

CMHC Nursing Home and Hostels
Design Guideline Study

Working paper no.2

RA
998
C3C55
no.2
c.2

1
A.W. Cluff and P.J. Cluff

Architects and Planners

(0576)

FOR REFERENCE ONLY
POUR RÉFÉRENCE SEULEMENT

WORKING PAPER # 2

PROFILE OF USERS

RA
998
C3 C55
no. 2
C.2

CMHC NURSING HOME AND HOSTELS
DESIGN GUIDELINE STUDY

Janet Reizenstein, M.C.P.

August, 1977.

CMHC NURSING HOME AND HOSTELS
DESIGN GUIDELINE STUDY

Working Papers

1. Conceptual Framework
2. Profile of Users
3. Programmes and Services
4. History of Long-Term Care Facilities in Canada
5. Definitions (Levels of Care, Nursing Homes and Hostels)
6. Aspects of Designing Nursing Homes and Hostels with Care Services for the Elderly.
7. Research Methodology: Literature and Legislative Review

Introduction

If all people involved in designing physical environments were sensitive to the needs of the future users of those environments and had the ability to design facilities appropriate for those needs, there would be no need for such things as design guidelines. Unfortunately, this is not yet so, as Natenshon (1969) explains:

"An architect brings to any building he sets out to design a set of principles, or, if you will, a body of prejudices about how people live. This mental set usually is based on his own observations and his architectural training. This view is generally subjective and culture-bound; it is gleaned from observing a small group who usually represent a small segment of the larger society. When he deals with people whose cultural background or physical condition differs from his "norm," his system is likely to break down." (P. 60).

In this CMHC study, we are concerned with the elderly users of two types of facilities: nursing homes and hostels with care services. This paper is an introduction to those elderly users, since we believe that information about the demographic, physiological and social/psychological characteristics of present and future residents of those facilities will further educate those responsible for their design. Sensitive and appropriate design is one important aspect of the system which delivers services to these elderly people. Other equally important considerations are: management, staff, philosophy of care, and economic conditions. (Ostrander, n.d.). The term "system" implies that these sectors work together. Natenshon (1969) comments:

Thus, the architect undertaking the design of a geriatric facility must simultaneously undertake a thorough examination of the people who will reside there. He must view their needs, their desires, and their capabilities. He must balance these demands against the realities of staffing and administration and, at the same time, consider the effect on residents' families. He must create a physical solution that will reinforce conditions of maximum resident welfare. The catch here is that there is as yet no unanimity on these matters. (P. 60).

Natenshon's last comment is worthy of discussion regarding the limitations of this study, since Gerontology (the study of aging) is itself a rather young field, much desirable information is not yet available and, as in any field, there is a large amount of debate concerning major issues. Canadian Gerontology is young as well, and although it is a growing field, it is limited in what it has been able to cover to date. A third factor limiting the scope and thoroughness of this paper was the connected realities of time and money. The profile which follows should be understood in terms of these limitations.

One important point, is that although nursing homes and hostels with care services have many user groups (including: residents, administrators, clerical staff, medical staff, housekeeping staff, social service staff, volunteers, visitors, families, and others). We will be describing characteristics of only one of these groups: the residents. Although the information is presented in discrete categories, elderly residents of these facilities must be seen as whole people. As Carp (1976) explains:

Despite the many changes that old age typically entails -- in sensory acuity, motor skills, sensory-motor coordination, financial capability, social context, and societal status -- old people are, first of all, people. Recognition of the characteristics that they continue to share with other human beings of all ages is essential to the design of optimal environments for the old. (P. 27).

It is difficult for those of us who are not yet old to imagine what it will be like. This profile is written to make that time more understandable and to enable design for elderly people to make more pleasant what may otherwise be a difficult and depressing period.

NOTE:

In the interest of simplicity, the following format will be used for references: (Author's name, date). The reader may refer to the full citation in the Bibliography at the end of the paper.

Like conspirators the old walk all bent over, as if hiding some precious secret, filled with self-protection. The body seems to gather itself around those vital parts, folding shoulders, arms, pelvis like a fading rose. Watch and you see how fragile old people come to think they are made.

Aging paints every action gray, lies heavy on every movement, imprisons every thought. It governs each decision with a ruthless and single-minded perversity. To age is to learn the feeling of no longer growing, of struggling to do old tasks, to remember familiar actions. The cells of the brain are destroyed with thousands of unfelt tiny strokes, little pockets of clotted blood wiping out memories and abilities without warning. The body seems to slowly give up, randomly stopping, starting again as if to torture and tease with the memory of lost strength. Hands become clumsy, frail transparencies, held together with knotted blue veins, fluttering in front of your eyes and reminding you of growing infirmity.

Sometimes it seems as if the distance between your feet and the floor is constantly changing, as if you walk on shifting and not quite solid ground. One foot down, slowly, carefully, force the other foot forward. Sometimes you are a shuffler, not daring to lift your feet from the uncertain earth but forced to slide hesitantly forward in little whispering movements. Sometimes you are able to really "step out" but this effort -- in fact the pure exhilaration of easy movement -- soon exhausts you.

The world becomes narrower as friends and family die or move away. To climb stairs, to ride in a car, to walk to the corner, to talk on the telephone; each action seems to take energy needed to stay alive. Everything is limited by the strength you hoard greedily. Your needs decrease, you require less food, less sleep, and finally less human contact; yet this little bit becomes more and more difficult. You fear that one day you will be reduced to the simple acts of breathing and taking nourishment. This is the ultimate stage you dread, the period of helplessness and hopelessness, when any further independence will be over.

*There is nothing to prepare you for the experience of growing old. Living is a process, an irreversible progression toward old age and eventual death. You see men of eighty still vital and tall and straight as oaks; you see men of fifty reduced to gray shadows in the human landscapes. The cellular clock differs for each one of us, and is profoundly affected by our own life experiences, our heredity, and perhaps most importantly, by the concepts of aging encountered in society and in oneself.**

* Sharon Curtin, *Nobody Ever Died of Old Age*, Little Brown & Co. 1972 PP. 15-17

This User Profile is divided into three sections:

I. Demographic Information

II. Physiological Information

III. Social/Psychological Information

I. DEMOGRAPHIC INFORMATION

A. All Elderly People in Canada.

A. Canadian Elderly

Overview

A clear picture of Canada's present and future elderly population emerges from a seeming morass of statistics: the elderly population is growing at a rapid rate, the number of very old (80+) is growing, the percentage of elderly females is increasing, life expectancies have increased (that for females is higher than that for males), but seem to be levelling off.

Demographic and Economic Changes

Bairstow (CCSD 1976) (PP. 85-86) summarizes demographic and economic changes in the provinces between 1961 and 1971:

"British Columbia, Alberta and Ontario were the fastest growing provinces with most of their growth taking place in the 15-24 age groups. In Alberta and Ontario, the elderly population grew even faster than that of the total province. In B.C., their growth was somewhat slower, reflecting a decrease in elderly immigration."

"Saskatchewan and Manitoba had very low growth rates, the result of significant outmigration. However, the remaining elderly population grew, causing the age structure to "age" considerably. "

"Quebec's population age structure was most strongly affected by a rapidly falling birth rate - from the second highest in Canada in 1960 to the lowest in 1970, manifested by a 190,741 decrease in the number of 0-4 year olds (1961-71). The elderly (55 and over)*increased at a rate that was more than twice the rate of the total, or an increase from 12.3 to 14.5 per cent of the total population. The 55-64 age group is larger than the 65 and over age group, so that the total number of elderly will continue to increase dramatically in Quebec in the next five to ten years. "

"The Atlantic provinces were characterized by relatively low over-all growth rates, but rapid increases in the numbers of young adults and elderly. Out-migration caused major decreases in the middle age group (35-44) and their children. "

"Age-specific indices comparing the age structures in each province to Canada's show that British Columbia was fourth "oldest" by 1971. Prince Edward Island, Saskatchewan and Manitoba were the first three. Prince Edward Island, Saskatchewan, Nova Scotia, Quebec and New Brunswick, in that order, "aged" the most. "

"Ontario had the largest elderly population in absolute numbers and percentage, but Quebec's proportion is increasing and will continue to do so. "

* 'Elderly' denotes 65+ elsewhere in this study.

"The elderly in the Atlantic provinces were the poorest in both 1961 and 1971. The situation in the Prairies improved dramatically, while in Quebec it improved the least, so that Quebec's elderly replaced those in the Prairies as the second poorest in Canada."

"Ontario and British Columbia had the lowest proportions of poor elderly in both 1961 and 1971. B.C. experienced the greatest improvement in the relative income position of the elderly, showing actual decreases in the number of elderly poor (partly explained by the low growth rate of the elderly population)."

Size (Present)

Estimated size of the Canadian and provincial populations by sex and age group are given in Table 1. Table 2 summarizes the previous tables and gives figures on the elderly (65+) population of Canada and the provinces.

In 1975, there were almost two million people over 65 in Canada. Provincial elderly populations from largest to smallest were: Ontario, Quebec, British Columbia, Alberta, Manitoba, Saskatchewan, Nova Scotia, New Brunswick, Newfoundland and Prince Edward Island. Females outnumbered males, nationally, 1,088,700 to 845,800.

TABLE 1. Estimated Population by Sex and Age Group, for Canada and Provinces, 1975(1)
- Thousands -

Age & Sex	Canada	Nfld.	P.E.I.	N.S.	N. B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B. C.	Yukon	N.W.T.
Male	11,385.9	280.0	59.3	411.4	338.6	3,067.9	4,095.2	508.1	463.8	896.3	1,234.1	11.1	19.9
0 - 4	900.2	30.8	5.2	34.7	30.2	216.7	325.1	43.7	37.1	78.3	94.3	1.2	2.9
5 - 9	977.3	31.8	5.4	36.9	31.4	256.4	346.1	43.4	39.1	81.6	101.2	1.1	2.7
10 - 14	1,199.9	34.0	6.8	44.5	38.0	332.3	420.7	51.7	49.8	97.0	121.0	1.2	2.7
15 - 19	1,178.5	32.3	6.5	43.7	38.2	337.0	403.6	50.6	50.6	93.8	119.3	1.0	1.8
20 - 24	1,068.3	28.2	5.6	40.0	34.6	304.8	368.7	47.2	44.8	82.3	109.7	0.8	1.5
25 - 29	970.8	21.0	4.6	34.0	28.1	269.5	356.3	42.1	30.8	75.2	106.4	1.1	1.7
30 - 34	804.5	15.9	3.2	25.8	20.8	229.9	295.7	32.7	23.7	62.3	91.6	1.1	1.6
35 - 39	664.8	13.3	3.0	21.6	16.8	182.8	248.7	26.7	21.6	52.4	75.8	0.9	1.2
40 - 44	648.7	12.6	2.9	20.5	15.9	177.5	243.5	26.0	23.0	52.4	72.9	0.7	1.0
45 - 49	629.8	12.0	2.7	19.5	15.5	171.2	239.2	25.9	24.4	48.8	69.3	0.6	0.8
50 - 54	588.4	11.2	2.6	19.9	15.6	156.2	223.2	26.1	24.8	42.8	64.9	0.4	0.6
55 - 59	479.0	10.6	2.5	18.6	14.1	124.9	172.7	23.3	23.3	34.9	53.4	0.3	0.5
60 - 64	430.0	9.6	2.5	17.0	12.7	109.4	155.0	21.9	21.4	30.0	49.8	0.3	0.4
65 - 69	326.7	6.4	2.0	13.3	10.0	82.6	116.0	17.0	17.0	23.5	38.5	0.2	0.3
70 - 74	235.6	4.5	1.5	9.3	7.1	56.3	83.9	12.7	13.3	18.0	28.8	0.1	0.1
75 - 79	146.3	2.9	1.2	6.1	4.9	34.0	52.4	8.0	8.3	11.0	17.5	-	0.1
80 - 84	84.0	1.7	0.7	3.7	3.0	17.4	28.4	5.2	5.9	6.9	11.1	-	-
85 - 89	39.8	0.7	0.4	1.7	1.3	6.9	12.5	2.7	3.5	3.8	6.2	-	-
90+	13.4	0.3	0.1	0.6	0.5	2.0	3.5	1.0	1.4	1.4	2.6	-	-

(1) Each figure has been rounded independently to the nearest hundred; hence totals do not necessarily equal the sum of individual rounded figures in distribution.

- Less than 50 persons.

Source: Statistics Canada Population Estimates and Projections Division, Census Field. Population of Canada and Provinces by Sex and Age Group
Estimated as of June 1, 1975 (Ottawa - Statistics Canada, 1975)

TABLE 1 (Continued)

Estimated Population by Sex and Age Group, for Canada and Provinces, 1975(1)

- Thousands -

Age & Sex	Canada	Nfld.	P.E.I.	N. S.	N. B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B. C.	Yukon	N.W.T.
Female	11,413.7	269.5	59.6	410.7	336.3	3,120.0	4,130.5	510.6	454.3	871.6	1,223.1	9.6	17.8
0 - 4	853.4	29.1	4.8	33.0	28.9	204.9	307.8	41.3	35.6	74.1	90.0	1.1	2.7
5 - 9	935.7	30.6	5.3	35.2	29.9	245.5	330.3	42.0	37.5	78.3	97.6	1.1	2.5
10 - 14	1,144.5	32.7	6.4	42.6	36.1	317.1	400.4	49.5	47.8	93.2	115.0	1.1	2.4
15 - 19	1,131.0	31.2	6.3	41.5	36.2	324.8	387.4	48.7	48.8	88.6	114.7	0.9	1.7
20 - 24	1,053.1	27.3	5.6	38.2	33.8	301.6	366.7	46.8	42.7	80.6	107.3	0.9	1.5
25 - 29	969.4	21.1	4.6	33.0	27.0	272.5	357.2	41.6	29.3	75.7	104.7	1.1	1.6
30 - 34	780.3	15.3	3.3	24.9	19.5	227.3	285.6	31.3	23.7	60.5	86.5	0.9	1.4
35 - 39	640.3	12.5	2.9	20.9	16.4	180.4	238.9	25.6	21.1	50.0	69.8	0.6	1.0
40 - 44	621.6	11.5	2.6	20.2	16.0	177.9	232.1	25.0	22.2	47.2	65.6	0.5	0.8
45 - 49	621.8	11.1	2.6	20.1	15.9	176.0	233.9	26.2	23.8	45.5	65.7	0.4	0.6
50 - 54	612.0	10.3	2.7	20.7	16.2	165.1	231.9	28.4	24.9	42.9	67.9	0.4	0.5
55 - 59	505.3	9.7	2.7	19.5	14.4	135.7	181.1	24.4	23.5	35.4	58.3	0.3	0.3
60 - 64	456.7	8.6	2.5	17.6	13.1	121.6	164.5	23.2	21.3	30.5	53.3	0.2	0.3
65 - 69	362.9	6.1	2.0	13.6	10.5	97.7	133.4	18.4	16.7	23.5	40.8	0.1	0.2
70 - 74	283.0	4.8	1.7	10.9	8.4	74.1	106.9	14.3	12.8	18.0	31.0	-	0.1
75 - 79	206.8	3.7	1.5	8.4	6.4	49.8	80.4	10.6	9.7	12.6	23.8	-	0.1
80 - 84	132.5	2.3	1.1	5.8	4.4	28.7	51.5	7.0	6.8	8.2	16.6	-	-
85 - 89	70.5	1.1	0.5	3.0	2.2	13.8	27.3	4.1	4.0	4.6	9.7	-	-
90+	33.0	0.5	0.4	1.6	1.1	5.6	13.1	2.0	1.9	2.2	4.5	-	-

(1) Each figure has been rounded independently to the nearest hundred; hence totals do not necessarily equal the sum of individual rounded figures in distributions.

- Less than 50 persons.

TABLE 1 (Continued)

Estimated Population by Sex and Age Group, for Canada and Provinces, 1975(1)

- Thousands -

Age & Sex	Canada	Nfld.	P.E.I.	N. S.	N. B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B. C.	Yukon	N.W.T.
Total ...	22,799.5	549.5	118.9	822.2	674.9	6,187.8	8,225.8	1,018.7	918.1	1,768.0	2,457.2	20.8	37.8
0 - 4	1,753.5	59.9	10.0	67.7	59.1	421.6	632.9	85.0	72.7	152.4	184.3	2.3	5.6
5 - 9	1,913.1	62.4	10.7	72.1	61.3	501.8	676.3	85.5	76.6	159.9	198.8	2.2	5.2
10 - 14	2,344.4	66.7	13.2	87.1	74.1	649.5	821.1	101.3	97.6	190.2	236.0	2.4	5.1
15 - 19	2,309.5	63.5	12.8	85.3	74.4	661.8	791.0	99.3	99.4	182.4	234.0	1.9	3.6
20 - 24	2,121.3	55.6	11.2	78.2	68.4	606.4	735.4	94.0	87.5	162.9	217.1	1.6	3.0
25 - 29	1,940.1	42.0	9.2	67.0	55.0	541.9	713.5	83.7	60.1	151.0	211.1	2.2	3.3
30 - 34	1,584.8	31.3	6.5	50.7	40.3	457.2	581.4	64.0	47.4	122.8	178.0	2.1	3.0
35 - 39	1,305.1	25.8	5.9	42.5	33.2	363.3	487.7	52.3	42.7	102.4	145.6	1.5	2.2
40 - 44	1,270.3	24.1	5.5	40.6	31.9	355.3	475.7	51.0	45.1	99.6	138.5	1.2	1.8
45 - 49	1,251.6	23.1	5.3	39.5	31.4	347.2	473.1	52.2	48.2	94.2	135.0	1.0	1.4
50 - 54	1,200.3	21.5	5.3	40.6	31.8	321.3	455.1	54.5	49.7	85.7	132.8	0.8	1.2
55 - 59	984.3	20.3	5.2	38.1	28.4	260.5	353.8	47.7	46.8	70.3	111.7	0.6	0.8
60 - 64	886.6	18.2	5.0	34.6	25.8	230.9	319.5	45.1	42.8	60.5	103.0	0.5	0.7
65 - 69	689.6	12.6	3.9	26.9	20.5	180.3	249.4	35.4	33.6	47.1	79.3	0.3	0.4
70 - 74	518.6	9.4	3.2	20.2	15.5	130.4	190.8	27.0	26.1	35.9	59.8	0.2	0.2
75 - 79	353.1	6.6	2.6	14.4	11.2	83.8	132.8	18.6	18.0	23.5	41.3	0.1	0.1
80 - 84	216.5	4.0	1.8	9.5	7.3	46.1	79.8	12.2	12.7	15.1	27.7	-	0.1
85 - 89	110.2	1.8	0.9	4.7	3.5	20.8	39.9	6.9	7.5	8.4	15.9	-	-
90+	46.4	0.8	0.5	2.3	1.6	7.6	16.6	3.0	3.3	3.6	7.2	-	-

(1) Each figure has been rounded independently to the nearest hundred; hence totals do not necessarily equal the sum of individual rounded figures in distributions.

- Less than 50 persons.

TABLE 2

Estimated Population by Sex and Age Group for Canada and Provinces (1975)

	<u>All 65+</u>	<u>Male</u>	<u>Female</u>
Canada	1,934.4	845.8	1,088.7
Newfoundland	35.2	16.5	18.5
Prince Edward Island	12.9	5.9	7.2
Nova Scotia	78.0	34.7	43.3
New Brunswick	59.6	26.8	33.0
Quebec	469.0	199.2	269.7
Ontario	709.3	296.7	412.6
Manitoba	103.1	46.6	56.4
Saskatchewan	101.2	49.4	51.9
Alberta	133.6	64.6	69.1
British Columbia	231.2	104.7	126.4
Yukon	0.6	0.3	0.1
North West Territories	0.8	0.5	0.4

--- In thousands ---

Source: Statistics Canada Population Estimates and Projections Division,
Census Field.

Population of Canada and Provinces by Sex and Age Group. Estimated
as of June 1, 1975. (Ottawa: Statistics Canada, 1975).

According to Information Canada*:

Population 15 - 44 years: "During 1971-1986 this group, the baby boom generation, will grow faster than the overall population, with an overall increase of 33-37%."

"There will be about 12.5 to 12.9 million persons 15 to 44 years in 1986 as compared with 9.4 million in 1971 or an average increase of 200,000 to 235,000 persons annually. The growth during successive five-year periods is projected to differ considerably and according to Projection B it will average about 243,000 a year during 1971-1976, 234,000 during 1976-1981 and 140,000 during 1981-1986."

* Population projections for Canada and the Provinces, 1972-2001 Ottawa: Information Canada, 1974.

Size (Future)

Table 3 gives four sets of projections for the population of Canada in 1976, 1981, 1986 and 2001, and Table 4 shows the absolute and relative increases in size of specified age groups - 1951 - 1971 and projected 1971 - 1986.

In explaining these projections, Information Canada * divides the population into three age groups: 15 - 44, 45 - 64, and 65 and older. All three are important to this study, since it is the older population of the future as well as that of the present who are potential users of nursing homes and hostels. Information Canada explains national as well as provincial trends.

* Population projections for Canada and the Provinces, 1972-2001 Ottawa: Information Canada, 1974.

Provincial differences in 15-44 years:

1971-86 growth will vary from "15% in Manitoba to 63% in British Columbia according to Projection B. For Ontario and Alberta, the corresponding growth rate will amount to 42% reflecting (for British Columbia as well) the combined influences of the post-war high fertility and of the consistent gain through migration whereas in the same vein, it is to be pointed out that the out-migration provinces indicate percentage increases lower than the national average of 33% for this age group". (Page 72).

Population 45-64 years:

"The number of persons 45 to 64 years is anticipated to increase from 4.0 million in 1971 to 4.7 million in 1986 under Projection B. This will denote an overall increase of 18% which is below the expected growth of the total population. One explanation is that the group is composed of births during the 'twenties and thirties' when the total fertility was on its downward course culminating by 1937 in the lowest rate for the pre-war period. Growth for this group will, however, be substantial after 1986 as the baby boom generation will reach this age group, and the size according to Projection B will approximate 6.7 million in 2001 indicating an expansion of 2 million during 1986-2001 in contrast to about three-fourths of a million in 1971-1986." (Page 74)

"Provincial trends - "According to Project B, the number of persons 45 to 64 will diminish between 3% to 8% in Prince Edward Island, Nova Scotia, New Brunswick and Manitoba during 1971-1986. The decrease will amount to 23% in Saskatchewan in the same period. In contrast, Newfoundland and Quebec will have lower growth than the national increase of 17.8% while Ontario, Alberta and British Columbia will experience above average increases between 25% to 33% in this period." (Page 74).

Population: 65 years and over:

"There were 1.7 million people aged 64 years and over in 1971 and Projection B indicates a size of 2.6 million by 1986 or an increase of 47% which, will be the fastest growing segment of the population in coming years. Besides the steady decline of mortality over the past, the relatively high fertility and large immigration in the beginning of this century will explain this expected large increase in the elderly population. After 1986, however, the increase will be less in the light of the unforeseen below-average growth in the age group 45 to 64 during the period 1971-1986, and the expected population of this group is about 3.3 million in 2001". (Page 74)

Provinces: "All will experience growth in this group: the lowest will be a rate of 15% during 1971-1986 in Prince Edward Island and the highest 56% in Alberta (which has the longest life expectancy rate)." (Page 74.)

"The overall effects of shifts in population structure result from the foregoing differential trends in specific age groups. Under Projection B, the proportion of population 0-14 years will diminish from 29.6% in 1971 to 24.5% in 1986 and 22.7% in 2001. It could drop as low as 19.6% by the end of this century as indicated by Projections C and D. The working ages group 15 to 64 will increase from 62.3% at the last census to 65.7% in 1986 according to medium fertility. Similarly, the proportions of persons 65 years and over will go up to 10% in 1986 from that of 8% in 1971". (Pages 76-77).

Sex Composition (Future)

Information Canada also explains population projections regarding male/female ratio:

Sex Composition:

1971 census males exceeded females by 22,000. "Projected trends imply a sex ratio in favour of females, and the number of females in the population could exceed by 175,000 in 1986 under Projection B. This will correspond to a sex ratio of 987 males per 1,000 females. The ratios for provinces suggest a general trend in favour of females due possibly to the cumulative effects of higher expectation of life among women than men, and the more balanced distribution of sexes among migrants in recent years. Notwithstanding, Newfoundland, Alberta, British Columbia, the Yukon and Northwest Territories are projected to have more males than females in 1986. In all other provinces, the sex ratio will range from 963 to 994 males per 1,000 females. (page 77).

TABLE 3

Enumerated and Projected Population of Canada and Provinces, 1971, 1976,
1981, 1986 and 2001 - Projection A.

Province or Territory	Enumerated Population	-----Projection A-----			
	1971	1976	1981	1986	2001
Population (in thousands)					
Canada	21,568.3	23,086.1	25,311.5	27,810.9	34,611.4
Newfoundland	522.1	555.5	602.9	660.8	819.0
P.E.I.	111.6	114.5	120.1	127.9	144.1
Nova Scotia	789.0	808.3	845.1	889.9	986.5
New Brunswick	634.6	654.9	684.8	720.0	795.3
Quebec	6,027.8	6,174.6	6,483.5	6,839.1	7,471.0
Ontario	7,703.1	8,530.6	9,672.1	10,935.5	14,698.0
Manitoba	988.2	1,011.9	1,061.5	1,119.3	1,249.2
Saskatchewan	926.2	863.0	809.9	757.6	492.2
Alberta	1,627.9	1,795.2	2,025.7	2,284.0	3,033.8
B.C.	2,184.6	2,512.6	2,926.1	3,379.1	4,757.5
Yukon	18.4	21.9	26.2	31.2	48.5
N.W.T.	34.8	43.0	53.6	66.5	116.3

Per Cent of Total Population

Canada	100.00	100.00	100.00	100.00	100.00
Newfoundland	2.42	2.40	2.38	2.38	2.37
P.E.I.	0.52	0.50	0.47	0.46	0.42
Nova Scotia	3.66	3.50	3.34	3.20	2.85
New Brunswick	2.94	2.84	2.71	2.59	2.30
Quebec	27.95	26.75	25.61	24.59	21.59
Ontario	35.71	36.95	38.21	39.33	42.44
Manitoba	4.58	4.38	4.19	4.02	3.61
Saskatchewan	4.29	3.74	3.20	2.72	1.42
Alberta	7.55	7.78	8.00	8.21	8.77
B.C.	10.13	10.88	11.56	12.15	13.75
Yukon	0.09	0.09	0.10	0.11	0.14
N.W.T.	0.16	0.19	0.21	0.24	0.34

Source: Population Projections for Canada and the Provinces, 1972 - 2001.
Statistics Canada, 1974.

TABLE 3 (Continued)

Enumerated and Projected Population of Canada and Provinces, 1971, 1976,
1981, 1986 and 2001 - Projection B.

Province or Territory	Enumerated Population	-----Projection B.-----			
	1971	1976	1981	1986	2001
	Population (in thousands)				
Canada	21,568.3	22,846.3	24,472.5	26,258.6	30,655.5
Newfoundland	522.1	553.7	591.9	638.1	756.2
P.E.I.	111.6	114.5	118.5	124.3	135.3
Nova Scotia	789.0	802.0	821.7	846.1	877.2
New Brunswick	634.6	654.4	675.6	700.3	741.9
Quebec	6,027.8	6,159.2	6,377.8	6,619.7	6,918.7
Ontario	7,703.1	8,370.1	9,187.7	10,073.6	12,518.1
Manitoba	988.2	999.3	1,019.9	1,044.8	1,066.3
Saskatchewan	926.2	880.7	843.0	807.4	615.4
Alberta	1,627.9	1,768.6	1,941.2	2,130.5	2,640.4
B.C.	2,184.6	2,481.2	2,821.7	3,187.8	4,255.0
Yukon	18.4	21.1	24.2	27.7	38.8
N.W.T.	34.8	41.5	49.2	58.3	92.2
Per Cent of Total Population					
Canada	100.00	100.00	100.00	100.00	100.00
Newfoundland	2.42	2.42	2.42	2.43	2.47
P.E.I.	0.52	0.50	0.48	0.47	0.44
Nova Scotia	3.66	3.51	3.36	3.22	2.86
New Brunswick	2.94	2.86	2.76	2.67	2.42
Quebec	27.95	26.96	26.07	25.21	22.57
Ontario	35.71	36.65	37.54	38.36	40.83
Manitoba	4.58	4.38	4.17	3.98	3.48
Saskatchewan	4.29	3.85	3.44	3.08	2.01
Alberta	7.55	7.74	7.93	8.11	8.61
B.C.	10.13	10.86	11.53	12.14	13.88
Yukon	0.09	0.09	0.10	0.11	0.13
N.W.T.	0.16	0.18	0.20	0.22	0.30

Source: Population Projections for Canada and the Provinces, 1972 - 2001.

Statistics Canada, 1974.

Enumerated and Projected Population of Canada and Provinces, 1971, 1976,
1981, 1986 and 2001 - Projection C.

Province or Territory	Enumerated Population	-----Projection C-----			
	1971	1976	1981	1986	2001
	Population (in thousands)				
Canada	21,568.3	22,772.4	24,041.4	25,382.9	28,369.7
Newfoundland	522.1	550.4	577.8	610.1	682.7
P.E.I.	111.6	114.1	116.1	119.3	123.2
Nova Scotia	789.0	799.4	807.0	816.7	803.8
New Brunswick	634.6	652.3	662.9	674.8	677.1
Quebec	6,027.8	6,141.2	6,269.3	6,398.7	6,383.4
Ontario	7,703.1	8,343.3	9,028.0	9,747.2	11,628.7
Manitoba	988.2	995.4	999.9	1,006.1	972.0
Saskatchewan	926.2	877.5	826.5	775.7	546.5
Alberta	1,627.9	1,763.1	1,907.1	2,060.2	2,449.5
B.C.	2,184.6	2,473.4	2,775.0	3,091.9	3,984.1
Yukon	18.4	21.0	23.7	26.6	35.5
N.W.T.	34.8	41.3	48.1	55.8	83.1
Per Cent of Total Population					
Canada	100.00	100.00	100.00	100.00	100.00
Newfoundland	2.42	2.42	2.40	2.40	2.41
P.E.I.	0.52	0.50	0.48	0.47	0.43
Nova Scotia	3.66	3.51	3.36	3.22	2.83
New Brunswick	2.94	2.86	2.76	2.66	2.39
Quebec	27.95	26.97	26.08	25.21	22.50
Ontario	35.71	36.65	37.55	38.40	40.99
Manitoba	4.58	4.37	4.16	3.96	3.43
Saskatchewan	4.29	3.85	3.44	3.06	1.93
Alberta	7.55	7.74	7.93	8.12	8.63
B.C.	10.13	10.86	11.54	12.18	14.04
Yukon	0.09	0.09	0.09	0.10	0.13
N.W.T.	0.16	0.18	0.20	0.22	0.29

Source: Population Projections for Canada and the Provinces, 1972 - 2001.
Statistics Canada, 1974.

