

**THE STUDY OF EMERGENCY RESPONSE
SYSTEMS FOR THE ELDERLY
Appendices (Volume 2)**

MacLaren Plansearch

TABLE OF CONTENTS (Volume 2)

- APPENDIX 1: WORKSHOP MATERIALS
- APPENDIX 2: LIST OF EMERGENCY RESPONSE SYSTEMS REVIEWED
- APPENDIX 3: CANADIAN EMERGENCY RESPONSE SYSTEM MONITORING SERVICES (By Service Type) JULY 1986
- APPENDIX 4: SURVEY OF ERS USERS
- APPENDIX 5: KEY INFORMANT INTERVIEWS: PRACTITIONERS AND SUPPORT SERVICES
- APPENDIX 6: REFERENCES: TECHNOLOGICAL INNOVATIONS
- APPENDIX 7: KEY INFORMANT INTERVIEWS: TECHNOLOGICAL INNOVATIONS
- APPENDIX 8: ANNOTATED BIBLIOGRAPHY OF CANADIAN LITERATURE ON CANADIAN SERVICES FOR SENIOR CITIZENS

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 1



The Study of Emergency Response Systems for the Elderly

WORKSHOP PRESENTATION

CMHC National Office, Ottawa

September 8, 1986

MaClaren Plansearch

Lavalin

PRESENTATION GUIDE

TABLE OF CONTENTS

		<u>Page</u>
1.	<u>OBJECTIVES OF THE STUDY</u>	1
2.	<u>OBJECTIVES OF THE WORKSHOP</u>	1
3.	<u>DEFINITION OF EMERGENCY RESPONSE SYSTEMS</u>	2
4.	<u>PRODUCT REVIEW: KEY CHARACTERISTICS</u>	5
5.	<u>EMERGENCY RESPONSE SYSTEM MONITORING SERVICES</u>	9
6.	<u>USER EVALUATION</u>	12
7.	<u>PRACTITIONERS AND SUPPORT PROVIDERS EVALUATION</u>	14
8.	<u>ISSUES RELATED TO COST BENEFIT ANALYSIS</u>	16
9.	<u>DEMAND FOR EMERGENCY RESPONSE SYSTEMS</u>	17

PRESENTATION GUIDE

1. OBJECTIVES OF THE STUDY

The main objectives of the study of emergency response systems for the elderly are:

- o to determine the potential of emergency response systems to help elderly people maintain independent lifestyles in the community, thereby reducing the demand for institutional care;
- o develop system designs and specifications for effective emergency response systems and related support service organizations; and
- o identify opportunities for the development and application of new technology and organizational structures that could improve the cost/benefits of emergency response systems and support services, particularly in comparison to institutional care.

2. OBJECTIVES OF THE WORKSHOP

The main objective of the workshop is to exchange information on emergency response systems. This will be done by presenting information on a topic by topic basis. Each topic will be introduced, the research method described and key findings presented. Key issues are drawn from the study results and these will form the basis for workshop discussion.

