URBAN-RURAL COMPARISON OF ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

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G.M. Gutman, Ph.D.
S. Milstein, Ph.D.
J. Killam, B.Sc.N., Dip. Gero.
D. Lewis, M.A.

Gerontology Research Centre
Simon Fraser University
555 W. Hastings St.
Vancouver, B.C.
V6B 5K3

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Gloria Gutman
Steve Milstein
Judy Killam
Doris Lewis

June, 1991

EXECUTIVE SUMMARY

This report, a companion to the one submitted in February, 1991 to the Continuing Care Division of the B.C. Ministry of Health (Gutman, Milstein, Killam and Lewis, 1991), begins with a review of the limited literature available comparing urban and rural Adult Day Care centres. The main body of the report compares and contrasts the characteristics and clients of Adult Day Care centres in the province of British Columbia located in communities with a total 1986 population of over 10,000 (designated as "urban" centres) and those located in communities with a population of under 10,000 (designated as "rural" centres).

The data derive from the first two phases of a three-phase study commissioned by the Continuing Care Division. In Phase I, which commenced in August 1989, a 100% sample of the centres in operation at the time (38 in urban locations and 11 in rural locations) provided information about their organizational structure and operating characteristics, staffing, and activities and services. A stratified random sample of 22 centres (18 urban and 4 rural) participated in Phase II. They provided the study team with copies of the Long Term Care Program's standard assessment form (i.e. the LTC-1), with identifying information removed to protect confidentiality, for a total of 479 new admissions to Adult Day Care during the preceding 12 months (December, 1988 to November, 1989).

Key Findings

1. In contrast to the urban centres 34.2% of which were found to be free-standing, all of the centres in rural locations were affiliated with another organization.

2. In both urban and rural settings, the organizations with which centres were most commonly affiliated were long-term care facilities.

3. Sharing was common among centres in both locations but was more extensive among the rural centres. For example, while about 90% of both the urban and rural centres shared space with the organization with which they were affiliated, 100% of the rural centres compared with 60% of the urban centres shared staff; 100% of the rural centres compared with 80% of the urban centres shared programs; and 81.8% of the rural centres compared with 68.0% of the urban centres shared other resources.

4. In similarity to findings from the United States, rural centres were found to be smaller than urban centres (i.e. to have fewer clients enrolled and to serve fewer per day). Among the rural centres, the average daily census was 9.7 clients compared with an average of 14.8 clients per day in urban centres. Approximately three-quarters (72.7%) of the rural centres compared with one quarter (28.9%) of the urban centres served fewer than ten clients per day.

5. Clients of rural centres attend less frequently then clients of urban centres. In just over one-third of urban centres (36.8%) clients attend on average only one day per week while in just over half (55.3%) the average attendance was two days. In rural centres the pattern was reversed. In just over half (54.5%) the average client attended only one day and in only just over one third (36.4%), two days. Attendance patterns in both locations contrast markedly with the situation in the United States where most clients attend three or more days per week.

6. As would be expected given their smaller population base, rural centres admitted fewer new clients than urban centres

during the 12 months preceding the study. Among rural centres, the number admitted ranged from 7 to 80 (mean = 27.2 clients). Among urban centres, the range was from 5-125 (mean 47.6 clients).

7. Seventy-one percent of the urban centres compared with 45.5% of the rural centres had a waitlist. There were more people on the waitlist and waiting times were longer for urban centres. The number on the waitlist ranged from 2 to 46 (mean = 12.9 persons) for urban centres and from 3-23 (mean = 10.5 persons) for rural centres. Waiting time ranged from 1 to 12 months (mean = 3.0 months) for urban centres and from 1 to 3 months (mean = 2.25 months) for rural centres.

8. A majority of both urban (84.2%) and rural centres (72.7%) employed a program worker who, in some centres was called a "care aide" or "bath aide" and/or doubles as a transport worker. However, only approximately two-thirds (63.6%) of the rural centres compared with 100% of the urban centres had a designated administrator/coordinator. It should also be noted that while overall, their representation was low (five or fewer centres), all of the following were employed exclusively in urban centres: an assistant director, music therapist, social worker, housekeeper/janitor, fitness consultant, dietician, arts and crafts coordinator and social/recreation coordinator. Consistent with the greater proportion affiliated with health care facilities, however, more rural than urban centres reported access, on a consultative basis to such health care professionals as: pharmacist, social worker, psychiatrist, audiologist, speech therapist, psychologist, music therapist and art therapist.

9. Use of volunteers was found to be markedly less in the rural than in the urban centres. Only 36.4% of the rural centres compared with 78.9% of the urban centres reported having

volunteers on a regular basis to assist with activities and services.

10. There were virtually no differences in the recreational and social activities offered by the urban and rural centres nor in the proportion of centres offering them. The same was true for meals. Differences, mainly of proportion, were noted however, in the following areas:

a) Health Care

More rural centres than urban centres provided such traditional hands-on services as changing medical dressings and performing skin care. Noticeably more urban centres, on the other hand, provided such supportive and preventive services as: arranging medical appointments, obtaining and maintaining equipment for clients; providing/assisting them to obtain a Medic Alert bracelet or Vial of Life; providing dental care and/or hearing and vision screening.

b) Personal Care

Consistent with the greater proportion located in care facilities and thus having ready access to bathing facilities, more rural than urban centres bath clients. More urban than rural centres take clients off the premises for shopping trips.

c) Transportation (other than to/from Centre)

More rural than urban centres provide clients with transportation for social and/or recreational events.

d) Social Services

More rural than urban centres write letters for clients. On the other hand, more urban than rural centres: follow-up clients after hospitalization, telephone-check clients and set up client telephone

networks, coordinate agencies involved with clients, and visit clients at home and in hospital.

e) Therapeutic Services
As noted in the February report, it is difficult to know, when the centres reported offering services in this category, the extent to which these were, in fact, "therapeutic" services. Setting that consideration aside, only a small number of urban-rural differences were noted. Among them was that more urban than rural centres provided reality orientation, physiotherapy and offer swimming as a therapeutic activity. More rural centres, on the other hand, offered training/retraining in activities of daily living, whirlpool therapy and art therapy.

f) Educational Programs
More urban than rural centres provide clients with information concerning safety in and outside the home and concerning standard and living wills.

g) Volunteer Activities
Client participation in the running of the centre was much more common in urban than in rural centres.

h) Quiet Time Activities
More rural than urban centres list TV watching as a client quiet time activity.

11. Examination of the characteristics of new admissions indicated that in both urban and rural centres, there are almost as many married as widowed clients. This contrasts markedly with the care facility population where "widowed" is the prominent marital status category.

12. In both urban and rural settings, less than one-third of new admissions live alone. This is consistent with findings from the United States which also show that most Adult Day Care clients do not live alone and underscores the important respite function this service performs.

13. When the level of care distribution for the total population served by the 49 centres was examined (n=2231 for urban centre and n=342 for rural centres) rural centres were found to be serving proportionally more Personal Care level and fewer Intermediate Care Level I and II clients than urban centres. Among new admissions, however, the pattern was reversed; further, rural clients were found to be both older and generally, more physically frail than their urban counterparts. (Their mental health status, relative to urban clients, is more difficult to assess given conflicting findings from the Medical Conditions and Mental Health Status portions of the LTC-1 - see Sections 5.3 and 5.8).

14. Taken together, the client characteristic data suggest that the rural Adult Day Care centre population may be in transition. While in the past, rural centres may have admitted a greater proportion of Personal Care clients than their urban counterparts, this seems no longer to be occurring. As a result, over time, the rural population will come to more closely resemble the urban population. That is, there will be an increasingly greater proportion at the Intermediate Care levels and increasingly greater numbers of both physically and mentally frail individuals. This has implications for the development of Adult Day Care services in rural areas. Among them, is that rural centres should examine those services identified in this report as more common in urban areas and, for those deemed critical for a heavier case load, begin to plan ways of implementation. Additionally, while in the short run it may be less critical than in urban areas, consideration should

be given to developing specialized centres and/or to providing staff with specialized training in meeting the needs of dementia victims whose numbers are likely, in future, to continue to increase.

15. Finally, there are several other policy questions that need to be addressed. Among those are whether the development of free-standing centres should be fostered in rural settings; whether there should be a minimum and a maximum size requirement for Adult Day Care centres in B.C. and whether these and other criteria and standards should be the same or different for rural as compared to urban centres.

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1.0 INTRODUCTION

1.1 Background and Overview of the Study

In 1979, Adult Day Care became a part of the B.C. Ministry of Health's Continuing Care Program. By 1989, there were 49 centres in operation in the province and it was felt timely to undertake a comprehensive review of the Adult Day Care component of the Continuing Care Program. As part of that review and as an aid for future planning, the Simon Fraser University Gerontology Research Centre was commissioned to conduct a study that would provide information concerning:

1. the activities and services provided by the 49 centres;
2. the characteristics of the clients currently being served;
3. the reasons clients are referred to Adult Day Care;
4. the reasons some referred clients do not attend; and
5. the referral process and the interface between the Long Term Care Program and Adult Day Care.

In fulfilling the commission, a literature review was undertaken and a three-phase study was conducted. In Phase I of the study, a questionnaire was sent, and responded to by all 49 centres, that asked about their organizational structure and operating characteristics, staffing, activities and services. In Phase II, 22 centres were asked to provide, with names removed, copies of the B.C. Long Term Care Program's standard client assessment form (the LTC-1 form) for all clients admitted between December, 1988 and November, 1989. Forms for a total of 479 clients were received, coded and analyzed. In Phase III, focus groups were held with and/or questionnaires were sent to a sample of Long Term Care Program case managers, Adult Day Care centre staff and referred but non-attendant clients in order to ascertain reasons for referral, reasons for non-attendance, and to explore the interface between Long Term Care and Adult Day Care.

Since it was felt that centre size (i.e. number of clients served) might have an important bearing on operating characteristics, on the nature of the activities and services provided and/or on the type of client, the data from Phases I and II were examined to ascertain if there were any key differences between the 13 (26.5%) centres serving from 1-29 clients, the 21 (42.9%) serving from 30-69 clients and the 15 (30.6%) serving from 70-121 clients. A cursory analysis was also performed to ascertain if there were key differences between centres affiliated with care facilities and those that were community-based or free-standing. This analysis was undertaken because the literature review indicated that in the United States, the auspices under which a centre operates, has considerable impact on the type of client served and on the services delivered. Additionally, comparisons were made between the 38 centres (77.6%) in urban locations and the 11 (22.4%) in rural locations.

In February, 1991 a report was submitted to the Continuing Care Division of the B.C. Ministry of Health entitled Adult Day Care Centres in British Columbia: Their Operating Characteristics, Activities and Services, Clients and Interface with the Long Term Care Program. This report presented:

a) a summary of findings from the literature review;
b) full findings from the analysis of the Phase I and Phase II data by centre size;
c) a description of important differences from the analysis of the Phase I and II data by centre affiliation arrangement; and
d) full findings from the Phase III data.

The focus of this present report is on the urban-rural comparison of the Phase I and II data; that is, on identifying similarities and differences between the organizational and operating characteristics, staffing, activities and services and clients of the 38 urban and 11 rural Adult Day Care centres in British Columbia.

1.2 Organization of this Report

As a backdrop against which to evaluate the findings, this report begins (Chapter 2) with a review of the existing literature comparing urban and rural Adult Day Care centres. This is followed (Chapter 3) by a description of the methodology employed in the present study to obtain the data of interest. Findings concerning urban-rural differences in centre characteristics are presented next (Chapter 4). These are followed (Chapter 5) by a description of the clients currently being admitted to B.C. Adult Day Care centres in the two types of settings. The report concludes (Chapter 6) with a summary of findings and a set of questions and recommendations for future research.

1.3 Definition of Terms

Table 1 shows the communities in which the 49 B.C. Adult Day Care centres were located and the number of centres in each community. The communities are ordered by the size of their total population in 1986.

Following the procedure used in a recent study conducted by one of the authors for the Canada Mortgage and Housing Corporation (Gutman and Hodge, 1990), communities were classified as "rural" if they had a total population of under 10,000 in 1986. Using this decision rule, 38 of the centres were considered to be located in urban areas and 11 in rural areas.

Table 1 also shows the number and percentage in each community aged 65 and over. As can be seen, this percentage varied from a low of 7.4% (District Municipality of Delta) to a high of 35.5% (City of White Rock), with greater variation among the urban than among the rural communities.

Table 1

DISTRIBUTION OF ADULT DAY CARE CENTRES IN BRITISH COLUMBIA IN 1989, BY COMMUNITY SIZE (total population and population aged 65+)

Community	Census Subdivision	No. of Centres	Total Population	Population Aged 65+	% Aged 65+
Urban					
Vancouver	C	12	431,147	64,725	15.0
Burnaby	DM	1	145,161	19,235	13.2
Richmond	DM	1	108,492	9,875	9.1
Delta	DM	2	79,610	5,860	7.4
Coquitlam	DM	1	69,291	5,485	7.9
North Vancouver	DM	1	68,241	5,535	8.1
Victoria	C	5	66,303	16,745	25.2
Kamloops	C	1	61,773	4,910	7.9
Kelowna	C	1	61,213	11,080	18.1
Langley	DM	1	53,434	4,525	8.5
Nanaimo	C	1	49,029	6,570	13.4
Chilliwack	DM	1	41,337	5,955	14.4
New Westminster	C	2	39,972	7,265	18.2
Maple Ridge	DM	1	36,023	3,640	10.1
Penticton	C	1	23,588	5,325	22.6
Mission	DM	1	21,985	2,385	10.8
Port Alberni	C	1	18,241	1,975	10.8
Campbell River	DM	1	16,986	1,355	8.0
Abbotsford	DM	1	14,496	1,270	8.8
White Rock	C	1	14,387	5,110	35.5
Powell River	DM	1	12,440	1,615	13.0
Rural					
Nelson	C	1	8,113	1,325	16.3
Trail	C	2	7,948	1,695	21.3
Summerland	DM	1	7,755	1,940	25.0
North Saanich	DM	1	7,247	1,195	16.5
Comox	T	1	6,873	855	12.4
Duncan	C	1	4,039	955	23.6
Grand Forks	C	1	3,282	720	21.9
Gibsons	T	1	2,675	450	16.8
Cumberland	VL	1	1,853	335	18.1
Sechelt	VL	1	1,224	300	24.5

Source: Statistics Canada (1987). 1986 Census of Canada. Census Divisions and Subdivisions. British Columbia: Part 1 (Catalogue No. 94-119).

2.0 LITERATURE REVIEW

This literature review does not duplicate that presented in the February report. Rather, it presents additional material, focussed on urban-rural comparisons. It should be noted at the outset, that although there is now a considerable literature on Adult Day Care, few authors have addressed the topic of urban-rural differences and even fewer have conducted empirical studies comparing the characteristics of centres and clients in the two types of settings. This is likely because, as in British Columbia, up to now, in most jurisdictions, Adult Day Care has been primarily an urban service. For example, Conrad, Hanrahan and Hughes (1990) sent questionnaires to all 1,347 Adult Day Care centres listed in the National Institute on Adult Daycare's directory. Among the 924 (68.6%) centres that responded to a question about their location, 78.1% indicated that it was in an urban setting.[1]

2.1 Reasons Adult Day Care Centres are less Common in Rural Locations

There are several possible reasons why Adult Day Care centres are less common in small communities and rural areas than in urban settings. The first, which applies equally to the United States and to Canada, has to do with the geographic distribution of the elderly population. According to census data reported by Krout (1986), in the United States in 1980, 70.3% of persons aged 65 and over who, as the February report indicated, are the major consumers of Adult Day Care services, lived in communities of 10,000 or more. The corresponding proportion for Canada, based on 1986 census data, is 68.5% (Statistics Canada, 1988; Canada Mortgage and Housing Corporation, 1991). As a result of their

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1 Conrad, Hanrahan and Hughes classify as "urban" communities that are located in Standard Metropolitan Statistical areas.

greater numbers, the urban elderly, and their problems and service needs, are more visible than their rural counterparts. Their numerical advantage also means that they, together with their caregivers and advocates, are in a stronger position than the rural elderly to exert pressure for the development of needed services. Second, as Conrad, Hanrahan and Hughes (1990) and Rogers and Gunter (1985b) point out, there are logistical considerations. In order to be viable, they contend, Adult Day Care centres require a daily census of 17-20 clients. This requires a population base within reasonable daily travel distance (i.e. a 50 mile radius). A sparse and/or dispersed elderly population may thus preclude the establishment of centres in many rural areas. A third and related consideration, identified by Conrad, Hanrahan and Hughes (1990), is that in many parts of the United States (and Canada), Adult Day Care is neither publicly funded nor eligible for third party reimbursement. As a result, it is less accessible to the elderly poor who tend to be more highly represented in the rural than in the urban population.[2]

Von Behren (1990), in attempting to explain why 32 of California's 58 counties, most of which are rural, do not have Adult Day Care centres, suggests a fourth reason. She argues that government guidelines, rules and regulations for Adult Day Care centres, which were designed for urban settings, constitute a barrier to centre development in many rural areas. She notes, for example, that:

> Service providers in rural areas have problems of service density and scale. Small numbers of people require a variety of services. Rural programs face productivity measures, administrative costs, and costs per unit of service based on experiences with larger urban programs, which benefit from economies of scale (p. 133).