TABLE 3 (Continued)

Enumerated and Projected Population of Canada and Provinces, 1971, 1976,
1981, 1986 and 2001 - Projection D.

Province or Territory	Enumerated Population	-----Projection D-----			
		1971	1976	1981	1986
	Population (in thousands)				
Canada	21,568.3	22,769.8	24,036.2	25,375.9	28,360.0
Newfoundland	522.1	555.9	590.9	631.7	734.2
P.E.I.	111.6	114.8	117.9	122.2	129.7
Nova Scotia	789.0	809.0	829.3	852.4	883.9
New Brunswick	634.6	657.4	674.8	694.0	720.9
Quebec	6,027.8	6,185.4	6,372.0	6,561.4	6,737.8
Ontario	7,703.1	8,290.1	8,904.0	9,548.5	11,183.9
Manitoba	988.2	1,016.4	1,048.9	1,084.6	1,148.5
Saskatchewan	926.2	911.6	906.5	904.7	840.8
Alberta	1,627.9	1,755.0	1,888.5	2,030.6	2,383.6
B.C.	2,184.6	2,412.9	2,635.1	2,868.9	3,492.4
Yukon	18.4	20.5	22.5	24.7	31.1
N.W.T.	34.8	40.3	45.9	52.1	74.0
Per Cent of Total Population					
Canada	100.00	100.00	100.00	100.00	100.00
Newfoundland	2.42	2.44	2.46	2.49	2.59
P.E.I.	0.52	0.50	0.49	0.48	0.46
Nova Scotia	3.66	3.55	3.45	3.36	3.12
New Brunswick	2.94	2.89	2.81	2.73	2.54
Quebec	27.95	27.16	26.51	25.86	23.76
Ontario	35.71	36.42	37.04	37.62	39.44
Manitoba	4.58	4.46	4.36	4.27	4.05
Saskatchewan	4.29	4.00	3.77	3.57	2.96
Alberta	7.55	7.71	7.86	8.00	8.40
B.C.	10.13	10.60	10.96	11.31	12.31
Yukon	0.09	0.09	0.09	0.10	0.11
N.W.T.	0.16	0.18	0.19	0.21	0.26

Source: Population Projections for Canada and the Provinces, 1972 - 2001.

Statistics Canada, 1974.

TABLE 3 (Continued)

Projections A, B, C and D arrived at by using different assumptions for fertility rates: (mortality rates assumed to be the same) indicate a range of future population.

Title and Fertility Assumption		Migration Assumptions	
Projection A: High Fertility:	Assumed Fertility Rate 1985 2.60	A 100,000	B 450,000
Projection B: Medium Fertility	2.20	60,000	435,000
Projection C: Low Fertility:	1.80	60,000	435,000
Projection D: Low Fertility:	1.80	60,000	218,000

* Projection C is most frequently used.

A International net gain of population each year.

B. International gross movement of people each year.

Source: Population Projections for Canada and the Provinces, 1972-2001,
Statistics Canada, 1974, P. 59, Table 6.1.

TABLE 4.

Absolute and Relative Increases in the Size
of Specified Age Groups, Canada, 1956-71 and 1971-1986

Age Group	Number		Per Cent change from 1956 to 1971	1986			
				Low Fertility (1.8) 60,000 Migrants		High Fertility (2.6) 100,000 Migrants	
	1956	1971		Number	Per cent change from 1971 to 1986	Number	Per cent change from 1971 to 1986
	,000			,000		,000	
0 - 19 years - ans...	6,388	8,495	33	7,430	-13	9,432	11
6 - 19 " "	4,018	6,268	56	5,063	-19	5,899	-6
20 - 44 " "	5,683	7,305	29	10,648	46	11,002	51
45 - 64 " "	2,766	4,023	45	4,739	18	4,793	19
65 + " "	1,244	1,745	40	2,566	47	2,584	48
TOTAL.....	16,081	21,568	34	25,383	18	27,811	29

Sources: Statistics Canada, Population 1921-1971 (Ottawa: Information Canada 1973) pp. 45-60; also Part III and unpublished data.

One of the reasons for a growing older population is increasing life expectancy. Table 5 shows actual and projected levels and gains in life expectancy, nationally and provincially, 1966 - 1986. Another influence on population size is immigration and emigration. Table 6 shows assumed average immigration and emigration (1972 - 1986), while Table 7 shows the assumed distribution of immigrants and emigrants for Canada and the provinces (1972 - 1986).

TABLE 5.

Actual and Projected Levels and Gains in Expectation
of Life at Birth, Canada & Provinces, 1966-86

	YEAR	MALE		FEMALE	
		LEVEL (number in years)	GAINS SINCE PRECEDING YEAR	LEVEL (number in years)	GAINS SINCE PRECEDING YEAR
Newfoundland:	1966	68.9	...	74.4	...
	1971	69.8	0.9	75.7	1.3
	1976	70.2	0.4	75.6	0.9
	1981	70.5	0.3	77.3	0.7
	1986	70.7	0.2	78.0	0.7
Prince Edward Island:	1966	68.3	...	75.5	...
	1971	69.0	0.7	76.8	1.3
	1976	69.5	0.5	77.7	0.9
	1981	69.7	0.2	78.4	0.7
	1986	70.0	0.3	79.1	0.7
Nova Scotia:	1966	68.3	...	74.8	...
	1971	68.4	0.1	75.8	1.0
	1976	68.9	0.5	76.7	0.9
	1981	69.1	0.2	77.4	0.7
	1986	69.3	0.2	78.1	0.7
New Brunswick:	1966	68.5	...	75.3	...
	1971	69.1	0.6	76.0	0.7
	1976	69.5	0.4	76.9	0.9
	1981	69.8	0.3	77.6	0.7
	1986	70.0	0.2	78.4	0.8
Quebec:	1966	67.9	...	73.9	...
	1971	68.4	0.5	75.1	1.2
	1976	68.8	0.4	76.0	0.9
	1981	69.1	0.3	76.7	0.7
	1986	69.3	0.2	77.4	0.7
Ontario:	1966	68.7	...	75.5	...
	1971	69.5	0.8	76.7	1.2
	1976	70.0	0.5	77.4	0.9
	1981	70.2	0.2	78.3	0.7
	1986	70.4	0.2	79.0	0.7
Manitoba:	1966	69.8	...	76.1	...
	1971	70.2	0.4	77.2	1.1
	1976	70.7	0.5	78.1	0.9
	1981	70.9	0.2	78.8	0.7
	1986	71.2	0.3	79.5	0.7

Table 5 . Cont'd

	YEAR	MALE		FEMALE	
		LEVEL	GAINS SINCE PRECEDING YEAR (number in years)	LEVEL	GAINS SINCE PRECEDING YEAR (number in years)
Saskatchewan:	1966	70.4	...	76.4	...
	1971	71.0	0.6	77.8	1.4
	1976	71.5	0.5	78.7	0.9
	1981	71.7	0.2	79.4	0.7
	1986	72.0	0.3	80.1	0.7
Alberta:	1966	70.1	...	76.2	...
	1971	70.8	0.7	77.5	1.3
	1976	71.3	0.5	78.4	0.9
	1981	71.5	0.2	79.1	0.7
	1986	71.8	0.3	79.8	0.7
British Columbia:	1966	69.2	...	75.8	...
	1971	69.6	0.4	77.0	1.2
	1976	70.1	0.5	77.9	0.9
	1981	70.4	0.3	78.6	0.7
	1986	70.6	0.2	79.3	0.7
Canada:	1966	68.7	...	75.2	...
	1971	69.2	0.5	76.1	0.9
	1976	69.7	0.5	76.9	0.8
	1981	70.0	0.3	77.7	0.8
	1986	70.2	0.2	78.4	0.7

Source: Population Projections for Canada and the Provinces, 1972-2001
 Statistics Canada, 1974, P. 25

TABLE 6.

Assumed Average Annual Immigration and Emigration
1972 - 1986

	Gross Immigration	Gross Emigration (thousands)	Net Immigration
Assumption 0	0	0	0
Assumption 1	200	60	140
Assumption 2	160	60	100
Assumption 3	120	60	60
Assumption 4	80	60	20

Assumption 0 = no immigrants per year.
 Assumption 1 = 200,000 immigrants per year.
 Assumption 2 = *160,000 immigrants per year.
 Assumption 3 = *120,000 immigrants per year.
 Assumption 4 = 80,000 immigrants per year.

Variation due to huge fluctuation in recent history. Emigration on the other hand has been nearly constant.

* Most likely

Source: Population Projections for Canada and the Provinces, 1972-2001
 Statistics Canada, 1974, P. 46.

TABLE 7.

Assumed Distribution of Immigrants and Emigrants among
the Provinces and Territories of Canada, 1972 - 1986.

Province or Territory	Immigration Assumptions				Emigration Assumption
	1	2	3	4	
Canada	200,000	160,000	120,000	80,000	60,000
Newfoundland	1,030	820	614	410	1,708
P.E.I.	225	180	134	90	319
Nova Scotia	2,645	2,116	1,588	1,058	1,871
New Brunswick	1,440	1,152	863	576	2,507
Quebec	34,672	27,738	20,804	13,869	17,148
Ontario	106,536	85,299	63,921	42,615	24,125
Manitoba	8,306	6,645	4,984	3,322	1,805
Saskatchewan	3,072	2,458	1,844	1,229	1,878
Alberta	14,245	11,396	8,547	5,698	3,000
B.C.	27,583	22,067	16,550	11,034	5,517
Yukon	82	66	49	33	39
N.W.T.	172	138	103	69	77
Assumption					

Source: Population Projections for Canada and the Provinces 1972-2001,
Statistics Canada, 1974, P. 48.

A.W. Cluff and P.J. Cluff

Architects and Planners

Analysis of National and Provincial Age Structure by Science Council of Canada

In their monograph, Perceptions 2: Implications of the Changing Age Structure of the Canadian Population, the Science Council of Canada (1976) PP. 7 - 16, gives an excellent interpretation of national and provincial age structure, natality and life expectancy, immigration and emigration, and dependency ratios, which bears repeating here:

TABLE 8

Actual and Projected Population by Broad Age Groups: Canada
1921-2001 (000's)

Year	---0-19---		----20-44----		---45-64---		---65 +---	
	Number	%	Number	%	Number	%	Number	%
1921	3828.1	43.7	3219.4	36.6	1320.3	15.0	420.0	4.8
1931	4321.8	41.7	3742.6	36.1	1736.2	17.7	576.1	5.6
1941	4318.5	37.5	4279.5	37.2	2140.7	18.6	768.0	6.7
1951	5308.6	38.0	5130.3	36.7	2484.2	17.7	1086.3	7.8
1961	7624.5	41.9	6054.6	33.2	3168.0	17.4	1391.2	7.6
1971	8495.3	39.4	7305.3	33.9	4023.2	18.7	1744.5	8.1
1981	7685.8	32.0	9526.6	39.7	4556.9	19.0	2272.3	9.5
1991	7554.1	28.4	10042.4	41.5	5079.0	19.1	2916.0	11.0
2001	7581.3	26.7	10744.6	37.9	6702.0	23.6	3341.8	11.8

Source: Science Council of Canada, Perceptions 2: Implications of the Changing Age Structure of the Canadian Population, 1976, P. 8. Original Sources: Statistics Canada, 1971 Census. Population Age Groups, cat. no. 92-715. Statistics Canada, Population Projections for Canada and the Provinces, 1972-2001, cat. no. 91-514; Projection C (fertility 1.80, net migration 60,000).

"While the 0-19 and 20-44 age groups more than doubled in absolute size from 1921 to 1971, both have actually decreased as a proportion of the population, despite the high fertility rates of the baby boom years. Meanwhile, the 45-64 age group tripled in size, increasing as a percentage of the population; and there were more than four times as many people over 65 in 1971 as in 1921, bringing Canada to its present status of an "aged" country."

"As far as the future is concerned, the Statistics Canada projections which assume low fertility (Projection C: 1.80) indicate that, for the first time in Canadian history, there may be an absolute decrease of young people (0-19), but a steady increase both in absolute and relative terms (until 2001) for the 20-44 age group. In this same projection, 45-64 year olds increase by nearly 67 per cent by 2001, while the population over 65 nearly doubles. Whatever fertility assumption is used, projections for these older age groups vary mainly in terms of percentages, not absolute numbers, since the people comprising the cohorts have al-

A.W. Cluff and P.J. Cluff

Architects and Planners

ready been born, and most are already living in Canada. Thus, it is quite likely that there will be about 3.3 million people in Canada over the age of 65 by the year 2001." *

"Not only is the elderly population increasing at a much higher rate than the population as a whole, but, more dramatically, the number of people over 80 is projected to increase by 130 per cent from 1971-2001. Figure One shows how the old and the more obviously enfeebled "old-old" (Neugarten 1975 pp.4-9) have increased as a percentage of the population, with projections to 2031 and 2001, respectively. Yet another significant feature in the growth of the elderly population is seen in Figure Two the percentage of the population over 65 by sex, from 1921-2001. Until 1951, males and females made up approximately equal proportions of the elderly population. Since that time, however, the percentage of elderly females has increased, and is expected to continue to increase, at a higher rate than the percentage of males, due, of course, to the significantly longer life expectancy which females enjoy. In practical terms, this means an increasing number of elderly widows. (Even if women begin to marry men younger than themselves, the effect would not be visible for four or five decades!)"

Provincial Age Structure

"To anyone aware of the tremendous diversity of the Canadian provinces, it should not, therefore, be surprising that there have been, are now, and will be in the future, significant interprovincial differences in age structure that reflect different levels of economic development, as well as different immigration and migration patterns."

"It is therefore correct, from a demographic point of view, to view the "youthful" native population of Canada's North as being structurally similar to that of less developed countries. The economic and social structure of the North is also consistent with this demographic fact."

"Figure 3, offers a good illustration of present age distribution by province. Newfoundland, with a fertility rate much higher than the other provinces, has the greatest percentage of children, while Prince Edward Island has highest proportion of elderly."

"In the other Atlantic provinces, we find a higher proportion of children and aged, and a lower proportion of adults, compared to the national mean. As Norland explains: "These trends are attributed to relatively high levels of natality, on the one hand, and to emigration of adults, on the other". (Norland 1974, p.44). **

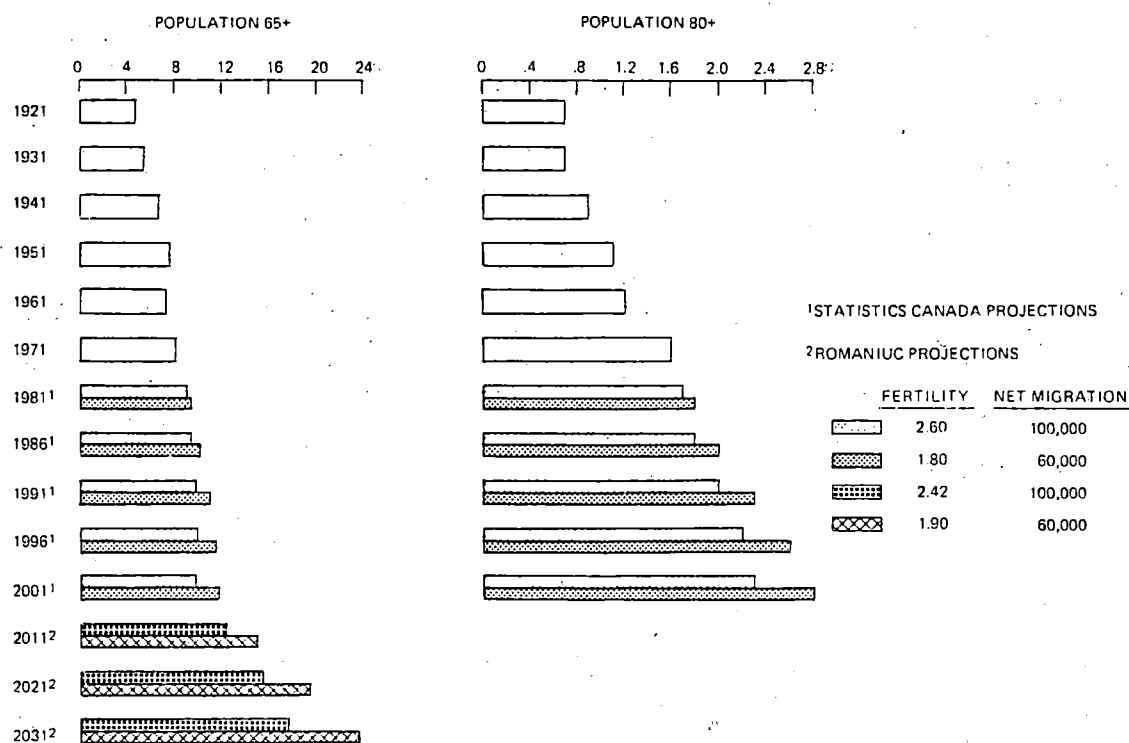
* Our emphasis

** Norland, J.A. The Age - Sex structure of Canada's Population -- A Profile Study based on the 1971 Census. Statistics Canada, review copy, Ottawa, Sept., 1974.

A.W. Cluff and P.J. Cluff

Architects and Planners

FIGURE I.

Elderly as a Percentage of Total Population: Canada 1921-2031

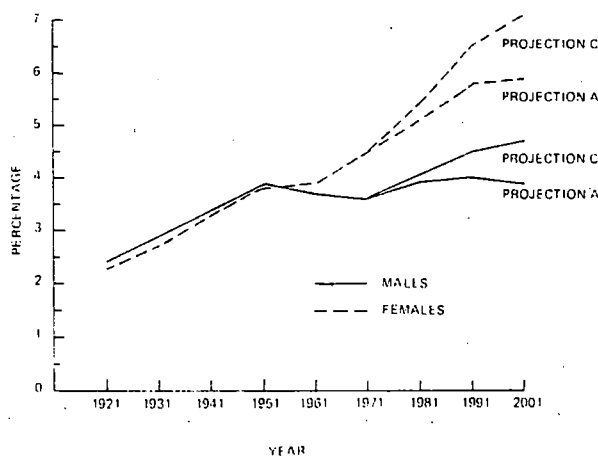
Note: The Romaniuc projections are based on an increase in life expectancy 4-5 years higher than the present Statistics Canada projections.

Sources: 1. Statistics Canada, *Population Projections for Canada and the Provinces, 1972-2001*, cat. no. 91-514, Projections A and C.

2. A. Romaniuc, *Potentials for population growth in Canada: A long-term projection*.

Source: See Figure III

FIGURE II.

Elderly as a Percentage of Total Population by Sex, 1921-2001

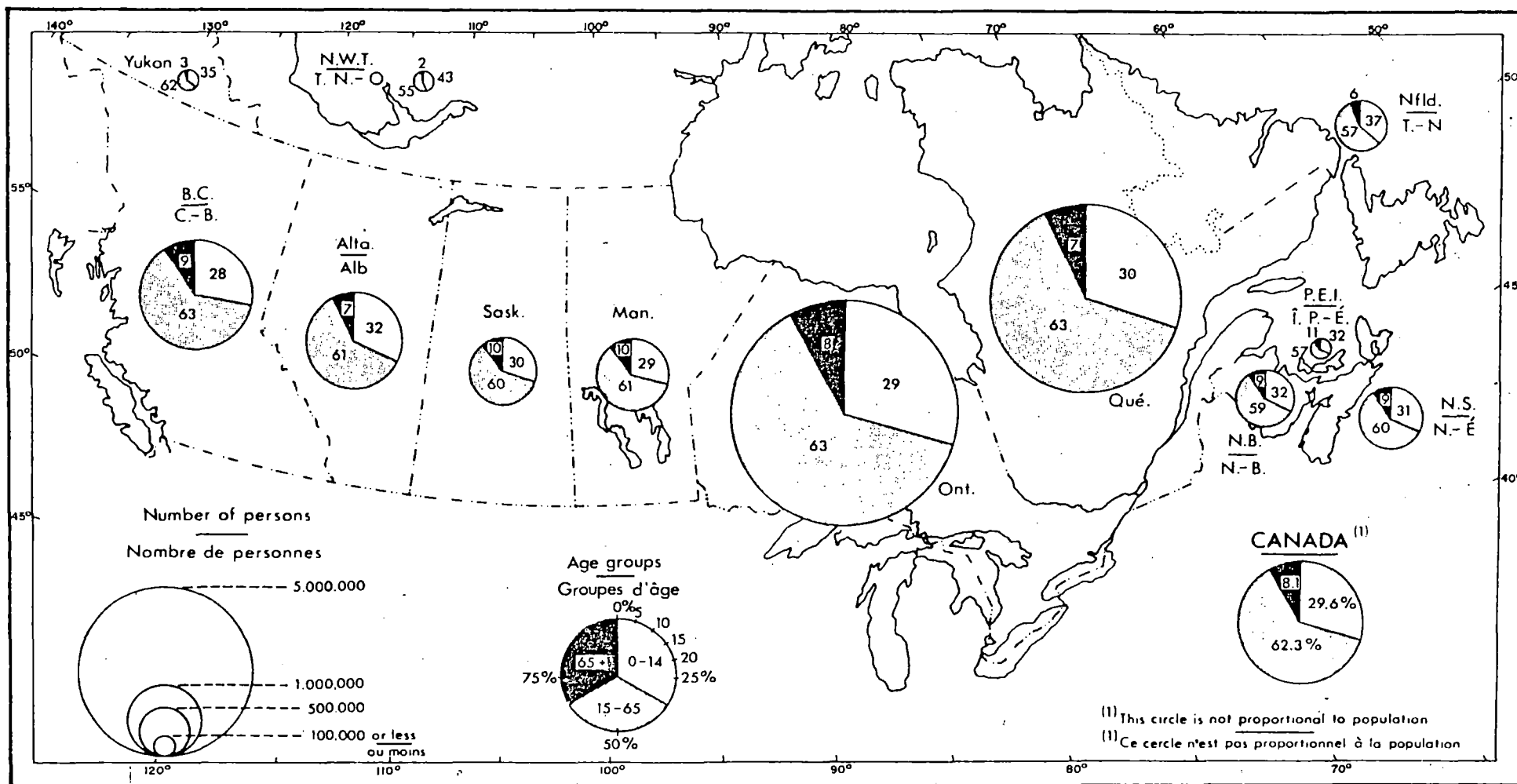
Note: Fertility: 2.60 (A), 1.80 (C)
Net migration: 100 000 (A), 60 000 (C)

Source: Same as Figure II.1.

See projection assumption in Figure II.6.

Source: See Figure III.

Figure II.7 Population by Specified Age Groups, Canada and Provinces, 1971



CENSUS OF CANADA, 1971

RECENSEMENT DU CANADA, 1971

Source: Census of Canada, 1971.

Source: Science Council of Canada, Perceptions 2: Implications of the Changing Age Structure of the Canadian Population, 1976, P. 13

A.W. Cluff and P.J. Cluff

Architects and Planners

Natality and Life Expectancy

"Natality is the immediate and most significant factor affecting the pyramid's base: when birth rates decline the base contracts, and conversely, when birth rates increase, the base expands.". (Norland 1974, p.32).

"Yet birth rates, fundamental as they may be for an understanding of population growth, have not been as important for Canadian population policy, as the more manipulable element of immigration. In Table 9, we see how the number of births and the fertility rate have changed over the past half-century. After a decline during the Depression of the 1930s, the fertility rate in Canada rose steadily each year, peaking in 1959 (3.95). The average totals and rates for 1951-60 and 1961-65 show the primary impact of the "baby-boom". Since 1960, the fertility rate has declined each year to the present."

TABLE 9

Average Yearly Live Births and Fertility Rate: Canada, 1921-1973

<u>Years</u>	<u>Number of Live Births</u>	<u>Fertility Rate</u>
1921-1930	249,017	3.30
1931-1940	235,989	2.82
1941-1950	324,811	3.20
1951-1960	442,945	3.80
1961-1965	456,534	3.60
1966-1970	372,910	2.51
1971	362,187	2.19
1972	347,319	2.02
1973	343,373	1.93

* Sources: Statistics Canada

Science Council of Canada: Perceptions 2: Implications of the Changing Age Structure of the Canadian Population, 1976.

"As Table 10 shows, life expectancy at birth has increased 15 per cent for males and over 22 per cent for females since 1931. Over the same period, mortality - the number of deaths per 1,000 population - has dropped from 10.2 to 7.4. However, as a population "ages", mortality rates increase. In a "zero growth" population, the mortality rate would be equal to the birth rate. Though life expectancy varies from province to province, generally being highest in Saskatchewan and lowest in Quebec, the gap between

A.W. Cluff and P.J. Cluff

Architects and Planners

provinces has narrowed in recent years. The latest Statistics Canada projects, are based on a life expectancy of 72.8 years for males and 79.1 for females by the year 2001.

TABLE 10

Average Life Expectancy at Birth by Sex, 1931-1971

<u>Year</u>	<u>Male</u>	<u>Female</u>
1931	60.0	62.1
1941	63.0	66.3
1951	66.3	70.8
1961	68.4	74.2
1971	69.2	76.1

* Sources: Statistics Canada

Science Council of Canada: Perceptions 2: Implications of the Changing Age Structure of the Canadian Population, 1976.

Immigration and Emigration

"In the past, immigration has made a substantial and important contribution to the size and quality of the Canadian labour force. However, as the labour force is now undergoing a very large natural increase, it is not surprising that immigration is no longer seen to be as desirable as it once was. It seems reasonable to expect that there will be strong pressures to limit immigration during the next 20 years as the baby boom cohort moves through precisely those years which in the past have constituted the prime age for immigrants (20-39). Whether the demand for immigrants will re-appear after this period is dependent upon the kind of economy and the labour demands of the year 2,000."

"Soon after their arrival, immigrants may also add their share of newborn children to the base of the pyramid, though they do so at a lower rate than native-born Canadians (see Statistics Canada 1974c). The present foreign-born population in Canada, is therefore, older on the average than the native born population and constitutes a significant proportion of the elderly population, as shown in Table 11."

A.W. Cluff and P.J. Cluff

Architects and Planners

"Until the 1931 census, the number of foreign-born elderly made little difference in the proportion of the total population over 65. However, from 1941 on, the number of foreign-born residents over 65 has added as much as 2 per cent to the elderly as a proportion of the total population."

TABLE 11

Native and Foreign-born Population over 65, 1911-1971

Year	--Native Born--		-Foreign Born-		---- Total ----	
	Number	%**	Number	%	Number	%
1911	240,000	4.3	94,000	6.0	335,000	4.7
1921	312,000	4.6	107,000	5.5	420,000	4.8
1931	422,000	5.2	154,000	6.7	576,000	5.6
1941	529,000	5.6	239,000	11.8	768,000	6.7
1951	691,000	5.8	395,000	19.2	1,086,000	7.8
1961	851,000	5.5	540,000	19.0	1,391,000	7.6
1971	1,108,000	6.1	636,000	19.3	1,745,000	8.1

* Sources: J.A.Norland, The Age-Sex Structure of Canada's Population: A Profile Study based on the 1971 Census, Statistics Canada.

Science Council of Canada: Perceptions 2: Implications of the Changing Age Structure of the Canadian Population, 1976.

** Per cent of total population.

"With regard to emigration, the expected effects on the age structure may be inferred from the previous discussion of immigration. Specifically, the primary effect of emigration is usually to decrease the proportion of the population in the age group 20-34. It is likely that the impact of Canadian emigration on the population age structure was considerable prior to 1931, when annual emigration rates often reached 10 per 1,000. Since 1931, however, emigration rates have not exceeded one-third of this figure and their effect could not have been of prime significance". (Norland, 1974, p. 38).

A.W. Cluff and P.J. Cluff

Architects and Planners

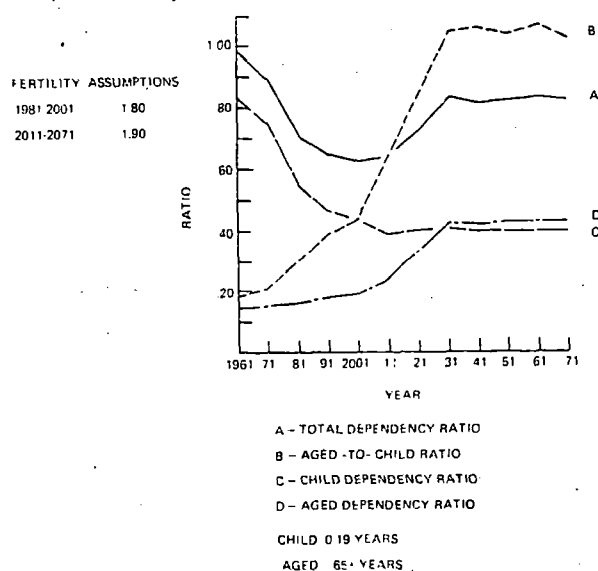
"Because immigration has such a direct impact on the size of the labour force, and because with current low fertility rates, it accounts for as much as 30-50 per cent of Canada's current rate of population increase, the current debate on population has focussed quite properly on this component of population growth."

Dependency Ratios

"The relationships between the various broad age groups in the population is often viewed in terms of dependency ratios because they are a good crude measure of a society's needs for social, medical, educational and other facilities. Figure IV. gives us an idea of how these ratios may change over time. Obviously, the further we gaze into the future, the more speculative the figures become. (In describing dependency ratios, we have chosen the cohort 0-19 rather than 0-14, believing that this provides a more accurate assessment of current trends - a higher proportion of young people completing high school thus remaining "dependent" on those of working age (20-64) for a longer period of time.)"

