _____	66. $ _____	-Prescription $ _____
Other_____	57. $ _____	67. $ _____	-Insurance $ _____
Other_____	58. $ _____	68. $ _____	-Dr. Office Visits $ _____
			75. Transportation $ _____
Subtotal:	59. $ _____	69. $ _____	76. Other $ _____
			77. Other $ _____
			78. Other $ _____
	70. Gross Household Total $ _____		Total Budget: $ _____

ASSESSED BY 79. _____ RN 80. _____ SW

2.. CLIENT'S NAME (last, first)	1. CASE#

81. Describe Economic Problems With Which Client Needs Help:

SECTION III SOCIAL & HEALTH SUPPORTS

82. Family Support a. ☐ No Family b. ☐ Family Will Help c. ☐ Family Cannot/Will Not Help d. ☐ Family Will Help If Trained

Informal Support:

a. Name	b. Telephone	c. Address	d. Relationship	e. Days/Hours Available	f. Task Performed
83.					
84.					
85.					
86.					
87.					
88.					
89.					
90.					
91.					
92.					
93.					

Formal Services In Place In The Last 6 Months

a. Agency Name	b. Service	c. Telephone	d. Contact Person	Currently Providing Service e. Yes	f. No
94.				☐	☐
95.				☐	☐
96.				☐	☐
97.				☐	☐
98.				☐	☐

2.CLIENT'S NAME (last, first) | 1.CASE #

SECTION IV HOUSING ASSESSMENT

99. Does Client a.☐Own or b.☐Rent c.☐House d.☐Apartment e.☐Other _____

	YES	NO	
100. Neighborhood Safe/Secure	a.☐	b.☐	
101. Cooking Facilities & Refrigerator on Premises	a.☐	b.☐	
102. Home Accessible to Service Worker	a.☐	b.☐	
103. Housing Adequate in Terms of Space	a.☐	b.☐	
104. Telephone Accessible & Usable	a.☐	b.☐	
105. Washer/Dryer on Premises	a.☐	b.☐	
106. Heating Adequate & Safe	a.☐	b.☐	
107. Tub/Shower/Hot Water on Premises 108. (Temp:_____)	a.☐	b.☐	
109. Pets	a.☐	b.☐	
110. Condition of Dwelling Sound	a.☐	b.☐	
111. Convenient Toilet Facilities	a.☐	b.☐	
112. Physical Barriers	a.☐	b.☐	
113. Smoke Detector	a.☐	b.☐	

114. Housing Arrangement a.☐Adequate b.☐Inadequate

115. COMMENTS ON HOUSEHOLD PROBLEMS:

SECTION V PSYCHO-SOCIAL ASSESSMENT

PROBLEMS AFFECTING ABILITY TO CARE FOR SELF

116. Does Client Have Such Problems? a.☐Yes b.☐No

Problem:	Observed	History	Yes	No
117. Alcohol/Substance Abuse	a.☐	b.☐	c.☐	d.☐
118. Smokes Carelessly	a.☐	b.☐	c.☐	d.☐
119. Disoriented to Time/Person or Place	a.☐	b.☐	c.☐	d.☐
120. Short Term Memory Loss	a.☐	b.☐	c.☐	d.☐
121. Wanders	a.☐	b.☐	c.☐	d.☐
122. Depression	a.☐	b.☐	c.☐	d.☐
Symptoms				
a. Weight Loss or Gain	a.☐	b.☐	c.☐	d.☐
b. Sleep Disturbance	a.☐	b.☐	c.☐	d.☐
c. Low Energy	a.☐	b.☐	c.☐	d.☐
d. Low Concentration	a.☐	b.☐	c.☐	d.☐
e. Self blame, feel guilty or helpless	a.☐	b.☐	c.☐	d.☐
f. Loss of Interest	a.☐	b.☐	c.☐	d.☐
g. Slow/Accelerated Movement	a.☐	b.☐	c.☐	d.☐
h. Suicidal Thoughts	a.☐	b.☐	c.☐	d.☐
123. Impaired Judgement:	a.☐	b.☐	c.☐	d.☐
124. Behavior Inappropriate to Situation	a.☐	b.☐	c.☐	d.☐
125. Bizarre Behavior	a.☐	b.☐	c.☐	d.☐
126. Danger to Self/Others	a.☐	b.☐	c.☐	d.☐
Symptoms:				
a. Verbal Intent to harm self/others	a.☐	b.☐	c.☐	d.☐
b. Violent Fantasies	a.☐	b.☐	c.☐	d.☐
c. Past Incidence of Abuse to Self/Other	a.☐	b.☐	c.☐	d.☐
d. Anger	a.☐	b.☐	c.☐	d.☐
e. Suicidal Thoughts or Gestures	a.☐	b.☐	c.☐	d.☐
f. Flat or Hysteric Affect	a.☐	b.☐	c.☐	d.☐
g. Possession of a Means or Plans	a.☐	b.☐	c.☐	d.☐
127. Gravely Disabled	a.☐	b.☐	c.☐	d.☐
Symptoms:				
a. Inadequate Care for Self	a.☐	b.☐	c.☐	d.☐
b. Socially Withdrawn/Isolated	a.☐	b.☐	c.☐	d.☐
c. Malnourished	a.☐	b.☐	c.☐	d.☐