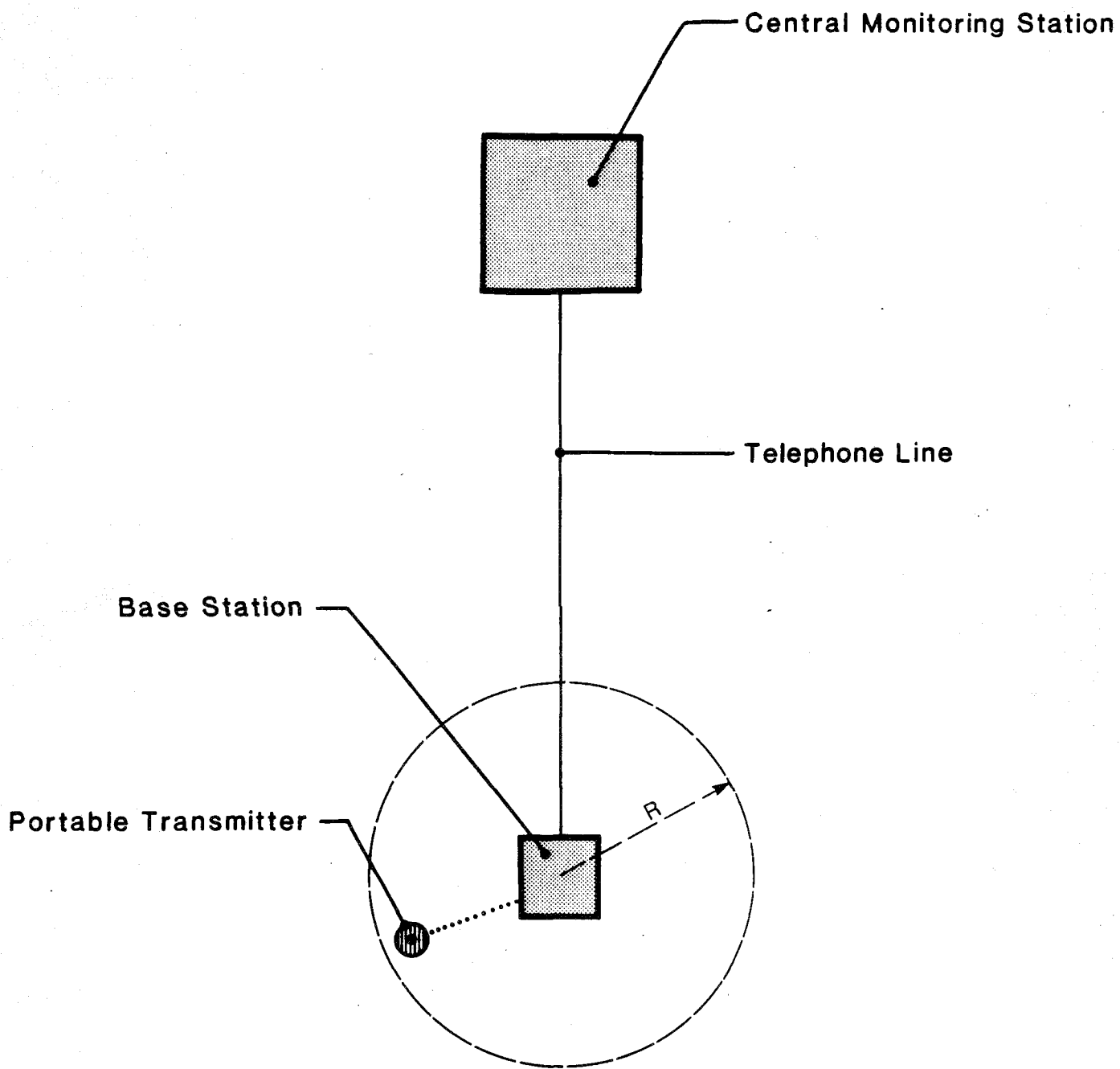


Figure 1.

Wireless Emergency Response System
Typical configuration of monitored system

3. DEFINITION OF EMERGENCY RESPONSE SYSTEMS

Emergency response systems provide the means to summons help when a medical, personal safety, fire or other environmental emergency happens to someone who does not have the individual means to cope.

This workshop provides a preliminary overview of existing emergency response systems available in Canada. There are varying levels of technology employed in different systems currently available to the elderly and it is important to note that this report only considers remote controlled systems that utilize telephone lines to signal an emergency. Remote controlled systems are either monitored through a central monitoring station or they are stand alone systems.

3.1 CENTRALLY MONITORED SYSTEM

The first type of remote system is a centrally monitored system which, when activated, sends an encoded message to a central emergency response centre where it is interpreted by a computer and then acted upon by centre staff (see Figure 1).

In order to activate an emergency call the user either operates a remote dialer device such as a hand held or pendant transmitter or else the system is activated by the failure of the user to regularly use the system as prescribed within a pre-set period of time. Some products have both remote dial and a timer initiated system.