Figure IV

Dependency Ratios for the Canadian Population, 1961-2001



- * Sources: Statistics Canada, 1971 Census, Population-Age Groups, cat. no. 92-715.
 Statistics Canada, Population Projections for Canada and the Provinces, 1972-2001, cat. no. 91-514; Projection C. (fertility - 1.80; net migration -- 60 000).

Note: The dependency ratio is calculated by dividing the population of the broad age group under consideration (i.e. 0-19 or 64+) by the total population age 20-64.

A.W. Cluff and P.J. Cluff

Architects and Planners

"In 1971, there were 75 children (0-19) and 15 aged persons (65+) for every 100 adults (20-64). However, with the assumption of continued low fertility, the relationships are projected to change dramatically. Though the total dependency ratio is expected to decline for the rest of the century, the aged dependency ratio is expected to rise steadily until, in about 2031, for the first time in Canadian history, there will be more people over 65 than from 0-19. In Figure IV this occurs when the aged dependency ratio first exceeds the child dependency ratio. Nevertheless, the total dependency ratio will, under these assumptions, still be slightly less than it is now, indicating that even in 2031 the relative size of the working population, compared to the total population, will be slightly greater than it was in the 1971 census. In addition, though the rate of increase of the elderly will rise until 1991, it will drop for the last decade of the century, due to the low birth rates of the 1930s. This decline in the rate of increase may provide a bit of breathing space, to prepare for the arrival of the baby boom offspring in old age, beginning around 2011."

"This means that it should, from a demographic point of view, be economically possible to adjust social and technological priorities to an older age structure without placing an intolerable burden on the working population. (This assumes that it is no more expensive to take care of old people than it is to take care of the young. Detailed economic work has yet to be done in this area)."

"As Norland points out (1974, p.108) dependency ratios 'should be considered as mathematical relations among the broad age groups, relations which are associated with a concept of economic significance', rather than as valid measures of actual economic dependence. They may be more useful, considered along with other demographic data, on a provincial or even municipal basis, when priorities must be set for the planning and implementation of new programs, or, indeed, the phasing out of programs which may, from a demographic viewpoint, be less essential."

Income

Unfortunately, one characteristic of many elderly people is an extremely low income. Table 12 shows annual income (1975) for all age groups and for elderly people, by sex. For all individuals, 53.1% of the elderly had annual incomes below \$2,999 compared with only 28.7% of all age groups. The income situation is better for men than for women generally and particularly bad for elderly women. For men, 35.2% of those over 65 and 16.6% of all age groups had annual incomes under \$2,999. For women, 67.7% of those over 65 and 44.4% of all age groups hold annual incomes under \$2,999.

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 12

PERCENTAGE DISTRIBUTION OF INDIVIDUALS

BY

INCOME GROUP, AGE AND SEX, 1975Income GroupAll IndividualsAll Age Groups65 and Over

Under \$500.	5.6%	1.4%
\$500. - \$999.	4.3	0.9
\$1,000. - \$1,499.	4.5	7.6
1,500. - 1,999.	4.3	8.8
2,000. - 2,999.	10.0	34.4
3,000. - 3,999.	7.2	15.9
4,000. - 4,999.	5.7	7.4
5,000. - 5,999.	5.7	6.7
6,000. - 6,999.	5.7	3.6
7,000. - 7,999.	5.4	2.8
8,000. - 8,999.	5.0	2.1
9,000. - 9,999.	4.6	1.9
10,000. - 11,999.	8.3	2.6
12,000. - 14,999.	9.8	2.0
15,000. - and over	14.0	2.9

TOTALS:

100.0

100.0

Average Income:

8,137

4,447

Median Income:

6,487

2,911

Sample Size

42,949

6,218

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 12 (continued)

Income Group

<u>Male</u>	<u>All Age Groups</u>	<u>65 and Over</u>
Under \$500.	2.7%	0.7%
\$500. - \$ 999.	2.4	0.5
\$1,000. - \$1,499.	2.6	3.4
1,500. - 1,999.	2.6	5.2
2,000. - 2,999.	6.3	25.4
3,000. - 3,999.	5.5	16.9
4,000. - 4,999.	4.5	9.9
5,000. - 5,999.	4.5	8.7
6,000. - 6,999.	4.5	5.0
7,000. - 7,999.	4.9	4.3
8,000. - 8,999.	4.9	3.3
9,000. - 9,999.	5.4	3.4
10,000. - 11,999.	11.3	4.3
12,000. - 14,999.	14.8	3.5
15,000. - and over	23.0	5.7
TOTALS:	100.0	100.0
Average Income:	10,770	5,999
Median Income:	9,824	3,880
Sample Size:	23,865	2,919

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 12 (continued)

Income Group

<u>Female</u>	<u>All Age Groups</u>	<u>65 and Over</u>
Under \$500.	9.3%	1.9%
\$500. - \$999.	6.8	1.3
\$1,000. - \$1,499.	7.1	11.1
1,500. - 1,999.	6.4	11.7
2,000. - 2,999.	14.8	41.7
3,000. - 3,999.	9.3	15.0
4,000. - 4,999.	7.2	5.4
5,000. - 5,999.	7.3	2.5
7,000. - 7,999.	6.0	1.6
8,000. - 8,999.	5.1	1.2
9,000. - 9,999.	3.6	0.7
10,000. - 11,999.	4.6	1.2
12,000. - 14,999.	3.2	0.9
15,000. - and over	2.2	0.7
TOTALS:	100.0	100.0
Average Income:	4,710	3,189
Median Income:	3,607	2,578
Sample Size:	19,084	3,299

SOURCE: Statistics Canada. Income Distributions by Size in Canada,
Preliminary Estimates, 1975.
(Ottawa: Statistics Canada, 1975)

A.W. Cluff and P.J. Cluff

Architects and Planners

Ethnicity

Table 13 shows ethnic group by age (30+) and sex, 1971. In order of size, population ethnic groups found in Canada are: British, French, German, Italian, Ukranian, Netherlands, Scandinavian, Indian and Eskimo, Polish, other European, Jewish, other and unknown, Hungarian, other Asian, Greek, Chinese, Portugese, Czech and Slovak, Russian, Finnish, Austrian and Japanese.

TABLE 13 Population by Five-Year Age Groups, Showing Ethnic Group and Sex for Canada 1971.

Source: Statistics Canada. Population Ethnic Groups by Age Groups. 1971 Census of Canada (Ottawa: Statistics Canada 1971)

40.

Ethnic Group and Sex no.			TOTAL	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95+
1	Canada	T	21,568,310	1,307,045	1,266,210	1,261,960	1,238,215	1,055,420	954,055	778,735	619,940	456,170	324,085	205,675	100,310	30,440	7,320
2		M	10,804,130	661,870	645,395	641,875	613,575	520,080	472,355	382,160	296,430	204,995	139,360	86,870	40,835	11,430	2,655
3		F	10,764,180	645,170	620,820	620,090	624,640	535,340	481,650	396,575	323,510	251,175	184,725	118,810	59,475	19,005	4,670
4	British Isles	T	9,625,120	525,560	506,645	527,855	552,865	580,060	470,025	380,895	301,110	237,505	182,930	124,385	64,005	20,190	4,730
5		M	4,764,500	263,790	254,140	264,205	266,465	245,655	230,605	185,640	139,695	100,680	73,515	49,365	24,730	7,065	1,590
6		F	4,859,615	261,765	252,505	263,650	286,405	262,405	239,420	195,250	161,415	136,830	109,415	75,025	39,275	13,130	3,145
7	French	T	6,180,120	379,700	361,190	353,010	332,145	279,950	245,900	199,170	153,710	107,420	69,585	40,395	18,050	5,095	1,305
8		M	3,076,315	189,730	178,910	174,955	163,400	136,195	118,710	95,415	71,055	47,625	30,125	17,010	7,490	2,070	540
9		F	3,103,805	189,975	182,280	178,050	168,740	143,755	127,195	103,755	82,650	59,795	39,460	23,380	10,560	3,025	540
10	Austrian	T	42,115	2,570	3,350	3,690	3,490	2,405	2,070	1,900	1,420	930	640	360	210	50	15
11		M	21,230	1,340	1,755	1,845	1,650	1,145	1,000	960	760	430	305	165	100	25	10
12		F	20,890	1,230	1,595	1,845	1,840	1,265	1,070	940	660	500	335	195	110	25	10
13	Czech & Slovak	T	81,870	6,065	5,740	5,910	5,825	3,120	2,725	3,295	4,990	2,910	1,105	350	180	35	10
14		M	43,770	3,190	3,285	3,390	3,155	1,745	1,425	1,270	3,045	1,765	615	185	95	20	5
15		F	38,095	2,880	2,460	2,520	2,670	1,375	1,305	2,020	1,945	1,140	495	165	80	15	5
16	Finnish	T	59,215	3,585	3,645	4,010	3,755	3,355	3,275	3,390	3,640	2,230	1,020	600	255	30	10
17		M	29,360	1,780	1,835	2,000	1,840	1,630	1,570	1,475	1,905	1,095	455	285	100	15	5
18		F	29,855	1,805	1,805	2,015	1,915	1,720	1,705	1,920	1,730	1,130	570	315	150	15	5
19	German	T	1,317,200	92,680	93,225	91,480	77,225	61,595	55,770	47,895	37,345	25,850	17,430	10,200	4,625	1,505	325
20		M	667,930	47,465	48,920	48,070	38,600	30,470	28,060	24,005	18,805	12,290	7,815	4,555	1,910	570	115
21		F	649,270	45,215	44,305	43,410	38,625	31,120	27,710	23,885	18,540	13,565	9,615	5,645	2,720	930	205
22	Greek	T	124,475	14,190	12,235	9,055	5,430	3,185	2,945	2,160	1,820	1,035	750	365	195	40	10
23		M	65,480	7,785	7,120	5,315	3,005	1,675	1,505	970	785	440	435	160	90	15	-
24		F	58,995	6,405	5,115	3,745	2,430	1,510	1,440	1,190	1,040	600	320	205	105	30	15
25	Hungarian	T	131,890	10,350	11,160	10,350	9,680	6,005	5,185	4,865	5,420	4,115	1,935	805	300	70	25
26		M	70,640	6,115	6,555	5,845	5,475	3,315	2,630	2,285	2,770	2,340	1,095	430	140	40	10
27		F	61,250	4,235	4,605	4,505	4,205	2,690	2,555	2,575	2,645	1,775	845	375	160	35	15
28	Italian	T	730,820	58,070	60,175	55,230	45,250	27,085	25,390	17,635	11,510	7,910	5,180	2,790	1,270	255	70
29		M	383,955	30,570	32,855	31,025	24,965	14,725	13,460	9,380	5,675	3,705	2,485	1,525	675	110	30
30		F	346,865	27,500	27,325	24,200	20,285	12,360	11,935	8,255	5,830	4,205	2,695	1,260	600	145	40

TABLE 13 (Continued)

Ethnic Group and Sex no.			TOTAL	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95+
31	Jewish	T	296,940	14,780	14,750	16,810	20,210	19,755	19,935	18,115	13,295	9,290	5,910	3,335	1,385	340	110
32		M	149,240	7,450	7,230	8,205	9,735	9,890	10,255	9,485	6,305	4,225	2,650	1,430	565	160	40
33		F	147,700	7,330	7,515	8,605	10,580	9,860	9,685	8,630	6,985	5,070	3,260	1,905	815	180	70
34	Netherlands	T	425,945	25,700	28,295	28,560	25,095	18,450	14,730	11,890	8,700	5,500	3,410	1,955	835	295	75
35		M	219,890	13,215	15,260	15,245	12,820	9,450	7,840	6,175	4,620	2,955	1,630	945	365	140	35
36		F	206,055	12,485	13,035	13,320	12,275	9,000	6,895	5,725	4,085	2,540	1,775	1,010	475	160	40
37	Polish	T	316,425	16,560	17,990	20,925	26,555	20,535	17,670	13,200	12,405	7,985	4,460	2,455	1,010	295	45
38		M	162,385	8,235	8,700	10,215	14,165	11,795	10,210	6,565	6,570	4,435	2,175	1,225	465	120	10
39		F	154,045	8,320	9,290	10,705	12,395	8,740	7,465	6,640	5,835	3,545	2,290	1,230	545	175	35
40	Portuguese	T	96,870	9,050	9,925	7,800	5,340	2,680	1,665	1,550	1,025	560	325	100	30	20	10
41		M	49,870	4,630	5,380	4,670	3,160	1,535	825	675	400	180	130	35	15	10	5
42		F	47,005	4,420	4,545	3,135	2,185	1,145	840	875	625	380	190	75	15	10	-
43	Russian	T	64,475	3,765	3,920	4,570	4,525	3,855	3,675	3,160	2,975	1,895	1,570	905	420	140	30
44		M	32,130	1,910	1,920	2,120	2,140	1,820	1,795	1,680	1,485	875	855	490	215	75	20
45		F	32,345	1,850	1,995	2,445	2,390	2,030	1,885	1,475	1,485	1,020	720	410	200	70	10
46	Scandin- avian	T	384,795	24,190	22,630	23,145	22,335	20,995	17,770	16,495	14,630	10,005	6,910	4,930	2,445	645	110
47		M	199,270	12,460	11,770	12,110	11,785	10,645	8,915	9,420	8,840	5,460	3,545	2,655	1,310	345	45
48		F	185,525	11,735	10,860	11,030	10,545	10,350	8,850	7,075	5,790	4,545	3,365	2,280	1,135	300	60
49	Ukranian	T	580,655	32,655	34,575	37,605	45,595	36,560	31,480	24,840	22,265	14,625	9,995	5,325	2,155	470	155
50		M	295,720	16,470	17,210	18,760	23,645	18,755	16,355	12,425	11,575	7,935	5,750	2,955	1,140	205	55
51		F	284,935	16,185	17,320	18,850	21,950	17,800	15,125	12,415	10,695	6,685	4,245	2,370	1,020	265	95
52	Other European	T	305,975	23,415	22,310	22,245	22,415	14,735	13,180	11,140	10,115	6,530	3,475	1,865	710	230	50
53		M	160,640	12,940	12,410	12,190	11,825	7,820	7,005	5,785	5,415	3,623	1,845	875	320	110	30
54		F	145,335	10,475	9,905	10,060	10,590	6,910	6,170	5,355	4,695	2,910	1,625	990	390	120	20
55	Chinese	T	118,820	11,220	11,815	6,540	4,020	3,100	3,505	4,045	3,095	2,375	2,145	1,190	359	120	20
56		M	62,800	5,530	6,810	3,930	2,030	1,425	1,290	1,875	1,535	1,425	1,525	915	305	95	20
57		F	56,015	5,690	4,200	2,500	1,990	1,670	2,210	2,170	1,560	950	620	275	95	30	-
58	Japanese	T	37,260	2,920	3,015	3,025	2,670	2,035	1,440	930	880	785	625	400	165	25	10
59		M	18,260	1,430	1,455	1,530	1,355	1,060	835	445	470	370	240	265	115	15	5
60		F	18,325	1,490	1,565	1,495	1,310	975	610	480	415	520	385	135	45	10	5

TABLE 13 (continued)

42.

no.	Ethnic Group and Sex		TOTAL	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95+
1	Other	T	129,460	16,460	11,720	7,405	5,005	3,150	2,995	2,240	1,680	970	665	435	225	65	15
2	Asian	M	68,335	9,230	7,075	4,480	2,860	1,605	1,505	1,040	710	385	275	210	85	25	10
3		F	61,125	7,230	4,645	2,925	2,145	1,545	1,490	1,210	970	585	390	225	135	40	5
4	Indian and	T	312,765	17,095	15,320	12,250	10,355	8,295	7,230	5,895	4,910	3,445	2,210	1,225	720	265	120
5	Eskimo	M	157,335	8,210	7,610	6,265	5,085	4,345	1,845	1,235	2,660	1,875	1,185	685	350	130	45
6		F	155,435	8,880	7,705	5,990	5,275	3,950	3,380	2,660	2,250	1,565	1,025	545	365	130	70
7	Other and	T	206,090	16,450	13,430	10,490	8,320	6,520	5,433	4,035	3,010	2,290	1,805	1,300	720	260	75
8	Unknown	M	104,385	8,380	7,185	5,500	4,415	3,370	2,720	1,950	1,345	855	720	515	255	75	20
9		F	101,705	8,065	6,245	4,990	3,905	3,155	2,715	2,085	1,665	1,405	1,090	790	470	185	60

A.W. Cluff and P.J. Cluff

Architects and Planners

Future Trends

There has been a great deal of speculation concerning ways in which the future elderly population will differ from the present group. The Social Planning Council of Metropolitan Toronto (1973) predicts that: the sex ratio is likely to change (men will live longer), the older population will be healthier due to better drugs and nutrition, the over-75 group will be larger, the elderly will be better educated, there will be fewer self-employed and unskilled persons (the number of white collar and professional persons will increase), expectations of the elderly will be higher, they will be a growing political force, the size of the age groups will increase and differences between retirement and old age will become sharper.

Brody (1974) predicts that there will be an increase in the total elderly population, as well as in the percentage of those over 65 who are institutionalized.

Neugarten (1975) predicts that the most significant demographic change in the future will be the increase of people in the young-old (55-75) age category. She anticipates that retirement will drop and that the average retiring age will be 55.

Tobin and Lieberman (1976) postulate:

"In the next 20 years or so, the likelihood is that we will have a much greater number of the very old and, thus, many more very old parents who will be dependent on elderly children, many of whom will be themselves too debilitated or too pressed with financial or other responsibilities for their own adult children to add care for an aged, deteriorating parent to their own burdens. If the typical age of those now seeking institutional care is in the lower 80s, we can expect it to rise to the late 80s in the next generation of the elderly.* Regardless of what efforts are made to prevent premature institutionalization, a significant percentage among the very old will require institutional care. Noninstitutional congregate settings facilitate independent living for many, but the percentage among the very old who will need institutional care will most likely not become less than the current 5 percent or so". (Page 3).

Schwenger (N.D.) predicts that increasing numbers of elderly people and the growing proportion of women in the elderly population will mean:

"More extensive and expensive health and social services. These demands will become even greater as people coming into older age are more urbanized, better educated, wealthier and more politicized".

* Our emphasis

A.W. Cluff and P.J. Cluff

Architects and Planners

B. Institutionalized Elderly People (Canada and United States)

A.W. Cluff and P.J. Cluff

Architects and Planners

Unfortunately recent Canadian national statistics dealing with characteristics of elderly people living in nursing homes and hostels do not exist.* Given this handicap, a rough demographic profile of nursing home and hostel users will be drawn given the most appropriate statistical material available. The best Canadian information which could be found concerning nursing home residents comes from the Assessment and Placement Service of the Hamilton Wentworth District Health Council**, (see Appendix for more information on this body). They have compiled statistics on people for whom nursing home placement is recommended. Two major limitations of this information should be noted: the data are from one municipality in one province (Ontario) and may not be representative of the national picture, and the data represents entering nursing home residents, not those already residing there.

HOSTEL
RESIDENTS
- FOOTNOTE
45.

It is important to note that physical and mental characteristics of elderly people are changing over time. According to Brody (1970):

"With respect to all aspects of congregate care, a caveat is in order. The changing needs of a constantly changing population must be kept in mind if models developed are not to be cemented into patterns unresponsive to the changes. Every five years, more than one-third of the aging population is a different aging population and has experienced different periods of history, culture, education, socioeconomic conditions (Brotman, 1967). (p. 316).

* See Appendix for note on statistical information available.

** A co-ordinating body formed to obtain medical, social and nursing evaluations of the disabled and chronically ill and make recommendations concerning appropriate programmes or levels of care for the development of the individual's assets and potential.

A.W. Cluff and P.J. Cluff

Architects and Planners

1. DEMOGRAPHIC INFORMATION

- Age
- Sex
- Income (Dependents)
- Marital Status
- Religion
- Language Spoken

A.W. Cluff and P.J. Cluff

Architects and Planners

AGETABLE 14Age *

	<u>Absolute Frequency</u>	<u>Adjusted Frequency (%)</u>
85+	238	34.2
75 - 84	280	40.2
65 - 74	132	19.0
55 - 64	30	4.3
45 - 54	11	1.6
35 - 44	4	0.6
25 - 34	1	0.1
	<u>696**</u>	<u>100.0</u>

Over ninety percent of this group is considered "elderly" and is 65 or over. Nearly seventy-five percent is 75 or older and over one third is 85 or older.

* The source for all tables in this Section is the Assessment and Placement Service of the Hamilton-Wentworth District Health Council.

** This refers to the number of valid cases.

A.W. Cluff and P.J. Cluff

Architects and Planners

SEXTABLE 15Sex

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Male	247	34.7
Female	464	65.3
	<u>711</u>	<u>100.0</u>

Females outnumber males, almost two to one.

INCOMETABLE 16Income

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
\$ 0-\$ 99	4	7
\$100-\$199	144	25.7
\$200-\$299	194	34.6
\$300-\$499	80	14.3
Over \$500	138	2.3
	1	0.2
	<u>1</u>	<u>0.2</u>
	<u>580</u>	<u>100.0</u>

Over sixty percent have monthly incomes under \$300, or less than \$3,600 per year.

A.W. Cluff and P.J. Cluff

Architects and Planners

DEPENDENTS *TABLE 17Dependents

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
One	398	71.3
Two	153	27.4
More than Two	7	1.3
	<u>558</u>	<u>100.0</u>

Most people support only themselves on their income, but less than one third support one or more additional people.

MARITAL STATUSTABLE 18Marital Status

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Single	65	9.3
Married	285	29.4
Divorced	9	1.3
Separated	27	3.9
Widowed	<u>392</u>	<u>56.2</u>
	<u>698</u>	<u>100.0</u>

Over half are widowed and less than ten percent have never been married.

* Number of persons supported by income.

A.W. Cluff and P.J. Cluff

Architects and Planners

RELIGIONTABLE 19Religion

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Roman Catholic	113	19.7
Protestant	421	69.6
Jewish	6	1.0
Other	28	4.6
	<u>37</u>	<u>6.1</u>
	605	100.0

In this sample, almost seventy percent are Protestant, and almost twenty percent are Roman Catholic.

LANGUAGES SPOKENTABLE 20Languages Spoken

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
English	620	90.0
French	7	1.0
Italian	19	2.8
German	2	0.3
Polish	6	0.9
Ukranian	8	1.2
Other	<u>27</u>	<u>3.9</u>
	689	100.0

Over ninety percent of this sample speak English. (There are likely to be great municipal and provincial differences evident on this topic).

A.W. Cluff and P.J. Cluff

Architects and Planners

2. RESIDENTIAL CIRCUMSTANCES

- Present Accommodation
- Living Situation
- Assistance Available in Home
- Home Services Provided

A.W. Cluff and P.J. Cluff

Architects and Planners

PRESENT ACCOMMODATION

TABLE 21

Present Accommodation

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
House	330	49.3
Apartment	218	32.6
Room	54	8.1
Institution	30	4.5
Other	37	5.5
	<u>669</u>	<u>100.0</u>

Almost half of those assessed to need nursing home placement currently live in a house and over eighty percent currently live in a house or apartment.

LIVING SITUATION

TABLE 22

Living Situation

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Alone	212	34.1
Spouse	161	25.9
Spouse and Child	20	3.2
Child	149	24.0
Parent	2	0.3
Other Relative	40	6.4
Other	38	6.1
	<u>622</u>	<u>100.0</u>

Most live alone or with a spouse. Slightly under a quarter live with their children.

A.W. Cluff and P.J. Cluff

Architects and Planners

ASSISTANCE AVAILABLE IN HOMETABLE 23Assistance Available in Home

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Fully	74	12.4
Partially	275	45.9
No One	249	41.8
	<u>1</u>	<u>0.2</u>
	599	100.0

Slightly over half have some sort of home assistance available.

HOME SERVICES PROVIDEDTABLE 24Homes Services Provided

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
More than One	205	33.4
Public Health Nurse	49	8.0
Visiting Nurse	51	8.3
Homemaker	15	2.9
Homecare	24	3.9
Meals-on-Wheels	10	1.6
Social Service	10	1.8
Other	44	7.2
None	<u>203</u>	<u>33.1</u>
	614	100.0

Approximately one third receive no home services, one third receive one service, and one third receive two or more services. Nursing care is the single most frequently provided home service.

A.W. Cluff and P.J. Cluff

Architects and Planners

3.

FUNCTIONAL CAPACITY

- Sight
- Hearing
- Enunciation
- Self-Expression
- Comprehension

A.W. Cluff and P.J. Cluff

Architects and Planners

VISIONTABLE 25Vision

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Excellent	47	6.8
Adequate for Personal Safety.	472	67.8
Limited	158	22.4
Distinguishes only Light and Dark.	16	2.3
Blind	<u>5</u>	<u>0.7</u>
	696	100.0

Approximately ninety percent have vision adequate for personal safety, or have limited vision.

HEARINGTABLE 26Hearing

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Excellent	110	15.7
Adequate for Personal Safety.	423	60.4
Partial	129	18.4
Almost Totally Deaf	35	5.0
Deaf	<u>3</u>	<u>0.4</u>
	700	100.0

Nearly eighty percent have hearing adequate for personal safety or have partial impairment.

A.W. Cluff and P.J. Cluff

Architects and Planners

ABILITY TO ENUNCIATE

TABLE 27

Ability to Enunciate

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Fully	363	51.9
Mostly	233	33.3
Partially	67	9.6
Barely	21	3.0
None	16	2.3
	<u>700</u>	<u>100.0</u>

Over half have the ability to make their words fully understandable. A third make their words mostly understandable, and the remainder have difficulty making their words intelligible.

SELF EXPRESSION

TABLE 28

Ability to Express Self by Words or Gestures

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Fully	302	43.2
Mostly	221	31.6
Moderately	126	18.0
Barely	39	5.6
Unable	11	1.6
	<u>699</u>	<u>100.0</u>

Approximately three-fourths are fully or mostly able to express themselves with words or gestures.

A.W. Cluff and P.J. Cluff

Architects and Planners

ABILITY TO COMPREHENDTABLE 29Ability to Comprehend Present Life System

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Fully	114	16.3
Mostly	146	21.1
Moderately	138	26.9
Barely	145	21.0
Unable	99	14.3
	2	0.3
	<u>692</u>	<u>100.0</u>

Slightly over one third are fully or mostly able to comprehend their present life situation, while over half are somewhat or severely limited in this ability.

A.W. Cluff and P.J. Cluff

Architects and Planners

4.

SELF-MAINTENANCE

- Ambulation
- Transfer
- Bladder
- Bowel
- Ability to Feed
- Ability to Dress
- Ability to Bathe or Wash
- Ability to Keep House
- Ability to Prepare Food
- Ability to Shop
- Ability to Use Telephone
- Ability to Travel
- Mental Capability to Manage Affairs
- Ability to Administer Own Medication

A.W. Cluff and P.J. Cluff

Architects and Planners

AMBULATION

TABLE 30

Ambulation

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Fully	124	17.8
Cane, Crutches or Walker	154	22.1
Wheelchair	86	12.3
Assistance Needed	293	42.0
Immobile	41	5.9
	<u>698</u>	<u>100.0</u>

Less than twenty percent require no ambulatory assistance. Nearly half require personal assistance or are immobile.

TRANSFER

TABLE 31

Transfer

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	195	27.9
Needs Supervision	173	24.7
Needs Assistance	291	41.8
Lifting	35	5.0
Bedridden	6	.9
	<u>700</u>	<u>100.0</u>

Over seventy per cent need supervision or assistance when transferring.

A.W. Cluff and P.J. Cluff

Architects and Planners

BLADDER CONTROLTABLE 32Bladder Control

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
No Incontinence	276	39.3
Rare Incontinence	168	23.6
Occasional Incontinence	148	20.8
Frequent Incontinence	79	11.3
Catheter Required For Retention	15	2.1
Catheter Required for Incontinence	15	2.1
Totally Incontinent	<u>5</u>	<u>0.7</u>
	702	100.0

Slightly under forty per cent are not incontinent (with regard to bladder control) while slightly over forty percent are rarely or occasionally incontinent. Slightly over 16% are incontinent.

BOWEL CONTROLTABLE 33Bowel Control

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
No Incontinence	341	49.3
Rare Incontinence	174	25.1
Occasional Incontinence	126	18.2
Frequent Incontinence	33	4.3
Totally Incontinent	<u>15</u>	<u>2.2</u>
	692	100.0

Almost half are continent with regard to bowel control, a quarter experience rare bowel incontinence and the remainder is occasionally or frequently incontinent.

A.W. Cluff and P.J. Cluff

Architects and Planners

ABILITY TO FEED

TABLE 34

Ability to Feed

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	273	38.8
Minor Assistance Needed	247	35.1
Moderate Assistance Needed	134	19.1
Requires Extensive Assistance-Co-operative	37	5.3
Requires Extensive Assistance-Unco-operative	<u>12</u>	<u>1.7</u>
	703	100.0

Nearly forty per cent require no assistance with eating, while slightly over forty per cent require minor or moderate assistance. Eight per cent require extensive assistance.

ABILITY TO DRESS

TABLE 35

Ability to Dress

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Self-Sufficient	96	13.7
Supervision Needed	190	27.1
Assistance Needed	228	32.8
Has to be Dressed - Co-operative	178	25.1
Has to be Dressed - Un-co-operative	<u>10</u>	<u>1.4</u>
	00	100.0

Nearly sixty per cent require supervision or assistance with dressing, while slightly over one quarter need to be dressed.

A.W. Cluff and P.J. Cluff

Architects and Planners

ABILITY TO BATHE

TABLE 36

Ability to Bathe

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	31	4.5
Supervision Needed	231	33.3
Assistance Needed	202	29.1
Unable - Co-operative	209	30.1
Unable - Unco-operative	<u>21</u>	<u>3.8</u>
	694	100.0

Approximately two-thirds require bathing supervision or assistance, while almost one-third are unable to bathe themselves.

ABILITY TO KEEP HOUSE

TABLE 37

Ability to Keep House

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	4	.8
Can Perform Light Daily Tasks	25	5.2
Can Perform Light Daily Tasks with Supervision	56	11.6
Needs Regular Assistance and Supervision	101	21.0
Unable	295	61.2
	<u>1</u>	<u>0.2</u>
	482	100.0

Over sixty per cent are not able to participate in housekeeping, while one-third require supervision or assistance.