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2 Conrad, Hanrahan and Hughes report that in the United States poverty rates are 17.6% for rural vs. 10.9% for urban elderly. Data compiled by the Canada Mortgage and Housing Corporation (1991) indicate that approximately 7-8% of those aged 65+ living in rural areas and small towns of fewer than 10,000 population have incomes below the Statistics Canada low income line.

She also notes that hiring professional staff is a major problem in rural areas. Reasons include lower salaries and benefits, fears of professional isolation and a lack of opportunities for professional growth. Further, she notes that "finding appropriate space - a place not requiring extensive renovation for an adult day care program that may meet several days per week to serve only eight people - is often a problem" (p. 136).

Koenan (1980) too, refers to the greater difficulty in rural than in urban settings of securing staff with the required skill level and in finding appropriate space. Additionally, he and others (Regional Municipality of Niagara, 1977; Rogers and Gunter, 1985 a & b) note that transportation is more problematic and expensive, and thus is a barrier, to the establishment of centres in rural areas.

With regard to travel time to and from the centre, the National Institute on Adult Daycare standard is that it should involve one hour or less each way. Underlying this standard are two considerations. One is that travel time of more than one hour is fatiguing to clients. The second is that long routes cut significantly into the time the client is able to spend participating in the centre's program.

Finally, Rogers and Gunter (1985b) note that there are "sociological factors" which tend to hold back centre development in rural areas.

> The absence of services contributes to the reluctance to seek services. There is a tendency to rely upon an informal service network and, when this network breaks down, to fail to seek alternative services from a formal network. Developing and sustaining a service depends very heavily upon the support and involvement of the community and the informal network (p.8).

2.2 Urban-Rural Differences in Centre Characteristics

The limited literature that is available suggests that there are differences between urban and rural Adult Day Care centres in size (i.e. number of clients served per day) and in the linkages they have with other organizations. The nature of these differences is described below. Also described is the type of spaces in which it is recommended that rural centres be established and why.

2.2.1 Size

Conrad, Hanrahan and Hughes (1990) report that rural Adult Day Care centres in the United States tend to be smaller than urban centres. While these researchers do not give average sizes for centres in the two settings, Von Behren (1990), notes that many rural centres serve fewer than ten clients per day.

2.2.2 Linkages with Other Organizations

Conrad, Hanrahan and Hughes (1990) examined linkages between Adult Day Care centres and other service providers by asking four questions concerning 16 organizations. The four questions were:

1. Does your centre receive client referral from ...?
2. Does your centre refer clients to ...?
3. Does your centre share the same location with ...?
4. Does your centre plan and coordinate services with ...?

The 16 organizations enquired about were: government agencies on aging, local health department, local social council, local parks and recreation, visiting nurses/home health, nursing homes, Veterans' Administration, housing authorities, hospitals, senior centres, nutrition sites, chore housekeeping, child day care, human services agencies, special disability groups and hospice.

In the published report of their study, Conrad, Hanrahan and Hughes (1990) state that rural centres were less well linked than urban centres. Unfortunately, no details are given as to the nature and degree of the urban-rural differences they observed.

One might speculate, however, that there would be fewer referrals to and from other agencies in rural as compared to urban settings since it seems likely that there would be fewer other agencies in rural settings from which to draw upon. Support for this supposition comes from a study by Krout (1989). He notes that in the state of Pennsylvania, the number of service provider organizations (private non-profit, public/government and for-profit) was greater in planning and service areas (PSAs) served by urban as compared with rural Area Agencies on Aging (AAAs). An indication of the magnitude of the difference is provided by comparing the median number of provider organizations in the two types of settings: 23 in urban PSAs vs 5 in rural PSAs. Because of their more limited resources, one might also expect more sharing to take place in rural locations. Von Behren (1990), in fact, notes that in rural settings "successful programs have built upon existing community resources, drawing upon components of the adult day care services from many different sources" (p. 133). She goes on to describe a "mobile" adult day care model in which professional staff are shared by several autonomous centres, each having its own core staff. A satellite mobile centre model is also described. In this arrangement, "the parent adult day care center is usually located in the area's largest community, with small satellite centres located in neighboring towns and sharing administration, staff, and services with the parent centre" (p. 134). Two key features of these satellite centres are that they are operated by trained volunteers and that they eliminate the need to transport clients long distances.[3]

2.2.3 Type of Space Occupied and Recommended

A nation-wide survey of Adult Day Care centres in the United States, conducted in 1985 by the National Institute on Adult

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[3] For further information on the satellite mobile centre model see Costello (1983) and Rogers and Gunter (1985).

Daycare (Von Behren, 1986) indicated that 151 of the 941 responding centres (16%) were located in buildings used primarily for adult day care. The 790 remaining centres most commonly shared space with: nursing homes (22%), churches (18%) and senior centres (12%).

According to Von Behren (1990), in rural areas, Adult Day Care centres tend to be located in churches, schools, senior centres, Legion halls, community centres, hospitals and nursing homes. In her opinion, however, a hospital or nursing home may be the most appropriate setting. "Advantages are that resources such as meals, staff (nurses, social workers, and therapists), activities, and equipment are often there" (p. 136). She also notes that private homes have been utilized in some rural areas. The latter, however, appear to have limited appeal. For example, Benn and Hack (1984) describe an attempt to establish a private home Adult Day Care program in rural Pennsylvania. While 60 potential providers came forward, and 15 passed screening interviews, reference checks, home inspections and attended a training course, only two homes, each with only one client, were operational at the time the program was evaluated. Benn and Hack (1984) attribute the positive response of potential providers, at least in part, to the high unemployment rate in the area (i.e. they were motivated by the potential source of income attached to becoming a provider). The low client response was attributed to a delay between advertising and start up, lack of transportation, the fact that the fee was not covered by insurance and clients' reluctance to leave home.

Cohen et al (1984) report a similar experience of reluctance, on the part of potential clients and/or their families, to go to the home of the provider. As a result, they modified their program to allow providers to travel to the home of the client. Over the one and one-half year life of the project, which was conducted in an urban centre (Boise, Idaho), 12 clients were enrolled; 60% were served in their own homes. Cohen et al (1984) note that

there are several drawbacks to this arrangement. One is that providers may be drawn into the role of housekeeper. Another is that the client does not have an opportunity to benefit from the social experience that congregate Adult Day Care provides. With regard to these concerns, Cohen et al (1984) report that:

> ... Our fear that the provider would abandon the specific day care role (companionship and assistance with activities of daily living) to gravitate to a simpler, safer role of chore worker was only somewhat realized. Timely, appropriate counselling by the case manager helped to ward off complete collapse of our objectives in many cases and minimize the negative effects in others. Regardless of the resistance some participants had to leaving their homes we continued to encourage them, gently, through the providers. In some cases we succeeded. In many, we did not (p. 30).

The conclusion that may be drawn from these two studies is that private home Adult Day Care is not a model that should be replicated in British Columbia. While their intention of developing methods by which congregate Adult Day Care could be modified to provide individualized attention through the use of unemployed community residents may, in theory, have merit, in practice, the drawbacks appear to outweigh the benefits.

2.3 <u>Urban-Rural Differences in Client Characteristics</u>

According to Von Behren (1986) the profile of the average Adult Day Care centre participant is as follows:

> The participant is Caucasian, female, 73 years old, ... and lives with his/her spouse, relatives or friends. One out of two needs supervision, and one out of five needs constant supervision. Almost one out of 13 is incontinent to the degree that changing is required while at the ADC center. One out of 13 is behaviorally disruptive. Nearly one out of 10 is developmentally disabled. Almost one out of five relies on a walker or cane, and about one out of eight is wheelchair-bound and cannot transfer without assistance. (p.25)

Unfortunately, Von Behren makes no urban-rural comparisons. The only study located to date that does so, is a Canadian study,

conducted in Manitoba, by Strain and Chappell (1983). Subjects in this study consisted of 20 individuals who attended one of three centres in the city of Winnipeg (the urban sample) and 24 who attended one of eight centres located outside Winnipeg (the rural sample). The two groups were compared at the time of entry into Adult Day Care and after one year.

Strain and Chappell (1983) report few differences in the socio-demographic characteristics of the two groups. Both among the urban and the rural sample approximately two-thirds were female. In both samples approximately 60% were between the ages of 50 and 79 with the remaining 40% aged 80 and over. In both groups approximately two-thirds were widowed. In both, fewer than one-quarter had more than a grade eight education and in both, a majority (60% in the urban sample and 71% in the rural sample) reported Canada as their place of birth. Major differences were found, however, in ethnicity and religion and, as one would expect, in occupation. Clients of urban centres were less likely than their rural counterparts to belong to an ethnic group but were more likely to be Catholic. They also were less likely to be farm labourers and were more likely to have held semi-skilled occupations.

Strain and Chappell (1983) attribute the ethnic and religious differences to the location of the specific Adult Day Care centres sampled. For example, they note that one rural centre was in a community with a high proportion of persons of German descent. Several of the urban centres were located in personal care homes operated by the Catholic community.

There were no significant differences between urban and rural clients in functional disability level, mental functioning or in activity level. While some differences in social interaction were apparent, these were mainly with non-kin. For example, at entry into Adult Day Care, rural subjects reported having more friends and seeing them more often than urban subjects. Rural

subjects also reported seeing more people for specific purposes. Strain and Chappell interpret the latter finding as indicating that the rural elderly receive more support than the urban elderly from local organizations. Finally, at time of entry into Adult Day Care, rural subjects tended to self-rate their health more positively than urban subjects.

It will be noted that a major difference between the Adult Day Care clients in the Strain and Chappell (1983) study and the "typical" client described by Von Behren was that a majority in the Strain and Chappell study, in both urban and rural samples, were widowed and/or living alone.

Rogers and Gunter (1985b), in their study of a satellite program in rural Illinois also describe a high proportion widowed (74%) and living alone (72%). In terms of age and sex, however, their sample was similar to the "typical" client: i.e. 81% were over age 70; 79% were female.

Other data of interest reported by Rogers and Gunter (1985b) were as follows:

- 69% had some difficulty with meal preparation. The most common problems identified were: difficulty shopping, lack of desire and inability to prepare meals;
- 10% were in receipt of home delivered meals;
- 34% had difficulty operating the telephone;
- 24% did not visit a physician regularly and 12% did not have a physician;
- 62% said that poor health interfered with their activities of daily living "sometimes" or "most of the time", and
- as assessed by the Mental-Status Questionnaire and Face-Hand Test, 4% were found to be severely and 32% moderately impaired mentally.

Rogers and Gunter (1985) also report that on a scale ranging from "very good" through "good", "fair", "poor", most clients (percentage unspecified) self-rated their health as only "fair". This is not surprising given the proportions (see below) reporting such health problems as:

	% with impairment
arthritis, bone and joint disorders	80
heart and circulatory disease	72
hypertension	60
diabetes	21
vision and hearing	21
central nervous system disease	20
gastrointestinal	18

Further, Rogers and Gunter report that there was a high rate of prescription and over-the-counter medication use in this sample: 62% took 1-5 prescribed medications and 20% took 6 or more. Monitoring indicated that over 50% had difficulty self-medicating, tending to confuse dosages, forget to take medication, over-medicating or deciding not to take medication.

A final point to note is in regard to the oft mentioned difficulty which the rural elderly experience with transportation. Rogers and Gunter (1985b) report that:

> ... the most frequent mode of transportation was dependency on a relative or friend. Over one-half had difficulty in getting from one location to another. This reflects the inaccessibility to various forms of transportation. There are no public transportation systems and the private systems are exceedingly costly (p.33).

3.0 METHOD

This chapter describes the procedure that was followed in obtaining information about the characteristics of the 38 urban and 11 rural Adult Day Care centres in British Columbia (Phase I) and about clients that are currently being admitted (Phase II).

3.1 Phase I

Phase I of the study began in August 1989 with a letter being sent by the Executive Director of the Continuing Care Division to all of the 49 Adult Day Care centres in operation in the province at that time. The letter (see Appendix 1) introduced the study, underscored its importance, and requested their cooperation with the Gerontology Research Centre. Under separate cover, letters of support for the study were sent by the B.C. Health Association and the Home Support Association of B.C. Several days after receipt of these letters Phase I data collection began. Each centre received a package of materials outlining the study, describing the expected outcome of Phase I and requesting that they provide the research team with the following information:

1. Job descriptions for every staff position within the centre;
2. Any additional information available describing the activities and services the centre offered;
3. A blank copy of all forms used to collect client information; and
4. The total number of clients who had attended the centre or received service in the preceding 90 days.

All of the centres forwarded the requested information. From the job descriptions and information about activities and services, a questionnaire was developed. As shown in Appendix 2, it contained a series of questions about the organizational structure and operating characteristics of the centre, and about its staff. It also contained an exhaustive check-list of

activities and services which was organized into the following ten categories:

1. Health Care;
2. Personal Service;
3. Transportation;
4. Social Services;
5. Therapeutic Activities;
6. Recreational Activities;
7. Educational Programs;
8. Client Volunteer Activities;
9. Quiet Time Activities;
10. Meals.

This questionnaire was sent in November, 1989 to all 49 centres. As shown in the letter in Appendix 3, completion of it was the last task requested of 27 of the centres. The other 22, in addition to completing it, were asked to provide client data. Section 3.2 below describes the procedure followed in selecting the 22 centres, the clients of interest and the method used to obtain the client characteristics data.

3.2 Phase II

3.2.1 Sampling Procedure - Centres

The 22 centres that participated in Phase II and which were requested to provide client data were selected so as to provide a regionally representative sample as well as one that reflected differences in centre size. The selection procedure involved first stratifying the 49 centres by region. The regional strata used were:

- Vancouver Island and Coastal Region,
- Fraser Valley and Lower Mainland, exclusive of City of Vancouver,
- Interior,
- City of Vancouver.

The centres within each region were then stratified by size. The size groupings used, which were chosen because they reflected "natural" breaks in the size distribution, were:

- 1-29,
- 30-69,

- 70 and over.

Two centres were then randomly selected from each cell of the resulting 12 cell matrix, except in the case of one cell which only contained one centre. One of the centres from the 23 drawn, was subsequently deleted because it had only one client which resulted in a final sample of 22 centres.

3.2.2 Sampling Procedure - Clients

The centres varied considerably in the length of time they had been in operation some, in fact, pre-dating establishment of the Continuing Care Program in 1978. Because, as a result, some of the clients might not meet current eligibility criteria and/or have up-to-date functional assessments, it was decided to focus on new admissions (i.e. persons admitted in the prior 12 months). The goal was to obtain a 100% sample of these.

To facilitate their identification, which in large centres could be a time consuming task for centre staff, a list was obtained from the Continuing Care central registry and sent to each centre containing the names and identification numbers of all clients admitted in the period December, 1988 through November, 1989.

3.2.3 Client Information Requested

The client data of interest concerned their sex, age, marital status, housing, household composition, recommended level of care (home or facility), medical condition, medication usage, communication ability, level of performance of activities of daily living (ADLs) and instrumental activities of daily living (IADLs), and mental health status. To obtain these data, the centres were asked, for each name on the list of new admissions sent to them, to make and forward a photocopy of the service provider's copy of the LTC-1, the B.C. Long Term Care Program's standard client assessment form. To ensure confidentiality, in making the photocopy they were asked to follow the procedure

described in Appendix 4 whereby, the client's name and other identifying information were obliterated.

Aggregated across centres, the list of new admissions obtained from the Continuing Care central registry totalled 632. However, because of recent transfers and deaths, as well as delays in sending information from the local Long Term Care office to the centres, the final sample of LTC-1 forms coded and analyzed totalled only 479.

It is important to recognize that while these 479 constitute a representative sample of new admissions, they are not representative of all clients in Adult Day Care in British Columbia. In most centres, there are some clients who have been attending over a number of years. It should also be recognized that even among the sample of new admissions some confounding variables were unavoidable. For example, a small number of individuals were known to have been in Adult Day Care prior to their current admission (i.e. to have been discharged but re-admitted within the 12 months preceding data collection for the study).

4.0 FINDINGS - CENTRE CHARACTERISTICS

This chapter presents findings from the first phase of the study. It begins with a description of the affiliation arrangements of the centres (Section 4.1). This is followed by presentation of the level of care distributions for the total urban and the total rural Adult Day Care centre population of the province (Section 4.2). The operating characteristics (Section 4.3) and staffing (Section 4.4) of the centres are described next. The chapter concludes (Section 4.5) with a detailed description of the activities and services they provide. Data derive from a questionnaire and activities and services checklist completed by all 49 centres.