With the monitored system, all emergency calls are received by an emergency response centre. Calls can be monitored either locally or at a regional or national office. ERS such as "Lifeline" are set up so that emergency calls go to a local emergency centre, usually a hospital. The advantages of local monitoring are:

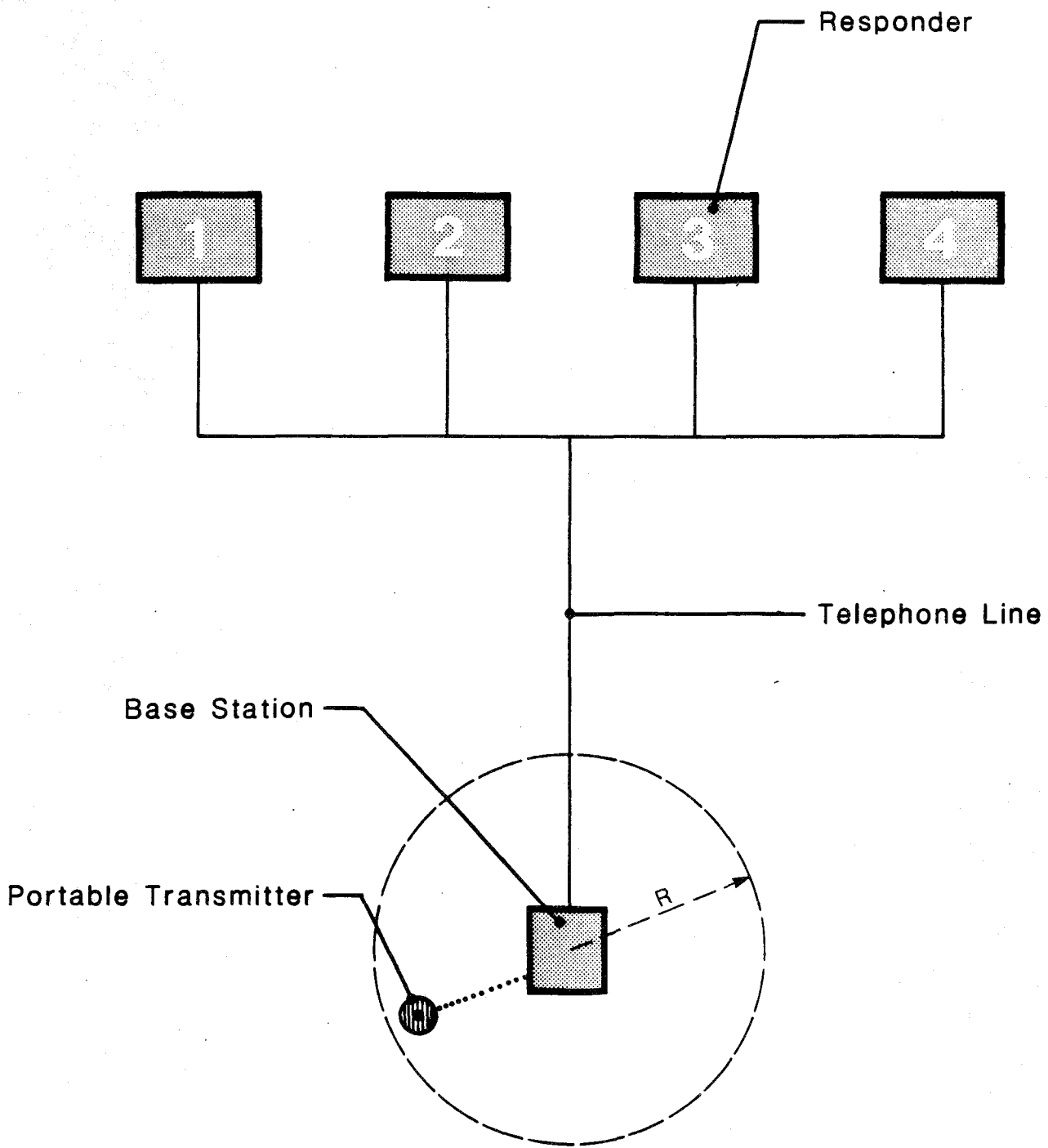


Figure 2.