A.W. Cluff and P.J. Cluff

Architects and Planners

ABILITY TO PREPARE FOOD

TABLE 38

Ability to Prepare Food

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	12	1.7
Assistance Needed	63	9.1
Physically Unable	297	43.1
Mentally Unable	127	18.4
Physically and Mentally Unable	<u>190</u>	<u>27.6</u>
	689	100.0

Slightly under ninety per cent are physically and/or mentally unable to prepare food.

ABILITY TO SHOP

TABLE 39

Ability to Shop

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	10	1.4
Needs to be Accompanied	101	14.6
Physically Unable	285	41.1
Mentally Unable	187	15.4
Physically and Mentally Unable	<u>191</u>	<u>27.5</u>
	694	100.0

Over eighty per cent are physically and/or mentally unable to shop.

A.W. Cluff and P.J. Cluff

Architects and Planners

ABILITY TO USE TELEPHONETABLE 40Ability to Use Telephone

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	114	17.0
Assistance Needed	223	33.2
Physically Unable	113	18.8
Mentally Unable	117	17.4
Physically and Mentally Unable	105	15.6
	<u>672</u>	<u>100.0</u>

Nearly fifty per cent are physically or mentally unable to use the telephone, while a third can use the phone with assistance.

ABILITY TO TRAVELTABLE 41Ability to Travel

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	13	1.9
Requires Company	303	43.5
Physically Unable	187	26.8
Mentally Unable	75	10.8
Physically and Mentally Unable	119	17.1
	<u>697</u>	<u>100.0</u>

Over half are physically and/or mentally unable to travel, while slightly less than half are able to travel if accompanied and assisted.

A.W. Cluff and P.J. Cluff

Architects and Planners

MENTAL CAPABILITY TO MANAGE AFFAIRSTABLE 42Mental Capability to Manage Affairs

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	24	4.1
Needs Guidance	63	10.7
Can Handle Only Minor Daily Business	54	9.2
Unreliable Due to Confusion of Forgetfulness	239	40.7
Unable to Comprehend Affairs	202	34.4
	5	0.9
	<u>587</u>	<u>100.0</u>

Nearly three-fourths are unable to manage their own affairs and another twenty per cent require guidance or assistance.

ABILITY TO ADMINISTER OWN MEDICATIONTABLE 43Ability to Administer Own Medication

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Independent	46	6.6
Capable if Dosage Prepared in Advance	128	18.5
Physically Unable	104	15.0
Mentally Unable	255	36.8
Physically and Mentally Unable	141	20.4
	18	2.6
	<u>692</u>	<u>100.0</u>

Nearly three-fourths are physically or mentally unable to administer their own medication, while nearly twenty per cent can administer it if the dosage is prepared in advance.

A.W. Cluff and P.J. Cluff

Architects and Planners

DIAGNOSES - 1976

Of the 2,231 diagnoses recorded on the 711 cases under discussion, the following were the ten most frequently recorded diagnoses. If items 1, 4, 5, 6 and 7 are considered as diagnoses which reflect involvement of the cerebral and/or mental function then this is by far the largest group, 605. Next is involvement of the cardiovascular system, items 2, 3 and 8 which is the next largest group, 356. Bear in mind, of course, that referrals have between 1 and 5 diagnoses each.

1.	General ischemic cerebrovascular disease	176
2.	Chronic ischemic heart disease	156
3.	Symptomatic heart disease	130
4.	Cerebral thrombosis	92
5.	Psychosis associated with other cerebral condition	87
6.	Senile and presenile dementia	79
7.	Other cerebral paralysis	71
8.	Arteriosclerosis	70
9.	Essential benign hypertension	68
10.	Diabetes mellitus	62

A.W. Cluff and P.J. Cluff

Architects and Planners

Although it is not part of the Hamilton Wentworth Assessment and Placement Service it is useful to look at some Statistics Canada figures on diagnosis and institutional placement. Table 44 has been altered from the original so as only to show figures on placement in facilities for the elderly. Non psychotic disorders associated with physical conditions are the two largest diagnoses (regarding mental health) of people admitted to "aged and senile homes."

A.W. Cluff and P.J. Cluff

Architects and Planners

TYPE OF INSTITUTION BY DIAGNOSTIC CLASS AND SEX

TABLE 44

<u>DIAGNOSTIC CLASS AND SEX</u>		* <u>Total</u>		<u>Aged and Senile Home</u>	
		<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
<u>Psychoses</u>					
Senile and Presenile Dementia	M.	516	2	19	9
	F.	567	2	24	13
Alcoholic Psychosis	M.	647	2	1	-
	F.	172	1	2	1
Psychosis Associated with Intra- cranial Infection.....	M.	29	-	-	-
	F.	16	-	-	-
Psychosis Associated with Other Cerebral Condition.....	M.	389	1	34	17
	F.	309	1	28	16
Psychosis Associated with Other Physical Condition	M.	352	1	-	-
	F.	404	1	-	-
Schizophrenia	M.	3,363	11	2	1
	F.	2,650	9	-	-
Affective Psychoses	M.	1,919	6	3	2
	F.	3,210	11	-	-
Paranoid States	M.	411	1	2	1
	F.	480	2	2	1
Other and Unspecified	M.	924	3	1	-
	F.	1,121	4	7	4
Total - Psychoses	M.	8,550	27	62	30
	F.	8,937	31	63	35
<u>Neuroses, Personality Disorders, and Other Nonpsychotic Mental Disorders</u>					
Neuroses	M.	5,821	19	1	1
	F.	11,580	40	3	2
Personality Disorders	M.	2,493	8	1	-
	F.	1,757	6	-	-
Sexual Deviation	M.	53	-	-	-
	F.	4	-	-	-
Alcoholism	M.	7,903	25	2	1
	F.	1,453	5	-	-
Drug Dependence	M.	751	2	-	-
	F.	453	2	-	-
Physical Disorders of Presumably Psychogenic Origin	M.	46	-	-	-
	F.	62	-	-	-
Special Symptoms Not Elsewhere Classified	M.	114	-	-	-
	F.	127	-	-	-
Transient Situational Disturbances.....	M.	1,220	4	-	-
	F.	1,629	6	3	2
Behaviour Disorders of Childhood	M.	1,394	4	-	-
	F.	693	2	-	-
Mental Disorders Nonpsychotic Associated with Physical Conditions..	M.	1,103	4	128	63
	F.	818	3	109	61
Total - Neuroses, etc.	M.	20,898	66	132	65
	F.	18,576	64	115	65

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 44 (CONTINUED)

		TABLE 44 (CONTINUED)			
		Total*		Aged Senile Home	
<u>Mental Retardation</u>		No.	%	No.	%
Borderline Mental Retardation	M.	237	1	-	-
	F.	77	-	-	-
Mild Mental Retardation	M.	259	1	-	-
	F.	157	1	-	-
Moderate Mental Retardation	M.	263	1	-	-
	F.	168	1	-	-
Severe Mental Retardation	M.	131	1	-	-
	F.	94	1	-	-
Profound Mental Retardation	M.	72	-	-	-
	F.	46	-	-	-
Unspecified Mental Retardation	M.	289	1	-	-
	F.	262	1	-	-
Total - Mental Retardation	M.	1,251	5	-	-
	F.	804	4	-	-
<u>Other Conditions</u>					
Epilepsy	M.	116	-	-	-
	F.	103	-	-	-
Not Elsewhere Classified	M.	70	-	-	-
	F.	77	-	-	-
Total - Other Conditions	M.	186	-	-	-
	F.	180	-	-	-
<u>Observation, Without Need for Further</u>					
<u>Medical Care</u>	M.	226	1	10	5
	F.	92	-	-	-
<u>Not Stated</u>	M.	231	1	-	-
	F.	200	1	-	-
TOTAL	M.	31,342	100	204	100
	F.	28,789	104	178	100

* Other Institutions included: public mental hospital, public psychiatric unit, institution for the mentally retarded, psychiatric hospital, federal psychiatric unit, hospital for addicts, institution for disturbed children and epilepsy hospital.

Source: Statistics Canada. Mental Health Statistics, Vol. 1: Institutional Admissions and Separations, 1974. (Ottawa: Statistics Canada, 1974).

5.

PSYCHOLOGICAL FUNCTIONING

- Memory and Orientation
- Ability to be Realistic in Judgement
- Depression
- Anxiety

A.W. Cluff and P.J. Cluff

Architects and Planners

MEMORY AND ORIENTATION

TABLE 45
Memory and Orientation

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Normal	189	16.3
Brief Periods of Forgetfulness	178	26.2
Brief Periods of Confusion and Disorientation	197	29.5
Marked Periods of Confusion and Disorientation	161	24.1
No Recall	25	3.7
	<u>667</u>	<u>100.0</u>

Nearly eighty per cent experience some forgetfulness, confusion, or disorientation, while under twenty per cent have normal memory and orientation.

ABILITY TO BE REALISTIC IN JUDGEMENT

TABLE 46

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
Normal	64	9.2
Adequate for Personal Safety	176	25.3
Limited	243	34.9
Gross Impairment	131	18.8
Unable to Make Any Judgement	82	11.8
	<u>696</u>	<u>100.0</u>

Approximately sixty-five per cent have moderately to severely limited ability to be realistic in judgement, while slightly over one-third are adequately realistic to deal with their own safety.

A.W. Cluff and P.J. Cluff

Architects and Planners

DEPRESSIONTABLE 47Depression

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
None	209	30.6
Mild	245	35.9
Moderate	191	28.0
Severe	34	5.0
Extreme	4	0.5
	<u>683</u>	<u>100.0</u>

Slightly under two-thirds experience mild or moderate depression, approximately six per cent suffer severe or extreme depression, while slightly under one-third do not experience it.

ANXIETYTABLE 48Anxiety

	<u>Absolute Frequency.</u>	<u>Adjusted Frequency (%)</u>
None	119	25.3
Mild	191	40.6
Moderate	125	26.6
Severe	29	6.2
Extreme	6	1.3
	<u>470</u>	<u>100.0</u>

Approximately two-thirds experience mild or moderate anxiety, approximately eight per cent suffer severe or extreme anxiety, while one-fourth do not experience it.

A.W. Cluff and P.J. Cluff

Architects and Planners

Another Canadian source with regard to characteristics of institutionalized elderly people is the Aging in Manitoba Study (Manitoba Department of Health and Social Development, 1973) which presents some figures on the need for assistance with activities of daily living (ADL).

TABLE 49

	<u>General Population Elderly</u>	<u>Elderly in Facilities</u>
Help with Feeding or Eating	0.4%	8.7%
Help with Dressing and Putting on Shoes	2.2%	23.6%
Help with Washing, Bathing and Grooming	3.9%	39.1%
Help Cutting Toenails	8.5%	59.4%
Help with Medication or Treatment	3.3%	46.0%
Nursing Care	5.5%	47.4%

Source: Aging in Manitoba, Manitoba Dept. of Health and Social Development, 1973.

A.W. Cluff and P.J. Cluff

Architects and Planners

There are a number of American studies which, taken together, and considered with the Hamilton Wentworth District Health Council figures, serve to paint a fairly distinct portrait of nursing home residents. It is important to note the limitations of these figures, however. Firstly, definitions of nursing homes vary widely. As noted previously, nursing homes funded by CMHC are likely only to cover people classified as needing Types 1 and 2 care*, whereas those in American nursing homes may be receiving chronic, special rehabilitative, or acute care** In addition, population characteristics may vary. However, given the paucity of appropriate data, that which follows appears to be the best which is currently available.

Gottesman and Hutchinson (1974) have compiled information from a number of national studies to propose a profile of institutionalized elderly people,** and preface their findings by acknowledging that:

"There are two major reasons why people are in institutions. First, they are likely to be suffering from one or more disabling chronic conditions. Second, they are likely to lack the psychological, social and/or economic means for dealing with their condition outside an institution".

* (Extract: Patient Care Classification by Types of Care, Ontario Ministry of Health publication #75-2222 8/75, pp3-4).

TYPE 1 (Residential Care). Care required by a person who is ambulant and/or independently mobile, who has decreased physical and/or mental faculties, and who requires primarily supervision and/or assistance with activities of daily living and provision for meeting psycho-social needs through social and recreational services. The period of time during which care is required is indeterminate and related to the individual condition.

Type 2 (Extended Health Care). Care required by a person with a relatively stabilized (physical or mental) chronic disease or functional disability, who having reached the apparent limit of his recovery, is not likely to change in the near future, who has relatively little need for the diagnostic and therapeutic services of a hospital but who requires availability of personal care on a continuing 24 hour basis, with medical and professional nursing supervision and provision for meeting psycho-social needs. The period of time during which care is required is unpredictable but usually consists of a matter of months or years.

** Corresponding to levels 3, 4 and 5.

** Their information is drawn primarily from: 1) National Center for Health Statistics, data from the 1969 Resident Institutions Survey; 2) a nationwide mail survey of 920 institutions conducted by George Washington University (Grintzig 1970); 3) national data regarding patients in mental hospitals (NCHS 1965, NIMH 1970, 1972); and 4) a current study of Aged Patients and Nursing Home Services conducted by the Philadelphia Geriatric Center - an intensive study of 40 nursing homes in the greater Detroit, Michigan area (Gottesman and Bourestom 1969; Gottesman 1971).

A.W. Cluff and P.J. Cluff

Architects and Planners

PHYSICAL AND MENTAL DISORDERSTABLE 50

Percentage of Patients with Physical and Mental Disorders
and Number of Conditions in Nursing and Personal Care Homes
(1969)

<u>Diagnosis and Number of Conditions</u>	<u>Male</u>	<u>Female</u>	<u>All Persons</u>
<u>DIAGNOSIS¹</u>			
Advanced senility	30	36	34
Less serious senility	27	28	28
Other mental condition	19	15	17
Hardening of the arteries	53	59	57
Stroke and related ill effects	28	23	25
Paralysis	10	8	9
Arthritis	53	59	51
Physical deformity	21	24	23
Diabetes	11	12	12
Back disorder	8	11	10
Digestive disorder	8	8	8
All others	34	28	30
<u>NUMBER OF CONDITIONS</u>			
No condition	3	1	3
One condition	16	14	15
Two conditions	22	21	21
Three conditions	21	22	22
Four or more	37	40	39

1. Entries do not add to 100 percent due to multiple entries.
Source (NCHS 1972).

From: Gottesman and Hutchinson (1974), P. 29.

Gottesman and Hutchinson (1974) PP. 28 - 31 explain:

"According to the National Survey (NCHS 1972) more than half of the elderly in nursing and personal care homes suffer from a mental condition. Thirty-four per cent of those surveyed had advanced senility and 28 per cent less serious senility. Another 17 per cent had other disorders, such as mental illness or retardation. Fifty-seven per cent are reported to have hardening of the arteries, a prior condition often blamed for mental disturbance in old age."

A.W. Cluff and P.J. Cluff

Architects and Planners

"Many patients have other conditions, either alone or in combination with mental disorder. The most common of these are heart disease (36 per cent), stroke (11 per cent), or speech disorders associated with stroke (14 per cent) - all disorders of the circulatory system. Next most common are disorders affecting the skeletal system, namely paralysis not due to stroke (9 per cent), back disorder (10 per cent), physical deformity (23 per cent), and arthritis (33 per cent). Finally, a smaller number of patients were reported to have disorders of the digestive system like diabetes (12 per cent), and other digestive disturbances (8 per cent)."

"To summarize, among nursing home patients one of the most common disabilities is mental illness, affecting more than half of the patients. The next is circulatory, affecting between one-third and one-half. About one-quarter of nursing home patients are somewhat physically handicapped by permanent stiffness, and finally, around 15 per cent have a digestive disorder."

"The meaning of these labels in actual behaviour and behavioural capacity can be more clearly understood when we look at the multiplicity of any one patient's problems and judge what patients are or are not able to do. Thirty-nine per cent of nursing home patients have four or more conditions; 21 per cent two conditions; 15 per cent one condition; and only 3 per cent no reported condition at all. In other words, it is not true that nursing home patients have disabilities; they have multiple disabilities."*

"As the National Survey did not ask directly whether patients were confused, for purposes of comparison we will use the category "advanced senility" as an estimate of confusion among nursing home patients. The study figure is 34 per cent. Compared to this in the George Washington University study of 920 nursing homes, 21 per cent of nursing home patients were reported as unaware of their surroundings all or most of the time. (Grintzig 1970). More specific information on the confusion of nursing home patients comes from a representative group of 1,144 patients carefully selected to represent patients in the greater Detroit, Michigan, area who were tested directly. When asked a series of seven questions about who they were, where they were, and events of the recent and distant past, 50 per cent were well oriented, 25 per cent oriented, and 25 per cent confused (Gottesman, 1971). Based on these three kinds of information, we can be fairly sure that roughly one-third to one-fourth of nursing home patients are likely to be confused most of the time. Nearly two-thirds of the patients are alert or confused only occasionally."

"Disturbances of the circulatory system and physical infirmities are the next most common diagnoses. These are most likely to affect ambulation and self-care. The National Survey reported 42 per cent of nursing home patients as using one aid for ambulation, and 36 per cent as needing two or more aids. Only 22 per cent of patients were reported able to walk without assistance. Wheelchairs are the most common aid; 31 per cent of patients were reported using them, while only 12 per cent used

* Our emphasis

A.W. Cluff and P.J. Cluff

Architects and Planners

walkers, and a very few used crutches or braces. These figures suggest considerable disability, but there is also evidence that nursing home patients have remaining skills. For example, Grintzig (1970) reported that 80 percent of patients in his 920 home study walked unassisted at least some of the time. In the Detroit study (Gottesman 1971) 60 per cent of patients were reported as ambulatory without help."

"The two-sided nature of the nursing home patient, as disabled but not beyond doing things for himself or with help, is seen in other ways. The National Survey (NCHS 1972) asked homes to indicate which of 21 basic care and nursing services each patient received. It found that 73 per cent received four or more services; 15 per cent two or three and 11 per cent only one".

TABLE 51

Proportion of Patient Use of Basic/Nursing Services and Physical Aids for Ambulation in Nursing and Personal Care Homes (1969)

Number of Basic/Nursing Services ¹ and Use of Aids ² .	--(% of Distribution)--		
	Male	Female	All
<u>Number of Services</u>			
One Service	13	10	11
Two Services	6	6	6
Three Services	10	9	9
Four or More	70	75	73
<u>Number of Aids Used</u>			
No aid	28	20	22
One aid	41	42	42
Two aids	25	30	28
Three aids	5	7	7
Four or more	1	1	1

1. Basic/nursing services include such things as help with dressing, bathing, eating, massage, medications, diet, sterile dressings, vital signs, injections, etc.

2. Aids include walkers, crutches, braces, wheelchairs, etc.

From: Gottesman and Hutchinson, 1974, P. 31

A.W. Cluff and P.J. Cluff

Architects and Planners

"While details of that study are not available to show which specific services were used, we can estimate from the 920 home study (Grintzig 1970) that only 5 to 15 percent of nursing home patients are extremely disabled by deafness, blindness, or serious illness. Even though the large proportion are not seriously disabled, about half are reported to get help with activities of daily living. According to the Detroit study, nearly 25 per cent of nursing home patients are independent in basic activities; 55 per cent need some help, about 20 per cent of the patients surveyed need extensive help in activities of daily living (Gottesman, 1971)."

"Both the 920 home study and Detroit area study found roughly one-fourth of the patients incontinent."

TABLE 52

Proportion of Patients in Need of Assistance by Type of Daily Activity in the Detroit Area Study

<u>Activity</u>	<u>Per Cent of Patients</u>
Bathing	58
Dressing	54
Toileting	44
Transfer	38
Eating	13

Sources: Gottesman, 1971, Gottesman and Hutchinson, 1974, P. 31

A.W. Cluff and P.J. Cluff

Architects and Planners

LENGTH OF STAY

Gottesman and Hutchinson find that there is an increasing trend away from use of the mental hospital and toward use of the nursing home for both chronic mentally ill older persons and those who have recently become disturbed.

TABLE 53

Comparison of Length of Stay of Patients in Mental Hospitals and Nursing/Personal Care Homes (% Distribution)

<u>Length of Stay</u>	<u>Nursing Homes 1969¹</u>	<u>Mental Hospitals 1968^{2, 3}</u>
Less than 1 year	30	17
1 - 5 years	55	24**
5 - 10 years	12	12***
10+ years	3	47
Median	2 years	5 - 9 years

Source: 1. NCHS, 1973
 2. NIMH, 1970
 4. Residents 64+ CT, DE, DC, MD; ** 1 to 4 years; *** 5 to 9 years.

From: Gottesman and Hutchinson (1974), P. 33

Over half of nursing home residents live there between one and five years, compared with almost half of mental hospital patients who remain there ten or more years.

SOCIAL AND ECONOMIC CHARACTERISTICS*

Nursing home residents tend to be older, are predominantly female, and are unmarried or widowed. It is likely that their disabilities require a great deal of attention and that community resources to care for them are lacking.

* Sections on race/ethnicity and economic status have not been included since these evidence strong national differences.

A.W. Cluff and P.J. Cluff

Architects and Planners

Gottesman and Hutchinson describe age, sex, and marital status of institutionalized elderly people:

AGE

"Advanced age increases one's change of entering an institution for two reasons. As one grows older, the likelihood of chronic illness - either physical or mental - increases. So also does one's likelihood of being alone. In fact, older people are overrepresented by far in both nursing homes and mental hospitals. In 1970, 10 per cent of 203 million Americans were 65 or over. At that same time, 88 per cent of nursing home residents, and 30 per cent of patients in public mental hospitals were 65 and over. This disproportionate representation of older people is even more striking at more advanced ages." (P. 33)

"One out of 100 people in the total population is over 85 years old, but one-third of nursing home patients and about one-seventh of mental patients are that age." (P. 34)

TABLE 54

Comparison of General Population with Persons in Nursing/
Personal Care Homes and Mental Hospitals by Age
(Percentage Distribution)

<u>Age</u>	<u>General Population (1970)</u>	<u>Nursing Home² (1969)</u>	<u>Mental Hospitals^{3, 4} (1970)</u>
Under 65 years	90	12	71
65 and Over	10	88	29
65-74 years	6	16	16
75-84	3	39	13
85 and over	1	32	13
Total Persons (In Thousands)	203,212	811	390

Source: 1. USDHUD, 1971
2. NCHS, 1973
3. NIMH, 1972, 1973
4. Includes public, private, and VA hospitals

From: Gottesman and Hutchinson (1974). P. 35

A.W. Cluff and P.J. Cluff

Architects and Planners

THE PATIENT UNDER SIXTY-FIVE

Gottesman and Hutchinson (1974), P. 38 speculate on younger nursing home patients (See Table 55):

"From the discussion that has preceded this, we can summarize that younger nursing home patients are even more likely to be unmarried and to be men, and to be of even more marginal social status than the old."

"The disorders of young nursing home patients are different from those of the old in two ways. Far more of the young than old are reported to have a mental condition other than senility, and far fewer have a heart condition. According to the national study, young nursing home patients have fewer chronic conditions than the old. On the average, young patients have just over one condition, as compared to older patients' more than three conditions. Younger patients are also reported to receive somewhat, but not dramatically fewer, services than the old."

"A recent study of VA patients adds to our understanding of younger nursing home patients (Greenwald, S.R. and Linn, M. 1971). Comparing groups of young and older patients, the authors found younger nursing home patients to suffer less than the older ones from heart disease and more from alcoholism. Exploring further, that study found that younger patients were also more likely to have cirrhosis of the liver, a disease associated with alcoholism, or a primary diagnosis of paraplegia, multiple sclerosis, transverse myelitis or lung cancer. No older patient had these diseases. These findings agree with the earlier cited fact that nursing home patients under 65 in the United States generally are most likely to be admitted with paralysis or nonorganic mental disturbance."

"Despite differences in disorders in the young and old patient groups, national data discovered no differences in length of stay. About 70 per cent of each group had been hospitalized for one year or more."

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 55

Comparison of Young and Old Patients in Nursing/Personal
Care Homes by Number of Conditions and Number of
Basic and Nursing Services (1969)

Diagnosis and Number of Conditions and Services	--Per Cent of Patients--		
	Under 65	65 and Over	Total Group
<u>DIAGNOSIS¹</u>			
Advanced senility	8	38	34
Less serious senility	9	30	28
Other mental condition	52	12	17
Hardening of arteries	18	57	57
Speech defect due to stroke	14	14	14
Other effects of stroke	8	11	11
Heart trouble	12	39	36
Paralysis not due to stroke	17	8	9
Arthritis	13	36	33
Diabetes	10	12	12
Chronic back trouble	9	10	10
Deformity	25	22	23
Chronic digestive system	6	8	8
All others	34	29	30
<u>NUMBER OF CONDITIONS</u>			
No conditions	3	3	3
Two conditions	26	21	21
Three conditions	19	22	22
Four or more	19	42	39
<u>NUMBER OF SERVICES</u>			
One service	20	10	11
Two services	8	6	6
Three services	11	9	9
Four or more	61	75	73

1. Entries under Diagnosis do not add to 100 per cent due to multiple entries.

Sources: National Center for Health Statistics, (1972),
Gottesman and Hutchinson (1974), P. 38

A.W. Cluff and P.J. Cluff

Architects and Planners

Gottesman and Hutchinson (1974) PP. 34-36 comment on the sex and marital status of institutionalized elderly in the U.S. (See Table 56):

SEX

"Women represent a somewhat larger proportion of elderly mental patients than they do of the elderly in the general population. Women are an even larger proportion of the nursing home population at every age. Since at every age women have a longer life expectancy than men, they have a greater chance of being ill and alone."

"Men in nursing homes are, on the average, somewhat younger than women. They are less likely to be widowed than female patients, but somewhat more likely to be divorced or never married. In general men are somewhat more likely than women to enter a nursing home for functional mental illness, stroke or paralysis. Because they are younger, they are somewhat less likely than women patients to have advanced senility, arteriosclerosis, arthritis, or physical deformity. In general, male nursing home patients have fewer disabling conditions than females, but the differences are small. Men also receive somewhat fewer services than women, and use fewer ambulation aids. "

MARITAL STATUS

"The argument we are developing is that one is more likely to be in an institution if one does not have a family which can provide care. Age provides very strong evidence for this when the marital status of nursing home and mental hospital patients is compared to that of the general population. At every age, single people are much more likely to be institutionalized than others their age. Divorced and separated people are also more vulnerable, and even the widowed are somewhat more likely to enter a mental hospital or nursing home. On the other hand, people who have intact marriages are, at every age, much less likely to become institutionalized persons."

"We have already suggested that a reason for these differences is the absence for unmarried or widowed persons of anyone to care for them if they become ill. Similarly, lack of family tolerance and protection may mean the mentally unstable single person has more likelihood of being placed in a mental hospital if young; a nursing home, if older."

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 56

Comparison of General Population With Persons Resident Long-Term Care Facilities By Marital Status (percentage distribution)

Marital Status	Under 65 Years			65-74 Years		75 and Over	
	Gen. ¹ Pop. 1969	Nursing Home ² 1969	Mental Hosp. ³ 1960	Gen. Pop.	N.H.	Gen. Pop.	N.H.
<u>MALE</u>							
Married	66	15	21	79	20	59	22
Widowed	1	10	3	11	12	33	28
Div. & Sep.	3	17	12	3	12	2	9
Single	30	58	64	7	46	6	37
<u>FEMALE</u>							
Married	68	13	34	46	34	19	22
Widowed	5	26	8	44	29	71	50
Div. & Sep.	3	13	16	3	11	2	6
Single	24	48	42	7	26	8	22

1. U.S. Bureau of the Census, 1970

2. NCHS, 1973

3. U.S. Bureau of the Census, 1963

From: Gottesman and Hutchinson (1974), P. 35.

A.W. Cluff and P.J. Cluff

Architects and Planners

Another American study provides a useful profile of long term care facility residents. (U.S. Department of Health and Welfare, 1973)*:

WHO ARE THE PATIENTS?

They are old: the median age is 82, and 50% are over 80. 73% are women; 90% are Caucasian. 87% are single (mostly widowed). 52% completed grade school; 16% graduated from high school; 4% finished college.

They are retired, or have never worked (95%). 60% were formerly skilled, semi-skilled, or clerical workers; farmers; or housewives. 8% were in professional or managerial positions. At present, 68% have less than \$3,000 annual income from all sources, and 22% have no income at all.

IN WHAT DAILY ACTIVITIES DO PATIENTS NEED HELP?

They cannot bathe without difficulty: 60% need some help, and 33% more cannot bathe themselves at all. 72% require help in dressing. 34% need some help in eating, and 16% must be fed by others. 45% must be helped in using the toilet; 29% cannot use it at all. 50% experience some degree of incontinence - from occasional to total. 87% are not fully ambulatory; 9% suffer pressure sores because of reduced ability to move in bed.

WHAT OTHER IMPAIRMENTS HAVE THEY?

Impaired vision is suffered by 68%; 3% more are legally blind. 33% have at least some hearing loss. 32% have some degree of speech impairment. 92% are missing some or all natural teeth, and 38% lack compensating restorations or dentures. 54% show some confusion as to time, place, or their own identity (27% occasionally and 27% continuously). 41% display inappropriate behaviour - typically wandering or disruptiveness.

WHAT ARE THEIR MEDICAL CONDITIONS?

Patients' commonest primary and secondary diagnoses when admitted to skilled nursing facilities are: heart disease, 38%; chronic brain disease, 29%; generalized arteriosclerosis and hypertension, 23%; diseases of the musculo-skeletal system, 20%; stroke, 18%; fractures, 16%; neurological disease, 15%.

*Designed co-operatively by several government organizations and consultants from leading universities, the survey was conducted by teams of specially trained experts. Each team consisted of a physician, a nurse, an administrator, a nutritionist, a pharmacist, a physical therapist, a fire safety engineer, and a social worker.

To insure statistical reliability, the nursing homes surveyed were chosen proportionally from ten regional lists. Homes and patients in them were selected by random sampling techniques. All visits were unannounced.

The survey covered 288 homes - enough to provide a reliable sample of all skilled nursing facilities. The survey data were processed according to approved statistical techniques. The result is a valid, comprehensive picture of long-term nursing home care.

A.W. Cluff and P.J. Cluff

Architects and Planners

In the report of its hearings, the Subcommittee on Long Term Care of the U.S. Senate Special Committee on Aging, put forth a profile of the American nursing home population*:

THEY ARE VERY OLD - The average age of patients is 82; 95 per cent are over 65 and 70 per cent over 70.