4.1 Affiliation Arrangements

Table 2 shows the affiliation arrangements of the 49 centres. As can be seen, a major difference between centres located in urban as compared with rural locations was in the greater number in urban locations that were not part of nor affiliated with another organization (i.e. that were free-standing). Whereas 13 of the 38 urban centres (34.2%) were free-standing, all of the rural centres were affiliated with another organization. The centres in the two types of locations were similar, however, in the types of organization with which they were affiliated. In both urban and rural settings affiliation was predominantly with a facility offering long-term care. Where urban and rural affiliated centres differed was in the extent to which they shared space, staff, programs and other resources with the other organization. Sharing was more extensive among the rural centres. For example, while about 90.0% of both the urban and the rural centres shared space with the organization with which they were affiliated, 100% of the rural centres compared with 60.0% of the urban centres shared staff; 100% of the rural centres compared with 80.0% of the urban centres shared programs and 81.8% of the rural centres compared with 68.0% of the urban centres shared other resources.

Table 2

AFFILIATION ARRANGEMENTS OF URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%**	n	%**	n	%**
Affiliation						
No affiliation	13	34.2	0	0.0	13	26.5
Community care facility (PC, IC and/or EC)	14	36.8	8	72.7	22	44.9
Hospital-based extended care unit	4	10.5	0	0.0	4	8.2
Community/seniors centre	4	10.5	0	0.0	4	8.2
Home support agency	0	0.0	2	18.2	2	4.1
Acute hospital	0	0.0	1	9.1	1	2.0
Agency offering multiple services to seniors	1	2.6	0	0.0	1	2.0
Seniors housing complex, rec. centre & care facility	1	2.6	0	0.0	1	2.0
Community centre, care facility, & munic. health department	1	2.6	0	0.0	1	2.0

** column percentages

4.2 Level of Care of Clients

At the time of the survey (December, 1989) the 49 centres combined served 2,573 clients. As shown in Table 3, the most commonly represented overall, in both urban and rural centres, were Intermediate Care Level I clients. The next most common client categories among urban centres were, respectively, Intermediate Care II and Personal Care. In rural centres, the care levels ranking second and third were reversed. That is, there were more clients at the Personal Care level than at the Intermediate Care II level among the rural centres. Clients at the Intermediate Care III level were more highly represented in urban centres where they constituted 8.2% of the population compared with 5.8% of the rural centres' population. The proportion at the Extended Care level was identical in the two settings (5.3%).

Table 3

LEVEL OF CARE OF CLIENTS SERVED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%**	n	%**	n	%**
<u>Level of Care</u>						
Personal Care	426	19.1	100	29.2	526	20.4
Intermediate Care I	684	38.7	115	33.6	979	38.0
Intermediate Care II	600	26.9	73	21.3	673	26.2
Intermediate Care III	184	8.2	20	5.8	204	7.9
Extended	118	5.3	18	5.3	136	5.3
Unclassified	39	1.7	16	4.7	55	2.1
Total no. of clients	2231		342		2573	

** column percentages

4.3 <u>Operating Characteristics</u>

4.3.1 Days and Hours of Operation

As shown in Table 4, approximately two-thirds (63.2%) of the urban centres and half (54.5%) of the rural centres operated five days per week. Hours of operation ranged from 4 to 11.5 per day among the urban centres, with most (68.4%) open for 7 to 8 hours, usually between 9 a.m. and 5 p.m. Among the rural centres, the hours of operation ranged from 5 to 8 per day: 18.2% were open 5 hours, 27.3% were open 6 hours and 54.5% were open 7 to 8 hours per day.

Table 4

NUMBER OF DAYS PER WEEK URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA ARE IN OPERATION

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%**	n	%**	n	%**
<u>Days per week</u>						
2	6	15.8	3	27.3	9	18.4
3	4	10.5	2	18.2	6	12.2
4	4	10.5	0	0.0	4	8.2
5	24	63.2	6	54.5	30	61.2

** column percentages

4.3.2 Transportation to/from Centre

When asked explicitly "Do you provide transportation to and from the Adult Day Care centre to some or all of your clients?" 86.8% of the urban centres and 81.8% of the rural centres said "yes". As shown in Table 5, among the centres providing transportation, approximately two-thirds in both urban and rural locations do so via a vehicle owned by the centre or the facility/service it is affiliated with. Fewer rural than urban centres, however, arrange for clients to access the centre via HandyDART, which is not surprising since HandyDART is known to be less available in rural settings. Use of private vehicles belonging to clients' families, to staff or to volunteers was also considerably less among centres in rural locations. This may be due in part, to the smaller proportion of rural than urban centres having volunteers regularly available (see section 4.4.3).

Table 5

TRANSPORTATION TO/FROM URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Transportation Provided						
Yes	33	86.8	9	81.8	42	85.7
Transportation Type***	(n=33)		(n= 9)		(n=42)	
HandyDART	27	81.8	5	55.5	32	76.2
Centre vehicle	23	70.0	6	66.7	29	69.0
Other publicly supported transp.	3	9.1	1	11.1	4	9.5
Private service	1	3.0	1	11.1	2	4.8
Other (staff, family or volunteer car; Legion bus	17	51.5	1	14.3	18	42.9

*** columns cannot be summed as multiple responses were permitted

4.3.3 Fees Charged

Thirty five of the 38 urban centres (92.1%) and ten of the eleven rural centres (90.9%) charge clients a per diem fee. In the case of Long Term Care Program clients, the fee ranged, in urban centres, from $1 to $8. In rural centres, the range was from $3 to $6 per day. In both settings, the most common fee charged was $3 to $4.

Twenty one (55.3%) of the urban centres and three (27.3%) of the rural centres served private as well as Long Term Care Program clients. One of the urban centres did not charge its private clients, one charged them the same rate as Long Term Care Program clients and 19 had a differential fee for private clients which ranged from $31 to $52 per day. Among the rural centres, one charged private clients $5 per day, one charged $24 per day and one charged $46 per day.

4.3.4 Average Daily Census

As shown in Table 6, the average daily census was found to be smaller in the rural than in the urban centres. As can be seen, the mean number of clients served per day was 9.7 in rural centres compared with 14.8 in urban centres. More telling, 72.7% of rural centres, compared with only 28.9% of urban centres, served ten or fewer clients per day.

Table 6

AVERAGE NUMBER OF CLIENTS PER DAY ATTENDING URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%**	n	%**	n	%**
Average No.						
1-5	1	2.6	2	18.2	3	6.1
6-10	10	26.3	6	54.5	16	32.6
11-15	11	28.9	1	9.1	12	24.5
16-20	10	26.3	1	9.1	11	22.4
21-25	6	15.8	1	9.1	7	14.3
Mean	14.8		9.7		13.6	
Range	5-25		1-15		1-25	

** column percentages

4.3.5 Average Frequency of Attendance per Week

As shown in Table 7, in just over one-third of urban centres (36.8%) clients attend, on average, only one day per week and in just over half (54.5%), two days per week. In rural centres the pattern was reversed. In just over half (55.3%) most clients attend only one day and in just over one-third (36.4%) two days per week. In both settings, fewer than 10% of centres reported an average attendance of three days per week.

Table 7

AVERAGE FREQUENCY OF ATTENDANCE PER WEEK AT URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%**	n	%**	n	%**
Days per week						
1	14	36.8	6	54.5	20	40.8
2	21	55.3	4	36.4	25	51.0
3	3	7.9	1	9.1	4	8.2
Mean	1.7		1.5		1.7	

** column percentages

4.3.6 Number of Clients Admitted in the Last 12 Months

Table 8 shows the number of clients admitted to the Centres in the 12 months preceding the study. Consistent with their generally small size and smaller population base, on average, rural centres admitted fewer clients (mean = 27.2) than urban centres (mean 47.6).

Table 8

NUMBER OF CLIENTS ADMITTED IN LAST 12 MONTHS TO URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%**	n	%**	n	%**
No. Admitted						
5-25	9	23.7	5	45.4	14	28.6
26-50	13	34.2	5	45.4	18	36.7
51-75	12	31.6	0	0.0	12	24.5
76-100	2	5.3	1	9.1	3	6.1
101-125	2	5.3	0	0.0	2	4.1
Mean	47.6		27.2		43.9	
Range	5-125		7-80		5-125	

** column percentages

4.3.7 Waitlists

Twenty seven (71.1%) of the urban centres and five (45.5%) of the rural centres reported that they had a waitlist. Among centres having a waitlist, those in urban locations tended to have longer lists and longer waiting times than those in rural locations.

The number on the waitlist in urban locations ranged from 2 to 46 (mean = 12.9 persons). In rural locations, the range was from 3 to 23 (mean = 10.5 persons). In urban locations, the average waiting time ranged from 1 to 12 months (mean = 3.0 months). In rural locations, the range was from 1 to 3 months (mean = 2.25 months).

4.4 Staffing

4.4.1 Full vs Part-time Staff

Thirty (78.9%) of the urban centres and six (54.5%) of the rural centres reported having one or more full-time staff. The remainder are operated totally by part-time staff.

4.4.2 Type of Staff Employed/Available for Consultation

As can be seen in Table 9, all of the urban centres compared with approximately two-thirds (63.6%) of the rural centres reported having a designated administrator/coordinator. The four rural centres without an administrator/coordinator indicated that they received direction from (and shared other staff) with the organization with which they were affiliated.

A majority of both urban (84.2%) and rural (72.7%) centres reported employing a program worker who, in some centres is called a "bath aide" or "care aide" and/or doubles as a transportation worker. It should be noted that while overall, their representation was low (five or fewer centres), all of the following were employed exclusively in urban centres: an

Table 9

TYPE OF STAFF EMPLOYED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Type of Staff***						
Administrator/ coordinator	38	100.0	7	63.6	45	91.8
Program worker	32	84.2	8	72.7	40	81.6
Nurse	22	57.9	7	63.6	29	59.2
Sec./bookeeper	20	52.6	6	54.5	26	53.1
Cook	16	42.1	5	45.4	21	42.9
Transport worker	13	34.2	5	45.4	18	36.7
Asst. director	5	13.2	0	0.0	5	10.2
Music therapist	5	13.2	0	0.0	5	10.2
Occupat. therapist	2	5.3	1	9.1	3	6.1
Physiotherapist	2	5.3	1	9.1	3	6.1
Social worker	1	2.6	1	9.1	2	4.1
Housekeeper/janitor	2	5.3	0	0.0	2	4.1
Education officer	0	0.0	1	9.1	1	2.0
Fitness consultant	1	2.6	0	0.0	1	2.0
Dietician	1	2.6	0	0.0	1	2.0
Arts & crafts coordinator	1	2.6	0	0.0	1	2.0
Social/recreational coordinator	1	2.6	0	0.0	1	2.0

*** columns cannot be summed as multiple response were permitted

assistant director, music therapist, social worker, housekeeper/janitor, fitness consultant, dietician, arts and crafts coordinator and social/recreational coordinator.

Consistent with the greater proportion affiliated with health care facilities, however, rural centres exceeded their urban counterparts (see Table 10) in the proportion reporting access, on a consultative basis to: a pharmacist, social worker, psychiatrist, audiologist, speech therapist, psychologist, music therapist and art therapist.

Table 10

CONSULTATIVE SERVICES USED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Type of Consultant***						
Dietician	36	94.7	10	90.9	46	93.9
Physiotherapist	31	81.6	8	72.7	39	79.6
Pharmacist	25	65.8	11	100.0	36	73.5
Social worker	23	60.5	8	72.7	31	63.3
Occupat. therapist	25	65.8	4	36.4	29	59.2
Recreational therapist	21	55.3	6	54.5	27	55.1
Psychiatrist	19	50.0	7	63.6	26	53.1
Audiologist	18	47.4	8	72.7	26	53.1
Speech Therapist	17	44.7	8	72.7	25	51.0
Psychologist	16	42.1	8	72.7	24	49.0
Nurse	17	44.7	3	27.3	20	40.8
Music Therapist	15	39.5	5	45.5	20	40.8
Geriatrician	13	34.2	1	9.1	14	28.6
Art therapist	8	21.1	3	27.3	11	22.5

*** columns cannot be summed as multiple response were permitted

4.4.3 Use of Volunteers

Thirty (78.9%) of the urban centres compared with only 4 (36.4%) of the rural centres reported having volunteers as part of their

current staff. In some cases, these were individuals who were at one time themselves clients of the centre.

Among the urban centres having volunteers, the number ranged from 1 to 30 (mean = 7.8). The corresponding range for rural centres was from 2 to 17 (mean = 7.7).

4.5 Activities and Services

As indicated in Chapter 3, in Phase I, each centre was asked to submit job descriptions and other information describing the activities and services it offered. These data, with some additions based on the literature review, were then compiled by the study team into a master list and subsequently, into a checklist, that was sent to all 49 centres. In the checklist, the activities and services were grouped into the following ten broad categories: Health Care Services, Personal Care Services, Transportation Other Than To and From the Adult Day Care Centre, Social Services, Therapeutic Activities, Recreational and Social Services, Educational Programs, Client Volunteer Activities, Quiet Time Activities and Meals. The sections below describe the number and proportion of urban and rural centres offering the specific activities and services included in each of the ten categories.

4.5.1 Health Care Services

As shown in Table 11, a total of 17 health care services were reported by 10% or more of the centres. When these were rank ordered in terms of the number of centres offering them, those offered by 70% or more of the urban centres were, respectively: podiatry/footcare; nutrition counselling; monitoring blood pressure, heart rate, blood sugar, etc.; arranging medical appointments and administering medications.

With one exception, the same services were among those most frequently offered by the rural centres. The one exception was arranging medical appointment which was replaced, among services

offered by 70% or more of centres, by skin care and changing medical dressings in the case of the rural centres.

Table 11

HEALTH CARE SERVICES PROVIDED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Health Care Services***						
Podiatry/footcare	34	89.5	11	100.0	45	91.8
Nutrition Counselling	34	89.5	9	81.8	43	87.8
Monitor blood pressure, heart rate, blood sugar, weight, etc.	31	81.6	9	81.8	40	81.6
Change medical dressings	26	68.4	11	100.0	37	75.5
Arrange medical appts.	30	78.9	7	63.6	37	75.5
Administer meds.	28	73.7	8	72.7	36	73.5
Monitor compliance with med. schedule	26	68.4	7	63.6	33	67.3
Review client's meds.	26	68.4	7	63.6	33	67.3
Skin care (rubs, etc.)	21	55.3	10	90.9	31	63.3
Obtain equip. for clients (wheelchair, glasses, adaptive clothes, etc.)	26	68.4	2	18.2	28	57.1
Provide/arrange for Medic Alert bracelet, necklace, etc.	21	55.3	2	18.2	23	46.9
Maintain client equip. (wheelchair, clothing, etc.)	18	47.4	4	36.4	22	44.9
Provide/arrange for Vial of Life	15	39.5	0	0.0	15	30.6
Dental Care	14	36.8	0	0.0	14	28.6
Provide emergency alert services (eg. Life Line)	10	26.3	2	18.2	12	24.5
Hearing screening	11	28.9	1	9.1	12	24.5
Vision screening	6	15.8	0	0.0	6	12.2

*** columns cannot be summed as multiple response were permitted

While the ranking data suggests, and there is, a striking similarity between the health care services most frequently provided by urban and rural centres, an interesting difference

emerges when one examines the data in another way. If the focus is placed on those services showing a percentage difference of more than 10% between urban and rural centres and the direction of the difference is noted, it appears (see below) that rural centres provide slightly more in the way of traditional hands-on health care than urban centres while urban centres provide substantially more in the way of supportive and preventive health care services.

Higher Percentage of Urban Centres

Arrange medical appointments (78.9% vs 63.6%)
Obtain equipment (68.4% vs 18.2%)
Provide/arrange Medic Alert (55.3% vs 18.2%)
Maintain client equipment (47.4% vs 36.4%)
Provide/arrange Vial of Life (39.5% vs 0.0%)
Dental care (36.8% vs. 0.0%)
Hearing screening (28.9% vs 9.1%)
Vision screening (15.8% vs 0.0%)

Higher % of rural centres

Podiatry/footcare (100.0% vs 89.5%)
Change medical dressings (100.0% vs 68.4%)
Skin care (90.9% vs 55.3%)

4.5.2 Personal Care Services

As shown in Table 12, more than three-quarters of both the urban and the rural centres assist clients with personal grooming. However, substantially more urban than rural centres (68.4% vs 36.4%) take clients off the centre's premises on shopping trips. Substantially more rural than urban centres, on the other hand, provide a bathing service for clients (90.9% vs 50.0%).