Wireless Emergency Response System
Typical configuration of stand alone system

1. That users are likely to feel more confidence in a locally based service; and
2. The local emergency handlers are more responsive and able to adapt to local conditions.

Other systems such as the "SG-1" monitor all calls in North America through their Portland, Oregon office. The main advantage of this set-up is reduced costs for monitoring.

An important feature of centrally monitored systems is the nature of the emergency response centre. "Lifeline" for example, sells monitoring equipment to hospitals and community agencies and trains these organizations to monitor calls and administer emergency response programs. Another variation on this theme is the "TAS Pagette" which offers monitoring service for "Medical1" products. In these cases the monitoring or service side of the system is a separate business from the product or technological device side.

On the other hand, companies such as "Protect Alert" offer both the hardware and the monitoring service.

3.2

STAND ALONE SYSTEM

Another major type of remote controlled emergency response system is the stand alone system. The stand alone system is not linked to a designated response centre, rather, the system when activated (either by remote dial or timer-activated as with the centrally monitored system) is programmed to dial telephone numbers that the user chooses (see Figure 2). Activating the emergency system results in a voice or voice simulated message being sent sequentially to the telephone numbers on the program. The major variation in these systems is that the telephone numbers and message are either self-programmable or they are not. "Apello", is an example of the stand alone system that is not programmable by the user - it must be pre-programmed.

3.3

OTHER EMERGENCY RESPONSE SYSTEMS

While this workshop is limited to remote controlled ERS, there are many other systems in use by the elderly to prompt response to an emergency situation. Examples of other categories of emergency response systems possible are:

- o Postal Alert
- o Card System
- o Buddy System
- o Hard-wired Systems
- o Non-Activity Systems

4. PRODUCT REVIEW: KEY CHARACTERISTICS

A national telephone survey provided data for a review of emergency response system products. ERS hardware consists of:

- o portable transmitter;
- o base station;
- o telephone links; and
- o monitoring station.

4.1 PORTABLE TRANSMITTER

The following characteristics were common to all transmitters covered in the ERS survey:

- o portability
- o digitally coded radio signal;
- o D.C. (battery) powered;
- o limited operating range;
- o pressure/force actuated; and
- o 100% solid state components.

A number of the above characteristics vary from one ERS to another. For example, the coding algorithms are different and often selectable. Battery operating life is usually quoted as 6-12 months, but it can be as high as 3 years. Most systems fall within 50-60 metres operating range, but again, there are a few exceptions. Although all transmitters have some sort of a button actuator, some are equipped with a single button, whereas other have two buttons.

From a technical point of view, the components of the transmitters differ in a few non-essential aspects. These include:

- o shape (round, rectangular);
- o size; and
- o how carried (pendant, wrist, pocket).

BASE STATION

Base stations also have a number of common characteristics:

- o contain decoder and dialer;
- o powered through an A.C. adapter;
- o power back-up (rechargeable battery);
- o "TEST" and "RESET" buttons;
- o use of a phone line (dial or touch tone);
- o audible and/or visual transmission indicator; and
- o (EEPROM) memory.

There are small variations between systems within these common characteristics. For example, rechargeable batteries usually provide power back-up for 3-5 hours, but, in some cases this period extends to several days. Successful transmission is usually indicated by a change in tone (buzzer) or by extinguishing a blinking light.

Features available as an option or pre-packaged with some base stations include:

- o additional emergency buttons (police, fire);
- o "HOME/AWAY" switch;
- o inactivity reporting;
- o continuous self-check; and
- o periodic, regular unit check.