MOST OF THEM ARE FEMALE - Women outnumber men two to one in pre-1970 studies and three to one in more recent tabulations.

MOST OF THEM ARE WIDOWS - Sixty-three per cent are widowed; 22 per cent never married; about 5 per cent were divorced and only 10 per cent are married.

THEY ARE ALONE - Since most nursing home patients are in their 70's and 80's they may well have outlived their own children. Almost 50 per cent have no viable relationship with a close relative, and another 30 per cent have only collateral relatives near their own age.

THE GREAT MAJORITY ARE WHITE - 96 per cent of nursing home patients are white, with blacks accounting for an additional 2 per cent. The remainder includes diverse groups such as Mexican-Americans, elderly Asians or Indians, etc.

MOST OF THEM COME TO THE NURSING HOME FROM THEIR PRIVATE HOMES - More than 55 per cent of patients came to the long-term care facility from their own or relatives homes: 32 per cent came from hospitals (22 per cent from general and 10 per cent from State mental hospitals); 13 per cent came from other nursing homes or homes for the aged, boarding homes or other housing.

MOST OF THEM COULD EXPECT TO BE IN A NURSING HOME WELL OVER A YEAR - But many studies indicate that the length of stay in a nursing home is 2 or more years.

MOST PATIENTS ENTERING A NURSING HOME WILL DIE THERE - There is great variation in statistics on this subject. Some studies indicate that 87 per cent of patients died in the nursing home; others reveal that only 4 per cent of nursing home patients can ever be returned to the community. The more conservative figures indicate that 50 per cent of nursing home patients die in nursing homes; 21 per cent are returned to hospitals; 19 per cent are sent home (or to their relatives homes) and 10 per cent are placed in other accommodations.

NURSING HOME PATIENTS GENERALLY HAVE ABOUT FOUR CHRONIC OR CRIPPLING DISABILITIES - Authoritative studies reveal that nursing home patients have 3.8 disabilities. Cardiovascular disease ranks first, experienced by 65 per cent of the patients. What is loosely termed senility is generally found among 20 per cent of the patients; fractures are third most prevalent at 11 per cent, followed by arthritis at 10 per cent.

* United States Senate (1974), PP. 16-18.

A.W. Cluff and P.J. Cluff

Architects and Planners

A MAJORITY OF PATIENTS ARE MENTALLY IMPAIRED - Widely supported data establishes that 55 per cent or more of long-term care patients are mentally impaired. One study, however, put the figure at 80 per cent.

LESS THAN HALF OF THE PATIENTS CAN WALK - About 55 per cent require assistance in bathing; 47 per cent need help in dressing; 11 per cent in eating and 33 per cent are incontinent.

THEY TAKE LARGE QUANTITIES OF DRUGS - The average nursing home patient takes 4.4 different drugs per day, some taken 2 and 3 times; 70 per cent take five or more drugs per day. Some recent studies average seven different drugs a day. The average cost of drugs per patient is \$300 per year.

THEY REGARD THE NURSING HOME WITH FEAR AND HOSTILITY, AND THERE ARE SHARP INCREASES IN THE DEATH RATE ASSOCIATED WITH TRANSFER TO NURSING HOMES - Much evidence clearly indicates that old people look upon a nursing home with fear and hostility. It has been documented that old people believe entry into a home is a prelude to death, and that there is a negative relationship between survival and institutionalization. Substantially higher death rates were recorded among those admitted to nursing homes than among control groups, generally those on a list waiting admission.

This phenomenon has been termed "transplantation shock" by one researcher, who recorded a 42 per cent death rate for those admitted to institutional facilities and 28 per cent for those waiting admission. Some experts charge that the shock of the uprooting is the cause, and others emphasize attitudes associated with the move.

MOST NURSING HOME PATIENTS ARE PLACED IN FACILITIES CLOSE TO THEIR HOMES - Five out of six nursing home patients are housed in facilities less than 25 miles away from their community home. Proximity is the major consideration to families of nursing home patients.

SOME HAVE VISITORS, BUT MOST DO NOT - Estimates vary, but there is agreement that most nursing home patients do not have visitors. This is because a third or more have no relatives. A comprehensive New Hampshire study disclosed that 42 per cent had visitors weekly.

THERE IS LITTLE EVIDENCE TO SUPPORT THE THEORY THAT FAMILIES "DUMP" THEIR AGED INTO NURSING HOMES - Most studies indicate that institutionalization is the last, not the first resort, of families. Elaine Brody of the Philadelphia Geriatric Center has written about families facing this question:

"In general they have exhausted all other alternatives, endured severe personal, social and economic stress in the process, and made the final decision with utmost reluctance. This has ceased to be an issue in gerontology".

A.W. Cluff and P.J. Cluff

Architects and Planners

In another American study*, Kahn, Hines, Woodson and Burkham-Armstrong (1977) found the major problems of nursing home residents to be (in order):

1. Immobility
2. No Other Place to Live
3. Sensory Deprivation
4. Depression
5. Confusion
6. Loneliness

They also confirm something that many have speculated on: that many people in nursing homes are improperly placed. They estimate that 45% of the residents required traditional long term care facility placement, that 11% required a more specialized facility that could handle psychologically disabled people, that 28% could probably function well in a congregate living facility, and that 16% might function at home with home health supportive services.

Percentage of Institutionalized Elderly

Population statistics for both Canada and the U.S. usually show that approximately 4% of those over 65 are in nursing homes and other extended care facilities. Kastenbaum and Candy (1973) pointed out the fallacy involved in using this small figure to estimate the proportion of the elderly population actually served by long term care facilities, since this figure is cross-sectional (taken at one point in time). They did two small experiments in 1971 which demonstrated that 25% of the elderly population died in some type of extended care facility. Since many are transferred to hospitals when severely ill, the figure for those living in extended care facilities is likely to be even higher. Thus, rather than serving a very small segment of the elderly population as has been traditionally believed, nursing homes and other long term care facilities may serve over one-quarter of the elderly population at one time or another.**

Hostel Residents

Statistics on potential and actual hostel residents are even more difficult to come by than those for nursing home residents. Beyond Shelter

*To determine the quality of life and care in 20 long-term care facilities in the Metro Denver area, assessments were made on 158 residents regarding their problems, functioning level and appropriateness of level of care based on information from residents, staff, nurses, activity directors and medical records.

**This finding has recently been replicated. Ingram and Barry (1977) found that 20% of the people (55+) who died in the U.S. during 1972, died while they were residents of a nursing home.

A.W. Cluff and P.J. Cluff

Architects and Planners

(Canadian Council for Social Development, 1973), a study of National Housing Act financed housing for the elderly, was the most useful source examined. Statistics cited in this document describe people currently living in hostels for the elderly in Canada.

TABLE 57

Sex*

	<u>No. of Hostel Residents</u>	<u>% of Hostel Residents</u>
Quarter or less male	18	42.9
Quarter to half male	17	40.5
Half and more male	7	16.7
	<u>42</u>	<u>100.0</u>

Consistent with their numbers in the population, elderly men make up one half or less of the residents in over eighty per cent of the hostels studied.

TABLE 58

Age

	<u>No. of Hostel Residents</u>	<u>% of Hostel Residents</u>
Majority under 75 years	19	31.1
Half under 75 years and half above 75 years	3	4.9
Majority 75 years and over	39	63.9
	<u>61</u>	<u>100.0</u>

Nearly two-thirds of the hostels studied have a majority of residents 75 years of age, or older, while nearly one-third have a majority of residents under 75 years.

* The source for this and the tables which follow is: Canadian Council for Social Development (1973).

A.W. Cluff and P.J. Cluff

Architects and Planners

TABLE 59

<u>Health</u>	<u>No. of Hostels</u>	<u>% of Hostels</u>
3/4 or over of residents with no physical incapacity.	6	15.0
1/2 to 3/4 of residents with no physical incapacity.	6	15.0
1/4 to 1/2 of residents with no physical incapacity.	2	5.0
1/4 of residents or less with no physical incapacity	20	50.0
All residents with some physical incapacity	6	15.0
	<u>40</u>	<u>100.0</u>

Approximately two-thirds of the hostels studied report at least three-fourths of their residents having some physical incapacity, while one-third of the hostels report one-fourth to three-fourths of their residents having no physical incapacity.

TABLE 60

People with Seriously Limited Physical Ability

	<u>No. of Hostels</u>	<u>% of Hostels</u>
None	10	25.0
Quarter or less	17	42.5
Quarter to Half	7	17.5
Half or more	6	15.0
	<u>40</u>	<u>100.0</u>

The majority (85%) of hostels studied reported half or less of their residents having seriously limited physical ability (unable to accomplish many daily tasks, such as walking, washing, keeping house, talking, seeing or hearing).

TABLE 61People with Moderately Limited Physical Ability

	<u>No. of Hostels</u>	<u>% of Hostels</u>
None	7	16.7
Quarter or less	20	47.6
Quarter to Half	9	21.4
Half or more	6	14.3
	<u>42</u>	<u>100.0</u>

Approximately two-thirds of the hostels studied report having one-fourth or fewer residents with moderately limited physical ability, while slightly over twenty per cent report having one-fourth to one half of their residents having moderate physical limitations and fourteen per cent report that one half or more residents have moderately limited physical ability.

TABLE 62Residents' Physical Capacity

	<u>No. of Hostels and mixed Developments</u>	<u>% of Hostels and mixed Developments</u>
Seriously limited ability	13	7.0
Moderately limited ability	41	21.9
Slightly limited ability	70	37.4
No incapacity	63	33.7
	<u>187</u>	<u>100.0</u>

Most residents (over two-thirds) of hostels (and mixed developments*) are slightly limited in their physical abilities or have no incapacitation. Slightly over twenty per cent have moderately limited abilities with a small seven per cent having seriously limited abilities.

* As distinct from self-contained developments.

A.W. Cluff and P.J. Cluff

Architects and Planners

Statistics on the number of nursing homes and hostels are as difficult to come by as those on nursing home and hostel residents. However, in Housing the Elderly (Canadian Council for Social Development, 1976) two useful tables can be found.

The first (Table 63) describes the number and distribution of homes and rated beds for special care in adult care institutions by broad type of institution, type of ownership and province. The second (Table 64) describes the number and distribution of homes for special care within each level of care, by type of institution and by province.

TABLE 63

NUMBER AND DISTRIBUTION OF HOMES AND RATED BEDS FOR SPECIAL CARE IN ADULT CARE INSTITUTIONS BY BROAD TYPE OF INSTITUTION, TYPE OF OWNERSHIP AND PROVINCE, CANADA.

Province	Homes for Special Care						Rated Beds in Homes for Special Care					
	Provincial or Municipal		Voluntary or Charitable		Proprietary (Private)		Provincial or Municipal		Voluntary or Charitable		Proprietary (Private)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Newfoundland	3	4.3	18	25.7	49	70.0	70	100.0	517	23.6	1098	50.1
Prince Edward Island	8	50.0	3	18.8	5	31.2	16	100.0	878	69.4	220	17.4
Nova Scotia	19	13.5	19	13.5	103	73.0	141	100.0	1365	24.5	1880	32.3
New Brunswick	4	4.0	40	39.6	57	56.4	101	100.0	372	9.8	2399	63.5
Quebec	281	60.0	1	0.2	186	39.7	468	99.9	20659	81.8	90	0.4
Ontario	88	9.2	199	20.9	664	69.8	951	99.9	17404	31.5	13126	23.8
Manitoba	12	11.1	62	57.4	34	31.5	108	100.0	1673	20.6	4272	52.6
Saskatchewan	79	66.4	29	24.4	11	9.2	119	100.0	5216	65.4	1648	20.6
Alberta	102	54.2	36	19.1	50	26.6	188	99.9	8078	58.4	1955	14.1
British Columbia	15	2.4	87	13.8	529	83.8	631	100.0	915	6.0	4039	26.6
Northwest Territories	3	50.0	3	50.0	0	0.0	6	100.0	50	55.0	41	45.0
Yukon	4	80.0	1	20.0	0	0.0	5	100.0	89	79.5	23	20.5
Canada	618	22.0	498	17.8	1688	60.2	2804	100.0	57216	41.3	30711	22.2
											50670	36.6
											138597	100.1

SOURCE: Statistical Information on Homes for Special Care, March 31, 1974. Ottawa: Program Information and Evaluation, Health and Welfare Canada, July 1974. Tables 1 and 2.

Source: Canadian Council on Social Development, Housing the Elderly

TABLE 64

NUMBER AND DISTRIBUTION OF HOMES FOR SPECIAL CARE WITHIN EACH LEVEL OF CARE, BY TYPE OF INSTITUTION AND BY PROVINCE, MARCH 1974

Levels of Care	Number				Percentage of all Institutions				
	Homes for the Aged	Nursing Homes	Hostels	Other Institutions	Homes for the Aged	Nursing Homes	Hostels	Other	Total
<u>Newfoundland</u>									
Level 1*	27	-	4		34.18	-	5.06		
Level 2*	20	-	-		25.32	-	-		
Level 3*	17	-	-		21.52	-	-		
Other	1	-	2		1.27	-	2.53		
Total	33	-	6	40	41.77	-	7.59	50.63	100.00
<u>Prince Edward Island</u>									
Level 1	7	2	-		35.0	10.0	-		
Level 2	4	1	-		20.0	5.0	-		
Level 3	4	6	-		20.0	30.0	-		
Other	-	-	-		-	-	-		
Total	8	7	-	5	40.0	35.0	-	25.00	100.00
<u>Nova Scotia</u>									
Level 1	105	11	-		66.46	6.96	-		
Level 2	30	7	-		18.99	4.43	-		
Level 3	28	17	-		17.72	10.76	-		
Other	1	-	-		0.63	-	-		
Total	117	21	-	20	74.05	13.29	-	12.66	100.00
<u>New Brunswick</u>									
Level 1	70	10	10		66.67	9.52	9.52		
Level 2	38	7	-		36.19	6.67	-		
Level 3	33	9	-		31.43	8.57	-		
Other	-	-	9		-	-	8.57		
Total	72	11	10	13	68.57	10.48	9.52	11.43	100.00
<u>Quebec</u>									
Level 1	216	208	5		35.01	33.71	0.81		
Level 2	201	199	5		32.58	32.25	0.81		
Level 3	191	196	4		30.96	31.77	0.65		
Other	4	-	-		0.65	-	-		
Total	237	211	5	164	36.41	34.20	0.81	26.58	100.00
<u>Ontario</u>									
Level 1	17	10	57		1.26	0.74	4.21		
Level 2	169	399	1		12.48	29.47	0.07		
Level 3	110	394	-		8.12	29.10	-		
Other	74	4	16		5.47	0.30	1.18		
Total	178	416	57	703	13.15	30.72	4.21	51.92	100.00

TABLE 64 (cont'd)

<u>Manitoba</u>									
Level 1	31	5	4		21.68	3.50	2.80		
Level 2	17	3	-		11.89	2.10	-		
Level 3	15	34	-		10.49	23.78	-		
Other	2	3	1		1.40	2.10	0.70		
Total	45	40	4	54	31.47	27.97	2.80	37.77	100.00
<u>Saskatchewan</u>									
Level 1	81	8	-		60.90	6.02	-		
Level 2	65	12	-		48.87	9.02	-		
Level 3	35	17	-		26.32	12.78	-		
Other	1	-	-		0.75	-	-		
Total	87	20	-	26	65.41	15.04	-	19.55	100.00
<u>Alberta</u>									
Level 1	68	66	7		27.42	26.61	2.82		
Level 2	-	71	2		-	28.63	0.81		
Level 3	-	72	-		-	29.03	-		
Other	-	1	2		-	0.40	0.81		
Total	68	72	8	100	27.42	29.03	3.23	40.32	100.00
<u>British Columbia</u>									
Level 1	135	2	19		17.49	0.26	2.46		
Level 2	317	1	1		41.06	0.13	0.13		
Level 3	2	70	-		0.26	9.07	-		
Other	1	-	-		0.13	-	-		
Total	449	73	20	230	58.16	9.46	2.59	29.79	100.00
<u>Northwest Territories</u> (all Level 1 or 3)									
Total	1	3	1	10	13.34	20.00	6.67	66.67	100.00
<u>Yukon</u> (all Level 1 or 3)									
Total	3	1	1	4	33.33	11.11	11.11	44.44	100.00
<u>Canada</u>									
Level 1	761	322	106		20.83	8.81	2.90		
Level 2	861	700	9		23.57	19.16	0.25		
Level 3	436	819	5		11.94	22.42	0.14		
Other	84	8	31		2.30	0.22	0.85		
Total	1298	875	112	1,368	35.53	23.95	3.07	37.44	100.00

SOURCE : Statistical Information on Homes for Special Care, March 31, 1974. Ottawa: Program Information and Evaluation, Department of National Health and Welfare, July 1974. Table 9.

* Level 1 Care refers to Domiciliary and Supervised Care often in a home for special care or hostel.

Level 2 Care refers to Personal Care provided in ones home.

Level 3 Care refers to Nursing Care in a home for special care.

Totals are not sum total column because some homes fall into more than one category of care and are counted more than once.

Source: Canadian Council on Social Development, Housing the Elderly, 1970.

A.W. Cluff and P.J. Cluff

Architects and Planners

SUMMARY PROFILES *

Nursing Home User

1. Demographic Information

Age

90% are 65+. Nearly 75% are 75+ and over one-third are 85+.

Sex

Females outnumber males, almost two to one.

Income

Over 60% have annual incomes less than \$3,600. Most people support only themselves on their income, but less than one-third support one or more additional people.

Marital Status

Over half are widowed and less than 10% have never been married.

Religion

In this sample, almost 70% are Protestant and almost 20% are Roman Catholic.

Languages Spoken

Over 90% of this sample speak English (there are likely to be great municipal and provincial differences).

2. Present Accommodation

Almost half of those assessed to need nursing home placement currently live in a house and over eighty per cent currently live in a house or apartment.

Living Situation

Most live alone or with a spouse. Slightly under a quarter live with their children.

Assistance Available in Home

Slightly over half have some sort of home assistance available.

Home Services Provided

Approximately one-third receive one service and one-third receive two or more services. Nursing care is the single most frequently provided home service.

* Based only on Canadian Statistics cited in this section.

A.W. Cluff and P.J. Cluff

Architects and Planners

3. Functional Capacity

Vision

Approximately 90% have vision adequate for personal safety, or have limited vision.

Hearing

Nearly 80% have hearing adequate for personal safety, or have partial impairment.

Ability to Enunciate

Over half have the ability to make their words fully understandable. One-third make their words mostly understandable and the remainder have difficulty making their words intelligible.

Self-Expression

Approximately 75% are fully or mostly able to express themselves with words or gestures.

Ability to Comprehend

Slightly over one-third are fully or mostly able to comprehend their present life situation, while over half are somewhat or severely limited in this ability.

4. Self-Maintenance

Ambulation

Less than 20% require no ambulatory assistance. Nearly half require personal assistance or are immobile.

Transfer

Over 70% need supervision or assistance when transferring.

Bladder Control

Slightly under 40% are not incontinent, while slightly over 40% are rarely or occasionally incontinent. Slightly over 16% are incontinent.

Bowel Control

Almost half are continent with regard to bowel control, a quarter experience rare bowel incontinence and the remainder are occasionally or frequently incontinent.

Ability to Feed

Nearly 40% require no assistance with eating, while slightly over 40% require minor or moderate assistance. 8% require extensive assistance.

A.W. Cluff and P.J. Cluff

Architects and Planners

Ability to Dress

Nearly 60% require supervision or assistance with dressing, while slightly over one-quarter need to be dressed.

Ability to Bathe

Approximately two-thirds require bathing supervision or assistance, while almost one-third are unable to bathe themselves.

Ability to Keep House

Over 60% are not able to participate in housekeeping, while one third require supervision or assistance.

Ability to Prepare Food

Slightly under 90% are physically and/or mentally unable to prepare food.

Ability to Shop

Over 80% are physically and/or mentally unable to shop.

Ability to Use Telephone

Nearly 50% are physically or mentally unable to use the telephone, while a third can use the phone with assistance.

Ability to Travel

Over half are physically and/or mentally unable to travel, while slightly less than half are able to travel if accompanied and assisted.

Mental Capability to Manage Affairs

Nearly three fourths are unable to manage their own affairs and another 20% require guidance or assistance.

Ability to Administer Own Medication

Nearly 75% are physically or mentally unable to administer their own medication, while nearly 20% can administer it if the dosage is prepared in advance.

Diagnoses

The largest group are those which reflect involvement of the cerebral and/or mental function. Next largest is involvement of the cardiovascular system. The ten most frequently recorded diagnoses were:

A.W. Cluff and P.J. Cluff

Architects and Planners

1. General ischemic cerebrovascular disease.
2. Chronic ischemic heart disease.
3. Symptomatic heart disease.
4. Cerebral thrombosis.
5. Psychosis associated with other cerebral condition.
6. Senile and presenile dementia.
7. Other cerebral paralysis.
8. Arteriosclerosis.
9. Essential benign hypertension.
10. Diabetes mellitus.

5. Psychological Functioning

Memory and Orientation

Nearly 80% experience some forgetfulness, confusion, or disorientation, while under 20% have normal memory and orientation.

Ability to be Realistic in Judgement

Approximately 65% have moderately to severely limited ability to be realistic in judgement, while slightly over one-third are adequately realistic to deal with their own safety.

Depression

Slightly under two-thirds experience mild or moderate depression, approximately 6% suffer severe or extreme depression, while slightly under one-third do not experience it.

Physical and Mental Disorders

More than half of the elderly in nursing and personal care homes suffer from a mental condition. Many patients have other conditions, either alone or in combination with mental disorder. Circulatory diseases affect between one-third and one-half, about a quarter are somewhat physically handicapped by permanent stiffness and around 15% have a digestive disorder.

ADL

25% are independent. 55% need some help. 20% need extensive help.

Length of Stay

30% say less than one year. 55% stay between one and five years, 12% stay five to ten years, and 3% stay over ten years.

A.W. Cluff and P.J. Cluff

Architects and Planners

Patient/Residents Under 65

They are likely to be male, unmarried, and of a marginal social status. More are reported to have a mental condition other than senility and they have fewer chronic conditions than the old.

Hostel User

Sex

Elderly men make up one-half or less of the residents in over 80% of the hostels studied.

Age

Nearly two-thirds of the hostels studied have a majority of residents 75 years of age or older.

Health

Approximately two-thirds of the hostels studied report at least three-fourths of their residents having some physical incapacity.

Most residents (over two-thirds) of hostels (and mixed developments*) are slightly limited in their physical abilities or have no incapacitation. Slightly over 20% have moderately limited abilities with a small 7% having seriously limited abilities.

* As distinct from self-contained developments.

Physiological and Social/Psychological Aspects of Aging

The process of aging is characterized by change. People experience physiological, psychological and sociological changes as they move through the life cycle, but these are particularly felt in the later years of life. Changes associated with aging are inter-related. For example, there may be psychological reactions (e.g. depression) to physiological conditions (e.g. loss of hearing). Although nursing home and hostel users are not necessarily "typical" elderly people, in that their needs may be greater, it is important to first understand general characteristics of aging. Many of these characteristics or conditions also have direct design implications.

Physiological changes will be described first, since many social/psychological characteristics stem from physical conditions. Working with Older People, Vols. I, II and III (U.S. Department of Health, Education and Welfare, 1974) was the single most useful source found on this subject: and since it is comprehensive, clear and concise, it will be quoted from extensively.

A.W. Cluff and P.J. Cluff

Architects and Planners

II. PHYSIOLOGICAL INFORMATION

A.W. Cluff and P.J. Cluff

Architects and Planners

Aging can be thought of as the many changes (both directly observable and not directly observable) which occur with a degree of consistency over time. There are two main groups of theories with regard to aging. The first group of theories accounts for aging on a genetic basis, and includes such concepts as cessation of cell growth and failure to replace dead cells, gradual failure of production of a growth substance, and accumulation within cells or tissues of substances which may be chemically or mechanically harmful. The second group of theories accounts for acceleration of the aging process due to environmental factors. These factors include: disease, physical trauma or injury, radiation effects and adverse influences of other people. Due to his or her genetic make up and socio economic situation each individual is likely to respond differently to the aging process.*

The ideal profile of aging people would probably give normal physiological conditions associated with chronological ages. This way, deviations could be noted and action taken early. However, this type of information is not widely available. Available data suggests that it is a mistake to compare the health of elderly people with that of young people.**

Physiological decline happens in various ways:

"Some processes show little or no significant change with age; others change during the fifth or sixth decade and stabilize. Still others remain essentially unchanged until relatively late in life and then slowly decline. Finally, some processes begin to decline during the third and fourth decades and the declines slowly gather speed. Certain functions decline early in life but the decline is obvious only under heavy stress. (PP 11-12)."

Although there is much debate over many definitional issues in aging, there is a large body of descriptive information on physiological changes associated with aging. Abstracts of this information will be presented in the pages which follow.

* United States Department of Health, Education and Welfare, Working With Older People, Vol. II, 1974, PP. 2-3.

** United States Department of Health, Education and Welfare, Working With Older People, Vol. I, 1974, P. 11.

A.W. Cluff and P.J. Cluff

Architects and Planners

Skin *

Changes in appearance include: inelasticity, dryness, thinness and wrinkles, as well as yellow and brown pigmentary discoloration. In addition, minute hemorrhages resulting in "black and blue" spots, warts and fissures occur. The hair turns grey and then white, thins in women and thins and recedes in men. Old people also sweat less than younger people.

Skeletal System **

Skeletal changes include: some reduction in height, stooped posture, and loss of muscle power. These changes influence: the carrying out of daily tasks, efficiency of the respiratory system, defecation and urination, and energy reserves.

Motor Performance ***

Smoothness and/or speed of voluntary muscles may be affected by changes in the nervous system. It is likely that these changes in motor skills of older people contributes to high accident rates. Deaths which result from falls are more common than deaths from all other sources of accidents combined. Physical changes and errors of judgment increase the likelihood of accidents. Sustained physical activity is believed to positively effect control over body movements, unless the person suffers from a degenerative disease.

* United States Department of Health, Education and Welfare, Working With Older People, Vol. I, 1974, P. 12.

** Ibid. P.13.

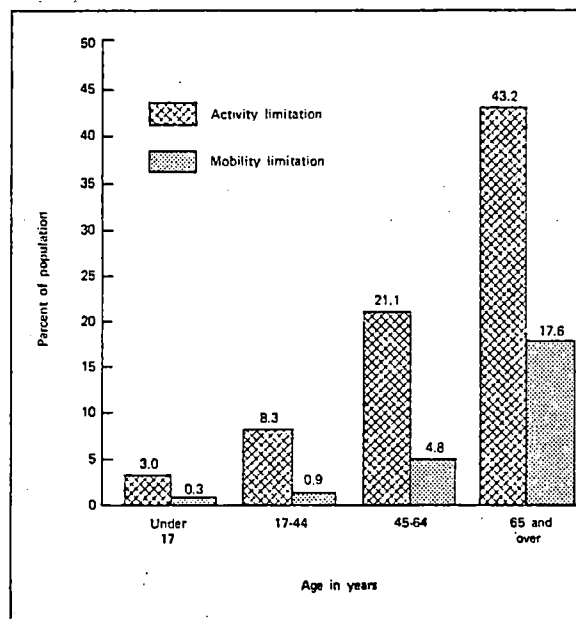
*** United States Department of Health, Education and Welfare, Working With Older People, Vol. II, 1974, PP. 27-28.

Limitation of Activity or Mobility

Figure V demonstrates the correlation between age and activity and/or mobility limitation.

Figure V

Percent of Population with Limitation of Activity
or Mobility due to Chronic Conditions
by Age



Source:

U.S. Dept. of HEW, Public Health Service, Health Resources Administration,
Limitation of Activity and Mobility Due to Chronic Conditions, U.S. 1972,
P. 5.

A.W. Cluff and P.J. Cluff

Architects and Planners

Anthropometrics

Koncelik (1976) presents data on dimensions of adults, 35-44 years of age, and those of adults 75-79 years of age. This chart portrays distinct differences which must be accounted for in design:

Figure VI

Anthropometrics of Two Age Groups

ANTHROPOMETRICS OF TWO AGE GROUPS					
Left Column is 5th. Percentile, Right is 95th. Percentile					
Dimensions in inches	35 - 44 Yrs.		75 - 79 Yrs.		Sex
Erect Standing Hgt.	64.2	71.7	61.3	69.5	Men
	59.6	66.6	55.3	64.5	Women
Weight	134	207	107	191	Men
	109	184	95	178	Women
Erect Sitting Hgt.	33.3	37.7	31.8	36.1	Men
	31.5	35.4	28.1	34.0	Women
Normal Sitting Hgt.	31.9	36.0	29.8	35.2	Men
	30.1	34.3	27.1	32.8	Women
Knee Hgt.	19.8	23.3	19.0	22.2	Men
	18.0	21.0	17.3	20.7	Women
Elbow Hgt.	7.8	11.3	6.5	10.2	Men
	7.5	10.8	6.4	9.8	Women
Thigh Clearance Hgt.	4.6	6.8	4.1	6.1	Men
	4.2	6.7	4.0	6.1	Women
Upper Leg Length	21.3	24.8	21.0	24.4	Men
	20.5	24.0	19.9	23.5	Women
Popliteal Length	17.4	21.1	17.0	20.8	Men
	17.1	20.7	17.0	19.9	Women
Popliteal Height	15.6	18.8	15.2	17.9	Men
	14.0	17.0	13.5	16.9	Women
Elbow to Elbow	14.1	19.2	14.0	18.7	Men
	12.5	18.2	13.1	18.1	Women
Seat Width	12.4	15.6	12.1	14.9	Men
	12.4	16.5	12.2	16.5	Women

Data Extracted From: Weight, Height, & Selected Body Dimensions of Adults - 1960-62 (U.S. Public Health Service)

Source: Joseph Koncelik, Designing the Open Nursing Home, Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1976, P. 20.

A.W. Cluff and P.J. Cluff

Architects and Planners

Nervous System *

Changes in the nervous system of older people include: lessening of tactile discrimination, slower and less efficient reflexes, slower recovery of balance from changes in position, greater susceptibility to shock, impairment in short term memory.