Table 12

PERSONAL CARE SERVICES PROVIDED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Personal Care Services***						
Personal Grooming	29	76.3	9	81.8	38	77.6
Taking clients on shopping trips (for food, clothing, etc.)	26	68.4	4	36.4	30	61.2
Bath (ADC clients)	19	50.0	10	90.9	29	59.2
Mend/alter clients' clothes	8	21.1	2	18.2	10	20.4
Bath (non-ADC clients)	4	10.5	2	18.2	6	12.2

*** columns cannot be summed as multiple response were permitted

4.5.3 Transportation (other than to/from ADC)

As shown in Table 13, while fewer rural than urban centres provide clients with transportation for shopping, more rural than urban centres provide it for social and/or recreational events.

Table 13

TRANSPORTATION SERVICES (other than to/from ADC) PROVIDED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Type of Transportation***						
For social/recreational events	26	68.4	10	90.9	36	73.5
For shopping	20	52.6	3	27.3	23	46.9
For medical appts.	15	39.5	4	36.4	19	38.8

*** columns cannot be summed as multiple response were permitted

4.5.4 Social Services

As shown in Table 14, more than 80% of both the urban and rural centres provide clients with information and referral to other services; counsel clients, caregivers and/or their families; and liaise between clients and other social service agencies. Examination of services showing a difference of more than 10% between urban and rural centres, indicates however, (see below) that more urban than rural centres: counsel clients, caregivers and families; follow-up clients after hospitalization; telephone check clients; coordinate agencies involved with the client; visit clients in their home and in hospital; and set up client telephone networks. A higher proportion of rural than urban centres, on the other hand, write letters for clients.

Higher % of urban centres

Counsel clients, caregivers, families (97.4% vs 81.8%)
Follow-up clients after hospital (92.1% vs 63.6%)
Telephone check clients (89.5% vs 54.5%)
Coordinate agencies (68.4% vs 54.5%)
Visit clients at home (57.9% vs 45.5%)
Visit clients in hospital (57.9% vs 45.5%)
Set up client telephone network (28.9% vs 18.2%)

Higher % of rural centres

Letter writing (72.7% vs 42.1%)

Table 14

SOCIAL SERVICES PROVIDED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Social Services***						
Info. and referral to other services	37	97.4	10	90.9	47	95.9
Counsel clients, care-givers and/or families	37	97.4	9	81.8	46	93.9
Liaise between client & other social service agencies	36	94.7	10	90.9	46	93.9
Follow-up clients after hospital	35	92.1	7	63.6	42	85.7
Telephone check clients	34	89.5	6	54.5	40	81.6
Client advocacy	27	71.1	7	63.6	34	69.4
Letter reading for clients	25	65.8	8	72.7	33	67.3
Coordinate various agencies involved with client	26	68.4	6	54.5	32	65.3
Visit client in his/her home	22	57.9	5	45.5	27	55.1
Visit client in hospital	22	57.9	5	45.5	27	55.1
Letter writing for clients	16	42.1	8	72.7	24	49.0
Pastoral services	17	44.7	6	54.4	23	46.9
Operate special interest groups (stroke, weight control, diabetic	11	28.9	3	27.3	14	28.6
Set up client telephone network	11	28.9	2	18.2	13	26.5
Locate suitable housing	10	26.3	2	18.2	12	24.5

*** columns cannot be summed as multiple response were permitted

4.5.5 Therapeutic Activities

As shown in Table 15, more than 80% of both the urban and rural centres offer exercise as a therapeutic activity; provide reminiscence therapy and sensory stimulation and assist clients

with management of incontinence. As shown below, however, more urban than rural centres provide reality orientation, physiotherapy, teach meal planning and cooking and offer swimming as a therapeutic activity. A greater proportion of rural than urban centres, on the other hand, offer training/retraining in activities of daily living, whirlpool therapy and art therapy.

Higher % of urban centres

Reality orientation (89.5% vs 72.7%)
Physiotherapy (86.8% vs 72.7%)
Swimming as therapy (42.1% vs 18.2%)

Higher % of rural centres

Training/retraining in ADL (72.7% vs 60.5%)
Whirlpool therapy (63.6% vs 47.4%)
Art therapy (45.5% vs 31.6%)

Table 15

THERAPEUTIC ACTIVITIES PROVIDED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Therapeutic Activities***						
Exercise class (as therapeutic activity)	37	97.4	11	100.0	48	98.0
Reminiscence therapy	35	92.1	11	100.0	46	93.9
Management of incontinence/toilet training	34	89.5	10	90.9	44	89.8
Reality orientation	34	89.5	8	72.7	42	85.7
Sensory stimulation	34	89.5	9	81.8	43	87.8
Physiotherapy (rehabilitation, assisting in mobility)	33	86.8	8	72.7	41	83.7
Music therapy	27	71.1	8	72.7	35	71.4
Training/retraining in ADL	23	60.5	8	72.7	31	64.6
Whirlpool therapy	18	47.4	7	63.6	25	51.0
Stress management	18	47.4	5	45.5	23	46.9
Teach meal planning and cooking skills	16	42.1	5	45.5	21	42.9
Swimming (as therapeutic activity)	16	42.1	2	18.2	18	36.7
Art therapy	12	31.6	5	45.5	17	34.7

*** columns cannot be summed as multiple response were permitted

4.5.6 Recreational and Social Activities

As shown in Table 16, the urban and rural centres were highly similar in the recreational and social activities they offered. Only two activities show noticeable differences: Physical recreation such as bowling or swimming was more common in urban than in rural centres (84.2% vs 63.6%) while pet visits to the centre were more common in rural settings (90.9% vs 78.9%).

Table 16

RECREATIONAL AND SOCIAL ACTIVITIES OFFERED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Recreational and Social Activities ***						
Arts & crafts	38	100.0	11	100.0	49	100.0
Games (cards, bingo, etc.)	38	100.0	11	100.0	49	100.0
Visiting entertainment at the centre	38	100.0	11	100.0	49	100.0
Outdoor activities (walks, picnics, barbeques, etc.)	37	97.4	11	100.0	48	98.0
Special meals (such as birthday parties holidays)	37	97.4	11	100.0	48	98.0
Client socials	34	89.5	11	100.0	45	91.8
Baking & cooking as a social activity	34	89.5	11	100.0	45	91.8
Day excursions	33	86.8	10	90.9	43	87.8
Social excursions involving families	33	86.8	9	81.8	42	85.7
Pet visits to centre	30	78.9	10	90.9	40	81.6
Physical recreation (bowling, swimming, etc.)	32	84.2	7	63.6	39	79.6
Gardening	29	76.3	9	81.8	38	77.6
Activities involving community groups (regular school children visits, etc.)	28	73.7	9	81.8	37	75.5
Overnight excursions	10	26.3	2	18.2	12	24.5
Pet care (of pets at ADC)	9	23.7	2	18.2	11	22.4
Computer activities	3	7.9	1	9.1	4	8.2
Other recreational & social activities	15	39.5	5	45.5	20	40.8

*** columns cannot be summed as multiple response were permitted

4.5.7 Educational Programs

As shown in Table 17, 80% or more of both the urban and rural centres provide clients with information about community resources, current events and preventive health measures. Information about safety in the home, however, is more commonly provided by urban centres (86.8% vs 63.6%) as is information concerning safety outside the home (84.7% vs 63.6%). Also more commonly provided by urban centres was information covering both standard wills (39.5% vs 27.3%), and living wills (23.7% vs 9.1%).

Table 17

EDUCATIONAL PROGRAMS PROVIDED BY URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Educational Programs***						
Information about community resources	37	97.4	9	81.8	46	93.9
Current events	36	94.7	9	81.8	45	91.8
Preventative health measures	34	89.5	9	81.8	43	87.8
Safety in the home	33	86.8	7	63.6	40	81.6
Safety outside the home	32	84.2	7	63.6	39	79.6
Wills	15	39.5	3	27.3	18	36.7
Financial planning	11	28.9	3	27.3	14	28.6
Living Wills	9	23.7	1	9.1	10	20.4
Other	14	36.8	1	9.1	15	30.6

*** columns cannot be summed as multiple response were permitted

4.5.8 Client Volunteer Activities

As shown in Table 18, participation by clients in the running of the centre tends to be more common in urban centres (76.3% vs 45.4%) whereas assisting other clients is a more common volunteer activity in rural centres (72.7% vs 63.2%).

Table 18

CLIENT VOLUNTEER ACTIVITIES AT URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Client Volunteer Activities***						
Client participation in running the centre	29	76.3	5	45.4	34	69.4
Doing volunteer work for other clients	24	63.2	8	72.7	32	65.3
Doing volunteer work for the community	12	31.6	4	36.4	16	32.7
Other client volunteer activities	9	22.5	0	0.0	9	18.4

*** columns cannot be summed as multiple response were permitted

4.5.9 Quiet Time Activities

Virtually all the centres in both settings offer clients an opportunity to chat, rest or read. As shown in Table 19, the only noticeable difference between rural and urban centres was in the greater proportion in rural settings reporting T.V. watching as a quiet time activity (72.7% vs 36.8%).

Table 19

QUIET TIME ACTIVITIES AT URBAN AND RURAL ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Quiet Time Activities***						
Conversation	38	100.0	11	100.0	49	100.0
Rest	35	92.1	11	100.0	46	93.9
Reading	35	92.1	10	90.9	45	91.8
Watching T.V.	14	36.8	8	72.7	22	44.9
Other	19	50.0	1	9.1	20	40.8

*** columns cannot be summed as multiple response were permitted

4.5.10 Meals

In both rural and urban settings 90% or more of the centres offer a hot meal and a snack at the Adult Day Care centre. As shown in Table 20, only about one quarter in either setting offer take home meals.

Table 20

MEALS PROVIDED BY URBAN AND RURAL
ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=38)		Rural (n=11)		Total (n=49)	
	n	%	n	%	n	%
Meals***						
Hot meals at day care	37	97.4	11	100.0	48	98.0
Snack at day care	36	94.7	10	90.9	46	93.9
Take home meals	8	21.1	3	27.3	11	22.4

*** columns cannot be summed as multiple response were permitted

5.0 FINDINGS - CLIENT CHARACTERISTICS

This chapter presents findings from Phase II of the study in which, 22 of the Adult Day Care centres in British Columbia, 18 in urban locations and 4 in rural locations, were asked to provide information concerning new clients admitted between December, 1988 and November, 1989.

As indicated in Chapter 3, the data source was the LTC-1 form, the Long Term Care Program's standard assessment form, the service provider's copy of which was photocopied and sent to the research team with the client's name and other identifying information removed.

In describing the characteristics of the 393 urban and 86 rural Adult Day Care centre clients for whom LTC-1 forms were received socio-demographic characteristics are presented first (Section 5.1). Their level of care distribution is presented next (Section 5.2). This is followed by descriptions of their medical conditions (Section 5.3), the number and types of medications they consume (Section 5.4), their communication ability (Section 5.5), their level of performance of activities of daily living (Section 5.6), their self-care ability (Section 5.7) and finally, their mental health status (Section 5.8).

In interpreting the tables in this chapter it should be noted that percentages reported do not include missing data and that in some subsections, the amount of missing data (indicated in brackets at the bottom of each) is as high as 22% (e.g. dental status - Table 26).

As indicated in the February report, it is our impression that the missing data problem stems from two sources. First, failure of some Long Term Care Program case managers to obtain all of the information required to complete all portions of the LTC-1 form. Second, failure of the local Long Term Care Program office to

transmit LTC-1 pages 1-4 inclusive to the Adult Day Care centre serving the client.

We have two purposes in highlighting the fact that there is missing data and the sources from which it is presumed to come. First, it is hoped that by doing so, we will alert the Continuing Care Division of the need to take steps to ensure that in future, these omissions do not occur. Second, to alert readers of this report to exercise caution in interpreting some of the findings.

A note of caution is also in order given that the data have not been subjected to statistical analysis. It is possible that if and when they are, as in the Strain and Chappell (1983) study, few differences between urban and rural clients will be found to be statistically significant. Still, the differences reported are important to note considering their number and, more importantly, their direction and consistency in suggesting that among new admissions rural clients are more impaired, at least physically, than their urban counterparts.

5.1 Socio-demographic Characteristics of New Urban and Rural Adult Day Care Centre Clients

As shown in Table 21, among new clients admitted to the 22 Adult Day Care centres sampled, those admitted to rural centres were older (mean age = 80.3 years) than those admitted to urban centres (mean age = 78.6 years). There were also more males admitted to rural than to urban centres (43.5% vs 35.5%). Clients in the two settings were similar, however, in marital status and in housing and living arrangements. In both urban and rural centres there were almost as many married as there were widowed clients. In both settings less than one-third lived alone. In both settings over half lived in a house. The next most common housing type was apartments which, as one might expect, were home to fewer rural than urban clients. These data contrast markedly with care facility populations where 'widowed' is the predominate marital status category. They also contrast

(see Section 2.3) with data reported by Strain and Chappell (1983) and Rogers and Gunter (1985) both of whom report a majority of rural Adult Day Care clients to be widowed and/or to live alone. The data replicate however, other more extensive data from the United States (Arling, Harkins and Romaniuk, 1984; Conrad, Hanrahan and Hughes, 1990; Weissert et al, 1989) which also show that most Adult Day Care clients do not live alone.

Table 21

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Characteristic						
Sex						
Male	139	35.5	37	43.5	176	36.9
Female	253	64.5	48	56.5	301	63.1
Missing data	(2)		(1)		(2)	
Marital Status						
Single	23	6.2	3	3.7	26	5.7
Married	154	41.4	36	44.4	190	41.9
Widowed	175	47.0	40	49.4	215	47.5
Divorced/Separated	18	4.8	2	2.5	20	4.4
Other	2	0.5	0	0.0	2	0.4
Missing data	(21)		(5)		(26)	
Age						
<65	25	6.8	2	2.6	27	6.1
65-74	73	19.8	10	13.0	83	18.6
75-84	162	43.9	49	63.6	211	47.3
85+	109	29.5	16	20.8	125	28.0
+						
Mean	78.6		80.3		78.9	
S.D.	9.8		7.9		9.5	
Range	31-102		45-102		31-102	
Missing data	(24)		(9)		(33)	
Housing						
House	177	55.7	45	58.4	222	56.2
Apartment	119	37.4	20	26.0	139	35.2
Room	5	1.6	1	1.3	6	1.5
Care facility	4	1.3	1	1.3	5	1.3
Other	13	4.1	10	13.0	23	5.8
Missing data	(75)		(9)		(84)	
Household Composition						
Lives alone	95	29.6	22	28.6	117	29.5
With spouse	136	42.4	27	35.1	163	41.1
Other adult male	22	6.9	13	16.9	35	8.8
Other adult female	31	9.7	11	14.3	42	10.6
Children	36	11.2	4	5.2	40	10.1
Missing data	(73)		(9)		(82)	

** column percentages

5.2 Level of Care

In contrast to the level of care distribution for the entire urban and rural Adult Day Care population of the province (See Section 4.2), in this sample of new admissions the level of care distribution was the same for both urban and rural centres. That is, in both settings clients at the Intermediate Care I level were most commonly represented followed, respectively, by those at the Intermediate Care II level, the Personal Care level, the Intermediate Care III level and the Extended Care level. It should be noted, however, that while the proportions at the Intermediate III and Extended Care levels were similar in the urban and the rural samples, there were more rural than urban clients at the Intermediate Care II level and fewer at the Intermediate I and Personal Care levels. This suggests that not only are rural centres currently admitting an older population than their urban counterparts but also, that they are admitting a generally more impaired population. As will be seen, much of the data presented in this chapter supports this interpretation.

Table 22

LEVEL OF CARE OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Recommended LTC Level						
Personal Care	70	18.9	14	16.5	84	18.4
Intermediate Care I	173	46.6	38	44.7	211	46.3
Intermediate Care II	80	21.6	23	27.1	103	22.6
Intermediate Care III	28	7.5	7	8.2	35	7.7
Extended Care	20	5.4	3	3.5	23	5.0
Missing data	(22)		(1)		(23)	

** column percentages

5.3 Medical Conditions

As shown in Table 23, among both urban and rural centre clients, the two most common medical conditions were those falling within the International Classification of Diseases (ICD-9) categories "diseases of the circulatory system" and "diseases of the musculoskeletal system and connective tissue". (See Appendix 5 for a description of the specific diseases included in these and the other ICD categories included in Table 23).

Table 23

MEDICAL CONDITIONS OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%	n	%	n	%
Medical conditions***						
Diseases of circulatory system	230	58.5	54	62.8	284	59.3
Diseases of musculoskeletal system & connective tissue	173	44.0	42	48.8	215	44.9
Diseases of nervous system & sense organs	157	39.9	33	38.4	190	39.7
Mental disorders	160	40.7	21	24.4	181	37.8
Endocrine, nutritional & metabolic diseases	68	17.3	25	29.1	93	19.4
Diseases of digestive system	76	19.3	17	19.8	93	19.4
Diseases of genitourinary system	57	14.5	12	14.0	69	14.4
Symptoms & ill-defined conditions	51	13.0	6	7.0	57	11.9
Respiratory disease	47	12.0	10	11.6	57	11.9
Accidents, poisoning & violence	25	6.4	6	7.0	31	6.5
Diseases of skin & subcutaneous tissue	19	4.8	6	7.0	25	5.2
Neoplasms	15	3.8	2	2.3	17	3.5
Diseases of blood & blood-forming organs	11	2.8	3	3.5	14	2.9
Infective & parasitic diseases	4	1.0	0	0.0	4	0.8

** columns cannot be summed as some clients had more than one medical condition

Only two of the conditions shown in Table 23 show a difference of 10% or more between urban and rural clients: "mental disorders" (including dementia) which were more prevalent among the urban clients (40.7% vs 24.4%) and "endocrine, nutritional and metabolic diseases" which include such conditions as diabetes and thyroid dysfunction which were more prevalent among the rural than among the urban clients (29.1% vs 17.3%).