128. Past Mental Hospitalization ☐Yes ☐No Source of Information/Relationship/Phone

129. Where 130. Dates

131. Significant Life Changes/Stressful Events i.e. death of significant other, recent move (describe):

2.CLIENT'S NAME (last, first)	1. CASE#

132. Social Work Summary:

SECTION VI ACTIVITIES OF DAILY LIVING

Personal Care	Amount Of Care Needed					f. Comments:
	None	Minimum	Moderate	Total	Equipment Needed	
133. Take Shower/bath	a.☐	b.☐	c.☐	d.☐	e.☐	
134. Walk	a.☐	b.☐	c.☐	d.☐	e.☐	
135. Dress & Undress	a.☐	b.☐	c.☐	d.☐	e.☐	
136. Get In/Out of Bed	a.☐	b.☐	c.☐	d.☐	e.☐	
137. Get In/Out of Chairs	a.☐	b.☐	c.☐	d.☐	e.☐	
138. Take Care of Appearance & Personal Hygeine	a.☐	b.☐	c.☐	d.☐	e.☐	
139. Use Toilet	a.☐	b.☐	c.☐	d.☐	e.☐	

COMMUNITY LIVING SKILLS

	None	Some	Total	d. Comments:
140. Use Transportation	a.☐	b.☐	c.☐	
141. Handle Personal Business	a.☐	b.☐	c.☐	
142. Do Shopping	a.☐	b.☐	c.☐	
143. Do Housework	a.☐	b.☐	c.☐	
144. Prepare Meals	a.☐	b.☐	c.☐	
145. Do Laundry	a.☐	b.☐	c.☐	
146. Use Telephone	a.☐	b.☐	c.☐	

RECORD EVERY REFERRAL

REFERRAL LOG

DATE	CNTY	CLIENT NAME	C.D.#	SEX	AGE	RACE	MARITAL STATUS	LIVING STATUS	NAME OF REF.	TYPE OF REF.	PRESCREEN SCORE ELIGIB. YES	PRESCREEN SCORE ELIGIB. NO	RE-SEARCH ID #	INTER-VIEWER ID #	PROGRAM ASSIGNMENT STATUS CM	PROGRAM ASSIGNMENT STATUS IR	PROGRAM ASSIGNMENT STATUS PEND	PROGRAM ASSIGNMENT STATUS REF	IN-TAKE WORK-ER

TOTALS M= F=

CAUC= BLACK= ASIAN= SPAN.= AMER IND. = M= W= D= SE= S= UN=

A= FAM= FR= GRP= OTH=

I= 2= 3= 4= 5= 6= 7= 8= 9=

YES=

NO = TYPE OF REFERRAL KEY

1. Hospital
2. Physician
3. Community Org.
4. Family/Friends
5. Nursing Home
6. Self
7. Home Health Agen.
8. Public Agencies
9. Other (list)

CM= IR= PEND= REFUSED=

MARITAL STATUS KEY
M=MARRIED
W=WIDOWED
D=DIVORCED
SEP=SEPARATED
S=SINGLE

LIVING STATUS
A= ALONE
FAM= FAMILY
FR= FRIEND
GRP= GROUP HOME
OTH= OTHER

TRACKING FORM

Client Name	Phone #	Referral Date	Assessment Date	Intial Care Plan Date	Intial Client Consult Date	First M.D. Consult Date	Services Brokered	Confirm Date	Reassess Date	Reassess Date	Disposition