Carp (1976) makes suggestions as to how to compensate for these changes:

Anything unfamiliar in a task further reduces speed, as does any extraneous stimulation that does not have to do with the task (such as other nearby activities.) Trying to hurry a person only makes him slower and less accurate. If the task cannot be completed in a certain amount of time, the older person seems to "lose" the instructions, and he may not complete the task at all unless the instructions are repeated to him or are left where he can refer to them.

There are some general principles to use to get old people to respond well. First, they need plenty of time to get ready and a preparatory signal to let them know the task is about to begin. Old people need a reminder of what the task is, particularly if it extends over quite a period of time. Old people also need plenty of time to respond. Ideally, they should be allowed to perform at their own rate.

Old people do less with unfamiliar material and tasks. It is desirable, then, to introduce new situations gradually or to relate new situations to familiar ones. Finally, because of the sensory-perceptual changes discussed, old people always need a strong, clear signal and an environment without distractions, in order to perceive the environment accurately so that they can respond to it appropriately. (PP. 23-24).

Sensory Acuity

According to Leon Pastalan (1971) of the University of Michigan, "since people can respond directly only to these aspects of environment experienced through the sense organs, age changes in sensory and perceptual mechanisms affect very real environmental changes in the world in which the aging individual lives". Sensory decrement occurs in vision, hearing, speech, smell, taste, and touch. Pastalan suggests that compensation for these losses in acuity may be achieved either by 1) modifying the environment to make up for deficiency, or 2) by learning to adjust to a reduced environment as a result of sensory decrements.

Sensation and Perception

Carp (1976) describes reactions to losses in sensation and perception experienced by elderly people:

* United States Department of Health, Education and Welfare, Working with Older People, Vol. I, 1974, PP. 14-15.

A.W. Cluff and P.J. Cluff

Architects and Planners

Generally, with age there is loss in sensory acuity. It takes a stronger signal to get through. However, there is not a one-to-one relationship between the amount of sensory loss and consequences in behaviour.

People have the capacity to compensate for losses, and environments can assist this compensation. People extend their arms and wear glasses to compensate for visual changes; much less willingly, they put on hearing aids. Sometimes the compensation makes use of other senses, other modes of perception to help them perform better. To adapt to auditory loss, some people learn to read lips without being aware that they are doing it. As people age, they may begin checking on what they are doing with their body parts by looking at them. The visual signal is necessary to let them know for sure the position of the foot or hand. Older people do many things, consciously or unconsciously, that help to compensate for losses of acuity in the various senses.

However, all the habits of everyday living have been built up on the basis of earlier levels of sensory acuity. For example, a lifetime of habit has been based on 20-20 vision and now the person no longer has it. He receives visual information incorrectly or partially, which leads him to make mistakes, because his response repertory was built up on the basis of accurate reception of visual signals. This, in turn, makes him hesitant and unsure. He loses confidence and tends to give up trying to do some of the everyday things he has always done.

In addition to the loss of sensory acuity, the aging person has increasing difficulty in dealing with complex stimuli. If confronted with a number of "signals" at one time, he tends to become more confused than he would have been at an earlier age. Also, and very importantly, if rushed, he is even more likely not to "get his signals straight". These statements hold true generally for all sense modalities. (PP. 21-22).

Vision

Vision changes limit both active and passive activity for the older person and thus is an important influence on design. Carp (1976) describes some of these vision changes and their effects:

A.W. Cluff and P.J. Cluff

Architects and Planners

The eyes are usually considered the most important sense organs. Paradoxically, although vision becomes less accurate, aging people become increasingly dependent on vision. They begin to use visual cues to augment or correct kinesthetic, proprioceptive and auditory cues - which are also becoming less clear and accurate. Lipreading is an example. Or when stepping down from a curb, many old people look at the foot, because they are not really sure where it is. At earlier ages, looking was not necessary.

Vision deteriorates in several ways. The pupil becomes smaller and less light is let into the retina. Good illumination is some help as an environmental compensation. However, lens opacity increases with age and cataracts are more common, so glare is increasingly a problem. With age, the muscles of the eye lose elasticity and tone, so focusing becomes less accurate. Glasses help, as do clearly demarcated "edges" in the environment. Inaccurate focusing is less of a problem when forms are sharply delineated and objects are clearly distinguished one from another.

Colour vision holds up better than shape perception, although some hues tend to fade owing to lens opacity. Colour coding the environment is especially helpful to the old.

Dark adaptation becomes slower and less effective with age. As a person ages, it takes more time before he can see well enough to find a seat in a dark theatre. Sudden plunging from a brightly lighted to a darkened area, in a residential or transportation situation, can be dangerous and frightening to an old person.

The size of the visual field tends to constrict with age; that is peripheral vision is reduced. Visual "signals" outside the central range of vision are not received. (P. 22)

Eye Conditions include the following: *

Presbyopia (farsightedness) is a condition of decreased near vision resulting from progressive rigidity of the lens and reduced ability to accommodate. It generally manifests itself clinically at about age 40. It is correctable with spectacles.

Senile Cataract is usually present to some degree in all older people, but it is possible to live well beyond 80 without any significant handicap from a cataract. However, increasing opacity of the lens may gradually reduce visual efficiency as the cataract advances. The course and rapidity of development is highly variable. There is no need for inordinate delay in removing the opacifying lens. This can be done whenever the visual needs of the patient require.

Glaucoma is usually associated with an increase in intra-ocular pressure, and occurs more commonly in older people. Persistently increased intraocular pressure can result in the asymptomatic destruction of optic nerve tissue leading to a gradual loss of visual fields, and ultimately to blindness. Digital palpation is useless in the determination of intra-ocular pressure and the diagnosis of glaucoma. All physicians providing total health care should use a tonometer test to measure intraocular pressure in people over age 35. This should be done at regular intervals as part of routine health care to detect glaucoma at a treatable stage before visual loss.

* United State Department of Health, Education and Welfare,
Working With Older People, Vol. I 1974, P. 15.

With a group of researchers at the University of Michigan, Pastalan, Naytz and Merrill (1973) simulated visual losses of elderly people and made the following observations: (PP. 386-386)

- a) Glare from uncontrolled natural light and from unbalanced artificial light sources was the single most ubiquitous difficulty encountered. For instance, when walking up an aisle toward the front of a supermarket the typical vast expanse of plate glass across the front of the store on a bright day serves to obliterate most of the detail in surrounding objects. If only a single intense artificial light source is used for illumination rather than several, the chances of inducing uncomfortable glare is increased.
- b) Colours all tended to fade, the cool colours such as green and blue faded most, while red faded the least.
- c) Contouring was a difficult problem. One example of contouring involves the capacity to perceive the boundary between two contrasting surfaces. The problem was most apparent when two intense colours such as red and green bounded each other. The boundary becomes visually unstable because the intensity of the colours seem to overlap and as one focuses on the boundary it appears to shift. This becomes a real hazard when an elderly person has to negotiate stairs or distinguish floor from wall surfaces.
- d) The opposite problem from unstable boundaries is the disappearance of boundaries. Closely related colours such as blues and greens tend to fade and blend into each other. This also creates problems in distinguishing wall and floor surfaces. For example, a light green wall and a blue-green carpet becomes virtually impossible to distinguish, and stumbling into walls is common.
- e) Depth perception is affected. Frequently it is difficult to judge risers and treads going down a flight of stairs particularly when stairs are carpeted with a floral print carpet or painted the same colour.
- f) There was difficulty in eye recovery when moving from a lighted area to a dark area or vice versa. The abrupt movement from an area having too much light to an area having too little should be avoided or mitigated with transitional lighting arrangements.

- g) Dark wall surfaces bounded immediately by windows admitting bright sunlight make it difficult to see objects located near the walls. Again the extreme in contrast needs to be reduced.
- h) Ability to discriminate fine visual detail was seriously impaired. The reading of printed information such as names on people's doors, directional signage in hallways of public buildings, hospitals, stores and the like were continual burdens.

- Hearing

Audition also becomes less sensitive with age. Bergman (1971) confirms that there is a loss of sensitivity for soft sounds among older persons, as previous research using audiometric testing has shown. He states, however, that there is a second manifestation of prebycusis (deterioration of hearing associated with age) that purely audiometric testing cannot expose. This is a dramatic decline in the ability of older individuals to deal with the problems of distorted interrupted or noise-competed speech. He concludes that these difficulties may present severe drawbacks in the level of interpersonal communication possible among the aged or between generations. "More disturbing, however" he argues "is the probability that the distortions which are regarded by communications and electronic engineers as generally acceptable and without deleterious effects on the understanding of speech are causing significant difficulties for us as we grow older".

Carp. (1976) points out that:

Men tend to have more loss than women. The level at which auditory loss is handicapping to a person depends on many things. For example, a very bright person may interpret speech sounds even though he is quite deaf, in the sense of hearing pure tone, while a dull or disinterested person is unable to understand what is said. The behavioural effect of hearing loss depends upon interest, listening habits, and intellectual ability.

Hearing also depends upon the "noise climate". People with hearing problems receive auditory messages more clearly in quiet surroundings. Background noise seriously impedes their ability to hear. Thus, receiving a reply to a request for information may be very difficult at a busy intersection. In a multipurpose recreation room, other activities may interfere with listening to television or carrying on a conversation to a far greater extent for old people than for young.

A.W. Cluff and P.J. Cluff

Architects and Planners

The consequences of the inability to hear are serious, particularly if the person does not acknowledge the auditory decrement. He may then think that others are not making any effort to include him or even that they are trying to exclude him. Some old persons become withdrawn and suspicious as a result. (P. 22)

Pastalan, et al (1973), also simulated hearing losses in the elderly and noted the following, P. 387):

- a) Inability to hear conversation clearly with background noise such as noise from appliances, air conditioning units, or when people congregate together and talk such as at parties, theatres, lecture rooms, etc.
- b) Parts of words in a conversation are frequently unintelligible. This apparently occurs when a part of the word sound goes above the 2,000 cycle frequency. Thus it is not only a matter of loudness but even if the sound is loud enough, part of the sound can be filtered out if the frequency is high enough.
- c) Difficult to locate and identify sounds. For example, noises from down the hall sounded much like noises only a few feet away.
- d) Some combinations of carpeting, acoustical ceiling and draperies absorb too much sound and make functional hearing even more problematic.

● Speech *

"Changes in pronunciation, voice, and language usage are quite common in the aged. Aphasia (or dysphasia) are less common and refer to various impairments in the ability to use or understand words as a result of brain lesions. Many factors may be responsible for changes in pronunciation and vocal usage. These include lesions involving motor nerves controlling muscles used in respiration and articulation, lessened resilience of the tissues and cartilages used to produce voice and a lessening of finer muscular control in the oral structures used in speech."

* United States Department of Health, Education, and Welfare.
Working With Older People, Vol. I, 1974, P. 16

A.W. Cluff and P.J. Cluff

Architects and Planners

- Smell and Taste *

"Progressive loss of the sense of smell is quite common, also a loss of the sense of taste as the taste buds diminish in number. Such changes may be partly responsible for loss of appetite and other pleasurable sensations. The loss of sense of smell can also create a hazardous situation since it may involve inability to detect odours of dangerous gases."

In simulating this sensory loss, Pastalan, et al, (1973) found: (P. 387):

- a) The single most dramatic experience was the drop off in the taste of food and the pleasure of eating. Appetite and interest in food was reduced.
- b) Odours associated with various rooms in the dwelling unit which are used to aid environmental coding such as cooking and food smells in the kitchen, the smell of deodorants and bathing paraphernalia in the toilet, were missing. Street smells such as exhaust fumes, bakery smells, freshly mown grass, the scent of flowers were all significantly reduced and affected the richness of environmental information.

- Tactile *

"With advancing age there is a progressive loss of ability to experience heat, cold, and touch sensations. Vibration sense of the extremities is also often lost, although it may remain even in some nonagenarians."

Carp (1976) notes that:

"Temperature-regulation mechanisms become less effective, so that older people's bodies are less capable of adapting. Older people may be unaware that the ambient temperature has fallen to levels which are dangerous for them. Obviously, then, dependable and adequate heat and control of temperature within a fairly narrow range are essential components in environments for old people." (P. 22)

* United States Department of Health, Education and Welfare, Working With Older People, Vol. I, 1974, P. 16.

Pastalan, et als(1973) findings in this area were (p. 387):

- a) Difficulty with fine muscle control in eye-hand coordination tasks, such as unfolding napkins, adjusting dials, turning pages of newspapers, magazines and books, adjusting pressure in gripping objects.
- b) Making fine discriminations in temperature differences such as in dish and bath water.
- c) Problems in identifying subtle differences in textures.

Kinesthesia

Carp (1976) explains that:

"Perceptions of change in body position and of orientation in space become less accurate with age. Body sway also increases; when people stand up, put their feet together, and shut their eyes, the older tend to lose their balance more quickly. These proprioceptive and kinesthetic changes probably cause the increased use of visual checks on feet and hands. Together with reduced visual acuity, these changes no double contribute to the increasing tendency to fall, as people age." P. 22.

The relation between age and selected impairments in the United States is demonstrated in Table 65. There is no reason to believe that these figures would be significantly different in Canada.

Cardiovascular System *

"With aging there is a decline in cardiac output at rest. Moreover, the heart becomes less capable of responding to extra work which in young persons is characterized by an increase in rate and stroke volume. The heart does not enlarge with age unless there are underlying intrinsic and/or extrinsic causes. In the absence of these conditions the heart is usually normal or small in size in old people. There is a progressive increase in peripheral resistance to the flow of blood, and also a tendency for increased systolic blood pressure."

* United States Department of Health, Education and Welfare.
Working With Older People, Vol. I, P. 16

TABLE 65

PREVALENCE OF SELECTED IMPAIRMENTS PER 1000 PERSONS BY AGE
(UNITED STATES)

	UNDER 17	17 - 44	45 - 64	65+
VISUAL IMPAIRMENTS	9.4	31.9	63.0	204.6
SEVERE VISUAL IMPAIRMENTS	0.8		6.6	47.0
HEARING IMPAIRMENTS	13.0	42.4	114.1	231.1
				75+ 398.6
SPEECH DEFECTS	15.0	6.8	6.4	8.5
PARALYSIS	2.4	4.6	10.7	23.1

Source: United States Department of Health Education and Welfare, Public Health Services, Health Resources Administration, Prevalence of Selected Impairments, U.S., 1971., Washington, DC, HEW, 1975.

Respiratory System *

"Changes within the respiratory system may lead to a limiting of mobility and activities of all kinds - shortness of breath and other breathing difficulties produce varying degrees of fear and anxiety to older persons similar to the apprehensions which accompany heart conditions. There are three components of this system which may show age-related impairment: ventilation (breathing), diffusion (exchange of oxygen and carbon dioxide between lungs and blood), and pulmonary circulation."

Gastrointestinal Tract **

Food intake may be impaired by loss of the sense of smell, loss of taste buds, poor teeth and ill-fitting dentures. There is an increased tendency towards loss of digestive acid and a reduction in gastric volume. Constipation, common in older people may be caused by diminished peristalsis, general dehydration, and changes in the PH of the feces. Hemorrhoids further complicate elimination and are experienced by many older people. Bleeding from these may contribute to anemia.

Urinary Tract ***

"Polyuria (excessive urination) and nocturia (night-time urination) are common among the aged. In the male this is most often due to prostatic enlargement, which occurs in about 75 per cent of males over the age 55. This is often accompanied by infections of the bladder due to urinary stasis. In the female infections of the urethra with extension into the bladder are common and usually account for these symptoms."

Urinary incontinence is a major problem in many long term care facilities for elderly people. Koncelik (1976) sees this as a design problem:

"Largely because the medical, physiological and rehabilitation techniques available to alleviate it are not used effectively."

* United States Department of Health, Education and Welfare. Working with Older People. Vol. I, P. 17

** Ibid, PP. 17-18

*** Ibid, PP. 18-19

Reproductive Organs *Female● In the Female

"Undoubtedly the most consistent aging phenomenon is menopause, although even here there is a considerable variation in the age of onset. There are many behavioural problems associated with this event which will not be detailed here: many of them are a matter of common knowledge. In the female there is, however, a considerable period during which low-grade estrogenic (female sex hormone) activity continues; this appears to be due to the take-over of secretion of estrogenic substances by the adrenal glands. Gonadotropic (pituitary) activity continues at a high level for some years following the onset of menopause. Ultimately, however, there is atrophy of all of the genitals."

● In the Male

"In the male the menopause occurs considerably later in life and is accompanied by a cessation of spermatogenesis, with less marked atrophy of the genitalia. "

With regard to enjoyment of sex, Masters and Johnson (1966) make the following observations:

"The healthy aging woman normally has sex drives that demand resolution. The depths of her sexual capacity and the effectiveness of her sexual performance, as well as her personal eroticism, are influenced by all of the psycho- and physiological problems of her aging process. In short, there is no time limit drawn by the advancing years to female sexuality." (p. 246).

"Briefly, if elevated levels of sexual activity are maintained from earlier years and neither acute nor chronic physical incapacity intervenes, aging males usually are able to continue some form of active sexual expression into the 70 and even 80 year age groups. Even if sexual activity has been avoided for long periods of time, men in these age groups can be returned to effective sexual function if adequate stimulation is instituted and interested partners are available." (p. 263).

Koncelik (1976) posits that it is likely that future nursing homes (and hostels) may have to provide privacy for sexual activity on a larger basis than in the past.

* United States Department of Health, Education and Welfare, Working With Older People, Vol. 1, 1974, PP. 18-19

The Endocrine System *

● Functional Changes

"There have been many attempts to relate endocrine deficits to other aging changes. This derives primarily from the association of gonadal deficits with menopause and with the observation that patients with pituitary cachexia (severe weight loss) have certain superficial changes resembling aging. However, the actual demonstration of endocrine deficits has not met expectations. No significant pituitary deficits have been demonstrated and, in fact, certain hormones such as the gonadotrophins actually are secreted in increased amounts for a period of time following the menopause. Despite a decrease in oxygen consumption with advancing age, it would appear that there is no perceptible thyroid deficit. There is, however, a fall in the secretion of adrenal 17 ketosteroids, but not of other adrenal hormones. There is also a deficit in anabolic steroids, particularly those secreted by the gonads, which are important in that they are probably responsible for the loss of muscle protein."

Nutrition and Metabolism **

Since they eat alone and often lack motivation for adequate meal planning and preparation, many elderly people suffer from malnutrition and its effects. (Additional contributors to poor nutrition include: low income, inability to shop, lack of cooking abilities (especially men). Programs, such as meals on wheels, have improved the nutrition of many elderly people.

Eating habits usually change so that there is: reduced water intake, preference for sugars, and less desire for food due to decreased senses of smell and taste. However, nutritional requirements of elderly people are reduced since the basal metabolic rate decreases with age.

"Another body function, temperature maintenance, can also be considered to reflect alterations in nutrition and metabolism, proper nutrition being essential for maintaining the insulating qualities of the subcutaneous tissue, and metabolism for providing energy for the production of heat. It has been repeatedly observed that adjustments to adverse environmental temperatures is less rapid and complete as persons become older."

* United States Department of Health, Education and Welfare, Working With Older People, Vol. 1, 1974, P. 19.

** Ibid, PP. 19-21.

Younger Nursing Home Patient-Residents

Obviously, the physiological changes associated with elderly residents of nursing homes and hostels are not necessarily true of younger patient-residents. In one of the only studies available of nursing home residents under 65, Greenwald and Linn (1971) found that younger nursing home residents had a greater frequency of alcoholism than older ones, yet they tended to be suffering from other illnesses as well. These include: emphysema, urinary infection, bronchitis, gastrointestinal conditions such as: paraplegia, multiple sclerosis, transverse myelitis or lung cancer. Greenwald and Linn found that approximately 10% of the 700 nursing home residents who had been placed in the urban nursing homes they studied over a three year period were 50 years of age or younger.

Mental Deterioration

In a recent article, Dr. Lawrence K. Altman (1977) describes current views on senility and mental deterioration:

"Geriatric specialists estimate that 15 per cent of people 65 to 75 years old and 25 per cent of those 75 and older are senile, a total of about four million.* The National Institutes of Health say that 60 per cent of the 950,000 nursing home patients over the age of 65 are senile.* No accurate statistics exist to know if a larger percentage of older people are getting senile or if there are more senile people because there are more older people. But some geriatricians express the belief that for unknown reasons senility is truly increasing."

He states that causes of senility are still questionable since there is not always a correlation between senility and the loss of neurons. Altman defines senility as "memory loss, particularly for recent events, loss of ability to do simple arithmetic problems, and disorientation to time and place."

Diagnosis is difficult, since:

"Many conditions can produce symptoms that mimic senility, and many people are falsely labelled senile when their symptoms are due to depression, a thyroid gland abnormality, pernicious anemia, effects of drugs like bromides, or a variety of other conditions that can be effectively treated, if not cured by psychotherapy or drugs."

But now geriatricians believe that most cases of senility are due to senile dementia than are due to arteriosclerosis, as previously thought.

* United States figures.

Lawton (n.d.) states that there is general agreement that the following continua allow meaningful distinctions to be made among individuals:

1. Absence vs. presence of organic brain damage.
 - a) Cerebral arteriosclerosis
 - b) Senile brain disease
 - c) Presenile conditions (Pick's, Alzheimer's)
 - d) Conditions of other etiology
 - e) Acute brain syndromes secondary to
 - Alcoholism
 - Acute infections
 - Others
2. Absence vs. presence of behaviour disorder associated with organic brain damage.
 - a) Psychotic disorder
 - b) Neurotic disorder
 - c) Character disorder
3. Absence vs. presence of functional psychiatric disorder.
 - a) Psychosis (involuntional depression, manic-depressive psychosis, schizophrenia, "late paraphrenia", etc.
 - b) Neurosis
 - c) Character disorder.

The implications of the foregoing are:

- Organic brain damage and "functional" psychiatric diagnoses may exist independently in the same individual.
- Organic brain damage may or may not be associated with a diagnosable behaviour disorder.
- Chronic and acute brain syndromes may exist independently in the same individual.
- The major chronic brain syndromes (cerebral arteriosclerosis and senile brain disease) may co-exist in the same individual.
- Brain syndromes and behaviour disorders may appear for the first time in later life, or they may be evidenced continuously or episodically from any earlier period, and continue into the period of old age. Thus, old age may change the content or the manifestations of the disorder, or may exacerbate a pre-existing disturbance, but is not necessarily a causative factor.

The U.S. Public Health Service, in a document entitled Aged Patients in Long Term Care Facilities (1973), explained the following points regarding mental deterioration in elderly people.*

- Brain syndrome which reflects organic changes in the brain, consists of the following characteristics:
 1. Decreases or deficits in orientation.
 2. Memory loss.
 3. Decrease in patient's fund of general information.
 4. Decrease in patient's ability to do simple calculations.

Chronic brain syndrome is irreversable, whereas acute brain syndrome is reversible.

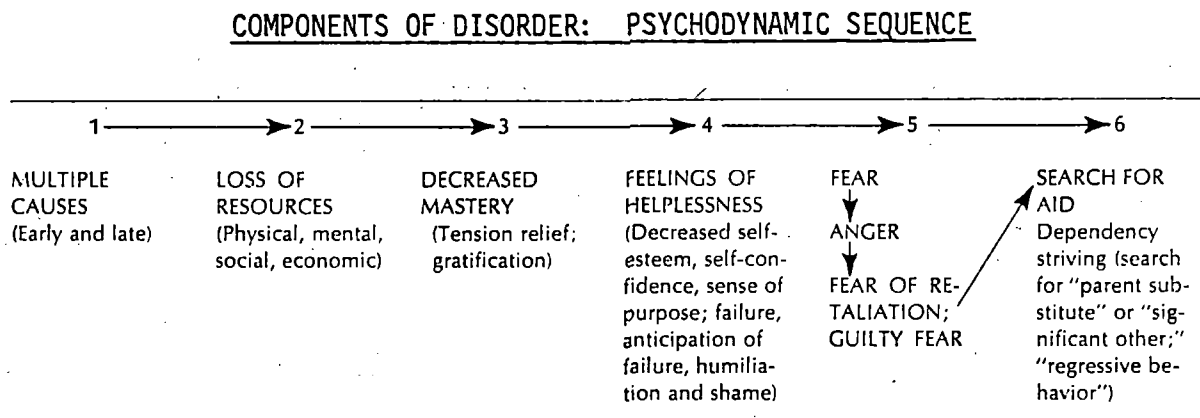
Usually, brain syndrome is the result of multiple causes. These include:

- Accidents in which there is serious injury affecting a substantial area of the brain.
- Infectious diseases, particularly when accompanied by high fever.
- Stresses and deficiencies of early life.
- Aspects of the individual's genetic inheritance, which cause a rapid loss of a substantial number of brain cells which is reflected by impairment in function.

*According to the most recent "conservative" estimates (U.S.), 50% of patients in nursing homes suffer from irreversible organic braing syndrome (Wershow, 1977).

Dr. Alvin Goldfarb (USDHEW, 1973) of the Hebrew Home for the Aged in Riverdale, New York characterizes the psychodynamic sequence of brain syndrome in the following diagram:

Figure VII



1. Multiple causes or initiating factors which occur either early in life and are reinforced or modified with aging or occur late in life and are peculiar to old age, several of which may combine forces and some of which may be necessary but insufficient alone, result in:
2. An absence or loss of resources for minimally, adequate functioning, so that:
3. There is a decreased mastery of problems, challenges, and adjustments posed by internal changes (biologically determined drives or acquired needs) and external changes and threats, with resulting:
4. Feelings of helplessness or actual powerlessness, and consequent:
5. Fear with accompanying or subsequent anger, with consequent:
6. "Rationally" or "irrationally" aimed and elaborated search for aid which becomes patterned in terms acceptable to the individual in terms of his personality organization based upon his past, his present, and his expectations; and contingent on his perception of what is acceptable to and likely to work in "his world", as well as by the social response it receives. In this search there are observable constellations of motivated personal action which range from apathy through pseudoanhedonia, display of helplessness, somatization, hypochondriasis, depression, and paranoid states to the most open and manipulative behaviour. In pre-disposed persons there may be a physiologic shift to a new and relatively inefficient homeostatic level with depressive states which are then revealed by altered appetite, bowel function, sleep, and other vegetative signs.

Source: United States, Department of Health, Education and Welfare.
National Institute of Mental Health. Public Health Service.
Aged Patients in Long-Term Care Facilities, Washington, D.C.,
HEW, 1973. P. 18.

A.W. Cluff and P.J. Cluff

Architects and Planners
191 Eglinton Ave. E., Toronto, Ont., Canada M4P 1K1

(416) 482-5212

Brain syndrome patients differ in energy and abilities. Some are physically and socially active. Some physically sick and debilitated brain syndrome patients are out of bed for only a few hours a day and need help in getting dressed, toileted and fed. They sleep a lot and don't talk much.

Dr. Goldfarb suggests that an optimum environment would be designed to take into account the differences among brain syndrome patients: (USDHEW, 1973):

"From what we know about persons with brain syndrome, the appropriate environment must be protective, and supportive. Regardless of their energy level, these are patients who can't be trusted to stay home alone. They are people who may wander into a busy street; walk off even well-protected stairwells; who may turn on the gas and forget to light it; who will leave water boiling in a kettle until the kettle bottom burns out; who lose their way even in their own homes.

They have to come to an institution which has a staff to supervise their activities because they couldn't live at home anymore and need a physical environment away from busy streets. They need an uncomplicated facility, which maximizes their ability to learn their way about: from their room to the dining room, the shop, the occupational therapy room, the lavatories. They need staff with time, patience, and skill to help them in many ways. They need supportive persons, if they are to live, who see to it that they eat, bathe, have toileted, and go to bed.

Now, all of this is not required in the other units. The more cerebrally intact and physically more functionally able old people would find this stultifying, too circumscribed, too care-oriented, not sufficiently interesting or challenging a way of life". (P. 80).

He concludes:

Lost brain cells cannot be replaced and lost capabilities may not be restored. Yet the severely impaired need not be doomed to a vegetable-like existence. Most of them have resources and capabilities which they can use pleasurably, with dignity and confidence if we have the knowledge, skill and patience to help them use their remaining assets". (P. 82)

A.W. Cluff and P.J. Cluff

Architects and Planners
191 Eglinton Ave. E., Toronto, Ont., Canada M4P 1K1

(416) 482-5212

Mental Illness *

Senile brain deterioration is not the only type of mental illness which can occur in elderly people. Mental illness can also result from a physical illness such as an infectious disease or malnutrition.

"Geriatric psychiatry is placing more emphasis on seeking mixed causes of mental illness in older persons, taking into consideration possible interactions among physical illness, mental illness and social illness." (P. 6).

In the United States, suicide is a growing problem among elderly white men. Apparently they, more than their female and non-white counterparts react negatively and violently to the many physical, social, and economic conditions associated with aging:

"Most older persons, at some time or other, are faced with physical illness and react in a depressive manner. With repeated episodes of bereavement and other psychological and social losses, depressive reactions in older individuals increase." (P. 35).

Terminal Care **

Research information (USDHEW, 1974) has suggested:

"Perhaps the greatest disservice that can be done to the dying person is to isolate him."

"To deny the dying person access to others and to the information of his normal environment, therefore, would seem to reduce the likelihood that he will resolve his own departure with dignity. Isolation of the dying is, perhaps, a reflection of the attitudes of younger professionals who are disquieted by their own unresolved conflicts. The social and psychological, as well as the physiological, concomitants of dying should be considered carefully in designing services for the terminally ill persons." (P. 7)

Note: Appendix III contains the Physical Classification, Behavior and Adjustment Classification, Physical Self-Maintenance Scale and Instrumental Activities of Daily Living Scale used by the Philadelphia Geriatric Center and quoted in Brody, (1974).

* United States Department of Health, Education and Welfare, Working With Older People, Vol. II, 1974, PP. 6, 34 - 35.