5.4 Medication Consumption

Table 24 shows the number of medications consumed by the sample of new admissions to Adult Day Care centres in B.C. As can be seen, medication consumption rates are noticeably higher among the rural clients.

Table 24

NUMBER OF MEDICATIONS CONSUMED BY URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Number of medications						
0	39	10.5	4	4.9	43	9.5
1	47	12.6	7	8.6	54	11.9
2	73	19.6	14	17.3	87	19.2
3	49	13.1	13	16.0	62	13.7
4	57	15.3	15	18.5	72	15.9
5	36	9.7	7	8.6	43	9.5
6	28	7.5	4	4.9	32	7.0
7	22	5.9	8	9.9	30	6.6
8+	22	5.9	9	11.1	31	6.8
Missing data	(20)		(5)		(25)	
Range	0-12		0-16		0-16	

** column percentages

Table 25 shows the types of medication consumed. Approximately twice the proportion of rural as urban clients consumed thyroid and diabetic medications. Also, noticeably more consumed anti-coagulants, antacids, diuretics and anti-anginal medications. However, more urban than rural clients consumed tranquilizers (14.7% vs 6.5%), anti-hypertensives (23.4% vs. 15.6%), and steroids (8.4% vs 3.9%).

Table 25

TYPES OF MEDICATION CONSUMED BY URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=334)		Rural (n=77)		Total (n=411)	
	n	%	n	%	n	%
Medications***						
Analgesic	100	29.9	25	32.5	125	30.4
Diuretic	82	24.6	26	33.8	108	26.3
Vitamin	81	24.3	21	27.3	102	24.8
Cardiac Therapy	78	23.4	19	24.7	97	23.6
Sedative	81	24.3	16	20.8	97	23.6
Anti-hypertensive	78	23.4	12	15.6	90	21.9
Anti-anginal	54	16.2	20	26.0	74	18.0
Anti-inflammatory	52	15.6	9	11.7	61	14.8
Laxative	48	14.4	11	14.3	59	14.4
Anti-depressant	46	13.8	10	13.0	56	13.6
Antacid	41	12.3	15	19.5	56	13.6
Tranquilizer	49	14.7	5	6.5	54	13.1
Anti-coagulant	33	9.9	13	16.9	46	11.2
Diabetic agent	29	8.7	13	16.9	42	10.2
Anti-convulsant	25	7.5	7	9.1	32	7.8
Steroid	28	8.4	3	3.9	31	7.5
Anti-Parkinsonism	24	7.2	6	7.8	30	7.3
Thyroid therapy	18	5.4	8	10.4	26	6.3
Anti-asthmatic	21	6.3	4	5.2	25	6.1
Eye treatment	20	6.0	3	3.9	23	5.6
Antibiotic	14	4.2	4	5.2	18	4.4
Skin preparation	13	3.9	2	2.6	15	3.6
Anti-emetic	12	3.6	2	2.6	14	3.4
Antihistamine	0	0.0	1	1.3	1	0.1
Other	44	13.2	14	18.2	55	13.4

*** columns cannot be summed as multiple drugs are listed on the LTC-1 for most clients

5.5 Communication Ability

Table 26 shows the vision, hearing, speech and understanding abilities of new admissions to Adult Day Care centres in British Columbia.

As can be seen, although the proportions who wear glasses and use hearing aids are highly similar among clients admitted to urban and rural centres, more rural than urban clients have vision and hearing impairments.

There were also slightly more in the rural than the urban sample with impaired speech and/or impaired understanding.

Table 26

COMMUNICATION ABILITY OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Wears glasses	306	89.0	74	91.4	380	89.4
Missing data	(49)		(5)		(54)	
Uses hearing aid	48	15.1	12	15.8	60	15.2
Missing data	(75)		(10)		(85)	
<u>Vision</u>						
Unimpaired	83	23.1	10	12.0	93	21.0
Adequate for personal safety	260	72.4	66	79.5	326	73.8
Distinguishes only light or dark	8	2.2	6	7.2	14	3.2
Blind - safe in familiar locale	6	1.7	1	1.2	7	1.6
Blind - requires assistance	2	0.6	0	0.0	2	0.5
Missing data	(34)		(3)		(37)	
<u>Hearing</u>						
Unimpaired	193	53.0	32	38.6	225	50.3
Mild impairment	124	34.1	40	48.2	164	36.7
Moderate impairment but adequate for safety	45	12.4	9	10.8	54	12.1
Impaired - inadequate for safety	2	0.5	1	1.2	3	0.7
Totally deaf	0	0.0	1	0.2	1	0.2
Missing data	(29)		(3)		(32)	
<u>Speech</u>						
Unimpaired	320	87.9	69	84.1	389	87.2
Simple phrases intelligible only	17	4.7	8	9.8	25	5.6
Simple phrases partially intelligible only	10	2.7	2	2.4	12	2.7
Isolated words intelligible only	12	3.3	1	1.2	13	2.9
No speech or speech not understandable or no sense made	5	1.4	2	2.4	7	1.6
Missing data	(29)		(4)		(33)	
<u>Understanding</u>						
Unimpaired	306	86.9	65	83.3	371	86.3
Understands simple phrases only	32	9.1	11	14.1	43	10.0
Understands key words only	2	0.6	0	0.0	2	0.5
Understanding unknown	11	3.1	2	2.6	13	3.0
Not responsive	1	0.3	0	0.0	1	0.2
Missing data	(41)		(8)		(49)	

** column percentages

5.6 Level of Performance of Activities of Daily Living

As shown in Table 27, the urban and rural samples were highly similar in terms of ambulation ability, use of mobility aids and ability to transfer. In both groups approximately half were rated as not fully independent with respect to ambulation. In both groups approximately one-third use a cane, approximately one-sixth use a walker and approximately one-tenth use a wheelchair. In both groups, approximately one fifth require supervision or some degree of assistance in order to transfer. Clients in the two settings were also similar in terms of their ability to eat independently and with respect to dental status. Although approximately two-thirds in each group had full dentures, only about 5% had difficulty chewing and only 5-6% required feeding.

Urban-rural differences are apparent, however, in the proportion of clients able to bathe, dress and groom independently. In all three of these areas the rural sample was clearly more impaired. There are also slightly more among the rural than the urban clients who were incontinent of bladder and bowel.

Table 27

LEVEL OF PERFORMANCE OF ACTIVITIES OF DAILY LIVING, URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Ambulation						
Independent in normal environments	167	46.8	41	51.3	208	47.6
Independent only within own home or care facility	116	32.5	26	32.5	142	32.5
Unsteady/requires supervision	42	11.8	6	7.5	48	11.0
Requires occasional or minor assistance	21	5.9	4	5.0	25	5.7
Requires significant or continued assistance	11	3.1	3	3.8	14	3.2
Missing data	(36)		(6)		(42)	

Table 27 (cont'd)

LEVEL OF PERFORMANCE OF ACTIVITIES OF DAILY LIVING, URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Mobility Aids***						
Uses cane	116	29.5	28	32.5	144	30.1
Uses walker	51	13.0	12	14.0	63	13.2
Uses crutches	2	0.5	0	0.0	2	0.4
Uses wheelchair	39	9.9	10	11.6	49	10.2
Other prosthesis or aid	5	1.3	1	1.2	6	1.3
Transfer						
Independent	294	82.6	67	79.8	361	82.0
Supervision (bed, chair, toilet)	18	5.1	6	7.1	24	5.5
Intermittent assistance	21	5.9	8	9.5	29	6.6
Continued assistance	21	5.9	3	3.6	24	5.5
Completely dependent for all movement	2	0.6	0	0.0	2	0.5
Missing data	(37)		(2)		(39)	
Bathing						
Independent in bath or shower	123	34.6	10	12.0	133	30.4
Independent with mechanical aids	42	11.8	10	12.0	52	11.8
Requires minor assistance or supervision	110	30.9	32	38.6	142	32.3
Requires continued assistance	76	21.3	30	36.1	106	24.1
Resists	5	1.4	1	1.2	6	1.4
Missing data	(37)		(3)		(40)	
Dressing						
Independent	210	58.8	42	50.0	252	57.1
Supervision and/or choosing of clothing	49	13.7	14	16.7	63	14.3
Periodic or daily partial help	76	21.3	22	22.6	98	22.2
Must be dressed	22	6.2	6	7.1	28	6.3
Missing data	(36)		(2)		(38)	
Grooming/hygiene						
Independent	209	58.4	38	45.2	247	55.9
Requires reminder motivation and/or direction	40	11.2	19	22.6	59	13.3
Requires assistance with some items	92	25.7	23	27.4	115	26.0
Requires total assistance	15	4.2	3	3.6	18	4.1
Resists	2	0.6	1	1.2	3	0.7
Missing data	(35)		(2)		(37)	

Table 27 (cont'd)

LEVEL OF PERFORMANCE OF ACTIVITIES OF DAILY LIVING, URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Eating						
Independent	299	83.3	71	86.6	370	83.9
Independent with special provision for disability	37	10.3	7	8.5	44	10.0
Requires inter-mittent help	21	5.8	4	4.9	25	5.7
Resists	2	0.6	0	0.0	2	0.5
Missing data	(34)		(4)		(38)	
Dental State						
No dentures	48	15.9	10	13.3	58	15.4
Full dentures	195	64.8	52	69.3	247	65.7
Partial dentures	48	15.9	11	14.7	59	15.7
Damaged dentures	2	0.7	0	0.0	2	0.5
Ne dentures, no teeth	4	1.3	2	2.7	6	1.6
Dentures, not worn	4	1.3	0	0.0	4	1.1
Missing data	(92)		(11)		(103)	
Client chews efficiently	253	94.8	59	90.8	312	94.0
Missing data	(126)		(21)		(147)	
Bladder Control						
Totally continent	298	82.1	64	78.0	362	81.3
Routine toileting or reminder	17	4.7	6	7.3	23	5.2
Incontinence due to identifiable factors	21	5.8	8	9.8	29	6.5
Incontinent less than once per day	13	3.6	1	1.2	14	3.1
Incontinent more than once per day	14	3.9	3	3.7	17	3.8
Missing data	(30)		(4)		(34)	
Bowel Control						
Totally continent	324	91.0	74	90.2	398	90.9
Routine toileting or reminder	16	4.5	2	2.4	18	4.1
Incontinence due to identifiable factor	6	1.7	1	1.2	7	1.6
Incontinent less than once per day	8	2.2	3	3.7	11	2.5
Incontinent more than once per day	2	0.6	2	2.4	4	0.9
Missing data	(37)		(4)		(41)	

** column percentages
*** columns cannot be summed as multiple responses were permitted

5.7 Self-care Ability

Table 28 shows clients' level of performance on what on the LTC-1 form are called "self-care" abilities but which elsewhere are called Instrumental Activities of Daily Living (IADLs). These include: food preparation, housekeeping, shopping, travelling, using the telephone and administering one's own medication and treatments. As can be seen, in every one of these activities clients in the rural sample are more impaired than those in the rural sample. While caution needs to be exercised in interpreting these data given the relatively large amount of missing data from the urban sample, the findings are consistent with those reported above for ADLs.

Table 28

SELF CARE ABILITY OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
Telephone						
Independent	180	56.3	44	53.0	224	55.6
Dials well known numbers	44	13.8	5	6.0	49	12.2
Answers telephone only	46	14.4	19	22.9	65	16.1
Physically or mentally unable	31	9.7	15	18.1	46	11.4
No opportunity or does not use phone	19	5.9	0	0.0	19	4.7
Missing data	(73)		(3)		(76)	
Medications and Treatments						
Completely responsible for self	124	41.3	28	34.1	152	39.8
Requires reminder or assistance	94	31.3	21	25.6	115	30.1
Responsible if meds prepared in advance	24	8.0	9	11.0	33	8.6
Physically or mentally unable	54	18.0	18	28.0	77	20.2
Resists	4	1.3	1	1.2	5	1.3
Missing data	(93)		(4)		(97)	

** column percentages

Table 28

SELF CARE ABILITY OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
<u>Food Preparation</u>						
Independent	65	20.3	9	10.8	74	18.4
Adequate if ingredients supplied	54	16.9	15	18.1	69	17.1
Can make or buy meals but diet inadequate	36	11.3	9	10.8	45	11.2
Physically or mentally unable	114	35.6	35	42.2	149	37.0
No opportunity or does not participate by choice	51	15.9	15	18.1	66	16.4
Missing data	(73)		(3)		(76)	
<u>Housekeeping</u>						
Independent with help for heavy tasks	46	14.3	9	11.1	55	13.6
Can perform only light tasks adequately	89	27.6	25	30.9	114	28.3
Performs light tasks but not adequately	34	10.6	4	4.9	38	9.4
Needs regular help and supervision	104	32.3	20	24.7	124	30.8
No opportunity or does not participate by choice	49	15.2	23	28.4	72	17.9
Missing data	(71)		(5)		(76)	
<u>Shopping</u>						
Independent	39	12.3	8	9.8	47	11.8
Independent only for small items	61	19.2	7	8.5	68	17.0
Must be accompanied	116	36.6	35	42.7	151	37.8
Physically or mentally unable	77	24.3	21	25.6	98	24.6
No opportunity or does not participate by choice	24	7.6	11	13.4	35	8.8
Missing data	(76)		(4)		(80)	
<u>Travelling</u>						
Independent	58	18.3	4	4.9	62	15.5
No public transport uses private vehicle or taxi	72	22.7	28	34.1	100	25.1
Car travel only if accompanied	171	53.9	49	59.8	220	55.1
Physically or mentally unable	14	4.4	1	1.2	15	3.8
Requires ambulance	2	0.6	0	0.0	2	0.5
Missing data	(76)		(4)		(80)	

5.8 Mental Health Status

Under the heading of Mental Health Status, the LTC-1 form includes five categories: comprehension, memory, self-direction, reality orientation and emotional stability. A four point system is used in rating the client's ability in each category. As can be seen in Table 29, although differences are very small, in each category except emotional stability the proportion showing impairment is greater among the rural than among the urban clients.

Table 29

MENTAL HEALTH STATUS OF URBAN AND RURAL NEW ADMISSIONS TO ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

	Urban (n=393)		Rural (n=86)		Total (n=479)	
	n	%**	n	%**	n	%**
<u>Comprehension</u>						
Good comprehension	242	65.0	51	62.2	293	64.5
Understands fairly complex instructions	93	25.0	23	28.0	116	25.6
Understands only simple language	32	8.6	7	8.5	39	8.6
Needs demonstration	5	1.3	1	1.2	6	1.3
Missing Data	(21)		(4)		(25)	
<u>Memory</u>						
Good	153	41.8	31	37.8	184	41.1
Forgetful	153	41.8	39	47.6	192	42.9
Some loss of memory	55	15.0	11	13.4	66	14.7
Severe loss of memory	5	1.4	1	1.2	6	1.3
Missing data	(27)		(4)		(31)	
<u>Self-Direction</u>						
Some initiative & responsibility	210	57.2	42	51.2	252	56.1
Does not initiate self-direction	120	32.7	33	40.2	153	34.1
Dependent	26	7.1	6	7.3	32	7.1
Continually dependent	11	3.0	1	1.2	12	2.7
Missing data	(26)		(4)		(30)	
<u>Reality Orientation</u>						
Responds appropriately most of the time	269	72.3	57	69.5	326	71.8
Indifferent to environment	77	20.7	18	21.9	95	20.9
Periods of disordered thinking	23	6.2	7	8.5	30	6.6
Fairly constant disordered thinking	3	0.8	0	0.0	3	0.7
Missing Data	(21)		(4)		(25)	
<u>Emotional Stability</u>						
Copes reasonably	200	55.7	56	69.1	256	58.2
Insecure; excitable	138	38.4	20	24.7	158	35.9
Mood changes; behaviour erratic	20	5.6	5	6.2	25	5.7
No emotional control; behaviour unpredictable	1	0.3	0	0.0	1	0.2
Missing data	(34)		(5)		(39)	

** column percentages

6.0 DISCUSSION

The provision of Adult Day Care in rural settings is not a topic that has received much attention in the literature. Aside from a small number of articles in which the author has pointed out why service might be difficult to provide in rural settings and/or commented on differences in size and number of linkages with other organizations, little information could be found describing ways in which rural centres and their clients differ from their urban counterparts. Findings from the present study thus fill an important knowledge gap. These findings are summarized below. Also presented are a series of policy questions and recommendations for future research.