Name: _____
Case #: _____
Assessment Date: _____
Conference Date: _____

CLIENT CARE PLAN

Conference Participants: _____

DATE	Problem/Need	Service Goal + Projected Date of Achievement	Approach/Services Duration + Frequency	Responsible Agent + Phone	Provider + Contact + Phone	Date Req.	Date Init.	Date Problem/Need Resolved/Discontinued

Reassessment in: 1. ___ 30 days 2. ___ 60 days 3. ___ 90 days 4. ___ 120 days 5. ___ 6 months 6. ___ Other (Specify) _____

Comments: _____

REASSESSMENT

ASSESSOR NAME _____ TITLE _____

AGENCY _____ DATE _____

SOURCE OF INFORMATION _____

CLIENT NAME _____ CASE NO. _____

SERVICE PERIOD _____ TO _____

LOCATION _____

I. SOCIAL AND EMOTIONAL STATUS

☐ NO CHANGE
☐ CHANGES:

II. SERVICES IN PLACE

III. MEDICATIONS

☐ NO CHANGE
☐ CHANGES:

IV. PHYSICAL FUNCTIONING

☐ NO CHANGE ☐ CHANGES:

Current Mental Status:	Incontinence:	Disability & Impairments:	Mobility Aides:	Activities:
☐ Alert	☐ Bowel	☐ Speech	☐ Cane	☐ Enc. amb.
☐ Forgetful	☐ Bladder	☐ Hearing	☐ Walker	☐ Up in chair
☐ Confused	☐ Catheter	☐ Vision	☐ Crutches	☐ Weight bearing
☐ Depressed		☐ Sensation	☐ Wheelchair	☐ Bedrest
		☐ Amputation	☐ Prosthesis	
		☐ Paralysis	☐ Human Assist.	
		☐ Contracture	☐ Other	
		☐ Decubiti		
		☐ Dyspnea		
		☐ Edema		

V. VITAL SIGNS AND REHABILITATION POTENTIAL

Rehab. Potential _____
Safety Measures _____
Vital Signs:
Temperature _____
Pulse _____
Respiration _____
Blood Pressure _____

VI. RESPIRATORY/CIRCULATORY

☐ NO CHANGE
☐ CHANGES:

___ Dyspnea ___ Edema
___ Coughing ___ Numbness
___ Cold extremities

VII. DIET NO CHANGE CHANGES:

STAFF COMMENTS:

APPENDIX 6

HOW TO FIND ASSISTANCE IN OAKLAND COUNTY THROUGH INFORMATION AND REFERRAL

Information and Referral Services assist individuals in locating appropriate human service providers to meet their needs. Information and Referral includes provision of information, regarding providers of particular services and, in some cases, assistance in making referrals to a particular service provider or agency.

HOW TO USE THIS SERVICE

1. Identify the type of service(s) you need. Some common services used by older adults include:

   - Home Delivered Meals
   - Homemaker
   - Personal Care Assistance
   - Home Health Care
   - Adult Day Care Centers
   - Nursing Home Information

2. Call one or more of the Information and Referral agencies listed below. Explain your needs and ask for assistance. Have a pencil and paper ready, and write down the names and telephone numbers of service agencies.

3. Call the service agencies and ask about their services. Some questions you might want to ask:

   - Are there any eligibility guidelines for the service?
   - What is the charge for service?
   - How often will the service be available (hourly, daily, weekly)?

WHERE TO FIND HELP

All of the following agencies provide telephone assistance to older adults through Information and Referral:

1.	Area Agency on Aging Region 1-B Hours: Monday - Friday	569-0333 8:30 a.m. - 5:00 p.m.
2.	Community Information Service Hours: Monday - Friday	1-800-552-1183 8:30 a.m. - 5:00 p.m.
3.	Jewish Information Service Hours: Monday - Friday	967-HELP 9:30 a.m. - 4:30 p.m.
4.	The Information Place Hours: Monday - Saturday	833-4000 9:30 a.m. - 5:30 p.m.
5.	The Oakland Livingston Human Service Agency Hours: Monday - Friday	1-800-482-9250 9:00 a.m. - 5:00 p.m.

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