** United States Department of Health, Education and Welfare, Working With Older People, Vol. , 1974, P. 7.

III. SOCIAL/PSYCHOLOGICAL INFORMATION

Elderly persons in nursing homes and hostels are individuals with particular characteristics and needs. Previous sections of this paper have described demographic and physiological characteristics attributable to elderly people in general and to those living in these facilities. This section deals with the less tangible or measurable, yet critically important area of social and psychological attributes and needs, since architectural and interior design must take these needs into consideration if it is to aid, rather than hinder the major users of these facilities in going about the courses of their daily lives. Our philosophical bias is that there be as Elaine Brody (1970) has written:

A climate and physical atmosphere designed to communicate a view of each elderly person as a unique and dignified individual, and provision of life-enriching and life-enhancing services to help the medically maintained, rehabilitated, personalized, humanized individual live with full realization of his/her potential for enjoyment. (P. 289)

This section will discuss intellectual abilities, role loss, effects of institutionalization and social/psychological needs of elderly persons in long term care facilities. Since hostels with care services are relatively new and for the most part, unresearched, there is less information available on hostel users than on nursing home users.

Intellectual Abilities

There seems to be a consensus that learning ability per se does not necessarily change with age, but that there are other factors associated with older people which may make learning take place at a slower rate than that of younger people.

The first age-related factor affecting learning is sensory input.* As Carp (1976) puts it, "if the signal is too weak, the person cannot learn from it." Slower responses are characteristic of older people and may lead to unfair pressure for speed on such things as psychological tests, and therefore to ultimate failure. Carp feels that interest and motivation are critical factors in the learning abilities of older people.

Another important factor in learning abilities of older people is years of formal education. Obviously, the higher the level of schooling, the more sophisticated the individual is likely to be with regard to problem solving. However, the interval since formal schooling is also a factor. The greater the interval since formal schooling, the less likely an individual will be to take time to analyze the nature of the task confronting him or her and the greater the likelihood that he or she will find a solution from experience. (USDHEW, 1974)

Health status is the third important age related factor involved in the intellectual abilities of older people. While speed of perception and mental decoding operations (on standardized intelligence tests) decline with age, information items, which normally increase with age show the greatest correlation with health status. Patterns of mental performance associated with organic brain damage in late life, appear to differ from those which accompany normal physiological aging. Changes in mental performance and in overt behavior also have been found to be associated with the development of cardiovascular disease. Diseases which lead to impaired functioning of the central nervous system may affect memory and learning. (USDHEW, 1974, Vol. II PP. 28-29)

According to Working With Older People, Vol. II, published by the U.S. Department of Health, Education and Welfare (1974):

The attitude toward learning itself changes with age. All things being equal, the older adult is less set, or ready, to learn than he used to be... In the retirement years, differences in the ability to learn can be expected to be greatly influenced by health status and psychosocial make-up, not necessarily by factors correlated with age. (P. 29)

* See previous section on physiological information.

Role Loss *

One aspect associated with aging is substantial change or termination of social roles as worker, parent, spouse, homemaker, citizen, user of leisure time, church member, club member and friend. These role changes or role losses have a definite impact on how the individual views him/her self and on how he or she is looked upon by others. Lawton (1975) draws on work by gerontologist Robert Haughurst in describing these roles.

Worker

Retirement signals a major change in role for people who have spent their adult life employed. Not only may the individual's self-concept change, but he or she will suddenly be faced with an abundance of free time. Another major effect of retirement is (for most) a substantial drop in income.

Parent

Children grow up and leave the parents' home, however the role of parent seems to have greater continuity (at least in terms of contact) than the worker role. Lawton (1975) notes that there is no evidence that the majority of elderly parents are alienated from their children, but that information is lacking on the quality of parent-child and grandparent - grandchild relationships.

Spouse

Many older people, especially older women, lose their spouse. Not only does this usually have a major psychological effect (grieving may continue for years) but research has shown sociological effects as well. The person's social world may shrink. According to Lawton (1975):

Among those who remain together as couples, the spouse role remains the most salient in terms of the dependence of much other behavior on that of husband and wife in relation to each other. (P. 13).

Sexual activity continues as long as the partners desire it. (Masters and Johnson, 1966).

* M.P. Lawton, Planning and Managing Housing for the Elderly, New York: John Wiley and Sons, 1975.

Homemaker

Both men and women are occupied in a wide variety of self-maintenance tasks and activities of daily living (ADL). The former include: toileting, bathing, dressing, walking, eating and grooming. ADL include: shopping, cooking, housecleaning, financial management, telephoning, transportation use, medical care, and laundering. (Lawton, 1975). Hostel residents may be self-sufficient with regard to self-maintenance tasks, but need assistance with ADL. Nursing home residents may require assistance with both.

Citizen

Elderly people may participate in volunteer work and community or political activities more frequently than they did when they were younger. (Lawton, 1975)

Leisure-time User

Although middle-class professionals tend to extol the virtues of hobbies, reading, and group activity, the "average" older person spends most of his or her leisure time watching television. Lawton (1975) suggests that television can be used as a teaching device as well as an entertainment medium.

Church Member

Lawton (1975) reports that frequency of participation does not seem to decline with age except when health or other extraneous factors interfere.

Club Member

Organization memberships do tend to decline. (Lawton, 1975)

Friend

The consensus of opinion among researchers is that relationships among unrelated people, especially between people of the same age, are exceedingly important. Lawton (1975) reports some evidence that less intimacy may characterize relationships during this period and states "that the dependence of a friendship on the relative proximity of the two people is most outstanding." (P. 20)

Older people frequently complain of isolation and loneliness as old friends die or move away. There are some older people, however, who voluntarily choose to withdraw from active social participation.

Socialization to Old Age

One of the problems assumed in a discussion of role loss is that roles are only taken away for one reason or another, and not replaced. Rosow (1974) argues that one of the greatest difficulties involved in aging is that it requires learning a whole new set of roles, expectations and social norms. There are too few positive role models. Rosow suggests that the most positive way of dealing with this lack of socialization to old age is by a "concentration of socially homogeneous members," which maximizes social opportunities and may develop peer group functions such as:

- . Group support
- . Membership in new groups
- . New role set
- . Role Specification
- . Positive reference group
- . Insulation of members
- . Qualified role models
- . New self-images

Thus, the age-segregated populations of nursing homes and hostels may be very socially beneficial to residents.

Effects of Institutionalization

Any discussion of social/psychological characteristics and needs of elderly persons in nursing homes and hostels with care services must take into consideration, not only common characteristics of older people and individual differences, but the fact that entry into these facilities represents a drastic change in life style and self image and usually has strong implications for social psychological well-being.

Since questions of institutions and their human implications are dealt with in greater depth in Working Paper #1 (Conceptual Framework), only major issues will be discussed here. Suffice it to say, that entering and adjusting to an institution* is a traumatic experience for most older people. In fact, it is so negative that Tobin and Lieberman (1976) found that adverse changes may occur before the person even enters the institution:

"Older people are likely to undergo profound psychological alterations almost immediately after they accept the reality that they will soon relinquish residential independence for the rest of their lives." (P. 209)

"The meaning of the losses connected with giving up independent living is separation; the experience is that of being abandoned, and reaction to it is extreme. Increasingly, the person becomes cognitively constricted, apathetic, unhappy, hopeless, depressed, anxious and less dominant in relationships with others." (P. 213)

* Most of this section relates to nursing homes, since there has not been much research done on hostels and their users.

Although there are rare exceptions, most present and past long term care institutions for the elderly have had very negative effects on the behavior and attitudes of their patient-residents. Perhaps the most over-riding effect has been a change in status from an independent, adult person with all the autonomy associated with this status, to a dependent, child-like person with little or no autonomy. This process of status loss is usually initiated by physiological changes and/or disease, and lack of care options.

Thus, the downward spiral begins with physical and/or mental losses or problems, is complicated by social or role losses (such as widowhood), resulting in a need for care. In many cases, the only realistic option is institutionalization. This option may or may not be decided upon by the patient-resident him/herself.* Although Brody (1970) reports that institutionalization of a parent is usually a reluctant decision on the part of their adult children, many institutionalized elderly people nevertheless feel abandoned by their families when they enter a long term care facility.

Unfamiliar, often stark, surroundings, lack of privacy and forced social interaction with strangers, and regimentation of activities (such as eating) lead to feelings of abandonment, uselessness and rejection, (Jacobs, 1969). Social isolation is another aspect of institutionalization. (Sommer and Osmond, 1960). The aging in Manitoba study (Manitoba Department of Health and Social Development, 1971) demonstrates this by comparing the social interaction of elderly in the general population with those in long term care facilities:

* According to Aging in Manitoba Needs and Resources, 1971 Volume 9 Special Data. Part A. The Elderly Population (1971):
Less than half (42.2%) of the elderly in long term care facilities chose the facility themselves or had their spouse choose it.

TABLE 66

Social Interaction of General Populations
Elderly Compared with Facility Elderly

	<u>General Population Elderly</u>	<u>Facility Elderly</u>
No daily contact with another person in their household.	22.5%	50.4%
Contact with relatives less than 12 times a month.	18.4%	60.6%
Contact with friends less than 8 times a month.	27.8%	46.0%
Contact with neighbors less than once a month.	13.0%	11%
Weekly contact with less than one person for specific purposes.	70.4%	62.7%
Of those employed, have contact with less than 2 persons daily.	28.4%	29.1%

Source: Manitoba Department of Health and Social Development,
Aging in Manitoba, 1971, 1973, p. 47.

It is difficult to pinpoint exactly which causes and results of institutionalization lead to unhappiness (and sometimes to depression) on the part of many patient-residents, since there are so many of each, these factors operate together, and since individuals vary.

Gottesman and Hutchinson, (1974) cite Lieberman who paints a generally depressing profile of older people in institutions:

"They share the following characteristics: poor adjustment, depression and unhappiness, intellectual ineffectiveness because of increased rigidity and low energy (but not necessarily intellectual incompetence), negative self-image, feelings of personal insignificance and impotency, and a view of self as old. Residents tend to be docile, submissive, show a low range of interests and activities, and to live in the past rather than the future. They are withdrawn and unresponsive in relationship to others. There is some suggestion that they have increased anxiety, which at times focuses on feelings of death. (There are) marked increases in mortality rates for aged persons entering mental hospitals and homes for the aged."
(P. 42)

There is much room for improvement. Gottesman and Hutchinson (1974) suggest that relationships between staff and residents, those among residents themselves, programs and services and the physical environment can all work together and contribute to making the long term care experience a more pleasant one for the patient-resident. Gottesman and Hutchinson (1974) also contend that residents should have the opportunity to care for themselves as much as they are able to:

"Instead of viewing the job of the nursing home as one of taking care of disabled people, the home's staff could see its job as providing the opportunities, expectations and supports for patients to do things for themselves in accordance with their maximum potential and capacities." (P. 44)

Brody (1970) makes the point often forgotten, that compartmentalization can cause professionals to deal with elderly people in long term care facilities in ways other than as whole individuals with their own unique history, personality and value system and a combination of mental, physical, and social problems.

Social/Psychological Needs

As Carp (1976) notes, mere prolongation of life is not a meaningful goal for older people without regard for the quality of that life. She explains why satisfaction of these needs is important:

"Frustration of these needs leads to the wasting of the individuals unique potential, to his dependence upon society rather than contribution to it, and to his suffering a consequent sense of failure or guilt." (P. 30)

She suggests that the following are important psychological needs:

1. Sensory Experience

This is important since, according to Carp:

"Normal persons become disorientated, withdrawn, and may experience hallucinations if they are temporarily deprived of normal sensory input. Apathy and lack of motivation have been identified as part of the sensory-deprivation syndrome." (Hebb, 1958) * (P. 31).

She strongly advocates use of strong and multiple sensory environmental information. (Pastalan's term is "redundant cuing.")

2. Tactile and Kinesthetic Stimulation

Carp feels these are important for all human beings, but especially for elderly people since they have "less opportunity to touch and to be touched because of the loss of or distance from those persons with whom such behavior is acceptable, such as parents, siblings, spouses and children." (P. 32) She advocates the use of a variety of textures in furniture coverings, bedclothes, cutlery, napery and dishware and other things that people touch (rather than wall coverings or drapes) in order to compensate for reduced tactile experience.

* Carp's reference

3. Interaction With Other People

This is a lifelong, basic need according to Carp and one which the physical environment may play a large role in supporting. However, she notes that due to individual differences (and their accentuation by age) not everyone fares well in age-segregated living situations, and that there should be other options available.

4. Privacy

Carp cites Westin and Pastalan in describing privacy as essential to good functioning and to a sense of well-being for older people. The physical environment plays an important role in the provision of privacy, as do staff and administrative practices.

5. New Experience

Carp (and other social scientists) argues that this is essential to alertness and good functioning at all stages of life, but again, particularly for the elderly since their lives may be more routine than those of younger people.

6. Predictability

A balance needs to be struck between new experience and the security of knowing where everything is (Lynch).* As Carp says:

"Indeed the old may be especially vulnerable to environmental unpredictability because of their reduced sensory-motor capabilities and deeply ingrained habits." (P. 37)

7. Self-esteem

8. Autonomy

These are two related needs common to all human beings, but again, should be particularly emphasized with regard to institutionalized elderly people, since their independence and sense of self-worth are so fragile:

"Autonomy connotes not only the absence of dependence but also the capacity to make choices and decisions. This is possible only when options exist. (Sussman, 1972)"* (P. 37)

* Carp's reference

Carp continues:

"The most pervasive human need is to be a person. This status is defined for each of us by the way other people deal with us. The 'decided about and done to' status of the old is perhaps the most flagrant violation of their first right as human beings." (P. 38)

Ostrander (1971) cites Snyder's list of social/psychological needs of elderly people. Those on her list which add to or differ from Carp's are:

- . Meaningful activity (as opposed to busywork)
- . Clearly defined and comprehensible social norms: a clear understanding of others' expectations, evaluations, opinions and feelings as they relate to individual functioning.
- . The opportunity to keep track of time, to differentiate one day from another, to be orientated to temporal changes.
- . An opportunity to reflect on the past as a means of understanding one's self and preparing for the future.

Obviously, there are particular social/psychological needs of special groups within the nursing home. Louis Novick, (1965) Executive Director of the Maimonides Hospital and Home for the Aged in Montreal, states five needs for brain-damaged aged:

1. Need for a Stable Pattern of Daily Activities.

Experiences that are repeated and familiar give the brain-damaged person a feeling of safety. Because he cannot use his brain adequately to observe and weigh alternatives that may solve his problems, he seeks the familiar course that experience has proven to be satisfactory.

2. Need to Depend.

The brain-damaged person frequently needs help with the most basic activities of living, such as toilet care, grooming, bathing, eating, dressing, walking, etc. Those who would help him must often anticipate his needs because of his inability to express himself properly.

3. Need for Love.

Because he is so dependent on another person, the attitude of this person toward him is tremendously important. The brain-damaged individual depends on the aide or orderly in the way that an infant depends on his mother. It is significant that when brain-damaged persons are upset, they frequently mention the name of a dearly loved parent, spouse, or child.

4. Need for Self-Expression.

Because the ability of the brain-damaged person is drastically curtailed, he may seek satisfaction in reliving his past achievements. For him, such reliving of experience is valid and proper. However, he may still retain certain abilities, although limited, and successful expression of these should be encouraged.

5. Need for Recreation.

The capacity for enjoyment, too, has been drastically curtailed, but some capacity still remains.

6. Need to Socialize.

The brain-damaged, like the mentally alert, want to be together with others.

The younger nursing home patient-resident also has a particular set of needs. As the Hamilton-Wentworth Assessment and Placement Service has stated:

"We continue to experience difficulty placing the person under 60 who requires long term care in a setting which will recognize the attitudes and expectations of the younger person and be able to provide the stimulus of hobbies, recreation and social contact. We use the term "young" for those under 60 or for those whose mental outlook is youthful and vigorous."

NOTE:

CMHC may feel that much of this information is inappropriate with regard to the users of the types of non-medically oriented nursing homes (e.g., providing only levels I and II of care) they are able to fund. However, it is our belief that since the needs of elderly people change over time and since it would be desirable to form a liaison with the Department of Health and Welfare in order to ensure provision of medical facilities, that information concerning the full range of nursing home users is a necessary resource.

BIBLIOGRAPHY

PROFILE OF USERS (CMHC NURSING HOME AND
HOSTELS DESIGN GUIDELINE STUDY)

Altman, Irwin and Wohlwill, J., eds. Human Behaviour and Environment. Vol. 1. New York: Plenum Press, 1976.

Altman, Lawrence K. "Senility is Not Always What It Seems to Be." New York Times. Sunday, May 8, 1977.

Atchley, R.C. Social Forces in Later Life: An Introduction to Social Gerontology. Belmont, California: Wadsworth, 1972.

Bairstowe, Dale. Demographic and Economic Aspects of Housing Canada's Elderly. Ottawa: C.M.H.C., 1973.

Barney, Jane L. "The Prerogative of Choice in Long-Term Care," The Gerontologist, Vol. 17, No. 4, 1977.

Bergman, Moe. "Changes in Hearing with Age." The Gerontologist. Vol. 11, No. 2, Summer, 1971.

Birren, J. The Psychology of Aging. Englewood Cliffs, N.J.: Prentice Hall, 1964.

Brody, E.M. "Congregate Care Facilities and Mental Health of the Elderly." Aging and Human Development. Vol. 1, November, 1970.

Brody, E.M. "Follow-Up Study of Applicants and Non-Applicants to a Voluntary Home." The Gerontologist. Vol. 11, No. 4, Part 1, Winter, 1971.

Brody, E.M. and Gottesman, L. "Issues of Institutional Care" in A Social Work Guide for Long-Term Care Facilities. Edited by Elaine M. Brody. Rockville, Maryland: National Institute of Mental Health, 1974.

Brody, E.M., Kleban, M.H., and Liebowitz, B. "The Intermediate Housing for the Elderly: Satisfaction for Those Who Moved in and Those Who did not." The Gerontologist. Vol. 15, No. 4, August, 1975.

Brody, S.J. and Cohen, E. "Broad Social Issues" in A Social Work Guide for Long-Term Care Facilities. Edited by Elaine M. Brody. Rockville, Maryland: National Institute of Mental Health, 1974.

Canadian Council for Social Development. Beyond Shelter - A Study of National Housing Act Financed Housing for the Elderly. Ottawa: n.p., 1973.

Canadian Council for Social Development. Housing the Elderly. Ottawa: Canadian Council for Social Development, 1976.

Carp, F.M. "Urban Life Style and Life-Cycle Factors" in Community Planning for an Aging Society. Edited by M.P. Lawton, R.J. Newcomer and T.P. Byerts. Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1976.

Chapanis, Alphonse. "Human Engineering Environments for the Aged." The Gerontologist. Vol. 14, No. 3, June, 1974.

Coe, Rodney M. "Self-Conception and Institutionalization" in Older People and Their Social World. Edited by A. Rose and W. Peterson. Philadelphia: F.A. Davis, 1965.

Crouch, C.D. "Lighting Needs for Older Eyes." Journal of American Geriatrics Society. Vol. 15, July, 1967.

Cummings, Elaine and Henry, W.E. Growing Old: The Process of Disengagement. New York: Basic Books, 1961.

Curtin, S. Nobody Ever Died of Old Age. Boston: Little, Brown and Company, 1972.

Deckert, T. Newell. "A Survey of Hearing Loss in an Older Age Hospital Population." The Gerontologist. Vol. 14, No. 5, Part 1, October, 1974.

Eisdorfer, Carl and Lawton, M. Powell, eds. The Psychology of Adult Development and Aging. Washington: American Psychological Association, 1973.

Environics Research Group. The Seventh Age: A Bibliography of Canadian Sources in Gerontology and Geriatrics, 1964-1972. Toronto: Envionics Research Group, 1972.

Etzioni, Amitai. "Nursing Homes: New Rules Are Not Enough." Washington Post. May 25, 1975.

Gelfand, Donald E. "Visiting Patterns and Social Adjustment in an Old Age Home." The Gerontologist. Vol. 8, No. 4, Part 2, Winter, 1968.

Gerontology Project Group. Research in Environmental Analysis and Design for the Aging: An Environment for the Aging - Report No. 1. Ithaca, N.Y.: College of Human Ecology, Cornell University, 1971.

Gottesman, L.E. and Hutchison, E. "Characteristics of the Institutionalized Elderly" in A Social Work Guide for Long-Term Facilities. Edited by Elaine M. Brody. Rockville, Maryland: National Institute of Mental Health, 1974.

Greenwald, S.R. and Linn, M.W. "The Younger Nursing Home Patient." Paper presented at the 24th Annual Meeting of the Gerontological Society. Houston, Texas, 1971.

Howarth, J. "A Contrast in Care for Senior Citizens." Globe and Mail. March 5, 1971.

Ingram, Donald K. and Barry, John R. "National Statistics on Deaths in Nursing Homes: Interpretations and Implications." The Gerontologist, Vol. 17, No. 4, 1977.

Jacobs, Ruth H. "One-way Street - An Intimate View of Adjustment to a Home for the Aged." The Gerontologist. Vol. 9, No. 4, Winter, 1969.

Kahana, Eva. "The Humane Treatment of Old People in Institutions." The Gerontologist. Vol. 13, No. 3, Part 1, Autumn, 1973.

Kahana, Eva and Coe, R. "Self and Staff Conceptions of Institutionalized Aged." The Gerontologist. Vol. 9, No. 4, Part 1, Winter, 1969.

Kahn, K.A., Hines, W., Woodson, A.S., and Burkham-Armstrong, G. "A Multi-Disciplinary Approach to Assessing the Quality of Care in Long-Term Care Facilities." The Gerontologist. Vol. 17, No. 1, 1977.

Kahn, Robert A. "The Mental Health System and the Future Aged." The Gerontologist. Vol. 15, No. 1, February, 1975.

Kastenbaum, R. and Candy, S. "The 4% Fallacy: A Methodological and Empirical Critique of Extended Care Facility Population Statistics." International Journal of Aging and Human Development. Vol. 4, No. 1, 1973.

Kleban, M.H., Brody, E.M. and Lawton, M.P. "Personality Traits in the Mentally Impaired Aged and their Relationship to Improvements in Current Functioning." The Gerontologist. Vol. 2, No. 2, Summer, 1971.

Koncelik, J. Designing the Open Nursing Home. Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1976.

Lawton, M. Powell. "The Human Being and the Institutional Building" in Designing for Human Behavior. Edited by J. Lang, W. Burnett, W. Moleski, and D. Vachon. Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1974.

Lawton, M. Powell. "Planning a Building for the Mentally Impaired Aged." Unpublished paper, Philadelphia Geriatric Centre, n.d.

Lawton, M. Powell. Planning and Managing Housing for the Elderly. New York: John Wiley & Sons, 1975.

Lawton, M. Powell, Newcomer, R.J. and Byerts, T.P., eds. Community Planning for an Aging Society. Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1976.

Manitoba. Department of Health and Social Development. Division of Research, Planning and Program Development. Aging In Manitoba, 1971. Winnipeg: Department of Health and Social Development, 1973.

Masters, W. and Johnson, V. Human Sexual Response. Boston: Little, Brown and Company, 1966.

Meacher, M. Taken for a Ride - Special Residential Homes for Confused Old People: A Study of Separatism in Social Policy. London: Longman, 1972.

Mendelson, Mary A. Tender Loving Greed. New York: Random House, 1974.

Metropolitan Toronto Social Planning Council. The Aging: Trends, Problems, Prospects. Toronto: Social Planning Council, 1973.

Nahemow, L. and Lawton, M.P. "Toward an Ecological Theory of Adaptation and Aging" in Environmental Design Research. Vol. 1. Edited by W. Preiser. Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1973.

Natenshon, L.J. "The Architectural Dilemma: Design, Individual Needs and Social Living." The Gerontologist. Vol. 9, No. 1, Spring, 1969.

Neugarten, Bernice L. "The Future and the Young-Old." The Gerontologist. Vol. 15, No. 1, February, 1975.

Novick, Louis J. "Programming for the Brain Damaged Aged in a Long-Term Care Facility." Hospitals. Vol. 39, May, 1965.

Ontario. Advisory Council on Senior Citizens. Annual Report. 1975/76.

Ontario. Department of Social and Family Services. Cultural Differences Among the Aged in Ontario. Toronto: Department of Social and Family Services, 1970.

Ontario. Department of Treasury and Economics. Economic Planning Branch, Policy Planning Division. The Older Population in Ontario Income Supports Household Characteristics. n.p.: 1970.

Ontario Medical Association. Rehabilitation Committee. Report of Task Force to Study the Assurance of Quality Care in Residential Institutions. n.p.: n.d.

Ostrander, E.R. Creating Interior Environments for Older Adults: Physical, Social Psychological and Psychological Considerations. Paper presented to International Symposium on Housing and Environmental Design for Older Adults. Washington, D.C., 1971.

Pastalan, Leon A. "How the Elderly Negotiate Their Environment" in Environment for the Aged: A Working Conference on Behavioral Research, Utilization and Environmental Policy. San Juan, Puerto Rico: The Gerontological Society, 1971.

Pastalan, Leon A., Mautz, R., Merrill, J. "The Simulation of Age Related Sensory Losses: A New Approach to the Study of Environmental Barriers" in Environmental Design Research. Vol. 1. Edited by W. Preiser. Stroudsburg, Pa.: Dowden, Hutchinson and Ross, 1973.

Patnaik, Beverly, Lawton, M.P., Kleban, Morton, and Maxwell, Robert. "Behavioural Adaptation to the Change in Institutional Research." The Gerontologist. Vol. 14, No. 4, August, 1974.

Peck, R. "Psychological Development in the Second Half of Life" in Psychological Aspects of Aging. Edited by J.E. Anderson. Washington, D.C.: American Psychological Association, 1956.

Rodstein, Manuel. "Accidents and Aging People" in Working with Older People, Vol. III: The Aging Person, Needs and Services. Washington, D.C.: The Department of Health, Education and Welfare, 1974.

Rose, Arnold M. and Peterson, W.A. Older People and Their Social World. Philadelphia: F.A. Davis, 1965.

Rosow, Irving. Social Integration of the Aged. Glencoe, Illinois: Free Press, 1967.

Rosow, Irving. Socialization to Old Age. Los Angeles: University of California Press, 1974.

Schwenger, C.W. Health Care for Aging Canadians. n.p.: n.d.

Schooler, Kermit K. "Environmental Change and the Elderly" in Human Behavior and the Environment, Vol. 1. Edited by I. Altman and J. Wohlwill. New York: Plenum Press, 1976.

Science Council of Canada. Perceptions #2 - Implications of the Changing Age Structure of the Canadian Population. Ottawa: The Science Council of Canada.

Shanas, E., Townsend, P., Wedderburn, D., Friis, H., Milhoj, P., and Stehouwer, J. Old People in Three Industrial Societies. New York: Atherton Press, 1968.

Sim, M. "Mental Deterioration in the Elderly" in Dilemmas in Psychogeriatrics: The Alternatives. Ottawa: The Ontario Psychogeriatric Association, 1976.

Snyder, Lorraine H. A Planning Guide and Behavior Program on Environments for the Aging. n.p.: 1973. (mimeographed)

Sommer, R. and Osmond, H. "Symptoms of Institutional Care." Social Problems. Vol. 8, No. 3, Winter, 1960-1961.

Statistics Canada. Hospital Statistics-Preliminary Annual Report, 1975. Ottawa: Statistics Canada, 1976.

Statistics Canada. Hospital Statistics, Volume 1: Beds, Services, Personnel, 1974. Ottawa: Statistics Canada, 1976.

Statistics Canada. Income Distribution by Size in Canada - Preliminary Estimates, 1975. Ottawa: Statistics Canada, 1975.

Statistics Canada. Mental Health Statistics, Volume 1: Institutional Admissions and Separations, 1974. Ottawa: Statistics Canada, 1974.

Statistics Canada. Population Projections for Canada and the Provinces, 1972-2001. Ottawa: Information Canada, 1974.

Tobin, S.S. and Lieberman, M.A. Last Home for the Aged. San Francisco, California: Jossey-Bass, 1976.

Toronto Western Hospital. Research Report - Hip Fractures, 1970. (Typewritten).

United States. Department of Health, Education and Welfare. Fact Sheet: Long-Term Care Facility Improvement Study - Introductory Report. Washington, D.C.: n.p., n.d.

United States. Department of Health, Education and Welfare. "Time and Recreation" in Working with Older People: Vol. III: The Aging Person, Needs and Services. Washington, D.C.: H.E.W., 1974.

United States. Department of Health, Education and Welfare. Working with Older People. Vols. 1-3. Washington, D.C.: H.E.W., 1974.

United States. Department of Health, Education and Welfare. National Institute of Mental Health. Public Health Service. Aged Patients in Long-Term Care Facilities. Washington, D.C.: H.E.W., 1973.

United States. Department of Health, Education and Welfare. Public Health Service. Weight, Height and Selected Body Dimensions of Adults. Washington, D.C.: H.E.W., 1962.

United States. Department of Health, Education and Welfare. Public Health Service. Health Resources Administration. Prevalence of Selected Impairments: United States, 1971, Washington, D.C.: HEW, 1975.

United States. Senate. Subcommittee on Long-Term Care of the Special Committee on Aging. Nursing Home Care in the United States: Failure in Public Policy - Introductory Report. Washington, D.C.: Government Printing Office, 1974.

United States. Senate. Subcommittee on Long-Term Care of the Special Committee on Aging. Nursing Home Care in the United States: Failure in Public Policy - What can be done in Nursing Homes: Positive Aspects in Long-Term Care. Washington, D.C.: Government Printing Office, 1975.

Vigorda, Debbie. The Longitudinal Study of Aging: A Review. n.p.: n.d. (typescript)

Weinstock, Camilda and Bennett, Ruth. "From 'Waiting on the List' to becoming a 'Newcomer' and an 'Old Timer' in a Home for the Aged: Two Studies of Socialization and its Impact upon Cognitive Functioning." International Journal of Aging and Human Development. Vol. 2, 1971.

Wershaw, Harold J. "Comment: Reality Orientation for Gerontologists-Some Thoughts About Senility." The Gerontologist. Vol. 17, No. 4, 1977.

Whitaker, Marilyn. Senior Citizen Hostels: An Evaluation of Existing Projects and Suggestions for Future Projects. Toronto: Toronto Branch, Central Mortgage and Housing Corporation, 1975.

White House Conference on Aging, 1971. Toward a National Policy on Aging. Final Report, Vol. II. Washington, D.C.: Government Printing Office, 1973.

Yaffe, B. "Administrative Turnover at Scarborough Lodge has Timbrell Studying Nursing Home Standards." Globe and Mail. March 21, 1977.