6.1 Summary of Findings

6.1.1 Centre Characteristics

In terms of centre characteristics, data from the present study indicate the following differences between Adult Day Care centres in urban and rural locations:

1. Whereas approximately one-third (34.2%) of the urban centres were found to be free-standing, all of the rural centres were part of or affiliated with another organization, typically a care facility.

2. While the proportion of affiliated centres sharing space was essentially the same in both urban and rural locations, other types of sharing (staff, programs, and other resources) was more extensive in rural locations.

3. In similarity to findings from the United States, rural centres were found generally to be smaller than urban centres (i.e. to serve fewer clients in total and fewer per day). For example, among rural centres, the

average daily census was 9.7 clients compared with 14.8 among the urban centres; 72.7% of the rural centres compared with 28.9% of the urban centres served fewer than 10 clients per day.

4. Attendance was found to be less frequent in rural centres. In just over one-third (36.8%) of urban centres, clients attended, on average, only one day per week and in just over half (55.3%), two days. In rural centres the pattern was reversed -- i.e. in just over half (54.5%), most clients attended only one day and in just only over one-third (36.4%), they average two days.

5. More urban than rural centres had waitlists (71.1% vs. 45.5%). Waitlists and waiting times were longer for urban centres. The mean number on waitlists for urban centres was 12.9 persons compared with 10.5 for rural centres. Wait time averaged 3 months for urban centres, but for some, it was as long as 12 months. The average for rural centres was 2.25 months with a maximum wait of only 3 months.

6. More urban than rural centres have a designated administrator/coordinator. Assistant directors, music therapists, social workers, housekeeper/janitors, fitness consultants, dieticians, arts and crafts coordinators and social/recreation coordinators, were employed as part of the regular staff exclusively in urban centres. Access to these and other health professionals on a consultative basis was, however, fairly common in rural centres.

7. Use of volunteers was greater in urban centres.

8. While there were virtually no differences in the <u>recreational and social activities</u> or the number and type of <u>meals</u> offered by urban and rural centres, differences, mainly of proportion, were found in the following program areas:

   - <u>Health care</u>: more rural than urban centres provided such traditional hands-on services as changing medical dressings and performing skin care. More urban centres provided such supportive and preventive services as: arranging medical appointments; obtaining and maintaining equipment for clients; providing/assisting them to obtain a Medic Alert bracelet or Vial of Life; providing dental care and/or hearing and vision screening;
   - <u>Personal care</u>: more rural than urban centres take clients shopping; more rural centres bath clients;
   - <u>Transportation</u>: more rural centres transport clients to social and/or recreational events;
   - <u>Social Services</u>: more rural centres write letters for clients. More urban centres follow-up clients after hospitalization, telephone-check clients and set up client telephone networks, coordinate agencies involved with clients and visit clients at home and in hospital;
   - <u>Therapeutic Services</u>: more urban centres provide reality orientation, physiotherapy, and offer swimming as a therapeutic activity. More rural centres offer training/retraining in activities of daily living, whirlpool therapy and art therapy;
   - <u>Educational Programs</u>: more urban centres provide clients with information concerning safety in and outside the home and concerning standard and living wills;
   - <u>Volunteer Activities</u>: more urban centres involve clients in the running of the centre;

- Quiet Time Activities: T.V. watching is more common in rural centres.

6.1.2 Client Characteristics

Among the new admissions to Adult Day Care sampled in this study, the following urban-rural differences were noted:

1. Socio-demographic Characteristics
   New-admissions to rural centres tended, on average, to be older than their urban counterparts (mean age = 80.3 years for rural centres; 78.6 years for urban centres). Males were more heavily represented among new admissions to rural centres (43.5% were male compared with 35.5% in the urban sample).

2. Medical Conditions
   Conditions included within the ICD category "endocrine, nutritional and metabolic disorders", such as diabetes and thyroid dysfunction, were found to be more prevalent among the rural clients. "Mental disorders" (including Alzheimer's Disease) were more common among urban clients.

3. Drug Consumption
   New admissions to rural centres were found to consume more medications than their urban counterparts.

4. Communication Ability
   More rural than urban clients were found to have vision and hearing impairments, impaired speech and/or impaired understanding.

5. Level of Performance of Activities of Daily Living
   More rural than urban clients were found to require assistance with bathing, dressing and grooming. Also

slightly more rural than urban clients were found to be incontinent of bowel and/or bladder.

6. <u>Self-Care Abilities</u>
More rural than urban clients require assistance with food preparation, housekeeping, shopping, travelling, using the telephone and administering medication.

7. <u>Mental Health Status</u>
Slightly more rural than urban clients have impaired comprehension, impaired memory, do not respond appropriately most of the time and/or lack self-direction.

6.2 Policy Questions and Recommendations for Future Research

A number of policy questions derive from the findings summarized above. Among them is whether in rural settings the development of free-standing centres should be encouraged. In order to answer this question it would be necessary to ascertain whether in urban locations in British Columbia, where they currently exclusively exist, free-standing centres serve a different clientele than affiliated centres. For example, in the February report it was noted that some individuals may be reluctant to attend an Adult Day Care centre located in a care facility because they view it as the first step on the road to institutionalization. If there are differences, the next step would be to establish demand. That is, to ascertain if, in rural areas, there are a sufficient number of individuals with the distinguishing characteristics of free-standing centre clients who would attend Adult Day Care regularly if a free-standing centre was established in their community.

Another step would be to ascertain the cost-benefits of sharing space and other resources and compare these with the cost-benefits of establishing and operating free-standing centres. For example, in a study of home-sharing match-up agencies

(Gutman, Melliship, Doyle and Baldwin, 1989), noise, lack of privacy, and shortages of both activity and storage space were identified as drawbacks of sharing. The same or different factors may be involved in the case of Adult Day Care. On the other hand, co-location, particularly in rural settings, may allow access to facilities, equipment and personnel that otherwise, would be unobtainable.

Another policy question to be considered is whether there should be a minimum and a maximum size requirement for Adult Day Care centres in British Columbia. With regard to minimum size, Conrad, Hanrahan and Hughes (1990) and Rogers and Gunter (1985b) contend that 17-20 clients per day are necessary in order for a centre to be viable. Koenen (1980) reports that the State of Washington recommends that at least 14 clients per day be served. He expresses concern however, that in setting a minimum number, useful programs that are smaller and less sophisticated may be eliminated. At the other end of the scale, he draws attention to the fact that if the client population is too large, some clients may receive little or no attention.

Another key question is whether separate criteria and standards should be developed for urban and for rural Adult Day Care centres. It will be recalled (see Section 2.1) that Von Behren (1990) contends that some of the standards developed for urban centres are too stringent and/or are inappropriate for rural settings and may serve as a deterrent to centre establishment. On the other hand, clients in rural settings are as entitled to quality Adult Day Care as urban clients and may not get it if less stringent standards are applied to rural centres.

Finally, it should be noted that taken together, data from this study suggest that the rural Adult Day Care centre population may be in transition. While in the past, rural centres may have admitted a greater proportion of Personal Care clients than their urban counterparts, this seems no longer to be occuring. As a

result, over time, the rural population will come to more closely resemble the urban population. That is, there will be increasingly greater proportions at the Intermediate Care levels, increasingly greater numbers who are physically frail and increasingly greater numbers with dementing illnesses. This has a number of implications for the development of Adult Day Care services in rural areas. One is that rural centres should carefully examine the services identified in this report as being more common in urban centres, ascertain which are most critical to and effective in maintaining the well-being of Intermediate Care clients, and begin planning now for ways of implementing these when their centre's overall case load gets heavier. Additionally, it should be recognized that while in the short run it may be less critical in rural than in urban areas, there is a need in both settings to give serious consideration to developing Adult Day Care centres that meet the special needs of dementia victims, to providing specialized training in their care to staff, and to implementing special design features that will ensure their safety and facilitate service delivery.

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APPENDIX 1

Information and Support Letters sent to all Centres at the Start of the Study

Province of
British Columbia

Ministry of
Health

Continuing Care Division
Parliament Buildings
Victoria
British Columbia
V8V 4V7

August 30, 1989

To all Adult Day Care Service Providers

Dear :

Re: Adult Day Care Study

The Adult Day Care Program has expanded in the past ten years as an important and integral part of the Continuing Care Division, Home Support Program. In order to ensure development of sound, long range planning for maximum utilization of this resource, additional information is required. Although various studies and surveys have been conducted in the past, some vital information is still not available.

A joint steering committee comprised of Ministry of Health personnel and adult day care service providers requested that the Ministry commission a study to specifically obtain an accurate Provincial summary of the range of services provided in all adult day care centres and the characteristics of the client population being served. In response, the Continuing Care Division of the Ministry of Health has contracted with the Gerontology Research Centre at Simon Fraser University for this study, which is being carried out by a team led by Dr. Stephen Milstein and Dr. Gloria Gutman.

. . . 2

This study is supported by the Home Support Association of British Columbia, the British Columbia Long Term Care Association, and the British Columbia Health Association. Your contribution and that of your agency, as well as compliance with the study schedule is essential.

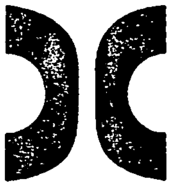
Thank you in advance for your assistance in making this important project successful.

Yours sincerely,

Original Signed By
Andrew Butler

per Paul Pallan
Executive Director
Continuing Care Division

!CICERI/REDGRAVE:drs CCD 3104H



Home Support
Association of
British Columbia

205-4255 Arbutus Street
Arbutus Shopping Centre
Vancouver, B.C. V6J 4R1
Fax (604) 734-8039
Telephone (604) 736-0416

DATE: August 25, 1989

TO: HSABC Adult Day Care Members

FROM: Gloria Lifton

Dear Adult Day Care Member:

I am writing to express my personal support and the support of the Home Support Association of British Columbia for the study of Adult Day Care Programs that is being carried out by the Simon Fraser University Gerontology Research Centre under contract to the Continuing Care Division of the Ministry of Health. Continued healthy development of a Provincial Adult Day Care system demands that accurate information as to the current status of the system be made available. Although a number of surveys have been completed none have been directed toward providing the basic information being sought in this study.

In making this request for your support we appreciate that most agencies and programs have a heavy workload and that you have already participated in several research projects. However, the potential value of this study makes it essential that you participate and also comply with the project timetable. It is my hope that all agencies affiliated with the Home Support Association of British Columbia can adhere to the project timetable.

Sincerely,

HOME SUPPORT ASSOCIATION OF B.C.

Gloria Lifton
Executive Director

GL/jw

APPENDIX 2

Request for Data for Phase I, Part I
(All Centres)

Please find enclosed a package containing several items. Some of these items are for your interest and to help you understand the importance of the Study. Others are tasks which we are asking you to fulfill during the course of the Study.

While we ask all Adult Day Care Agencies to provide some information in the initial stages of the Study as indicated, not all will be included in the final sample. Rather, the actual agencies selected for sampling will be randomly selected and asked to participate further in the Study. It is expected that 15-20 agencies will be selected to take part in this phase of the Study.

This package should include:

1. a letter from Dr. S. Milstein

2. a brief outline of the study

3. the expected outcome of Study 1

4. the allocation of tasks of all Adult Day Care Agencies with the completion date included

5. the response form

6. addressed envelope in which to return the response form to the research team if necessary

Questionnaires and other information gathering material will be mailed at appropriate times. Complete instructions will be included with this material.

SIMON FRASER UNIVERSITY

GERONTOLOGY DIPLOMA PROGRAM (604) 291-3593
GERONTOLOGY RESEARCH CENTRE (604) 291-3555

BURNABY, BRITISH COLUMBIA
CANADA V5A 1S6

Harbour Centre
515 W. Hastings
Vancouver, B.C.
V6B 5K3

September 7, 1989

Dear :

As you already know the Simon Fraser University Gerontology Research Centre has been asked by the Ministry of Health to carry out a study on Adult Day Care in British Columbia. This study was initiated by the Ministry and a steering committee made up of representatives of Adult Day Care agencies. The study is designed to obtain basic information as to what services are provided by Adult Day Care and who receives these services. In addition, the study will compare the assessed needs for specific services, as viewed by the LTC assessor, with the need following an assessment by the Adult Day Care once the client has been referred.

We are aware that agency personnel are extremely busy and agencies are often short of manpower and resources. Therefore we have designed this study to minimize the work that we are asking you to do. We have enclosed information on the tasks that you are being asked to do and an estimation of the time that each will take. We do realize that you have been asked to cooperate with and participate in a number of other studies and surveys during the last 6 months and regret that we must ask you to do it again. While we have attempted to minimize the demands that this study will make on agency time, we cannot carry out this work without your assistance. YOUR COOPERATION IS ESSENTIAL TO THE SUCCESS OF THIS STUDY.

.../2-

The study is structured and the data will be reported in a way that THE RESULTS CANNOT BE LINKED BACK TO ANY SPECIFIC AGENCY AND THE CONFIDENTIALITY OF YOUR CLIENTS WILL BE PROTECTED.

We are of the opinion that the Ministry of Health is interested in developing a strong continuum of care and that Adult Day Care is seen as an important and essential part of this continuum. Rational planning is not possible without this basic data. The results of this study should increase the value of the other studies, data and information that you have contributed.

It is our hope that the tasks we are asking of you will not provide too much of a burden on your program and that as a result of your participation, the ADULT DAY CARE system will become stronger. Please examine the entire package of material that you have received. If you have any questions or feedback please call me at 684-0846 (in Vancouver). We look forward to your participation and some interesting results.

Sincerely,

Stephen L. Milstein, Ph.D.

SLM/DL/ws

Encl.

ADULT DAY CARE STUDY

BACKGROUND

The idea for this study was first presented in March, 1987 when the Continuing Care Division of the Provincial Ministry of Health asked Dr. S. Milstein and Gutman of the Gerontology Research Centre at Simon Fraser University to attend a meeting of a Ministry steering committee to discuss a study of Adult Day Care in British Columbia. In attendance in addition to Dr. S. Milstein and Gutman were representatives of the Continuing Care Division, of regional health units and of the associations representing Adult Day Care Agencies.

At this and subsequent meetings of this group, it was agreed that there was a need for a study of Adult Day Care and that this work would be carried out by The Gerontology Research Centre. The involvement of key people from a representative group of agencies was extremely important as the cooperation of all of the adult day care agencies is essential to the success of this or any study of these agencies. Several meetings were held at which the type of information needed was discussed and the Gerontology Research Center's approach to collecting this information was presented. The goals, and procedures of this study reflect what was expressed at these meetings.

REASON(S) FOR THIS STUDY

Current thinking within the Ministry of Health, including the Continuing Care Division is that there is a need to strengthen home support services (of which adult day care is an integral part) and to limit the use of residential care to those instances where community supports are not suitable. The Ministry of Health, Continuing Care Division, assumed responsibility for management of the Adult Day Care Program in 1979. Since that time, the Adult Day Care Program has expanded from provision of a primarily social/recreational program to include provision of an organized program of physical, social and preventative health care services and therapeutic activities in 46 centres located throughout British Columbia.

Due to the expansion in size of the Adult Day Care Program and variability in types of programs offered, a comprehensive service review which will yield reliable, quantitative data with respect to identification of services provided, clients served, model(s) of service delivery and the role of adult day care in the overall case management of the client is required. This data will assist the Continuing Care Division with respect to long range planning for this unique resource.

SPECIFIC OBJECTIVES OF THE STUDY

1) To Prepare an inventory and description of all services provided in all adult day care centres.
2) To describe the client population in attendance at adult day care centres.
3) To describe the interface of the Long Term Care Program with adult day care.
4) Using the data collected under objectives 1-3 to determine if there are models of service delivery operating among the surveyed centres and if so to describe the models under which they are operating.

THE THREE (3) PHASES OF THIS STUDY

This study consists of three phases. They are: the description of services provided by adult day cares, the description of clients served by adult day cares, and a description of the relationship between the prescriptions given by the Long Term Care assessors and the service received. Each of these three phases is designed to meet the one of the objectives listed(1-3) in the previous section.

The rest of the material in this package pertains only to Phase 1 and 2. Further information regarding Phase 3 will be sent to you shortly.

THE EXPECTED OUTCOME OF STUDY I

The activity data will be reported as follows:

*A list of every activity and service offered by each of the agencies and the percentage of clients during the year who receive the service and or participate in the activity. This data will also be aggregated by category. The agency specific data will only be provided to the agency supplying it.

*The data from all the agencies will be aggregated by region (lower mainland, northern, interior, island) and the number, and percentage of agencies offering each activity or service will be reported. The percentage of clients during the year who receive the service and or participate in the activity will also be aggregated and reported.

*The data for the whole province from all the agencies will be aggregated, and the number and percentage of agencies offering each activity or service will be reported. The percentage of clients during the year who receive the service and or participate in the activity will also be aggregated and reported.