APPENDIX I

Assessment and Placement Service, Hamilton-Wentworth District Health Council.

HISTORICAL BACKGROUND

The A.P.S. was established by the Hamilton District Health Council in 1971 on the advice of the then newly formed Extended Care Committee. The project was funded in April of that year by the Ontario Ministry of Health and commenced operation in September, 1971.

One of the concerns of the Health Council has been the promotion of optimal utilization of the services for the disabled and chronically ill. The Extended Care Committee was formed to study the needs of this group and the services available. The result of their discussions was the recommendation that a co-ordination body be formed to obtain the medical, social and nursing evaluations of the disabled and chronically ill and make recommendations of the appropriate programmes or levels of care for the development of the individual's assets and potential.

The Health Council appointed a medical consultant and two members of the health professions to provide the co-ordinating evaluation function; a part time administrator and secretarial staff; and a data analyst to maintain statistics for the evaluation of the service's efficacy and the provision of an information base for future planning in the health needs of the disabled.

Assessment Form

Prior to commencement of operation an Assessment tool was developed to provide the necessary information for appropriate recommendation. Broadly, this information falls into three categories:

1. demographic (age, sex, marital status, next of kin, education, employment and cultural background, present location and level of income.
2. medical (diagnosis, prognosis, treatment, level of cognitive function, emotional status).
3. functional capacity (degree of ability to walk, talk, see, hear, comprehend, dress, bathe, undertake personal care and household care).

The demographic and functional capacity data is provided by a social worker-nurse team for the hospitalized applicant and by the Public Health, Victorian Order or St. Elizabeth Nurse for those applicants at home. The medical information is provided by the applicant's personal physician.

Recommendations

Recommendations are made on the basis of the information provided by the Health Care team with additional input as indicated and with an intimate knowledge of the available facilities and programmes.

Recommendations include appropriate level of care, and/or programmes of rehabilitation or recreation, and programmes whereby the disabled person may be assisted toward a meaningful role in society.

Referral Process

Referrals are made by health professionals in the community or health care institutions and/or members of the community, and may be as simple as a telephone call asking for the process to be set in motion.

Definitions

- Assessment - the evaluation of the needs, capabilities, and assets of the applicants from the information supplied by physicians, nursing and social services and other health professionals.
- Placement - the identification and recommendation of the most suitable programme(s) to meet the applicant's needs and develop his/her potential capabilities, and facilitation of the movement of the applicant to the site of the programme(s) or the movement of the programme(s) to the individual.
- Referral Form - The A.P.S. designed form used by the health professionals to provide demographic, medical, environmental and cultural background information on the applicant. Revised January, 1976.

LANGUAGE APPLICANT PREFERS TO SPEAK: 1 English 2 French 3 Italian 4 German
 5 Polish 6 Ukrainian 7 Croatian 8 Other - specify 27
 DOES APPLICANT UNDERSTAND ENGLISH? 1 Yes 2 No 28

LEVEL OF EDUCATION ATTAINED: 29

OCCUPATION (prior to illness or retirement): 30

FAMILY INCOME: (If applicant is a child, give parents' income)

Is monthly family income from all sources: 1 \$ 0. - \$ 99. 4 \$300. - \$499
 2 \$100. - \$199. 5 \$500. and over 29
 3 \$200. - \$299.

How many people are supported by this monthly family income: 30

Who is managing the applicant's affairs: 1 Self 2 Spouse 3 Children 4 Other Relatives
 5 Lawyer 6 Public Trustee 7 Home for Aged 8 Other, specify 31

USUAL LIVING ARRANGEMENTS

ACCOMMODATION:

1 House 2 Apartment 3 Room 4 Institution 5 Other, specify 32

Does the Applicant: 1 Own 2 Rent 3 Other, specify 33

WITH WHOM LIVING: (If other than institution)

1 Alone 2 Spouse 3 Spouse and Children 4 Children 5 Parents 6 Other Relatives
 7 Other, specify 34

IS ANYBODY AVAILABLE TO ASSIST APPLICANT IN ACTIVITIES OF DAILY LIVING (IF NEEDED):

(If other than institution)

1 Yes - Fully 2 Yes - Partially 3 No one 9 NA

If yes, specify who: 35

COMMUNITY SERVICES OR ORGANIZATIONS CURRENTLY INVOLVED:

1 Public Health Nurse 2 Visiting Nurses 3 Homemakers 4 Home Care
 5 Meals on Wheels 6 Social Service Agency 7 Other 8 None 36

Specify

Frequency

ANY SPECIFIC INTERESTS OR HOBBIES: 1 Yes 2 No If yes, specify 37

WHICH OF THE FOLLOWING DOES THE APPLICANT PREFER: 1 Wine 5 Beer & liquor
 2 Beer 6 Wine & liquor
 3 Liquor 7 Wine, beer & liquor
 4 Wine & beer 8 Abstainer 38

HOW OFTEN WOULD THE APPLICANT PREFER TO DRINK:

1 Less than once a week 2 More than once a week 3 Once each day 4 More than once each day
 but not daily 39

How many drinks each time: 40

ADDITIONAL COMMENTS:

ANY POTENTIAL
FOR IMPROVEMENT

1 Yes 2 No

IF YES, PLEASE
INDICATE WHERE
APPROPRIATE

FUNCTIONAL CAPACITY: COMPARED TO NORMAL FUNCTION - i.e. not age related (Circle appropriate numbers)

COMMUNICATION:

ABILITY TO SEE (WITH GLASSES IF WORN)	1 Excellent vision	2 Adequate for personal safety	3 Limited vision	4 Distinguishes only light and dark	5 Totally blind	<input type="checkbox"/>	41
ABILITY TO HEAR (WITH HEARING AID IF WORN)	1 Excellent hearing	2 Adequate for personal safety	3 Partially impaired	4 Almost totally deaf	5 Totally deaf	<input type="checkbox"/>	42
ABILITY TO ENUNCIATE (IN OWN LANGUAGE)	1 Words fully understandable	2 Words mostly understandable	3 Words partially understandable	4 Words barely understandable	5 Words not understandable	<input type="checkbox"/>	43
ABILITY TO EXPRESS SELF BY WORDS OR GESTURES	1 Fully able	2 Mostly able	3 Moderately able	4 Barely able	5 Unable	<input type="checkbox"/>	44
ABILITY TO COMPREHEND PRESENT LIFE SITUATION	1 Fully able	2 Mostly able	3 Moderately able	4 Barely able	5 Unable	<input type="checkbox"/>	45

SELF-MAINTENANCE

AMBULATION	1 Fully ambulatory	2 Independent with <input type="checkbox"/> cane <input type="checkbox"/> crutches <input type="checkbox"/> walker	3 Independent with wheelchair	4 Requires a person assist <input type="checkbox"/> on the level <input type="checkbox"/> on stairs	5 Immobile	<input type="checkbox"/>	46
TRANSFER	1 Needs no assistance	2 Supervision for transfer - e.g. bed to chair	3 Assistance for transfer - e.g. bed to chair	4 Lifting	5 Bedridden	<input type="checkbox"/>	47
BLADDER	1 Responsible for self - no incontinence	2 Rare incontinence	3 Occasional incontinence unless reminded	4 Frequent incontinence <input type="checkbox"/> Catheter for 5 retention 6 incontinence	7 Totally incontinent	<input type="checkbox"/>	48
BOWEL	1 Responsible for self - no incontinence	2 Rare incontinence	3 Occasional incontinence	4 Frequent incontinence	5 Totally incontinent	<input type="checkbox"/>	49
OSTOMY	1 No ostomy Not applicable	2 Responsible for self	3 Minor assistance	4 Considerable assistance	5 Total Care	<input type="checkbox"/>	50
ABILITY TO FEED	1 Without assistance	2 Minor assistance	3 Feeds self - requires moderate assistance - co-operative	4 Requires extensive assistance - co-operative	5 Requires extensive assistance - unco-operative	<input type="checkbox"/>	51
ABILITY TO DRESS	1 Can dress self appropriately	2 Supervision only	3 Assistance only	4 Has to be dressed - co-operative	5 Has to be dressed - unco-operative	<input type="checkbox"/>	52
ABILITY TO BATHE OR WASH	1 Without assistance	2 Supervision only	3 Assistance getting in and out of tub	4 Unable - co-operative	5 Unable - unco-operative	<input type="checkbox"/>	53
ABILITY TO KEEP HOUSE	1 Able to maintain house alone - assistance with heavy tasks	2 Able to perform light daily tasks only (bed making, dishes)	3 Able to perform light daily tasks with supervision	4 Needs regular assist- ance and supervision	5 Not able to participate in any housekeeping	<input type="checkbox"/>	54
ABILITY TO PREPARE FOOD	1 Requires no assistance	2 Requires some assistance	3 Completely unable physically to prepare & serve meals	4 Mentally unable to prepare & serve meals	5 Both physically and mentally unable to prepare and serve meals	<input type="checkbox"/>	55
ABILITY TO SHOP	1 Requires no assistance	2 Needs to be accompanied	3 Physically unable	4 Mentally unable	5 Both physically and mentally unable	<input type="checkbox"/>	56
ABILITY TO USE TELEPHONE	1 Requires no assistance	2 Needs some help - able to dial well known numbers & receive calls	3 Physically unable	4 Mentally unable	5 Both physically and mentally unable	<input type="checkbox"/>	57
ABILITY TO TRAVEL	1 Able to travel independently	2 Able to travel if accompanied and assisted	3 Physically unable	4 Mentally unable	5 Both physically & mentally unable	<input type="checkbox"/>	58
MENTAL CAPABILITY TO MANAGE AFFAIRS	1 Completely capable in all financial affairs	2 Capable but needs some guidance	3 Capable of independ- ently handling only minor daily business	4 Unreliable due to intermittent con- fusion or forget- fulness	5 Completely unable to comprehend affairs	<input type="checkbox"/>	59
ABILITY TO ADMINISTER OWN MEDICATION	1 Completely respon- sible/no assistance required	2 Capable if dosage prepared in advance	3 Physically unable to administer medication	4 Mentally unable to administer medication	5 Physically and mentally unable to administer medication	<input type="checkbox"/>	60
TOBACCO SMOKING	1 Never smoked	2 Ex-smoker (stopped more than one month ago)	3 Smokes <input type="checkbox"/> pipe <input type="checkbox"/> cigar	4 Smokes less than 20 cigarettes per day	5 Smokes 20 or more cigarettes per day	<input type="checkbox"/>	61

APPLICANT REQUIRES ASSISTANCE DURING THE DAY: 1 No 2 Yes

APPLICANT REQUIRES ASSISTANCE DURING THE NIGHT: 1 No 2 Yes

ANY BEHAVIOUR PROBLEMS? 1 No 2 Yes, specify

DID APPLICANT PERSONALLY PROVIDE THE INFORMATION RECORDED ON THIS APPLICATION?

1 Yes 2 No If no, specify

WHICH OF THE FOLLOWING PROGRAMS WOULD YOU SUGGEST AS THE MOST APPROPRIATE FOR THE

1 Day Centre

2 Support Service(s)

- in usual living arrangements

3 Rehabilitation

4 Lodging Home

5 Home for the Aged

6 Nursing Home

7 Chronic Hospital

8 Other, specify

9 NA

APPLICANT?

PERSON COMPLETING THIS FORM:

1 Social Worker

2 Public Health Nurse

3 V.O.N.

4 St. Elizabeth Nurse

5 Hospital Nurse

6 Physician

7 Discharge Planner

8 Other, specify _____

NAME: (Please Print)

ADDRESS: TELEPHONE:

SIGNATURE: DATE:

DATE:
Day Month Year

ADDITIONAL INFORMATION: (Relevant to assessment of the applicant)

FOR OFFICE USE ONLY

CASE ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

REFERRAL No. ☐ 8

APS COUNSELLOR ☐ 9

ASSESSMENT AND PLACEMENT SERVICE
OF THE HAMILTON DISTRICT HEALTH COUNCIL
BOX 2085, HAMILTON, ONTARIO. (416) 385-5361

REFERRAL FORM

PART B - MEDICAL INFORMATION

FOR PHYSICIAN TO COMPLETE

APPLICANT'S NAME:

DIAGNOSIS: Please list ALL diagnoses - recent & remote	Date of onset of present episode	Total duration of this condition	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12
1.	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15
2.	<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18
3.	<input type="checkbox"/> 19	<input type="checkbox"/> 20	<input type="checkbox"/> 21
4.	<input type="checkbox"/> 22	<input type="checkbox"/> 23	<input type="checkbox"/> 24
5.			

RECENT SURGICAL TREATMENT(S) AND DATE(S):

OTHER CLINICAL INFORMATION:

- 1 Behaviour problems
- 2 Chronic infections
- 3 Sinuses
- 4 Decubitus ulcer
- 5 Other, specify

NUTRITIONAL STATE: (Please circle appropriate number)

1 Overweight 2 Normal 3 Underweight

☐ 25

FOR THE TIME INTERVALS INDICATED, PLEASE ATTEMPT TO PREDICT THE APPLICANT'S GENERAL HEALTH

	Expected to improve	Expected to be stable	Expected to deteriorate	Expected to die	
Less than one month	1	2	3	4	<input type="checkbox"/> 26
In one month	1	2	3	4	<input type="checkbox"/> 27
In three months	1	2	3	4	<input type="checkbox"/> 28
In six months	1	2	3	4	<input type="checkbox"/> 29
In one year	1	2	3	4	<input type="checkbox"/> 30
In over a year	1	2	3	4	<input type="checkbox"/> 31

PSYCHOLOGICAL FUNCTIONING: COMPARED TO NORMAL FUNCTION (NOT AGE RELATED)

ANY POTENTIAL
FOR IMPROVEMENT?

1 Yes 2 No

IF YES, PLEASE
INDICATE WHERE
APPROPRIATE

Memory and Orientation	1 Normal	2 Brief periods of forgetfulness	3 Brief periods of confusion & disorientation	4 Periods of marked confusion and disorientation	5 No recall	<input type="checkbox"/>	32
Ability to be Realistic in Judgement	1 Normal	2 Adequate for personal safety	3 Limited	4 Gross impairment - unrealistic	5 Unable to make any judgement	<input type="checkbox"/>	33
Depression	1 None	2 Mild	3 Moderate	4 Severe	5 Extreme	<input type="checkbox"/>	34
Anxiety	1 None	2 Mild	3 Moderate	4 Severe	5 Extreme	<input type="checkbox"/>	35
Participation	1 Not withdrawn	2 Mildly withdrawn	3 Moderately withdrawn	4 Markedly withdrawn	5 Extremely withdrawn - stuporous	<input type="checkbox"/>	36
Cooperation	1 Always cooperative	2 Almost always cooperative	3 Usually cooperative	4 Rarely cooperative	5 Never cooperative	<input type="checkbox"/>	37

WILL APPLICANT REQUIRE ANY OF THE FOLLOWING SKILLED SERVICES NOW OR IN THE FUTURE?

NURSING SERVICES	Yes	No	If yes, specify Frequency & Duration	TECHNICAL SERVICES	1 Yes	2 No	
				If Yes, specify	Frequency & Duration		
Sterile Dressings	1	2	38	Microscopic Urinalysis	49
Indwelling Catheter	1	2	39	Blood counts & smears	
Oxygen	1	2	40	Blood chemistry	
Suction	1	2	41	X-ray	
Tube feedings or Intubation	1	2	42	REHABILITATION SERVICES	1 Yes	2 No	50
Irrigations	1	2	43	If Yes, specify	Frequency & Duration		
I.M.	1	2	44	Physiotherapy	
I.V.	1	2	45	Occupational therapy	
Sub Cutaneous	1	2	46	Speech therapy	
Special Diets	1	2	47	Vocational assessment	
Other, specify	1	2	48	COUNSELLING	Yes	No	
				Psychiatric	1	2	51
				Psychological	1	2	52
				Social Work	1	2	53

Could any of these skilled services (e.g. catheter) be dispensed with to aid in placement?

1 Yes 2 No If Yes, specify 54

PLEASE LIST ALL MEDICATIONS

DOSAGE

FREQUENCY

.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	55	56	57
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	58	59	60
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	61	62	63
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	64	65	66
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	67	68	69

ANY KNOWN ALLERGIES AND/OR REACTIONS: 1 Yes 2 No

If yes, specify 70

PREVIOUS (NOT CURRENT) HOSPITAL ADMISSION DATE:

NAME OF HOSPITAL:

- 1 St. Joseph's Hospital
- 2 Henderson Hospital
- 3 Hamilton General Hospital
- 4 Joseph Brant Hospital
- 5 Chedoke Hospital
- 6 M.U.M.C.
- 7 Hamilton Psychiatric Hospital
- 8 St. Peters
- 9 Other, specify

Day	
71	72

Month	
73	74

Year	
75	76

77

LAST TUBERCULIN SKIN TEST:

Date:
Day Month Year

1 Positive 2 Negative 3 Not done

78

LAST CHEST X-RAY:

1 Yes

Date:
Day Month Year

Where

2 Not done

Results

79

WHICH ONE OF THE FOLLOWING PROGRAMS WOULD YOU SUGGEST AS THE MOST APPROPRIATE FOR THIS APPLICANT:

- | | |
|----------------------|------------------------|
| 1 Day Centre | 6 Nursing Home |
| 2 Support Service(s) | 7 Chronic Hospital |
| 3 Rehabilitation | 8 Other, specify |
| 4 Lodging Home | |
| 5 Home for Aged | |

80

HAS APPLICATION FOR ONTARIO EXTENDED HEALTH CARE BENEFITS BEEN SUBMITTED?

1 No

2 Yes:

Date:
Day Month Year

Application No.

☐ Pending☐ Accepted☐ Rejected

7									
1	2	3	4	5	6	7	8		

DATE APPLICANT LAST SEEN BY ATTENDING PHYSICIAN

9	10
Day	

11	12
Month	

13	14
Year	

PHYSICIAN WHO WILL PROVIDE CONTINUING CARE:

(Print)

15	16	17	18	19

ADDITIONAL COMMENTS:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

PHYSICIAN COMPLETING THIS FORM (Print)

20	21	22	23	24

Address

Telephone

Signature

Date:

Day Month Year

APPENDIX II

Note on statistical information available on Canadian hostels and nursing homes for the elderly:

Being able to find very little information in print, we contacted:

Mr. B. Holden
Liaison Officer
Special Care Facilities Section
Health Division
Statistics Canada
Ottawa

We were informed by members of Health and Welfare Canada that if any statistics did exist, the Special Care Facilities Section would be aware of them.

Mr. Holden informed us that 1975 was the first year of the Section's data collection and that they had encountered "tremendous resistance", and had had, to date, a very poor response to all questionnaires. The difficulty with the limited amount of material that had been collected, Mr. Holden explained further, was that it could not be considered as anything more than an accidental sample. There was also some variance between the definitions for nursing homes and hostels used by his Section and this project, which made use of statistics even more difficult. Where we define "nursing homes" for the use of this project as facilities caring for Levels 1 & 2 of care, the Special Care Facilities Section is concerned with "facilities with 10 or more beds and which give mainly professional nursing care; this would include 'nursing homes and the majority of the larger Homes for the Aged.'" Mr. Holden also explained that the problem of statistical data for hostels was particularly difficult, as it appeared that many of these establishments do not keep records. In short, Mr. Holden felt he could offer little information on hostels (it had been impossible for example to determine even the number of hostels in existence), and it appears that we already are aware of all the existing information on nursing homes.

APPENDIX III

Philadelphia Geriatric Center Physical Classification**PHILADELPHIA GERIATRIC CENTER
PHYSICAL CLASSIFICATION**

- I. a. Capable of unlimited and unsupervised activity.
b. Fully ambulatory, able to go about the city independently in safety.
c. Has no physical condition requiring medical supervision or closeness to emergency medical care.
d. No evidence of heart disease in any form.
e. No evidence of prior cancer except cured skin cancer.
f. No complaints except those which could not be related to any known disease entity.
- II. a. Capable of moderate activity, ambulatory without supervision for activities in his own home or immediate vicinity.
b. Can manage without help or care and otherwise requires minimal supervision.
c. Physical condition may require medical supervision but frequent or special treatment or closeness to medical or nursing care is not required.
d. May have had previous illness which has left no residuals, e.g.; healed myocardial infarction without angina or ECG abnormalities other than healed infarction; CA with no evidence of recurrence, mild diabetes, diet controlled.
- III. a. Limited capabilities.
b. Dependent on others for bedmaking and baths and general supervision of activities.
c. May or may not need a walking aid (cane) but can carry on routine activities without additional personal service.
d. Generally requires escort on the outside.
e. May require regular periodic medical care and availability of emergency medical or nursing care is desirable.
f. These people have moderate incapacities such as angina; arthritis which does not limit them to a wheel-chair, chronic respiratory disease, diabetes requiring medication.
- IV. a. Limited capabilities requiring assistance for personal care and daily living activities.
b. Must be in a protected environment because of need for general nursing supervision.
c. Closeness to emergency medical care desirable.
d. Requires periodic medical care at close intervals.
e. These persons are practically housebound.
f. Angina or intermittent heart disease limits physical capacities; arthritis, preventing ambulation; severe hearing or visual impairment but who still have capacity to be independent for daily living activities after orientation.
- V. a. Chronically ill and confined to the vicinity of their own rooms.
b. Require a great degree of personal service and constant supervision.
c. Should be near their own dining and toilet areas and have a nurse on call at all times.
d. Physical condition requires 24-hour-nursing care or intensive medical treatment.
- VI. a. Persons requiring hospital-type care.
b. Bed patients requiring intensive medical and nursing care.
c. Infectious or contagious disease.

Source: E. M. Brody and Contributors, A Social Work Guide for Long-Term Care Facilities, United States Department of Health Education and Welfare, 1974.

PHILADELPHIA GERIATRIC CENTER**Behavior and Adjustment Classification (includes Mental and Emotional Functioning)**
(Instructions below)**1. Mental Functioning; Planning and Decisionmaking.**

- A. Intact mental functioning; capable of full participation in planning and exercising good judgement in decisionmaking.
- B. Mental functioning substantially intact; capable of participating in planning and decisionmaking with only minor dependence on others.
- C. Occasional memory lapses, but is oriented as to time, person, place; may have always had limited intellectual capacities; capable of participating in planning but may be slow in grasping content or must have some support from others in decisionmaking.
- D. Have memory defects but can function in daily living routines with some personal supervision and help; not disoriented; may have always been somewhat dependent on others due to retardation; capacity for planning and decisionmaking requires considerable help from others.
- E. Memory loss and disorientation sufficiently severe so that round-the-clock nursing care and supervision are required; totally dependent on others for planning and decisionmaking; may always have been severely retarded.
- F. Total disorientation and disorganization requiring mental hospital care.

2. Personal Adjustment—disturbing or disabling subjective symptoms, e.g., anxiety, depression, phobias, paranoid ideas.

- A. Free of above subjective symptoms.
- B. Mild subjective symptoms may be present but do not significantly impair functioning.
- C. May have mildly disturbing or disabling subjective symptoms.
- D. May have moderately disturbing or disabling subjective symptoms.
- E. May have severely disabling or disturbing subjective symptoms but do not endanger self or others.
- F. Mental impairment and/or psychosis which endangers self or others. Requires mental hospital care or treatment.

3. Behavior patterns which relate to capacity for group living, e.g., habits, grooming, disturbing behavior.

- A. Free of disturbing disabling character traits; personal habits; grooming and dress reflect good hygiene and interest in personal appearance.
- B. Mildly disturbing character traits which do not significantly impair capacity for group living; acceptable personal habits and hygiene.
- C. Mildly disturbing character traits which are not too disabling; continues to have interest in appearance and maintains acceptable hygiene with some supervision.
- D. Moderately disturbing character traits, but still within limits of tolerance in group living; need considerable supervision and help for personal grooming and care.
- E. Incapable of conforming to socially acceptable standards of personal hygiene, dress, etc.; character traits create severe problems in management.
- F. Character traits and behavior unmanageable in group living; requires sufficient control and management so that commitment to security institution required.

4. Social Adjustment; existence of satisfactory or inadequate inter-personal relations with family, friends, e.g., excessive withdrawal, hostility, manipulation of others or dependence on others.

- A. Maintains active and satisfying relationships with family and friends, initiating contacts when appropriate.
- B. Adequate social relationships with family and friends but may be less active in sustaining them.
- C. May have had adequate inter-personal relationships in the past, but currently showing some diminution of interest or minor problems in this sphere; may historically have had minor problems.
- D. Needs considerable encouragement and/or stimulation in inter-personal relationships; may have life pattern of moderate disturbance in this sphere; less apt than formerly to be interested or concerned about others.
- E. Unable at present to maintain personal relationships except minimally; may have had life-pattern of severe disturbance.
- F. Pathology sufficiently severe in sphere of inter-personal relationships as to require maximum management and control in mental hospital.

Explanation: This classification system encompasses four different aspects of behavior or functioning which are designated by the Arabic numerals one through four as follows:

- 1. Mental functioning; ability to participate in planning and decision-making
- 2. Personal adjustment; subjective symptoms: e.g., anxiety, depression, phobias, sleeping or eating problems, paranoid ideas.
- 3. Behavior patterns which relate to capacity for group living. e.g., habits, grooming, disturbing behavior.
- 4. Social adjustment; existence of satisfactory or inadequate inter-personal relations with family, friends, e.g., excessive withdrawal, hostility, manipulation of others or dependence on others.

Within each group there are six degrees of the level of functioning in that sphere. These gradations include the dimension of needing help (dependency) or supervision. They are designated by capital letters A through F, which describe the level of functioning in any sphere as follows:

- A. Independent
- B. Can function independently with minor support.
- C. Requires moderate support and/or supervision.
- D. Can function in relation to daily living routines only in protected or supervised setting.
- E. Requires round-the-clock nursing and medical service in a highly supervised setting.
- F. Requires mental hospital or maximum security care.

Instructions: One capital letter (A, B, C, D, E, or F) should be circled in each of the four groups (1, 2, 3, or 4). The overall classification will be a capital letter, and will be determined by the *lowest* letter circled. Thus, in classifying any client, four capital letters will be circled (one in each group). For example, if the circled letters should be 1A, 2C, 3B, 4D, the classification is D.

Circle one statement in each category A-F that applies to subject.

A. Toilet

1. Cares for self at toilet completely, no incontinence.
2. Needs to be reminded or needs help in cleaning self, or has rare (weekly at most) accidents.
3. Soiling or wetting while asleep more than once a week.
4. Soiling or wetting while awake more than once a week.
5. No control of bowels or bladder.

B. Feeding

1. Eats without assistance.
2. Eats with minor assistance at meal times and/or with special preparation of food, or help in cleaning up after meals.
3. Feeds self with moderate assistance and is untidy.
4. Requires extensive assistance for all meals.
5. Does not feed self at all and resists efforts of others to feed him.

C. Dressing

1. Dresses, undresses and selects clothes from own wardrobe.
2. Dresses and undresses self, with minor assistance.
3. Needs moderate assistance in dressing or selection of clothes.
4. Needs major assistance in dressing, but cooperates with efforts of others to help.
5. Completely unable to dress self and resists efforts of others to help.

D. Grooming (neatness, hair, nails, hands, face, clothing).

1. Always neatly dressed, well-groomed, without assistance.
2. Grooms self adequately with occasional minor assistance, e.g., shaving.
3. Needs moderate and regular assistance or supervision in grooming.
4. Needs total grooming care, but can remain well-groomed after help from others.
5. Actively negates all efforts of others to maintain grooming.

E. Physical Ambulation

1. Goes about grounds or city.
2. Ambulates within residence or about one block distant.
3. Ambulates with assistance of (check one) a. another person ____ b. railing ____ c. cane ____ d. walker ____ e. wheelchair ____
 1. ____ gets in and out without help.
 2. ____ needs help in getting in and out.
4. Sits unsupported in chair or wheelchair, but cannot propel self without help.
5. Bedridden more than half the time.

F. Bathing

1. Bathes self (tub, shower, sponge bath) without help.
2. Bathes self with help in getting in and out of tub.
3. Washes face and hands only, but cannot bathe rest of body.
4. Does not wash self but is cooperative with those who bathe him.
5. Does not try to wash self, and resists efforts to keep him clean.

adapted by Brody, Elaine & Lawton, M. Powell from
Langley-Porter Physical Self-Maintenance Scale
Philadelphia Geriatric Center, 5301 Old York Road, Philadelphia, Pa. 19141

Circle one statement in category A–H that applies to subject.

A. Ability to use telephone

1. Operates telephone on own initiative—looks up numbers and dials, etc.
2. Dials a few well-known numbers.
3. Answers telephone but does not dial.
4. Does not use telephone at all.

B. Shopping

1. Takes care of all shopping needs independently.
2. Shops independently for small purchases.
3. Needs to be accompanied on any shopping trip.
4. Completely unable to shop.

C. Food Preparation

1. Plans, prepares and serves adequate meals independently.
2. Prepares adequate meals if supplied with ingredients.
3. Heats and serves prepared meals, or prepares meals but does not maintain adequate diet.
4. Needs to have meals prepared and served.

D. Housekeeping

1. Maintains house alone or with occasional assistance (e.g., "heavy work—domestic help").
2. Performs light daily tasks such as dish-washing, bed-making.
3. Performs light daily tasks but cannot maintain acceptable level of cleanliness.
4. Needs help with all home maintenance tasks.
5. Does not participate in any housekeeping tasks.

E. Laundry

1. Does personal laundry completely.
2. Launders small items—rinses socks, stockings, etc.
3. All laundry must be done by others.

F. Mode of Transportation

1. Travels independently on public transportation or drives own car.
2. Arranges own travel via taxi, but does not otherwise use public transportation.
3. Travels on public transportation when assisted or accompanied by another.
4. Travel limited to taxi or automobile with assistance of another.
5. Does not travel at all.

G. Responsibility for own Medications

1. Is responsible for taking medication in correct dosages at correct time.
2. Takes responsibility if medication is prepared in advance in separate dosages.
3. Is not capable of dispensing own medication.

H. Ability to Handle Finances

1. Manages financial matters independently (budgets, writes checks, pays rent and bills, goes to bank), collects and keeps track of income.
2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.
3. Incapable of handling money.

Elaine M. Brody and M. Powell Lawton—Philadelphia Geriatric Center
5301 Old York Road, Philadelphia, Pa.
19141