THE EXPECTED OUTCOME OF STUDY II

* To describe the actual characteristics of the clientele served by Adult Day Care Centres.

* The report on the data will present each demographic variable in a contingency table which will give the number and percentage of individuals at each level of the variable by target group sub-category.

* The data will be aggregated by region and for the whole province.

RESPONSE FORM

I cannot meet the schedule for tasks #1 because of the following reason:

I can complete and return the requested information on the dates listed below.

TASKS #1 FOR THE ADULT DAY CARE AGENCIES
ON BEHALF OF THE ADULT DAY CARE STUDY

As a first step in the Adult Day Care Study, we are asking all the Adult Day Care agencies in the province to provide us with the following information:

1. A copy of the job description for every position within your Agency. This is the responsibility of the Executive Director or head of your Adult Day Care Agency.

2. Any additional information that you have on activities carried out, and programs and services offered by your agency. This information will be used to develop a master list categorizing your duties in operational terms.

3. A blank copy of all forms that contain any client information.

4. The total number of clients your agency has on file. Please note: only those clients who have attended or who have received services within the last 90 days are to be included.

Because we are committed to specific deadlines, it is most important that this information be returned to the research team no later than ten days after the receipt of this package. We expect this to be approximately September 25. If you cannot meet this schedule please complete the response form indicating when you can complete and return the requested information. Thank you for your cooperation.

APPENDIX 3

Request for Data for Phase I, Part II
(27 Centres not Selected to Provide Client Demographic Data)

INFORMATION SHEET

Enclosed in this package is a letter from Dr. S. Milstein and a questionnaire regarding the activities and services offered by adult day care centres in B.C. We realize that you are coming up to the busiest time of the year. The questionnaire will take 30 minutes or less to answer. Therefore it is our expectation that it can be completed before your Christmas activities commence.

Because we are also working within a tight schedule, if your cannot complete it by the deadline of December 8, 1989, please let us know when we can expect it by completing the following form and returning it to us at the address listed below.

Adult Day Care Centre Study
Gerontology Research Centre
Simon Fraser University at Harbour Centre
515 West Hastings Street
Vancouver, B.C.
V6B 5K3

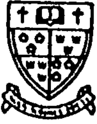
Attn: Doris Lewis.

I cannot meet the deadline of December 8, 1989 for returning the questionnaire but can complete and return it by

____

Signed_______________________

Facility_____________________



SIMON FRASER
UNIVERSITY
AT HARBOUR CENTRE

Sample letter to those agencies not providing client sample.

Gerontology Research Centre
Gerontology Diploma Program

515 West Hastings Street
Vancouver, British Columbia
Canada V6B 5K3

Centre Tel: 604/291.5062
Program Tel: 604/291.5065
Fax: 604/291.5066

Nov. 17, 1989

Dear :

Thank you for providing us with the program and client information that was requested of you. We are pleased to report that <u>every</u> Adult Day Care in the province sent in their information. This 100% participation will help us all to obtain an accurate picture of Adult Day Care in British Columbia.

We are now ready for step 2 of this study. Enclosed you will find an exhaustive check list of activities that were generated from the program material sent in by all the programs. Please read the instructions very carefully, complete the checklist and return it to us by December 8.

This is the last task that we are asking you to do for the Study. We greatly appreciate the cooperation that you have given us and look forward to providing you feedback on the array of services being offered in B.C.

Sincerely,

Stephen L. Milstein, Ph.D.
Research Associate

Encl.
SM/DL/ws

APPENDIX 4

Request for Data for Phase I, Part II and Phase II (22 Centres Selected to Provide Client Demographic Data)

INFORMATION SHEET

Enclosed in this package is:

a) a letter from Dr. S. Milstein

b) a questionnaire regarding the activities and services offered by adult day care centres in B.C.

c) a list of instructions regarding the procedure to be followed for providing the required information

d) a sample of the first page of a LTC form as a guide for gathering the required information

e) a faceplate to be used during the information gathering process

f) a worksheet containing identification numbers and names of clients to be used during the information gathering process.

We realize that you are coming up to the busiest time of the year. The questionnaire will take 30 minutes or less to answer. The photocopying of the LTC's of your sample of clients as listed on the enclosed worksheet will take approximately 30 to 40 minutes. Therefore it is our expectation that it can be completed before your Christmas activities commence.

Because we are also working within a tight schedule, if your cannot complete it by the deadline of December 8, 1989, please let us know when we can expect it by completing the following form and returning it to us at the enclosed address.

I cannot meet the deadline of December 8, 1989 for returning the questionnaire but can complete and return it by

____

Signed________________________

Facility_______________________

SIMON FRASER
UNIVERSITY
AT HARBOUR CENTRE

Gerontology Research Centre
Gerontology Diploma Program

515 West Hastings Street
Vancouver, British Columbia
Canada V6B 5K3

Centre Tel: 604/291.5062
Program Tel: 604/291.5065
Fax: 604/291.5066

Nov. 17, 1989

Dear :

Thank you for providing us with the program and client information that was requested of you. We are pleased to report that every Adult Day Care in the province sent in their information. This 100% participation will help us all to obtain an accurate picture of Adult Day Care in British Columbia.

We are now ready for steps 2 and 3 of this study. Enclosed you will find an exhaustive check list of activities that were generated from the program material sent in by all the programs.

In addition to the activity list we require some information from you regarding the clients attending your program. Only 22 of the 49 Adult Day Agencies have been randomly selected to provide client information, therefore it is very important that you follow the instructions regarding the selection of those clients on whom you will provide information. Please note when you are reading the client selection instructions that we do not wish to receive the names of the clients whose information that you send us.

.../2-

Office location: 2175-555 West Hastings Street

This is the last task that we are asking you to do for the Study. We greatly appreciate the cooperation you have given us and look forward to providing your feedback on the array of services being offered and characteristics of the clientele served by Adult Day Care in B.C. Please read the instructions very carefully, complete the checklist, gather the client information and return it to us by December 8, 1989.

Sincerely,

Stephen L. Milstein, Ph.D.
Research Associate

Encl.
SM/DL/ws

TASK #2

A SURVEY OF ACTIVITIES AND SERVICES OFFERED BY ADULT DAY CARE CENTRES IN BRITISH COLUMBIA

Col.#

		1

1. Facility ____________________

2. Location ____________________

Thank you for responding so well to our first request for a list of activities and services offered by your agency. The information you provided has been most helpful in developing this master list of activities and services which we are now asking you to complete.

We have designed this questionnaire with your busy schedule in mind. You will notice we have kept the writing of answers to a minimum. This questionnaire should take no longer than 30 minutes to complete.

Please note that we wish to know what services and activities your agency offers AT THE PRESENT TIME, not what you may hope to offer or have provided in the past. It is important that you answer each question as is indicated. Each question requires an answer; please do not leave any questions unanswered. Fill appropriate blanks with the requested information and CIRCLE "Yes" or "No" where applicable. The numbers in the far right columns are for data entry purposes and should be ignored by you.

SECTION I FACILITY DEMOGRAPHIC INFORMATION

	Question	Response	Column
3.	How many days per week is your Centre open?	________	4
4.	How many hours per day are you open? (to the nearest half hour)	________	5-8
5.	a) Do the clients themselves pay any fee?	(1) Yes (2) No	9
	IF NO, skip to question 6.		
	If yes, answer Parts (b) and (c).		
	b) Fee charged LTC client per day? (to the nearest dollar)	________	10-11
	c) Fee charged private client per day? (to the nearest dollar)	________	12-13
6.	Do you provide transportation to and from the Adult Day Care Centre to some or all of your clients?	(1) Yes (2) No	14
	IF NO, skip to question 7.		
	If yes, type of transportation:		
	a) facility owned	(1) Yes (2) No	15
	b) Handi-dart	(1) Yes (2) No	16
	c) other public supported	(1) Yes (2) No	17
	d) private service	(1) Yes (2) No	18
	e) private car	(1) Yes (2) No	19
	f) Other (specify) ________	(1) Yes (2) No	20
7.	On average, how many clients come to the Centre per day ? ____________		21-22
8.	On average, how often does an individual client attend the Centre each week? ____________ days		23

9. How many clients on your active list are categorized as :

a)	personal care?	________	24-25
b)	intermediate care I?	________	26-27
c)	intermediate care II?	________	28-29
d)	intermediate care III?	________	30-31
e)	extended care ?	________	32-33
f)	unclassified?	________	34-35

10. In total, how many clients have been admitted to your Adult Day Care Centre within the last 12 months? ________ 36-38

11. a) Is your Centre affiliated with any other institution or organization? (1) Yes (2) No 39

IF NO, skip to question 12.

b) If yes, is it affiliated with :

i)	a community/seniors' centre?	(1) Yes	(2) No	40
ii)	a personal care facility?	(1) Yes	(2) No	41
iii)	an intermediate care facility?	(1) Yes	(2) No	42
iv)	an extended care hospital?	(1) Yes	(2) No	43
v)	an acute care hospital?	(1) Yes	(2) No	44
vi)	a municipal health department?	(1) Yes	(2) No.	45
vii)	some other institution? (specify type) ________	(1) Yes	(2) No	46

c) If yes, do you share :

i)	space?	(1) Yes	(2) No	47
ii)	staff?	(1) Yes	(2) No	48
iii)	programs?	(1) Yes	(2) No	49
iv)	Other resources? (specify) ________	(1) Yes	(2) No	50

12. a) Do you have a client waiting list? (1) Yes (2) No | 51

IF NO, skip to question 13.

b) If yes, how many people are currently on the list? ____________________ | 52-53

c) If yes, what is your average wait time at this moment? (in months) ______________ | 54-55

13. How many people do you presently have on your staff? (include approved but unfilled positions)

			Column
a)	full-time paid	_____	56
b)	part-time paid	_____	57
c)	casual paid	_____	58
d)	volunteers	_____	59

14. Please indicate the number of full-time equivalents (FTE's) for each of the following positions in your centre (include approved but unfilled positions).

Position	No. of FTE'S	Column
a) Administrator	__________	60
b) Co-ordinator/Director	__________	61
c) Assistant Director	__________	62
d) Program Worker (Attendant)	__________	63
e) Transport Worker	__________	64
f) Nurse	__________	65
g) Cook	__________	66
h) Secretary/Bookkeeper	__________	67
i) Education Officer	__________	68
j) Art Therapist	__________	69
k) Music Therapist	__________	70
l) Occupational Therapist	__________	71

		Col.
m) Physiotherapist	______	72
n) Social Worker	______	73
o) Other (specify) ______	______	74
______	______	75
______	______	76

Col.#

		2

15. Please indicate for each of the following positions/ professions, whether or not you have access to consultative services, either in the community or through an affiliated facility or organization.

a) Art Therapist	(1) Yes	(2) No	4
b) Audiologist	(1) Yes	(2) No	5
c) Dietician/Nutritionist	(1) Yes	(2) No	6
d) Geriatrician	(1) Yes	(2) No	7
e) Music Therapist	(1) Yes	(2) No	8
f) Nurse	(1) Yes	(2) No	9
g) Occupational Therapist	(1) Yes	(2) No	10
h) Pharmacist	(1) Yes	(2) No	11
i) Physiotherapist	(1) Yes	(2) No	12
j) Psychiatrist	(1) Yes	(2) No	13
k) Psychologist	(1) Yes	(2) No	14
l) Recreation Therapist	(1) Yes	(2) No	15
m) Social Worker	(1) Yes	(2) No	16
o) Speech Therapist	(1) Yes	(2) No	17
p) Other (specify)	(1) Yes	(2) No	18

______

SECTION II

SERVICES

Below is a list of services offered by some Adult Day Centres. Please indicate if your agency presently offers these services by circling "yes" or "no" for each service listed. If you offer any services which are not listed, add them in the spaces provided at the end of each section.

16. Health Care Services

a)	Review clients medications	(1) Yes	(2) No	19
b)	Administer medications	(1) Yes	(2) No	20
c)	Monitor compliance with medication schedule	(1) Yes	(2) No	21
d)	Monitor blood pressure, heart rate blood sugar, weight, etc.	(1) Yes	(2) No	22
e)	Nutrition counselling	(1) Yes	(2) No	23
f)	Podiatry/foot care	(1) Yes	(2) No	24
g)	Dental care	(1) Yes	(2) No	25
h)	Vision screening	(1) Yes	(2) No	26
i)	Hearing screening	(1) Yes	(2) No	27
j)	Change medical dressings	(1) Yes	(2) No	28
k)	Skin care (rubs, etc.)	(1) Yes	(2) No	29
l)	Arrange medical appointments	(1) Yes	(2) No	30
m)	Provide emergency alert services (e.g. Life line)	(1) Yes	(2) No	31
n)	Provide/arrange for Vial of Life	(1) Yes	(2) No	32

o)	Provide/arrange for Medic Alert bracelet, necklace, etc.	(1) Yes	(2) No	33
p)	Obtain equipment for clients (wheelchair, glasses, adaptive clothes, etc.)	(1) Yes	(2) No	34
q)	Maintain client equipment (wheelchair, glasses, adaptive clothing etc.)	(1) Yes	(2) No	35
r)	Other health care services offered (specify)	(1) Yes	(2) No	36
	________________________________			37
	________________________________			38
	________________________________			39

17. Personal Care Services

a)	Bath (ADC clients)	(1) Yes	(2) No	40
b)	Bath (non-ADC clients)	(1) Yes	(2) No	41
c)	Personal grooming (hair dressing etc.)	(1) Yes	(2) No	42
d)	Mend/alter clients' clothes	(1) Yes	(2) No	43
e)	Take clients on shopping trips (for food, clothing etc.)	(1) Yes	(2) No	44
f)	Other (specify) ____________	(1) Yes	(2) No	45
	________________________________			46
	________________________________			47

18. Transportation (other than to or from ADC)

a)	Transportion for medical appointments	(1) Yes	(2) No	48
b)	Transportation for shopping	(1) Yes	(2) No	49
c)	Transportation for social/ recreational events	(1) Yes	(2) No	50
d)	Other (specify)	(1) Yes	(2) No	51
	______________________________			52
	______________________________			53

19. Social Services

a)	Information and referral to other services	(1) Yes	(2) No	54
b)	Counsel clients, caregivers and/or families	(1) Yes	(2) No	55
c)	Telephone check clients	(1) Yes	(2) No	56
d)	Set up client telephone network	(1) Yes	(2) No	57
e)	Client advocacy	(1) Yes	(2) No	58
f)	Liaise between client and other social agencies	(1) Yes	(2) No	59
g)	Coordinate various agencies involved with client	(1) Yes	(2) No	60
h)	Visit client in his/her home	(1) Yes	(2) No	61
i)	Visit client in hospital	(1) Yes	(2) No	62
j)	Follow-up clients after hospitalization	(1) Yes	(2) No	64
k)	Locate suitable housing	(1) Yes	(2) No	63
l)	Pastoral services	(1) Yes	(2) No	65
m)	Operate special interest groups (stroke, weight control, diabetic)	(1) Yes	(2) No	66
n)	Letter writing for clients	(1) Yes	(2) No	67

o)	Letter reading for clients	(1) Yes	(2). No	68
p)	Other social services (specify)	(1) Yes	(2) No	69
	______________________________			70
	______________________________			71

Col.#

		3

20. <u>Therapeutic Activities</u>

a)	Training/retraining in ADL	(1) Yes	(2) No	4
b)	Physiotherapy (rehabilitation, assisting in mobility)	(1) Yes	(2) No	5
c)	Art therapy	(1) Yes	(2) No	6
d)	Music therapy	(1) Yes	(2) No	7
e)	Sensory stimulation	(1) Yes	(2) No	8
f)	Reminiscence therapy	(1) Yes	(2) No	9
g)	Reality orientation	(1) yes	(2) No	10
h)	Management of incontinence/ toileting training	(1) Yes	(2) No	11
i)	Teach meal planning and cooking skills	(1) Yes	(2) No	12
j)	Exercise class (as therapeutic activity)	(1) Yes	(2) No	13
l)	Whirlpool therapy	(1) Yes	(2) No	14
m)	Stress management	(1) Yes	(2) No	15
n)	Swimming (as therapeutic activity)	(1) Yes	(2) No	16
o)	Other therapeutic activities (specify)	(1) Yes	(2) No	17
	______________________________			18
	______________________________			19
	______________________________			20

21. Recreational and Social Activities

	Activity			Col.
a)	Arts and crafts	(1) Yes	(2) No	21
b)	Baking and cooking as a social activity	(1) Yes	(2) No	22
c)	Games (cards,bingo, etc.)	(1) Yes	(2) No	23
d)	Visiting entertainment at the Centre	(1) Yes	(2) No	24
e)	Pet visits to the centre	(1) Yes	(2) No	25
f)	Pet care (of pets at ADC)	(1) Yes	(2) No	26
g)	Physical recreation (bowling, swimming, etc.)	(1) Yes	(2) No	27
h)	Gardening	(1) Yes	(2) No	28
i)	Computer activities (instruction, videogames, etc.)	(1) Yes	(2) No	29
j)	Outdoor activities (walks, picnics, barbeques, etc.)	(1) Yes	(2) No	30
k)	Special meals (such as birthday parties, holidays)	(1) Yes	(2) No	31
l)	Client socials	(1) Yes	(2) No	32
m)	Social activities involving families	(1) Yes	(2) No	33
n)	Day excursions	(1) Yes	(2) No	34
o)	Overnight excursions	(1) Yes	(2) No	35
p)	Activites involving community groups (regular school children visits, etc.)	(1) Yes	(2) No	36
q)	Other recreational and social activities (specify)	(1) Yes	(2) No	37
	______________________			38
	______________________			39
	______________________			40

22. Educational Programs

a)	Current events	(1) Yes	(2) No	41
b)	Information about community resources	(1) Yes	(2) No	42
c)	Preventive health measures	(1) Yes	(2) No	43
d)	Safety in the home	(1) Yes	(2) No	44
e)	Safety outside the home	(1) Yes	(2) No	45
f)	Financial planning	(1) Yes	(2) No	46
g)	Wills	(1) Yes	(2) No	47
h)	Living wills	(1) Yes	(2) No	48
i)	Other (specify)	(1) Yes	(2) No	49
	______________________			50
	______________________			51
	______________________			52

23. Client Volunteer Activities

a)	Doing volunteer work for the community	(1) Yes	(2) No	53
b)	Doing volunteer work for other clients	(1) Yes	(2) No	54
c)	Client participation in running the Centre	(1) Yes	(2) No	55
d)	Other client volunteer activities (specify)	(1) Yes	(2) No	56
	______________________			57
	______________________			58
	______________________			59

24. Quiet Time Activities

a)	Rest	(1) Yes	(2) No	60
b)	Conversation	(1) Yes	(2) No	61
c)	Reading	(1) Yes	(2) No	62
d)	Watching T.V.	(1) Yes	(2) No	63
e)	Other quiet time activities (specify)	(1) Yes	(2) No	64
	______________________			65
	______________________			66
	______________________			67

25. Meals

a)	Hot meals at Day Care	(1) Yes	(2) No	68
b)	Snacks at Day Care	(1) Yes	(2) No	69
c)	Take-home meals	(1) Yes	(2) No	70

CLIENT CHARACTERISTICS

The objective of this phase of the study is to describe the actual characteristics of the clientele served by adult day care centres. In order to obtain a truly representative sample of the total client population of all the adult day care centres, we have randomly selected 22 centres from 4 areas of B.C. These are: Vancouver Island and the Coastal region, Fraser Valley and the Lower Mainland, Interior, and the City of Vancouver. The centres have been chosen so that agencies with both a large and small client population are represented. From these 22 centres, we have obtained a sample of approximately 500 clients.

PROCEDURE TO BE FOLLOWED

1. Enclosed with your package is a Worksheet containing identification numbers and names of some of your clients. This will be your share of the total sample of clients. The set of identification numbers is the unique identification number for each client listed and will be the only identifying information to appear from this point onwards, thus protecting the anonymity of all selected clients.

2. For each client listed please make a photocopy of their completed LTC Assessment forms. The LTC forms are numbered on the right hand corner. There will be 5 of them to photocopy for each client. Obliterate any identifying information and place their identification number on each sheet as indicated in the following steps:

a) Place the enclosed template over the area on Form 1 where the identification information is recorded and secure with paper clips as indicated in the sample page provided.

b) Photocopy this page and the remaining 4 pages ensuring the copies are completely legible and readable.

c) Using a marking pen or a file folder label, obliterate the signature on page 1 <u>and</u> the client's name on the remaining 4 pages.

d) Place the unique identification number assigned to that client, as listed on the work sheet provided with your package, in the upper right corner of <u>each</u> of the 5 pages.

e) Fill in the date of admission to your Adult Day Care Centre for each client in the place specified on the front of the faceplate. We have enclosed a sample.

7. Return the copies of client information and the completed activity list by DECEMBER 8, 1989 to

Adult Day Care Centre Study
Gerontology Research Centre
Simon Fraser University at Harbour Centre
515 West Hastings Street
Vancouver, B.C.
V6B 5K3

Attn: Doris Lewis

WORKSHEET

Note: CONFIDENTIAL INFORMATION.

Please destroy this list once the LTC forms are copied and the ID numbers are transferred to photocopies. DO NOT SEND WITH THE REST OF THE INFORMATION.

Identification Number	Client Name

Province of British Columbia
Ministry of Health

LONG TERM CARE PROGRAM

APPLICATION AND ASSESSMENT FORM

SECTION 1
ADMINISTRATIVE AND SUMMARY

2 ☐ REVIEW
3 ☐ RE-ASSESSMENT
4 ☐ APPEAL
5 ☐ CORRECTION

(Sample only)

(Agency I.D.) (Client I.D.)
27 · 0078

3 MARITAL STATUS
1 ☐ SINGLE
2 ☐ MARRIED
3 ☐ WIDOWED
4 ☐ DIVORCED
5 ☐ SEPARATED
6 ☐ OTHER

Date of Admission to ADC ________________

SEX	BIRTHDATE
☐ M ☐ F	Y Y M M D D

B A 'CONTACT PERSON' IS ONE WHO ASSISTS THE CLIENT WITH AN APPLICATION AND/OR A PERSON WHO IS WILLING TO MAINTAIN A CONTINUING INTEREST IN THE CLIENT'S WELFARE WITHOUT IMPLYING RESPONSIBILITY.

C GIVE DETAILS OF PERSON OR NEXT-OF-KIN WHO SHOULD BE CONTACTED IN AN EMERGENCY. ENTER 'CONTACT' IF PERSON IS NAMED IN PARA. B.

D GIVE DETAILS OF PHYSICIAN RESPONSIBLE FOR CARE OF CLIENT. IF THERE IS SPECIALIST OR OTHER PHYSICIAN, ENTER IN PARA. F. SUMMARY

E APPLICATION

I HEREBY APPLY FOR BENEFITS FOR WHICH I/CLIENT MAY BE ELIGIBLE UNDER THE LONG TERM CARE PROGRAM AND CERTIFY THAT THE INFORMATION THAT I HAVE PROVIDED IS CORRECT TO THE BEST OF MY KNOWLEDGE AND MAY BE RELEASED TO THE LONG-TERM CARE SERVICE PROVIDER.

CLIENT OR AUTHORIZED SIGNATURE

CLIENT'S PREFERENCE (SEE REVERSE) PREFERRED FACILITIES

1 ☐ CARE AT HOME
2 ☐ FACILITY CARE 1. ________________
21 ☐ STANDARD
22 ☐ SEMI-PRIVATE
23 ☐ PRIVATE 2. ________________

F ASSESSMENT SUMMARY (TERM REVIEW IF CARRIED OUT)

ASSESSMENT DATE
REVIEW DATE
REASSESSMENT DATE
Y Y M M D D

ASSESSMENT DONE:
1 ☐ CLIENT'S HOME
2 ☐ FACILITY
3 ☐ ACUTE HOSPITAL
4 ☐ OTHER

1 ☐ TEAM REVIEW
2 ☐ FOLLOW-UP

ASSESSOR'S SIGNATURE

G APPROVAL OF CARE LEVEL AND SERVICES (FOR ADMINISTRATOR'S USE ONLY) THE FOLLOWING SERVICES ARE APPROVED:

1 ☐ NOT ELIGIBLE
2 ☐ CARE DECLINED BY CLIENT
3 ☐ CARE AT HOME
4 ☐ CARE AT HOME; MENTAL HEALTH SUPPORT
5 ☐ FACILITY CARE
6 ☐ DAY CARE

1 ☐ PERSONAL CARE
2 ☐ INTERMEDIATE CARE 1
3 ☐ INTERMEDIATE CARE 2
4 ☐ INTERMEDIATE CARE 3
5 ☐ EXTENDED CARE

PREFERRED FACILITY		ALTERNATE FACILITY	
FACILITY CODE	DATE ON LIST	FACILITY CODE	DATE ON LIST
	Y Y M M D D		Y Y M M D D

LTC ADMINISTRATOR'S SIGNATURE

DATE SIGNED

APPENDIX 5

Medical Diagnoses Included in ICD Categories

DIAGNOSES - (Medical diagnoses - from ICDA Classification)

Code 3-digit numbers if applicable, otherwise code 2-digits (plus "X") only.
X codes include "other" or "unspecified" problems within a given category. If two conditions have the same number, repeat that number twice in coding.

I INFECTIVE AND PARASITIC DISEASES

00X Intestinal Infectious Diseases
01X Tuberculosis
02X Zoonotic bacterial diseases
03X Other bacterial diseases
04X Poliomyelitis and other enterovirus diseases of central nervous system
044 Late effects of acute poliomyelitis
045 Aseptic meningitis due to enterovirus
05X Viral diseases accompanied by exanthem
06X Arthopod-borne viral diseases
07X Other viral diseases
08X Rickettsioses and other arthropod-borne diseases
09X Syphilis and other venereal diseases
094 Syphilis of central nervous system
10X Other spirochetal diseases
11X Mycoses
12X Helminthiases
13X Other infective and parasitic diseases

V25 II NEOPLASMS

14X Malignant neoplasm of buccal cavity and pharynx (i.e. mouth and throat)
141 Malignant neoplasm of tongue
149 Malignant neoplasm of pharynx, unspecified
15X Malignant neoplasm of digestive organs and peritoneum
150 Malignant neoplasm of esophagus
151 Malignant neoplasm of stomach
152 Malignant neoplasm of small intestine, including duodenum
153 Malignant neoplasm of large intestine, except rectum
154 Malignant neoplasm of rectum and rectosigmoid junction
155 Malignant neoplasm of liver and intrahepatic bile ducts, specified as primary
156 Malignant neoplasm of gallbladder and bile ducts
157 Malignant neoplasm of pancreas
158 Malignant neoplasm of peritoneum and retroperitoneal tissue
159 Malignant neoplasm of unspecified digestive organs
16X Malignant neoplasm of respiratory system
162 Malignant neoplasm of trachea, bronchus, and lung
17X Malignant neoplasm of bone, connective tissue, skin, and breast
170 Malignant neoplasm of bone
174 Malignant neoplasm of breast
18X Malignant neoplasm of genitourinary organs
180 Maligant neoplasm of cervix uteri
185 Malignant neoplasm of prostate
188 Malignant neoplasm of bladder
19X Malignant neoplasm of other and unspecified sites
191 Malignant neoplasm of brain
20X Neoplasms of lymphatic and hematopoietic tissue
201 Hodgkin's disease
203 Multiple myeloma
204 Lymphatic leukemia
207 Other and unspecified leukemia
21X Benign neoplasms
23X Neoplasm of unspecified nature

III ENDOCRINE, NUTRITIONAL, AND METABOLIC DISEASES

24X Diseases of thyroid gland
243 Cretinism of congenital origin
25X Diseases of other endocrine glands
250 Diabetes mellitus
255 Diseases of adrenal glands (Addison's Disease)

III ENDOCRINE, NUTRITIONAL, AND METABOLIC DISEASES

26X Avitaminoses and other nutritional deficiency (malnutrition)
27X Other metabolic diseases
274 Gout
277 Obesity not specified as of endocrine origin

V:7 28X (IV) DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS

280 Iron deficiency anemias
284 Aplastic anemia
286 Coagulation defects

V MENTAL DISORDERS

29X Psychoses
290 Senile and presenile dementia
291 Alcoholic psychosis
295 Schizophrenia
297 Paranoid states
30X Neuroses, personality disorders, and other non-psychotic mental disorders
300 Neuroses (anxiety/depression)
303 Alcoholism
304 Drug dependence
31X Mental retardation

VI DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS

32X Inflammatory diseases of central nervous system
33X Hereditary and familial diseases of nervous system
34X Other diseases of central nervous system
340 Multiple sclerosis
341 Other demyelinating diseases of central nervous system
343 Cerebral spastic infantile paralysis
345 Epilepsy
35X Diseases of nerves and peripheral ganglia
354 Polyneuritis and polyradiculitis
36X Inflammatory diseases of the eye
37X Other diseases and conditions of eye
370 Refractive errors (failing vision, poor vision)
374 Cataract
375 Glaucoma
379 Blindness
38X Diseases of the ear and mastoid process
388 Deaf mutism
389 Other deafness (incl. poor hearing)

V30 VII DISEASES OF THE CIRCULATORY SYSTEM

39X Chronic rheumatic heart disease
40X Hypertensive disease (high blood pressure)
41X Ischemic heart disease (CHF, "coronary", "heart atta
410 Acute myocardial infarction
411 Other acute and subacute forms of ischemic heart disease
413 Angina pectoris
42X Other forms of heart disease (coronary insufficiency "cardiac condition"
43X Cerebrovascular disease
431 Cerebral hemorrhage (stroke, CVA)
44X Diseases of arteries, arterioles, and capillaries
440 Arteriosclerosis
45X Diseases of veins and lymphatics, and other diseases of circulatory system
451 Phlebitis and thrombophlebitis
454 Varicose veins of lower extremities (leg ulcers)
455 Hemorrhoids

V31 VIII DISEASES OF THE RESPIRATORY SYSTEM

46X Acute respiratory infections, except influenza
47X Influenza
48X Pneumonia
49X Bronchitis, emphysema and asthma
490 Bronchitis, unqualified
491 Chronic bronchitis
492 Emphysema
493 Asthma
50X Other diseases of upper respiratory tract
51X Other diseases of respiratory system (lung problems-unspecified)

V32 IX DISEASES OF THE DIGESTIVE SYSTEM

52X Diseases of oral cavity, salivary glands, and jaws
53X Diseases of esophagus, stomach, and duodenum (gastritis)
531 Ulcer of stomach
532 Ulcer of duodenum
533 Peptic ulcer, site unspecified
54X Appendicitis
55X Hernia of abdominal cavity (incl. hiatus hernia)
56X Other diseases of intestine and peritoneum, constipation
57X Diseases of liver, gallbladder, and pancreas
571 Cirrhosis of liver

V33 X DISEASES OF THE GENITOURINARY SYSTEM

58X Nephritis and nephrosis
59X Other diseases of urinary system
595 Cystitis (bladder infection)
60X Diseases of male genital organs (prostate conditions)
61X Diseases of breast, ovary, fallopian tube and parametrium
62X Diseases of uterus and other female genital organs

V34 XI COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM

63X Complications of pregnancy: urinary infections and toxemias of pregnancy and the puerperium.
64X Abortion
65X Delivery
67X Complications of the puerperium

V35 XII DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE

68X Infections of skin and subcutaneous tissue
69X Other inflammatory conditions of skin and subcutaneous tissue
70X Other diseases of skin and subcutaneous tissue, edema or fluid retention, leg ulcer (unspecified cause)

V36 XIII DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE

71X Arthritis and rheumatism, except rheumatic fever
712 Rheumatoid arthritis and allied conditions
713 Osteoarthritis and allied conditions
715 Arthritis, unspecified
718 Rheumatism, unspecified
72X Ostemyelitis and other diseases of bone and joint, low back pain, osteoporosis
73X Other diseases of musculoskeletal system (bursitis)

V37 74X (XIV) CONGENITAL ANOMALIES

741 Spina bifida
742 Congenital hydrocephalus
759 Congenital syndromes affecting multiple systems

V38 XVI SYMPTOMS AND ILL-DEFINED CONDITIONS

(Includes: S.O.B., edema, shakiness, poor bal., fatigue)

78X Symptoms referable to systems or organs
79X Senility and ill-defined diseases
794 Senility without mention of psychosis, old age

V39 XVII ACCIDENTS, POISONINGS, AND VIOLENCE (NATURE OF INJURY)

80X Fracture of skull, spine, and trunk
81X Fracture of upper limb
82X Fracture of lower limb shoulder
820 Fracture of neck of femur (i.e. hip)
824 Fracture of ankle
83X Dislocation without fracture
84X Sprains and strains of joints and adjacent muscles
85X Intracranial injury (excluding those with skull fracture)
86X Internal injury of chest, abdomen, and pelvis
87X Laceration and open wound of head, neck, and trunk
88X Laceration and open wound of upper limb
89X Laceration and open wound of lower limb
90X Laceration and open wound of multiple location
91X Superficial injury
92X Contusion and crushing with intact skin surface
93X Effects of foreign body, entering through orific[e]
94X Burn
95X Injury to nerves and spinal cord
96X Adverse effect of medicinal agents
98X Toxic effect of substances chiefly nonmedicinal as to source
99X Other adverse effects

NOTE:

01A - 99A Operations and Nonsurgical Procedures (see ICDA book, page 524-7)

Code new fractures as surgery and old fractures under section XVII above

Operations and Nonsurgical Procedures: Use ICDA 8th Revision number codes (page 524-7) adding:

A = old

B = recent

C = unspecified