For example, additional emergency buttons allow the user to define more precisely the type of emergency, thereby reducing the system's response time and eliminating potential false alarms. However, these buttons must be activated manually.

Some systems, notably "Lifeline" have the "home/away" switch and the "inactivity reporting" built-in as a result of their operating

philosophy. The user is supposed to report to the central station once in 24 hours. If that does not happen, the base station automatically initiates an emergency call at the end of the 24 hour cycle. To avoid false alarms, when the user is away from home, the "home/away" switch is used.

The automatic line "seizure" allows the base station to forward an emergency call even with the telephone receiver off the hook. Voice communication in progress gets interrupted, the line is seized and a message sent to the central station. By acknowledging the call the operator at the central station resets the system.

Continuous base station self check is a built-in feature of the "Apello" system. A continuous diagnostic routine monitors the unit and reports "unit trouble" with an indicating light. In addition, the "Apello" system continuously monitors and reports the status of the telephone line. Most other ERS suppliers offer either a mandatory or an optional periodic system check at regular intervals, which is performed from the central station end.

4.3

CENTRAL MONITORING STATION

In technical terms there are no essential differences between central stations. All are equipped with at least one computer, telephone, tape recorder, video monitor and printer. Additional equipment, back-up phone lines or operators, serve to increase system reliability, but their number does not alter the basic operating principle or the features systems offer to their users.

The computer(s) provide an easy access to the data base which contains essential personal information for every service subscriber, list of institutions and persons to be contacted in case of emergency. The video monitor and printer provide, respectively, the "image" and the hard copy of the data base content.

SYSTEM DEPENDABILITY

The system dependability (a level of confidence) is a function of a number of key components. These include:

- o operational readiness;
- o accuracy and selectivity;
- o degree of redundancy;
- o simplicity of operating procedures; and
- o monitoring on a 24 hour basis.

5. EMERGENCY RESPONSE SYSTEM MONITORING SERVICES

It is important to note that the monitoring service is a critical component of the whole ERS. The nature and quality of monitoring will determine the speed of response to an emergency call and the appropriateness of the response. In addition, the monitoring service may take a large responsibility in ensuring the user understands how to use ERS and in providing guidance to minimize false alarms.

Seventy (70) different monitoring companies or agencies were interviewed to provide information on monitoring services available to ERS users.

5.1 KEY FINDINGS OF SURVEY

- o Approximately 6,000 to 7,000 elderly Canadians use ERS;
- o Five generic monitoring organizations exist:
 - A. Stand Alone: No monitoring. This systems relays programmed messages to selected individual responders.
 - B. Security Companies 1: National monitoring. These private companies generally monitor their own systems (or a provincial telephone company monitors the system) from a central location. Even if distributors are local, the monitoring is still done by a national office using long distance telephone lines and service (e.g. "Protect Alert" serves Eastern Canada through Don Mills).
 - C. Security Companies 2: Local monitoring. Many private security companies distribute their products and arrange monitoring services locally. Often the medical alarm is an added feature to a complete home security system that includes fire and burglar alarms.

D. Lifeline: Monitored by social service agency. "Lifeline" is in a category of its own because of the scope of its operations in Canada. Lifeline offers a complete package to social service agencies/hospitals. The package consists of hardware, materials to market the system, procedures for implementation, and an on-going follow-up of both the system and procedures for monitoring.

E. Other systems monitored by social service agencies: Many companies provide a package comparable to "Lifeline". They offer both home units and monitoring equipment suitable for social service agencies. These systems are often compatible with "Lifeline" products.

- o Monitoring services received between .35 and 1.3 emergency health-related calls per year per user;
- o Few other types of calls (including false alarms) were recorded;
- o Except for the Stand Alone system, all monitoring services offered 24 hour service;
- o Installation fees ranged from \$15 to \$230 (where the medical alarm is part of a complete home security package);
- o Average monthly fees ranged from \$10.00 to \$30.00;
- o Majority of users are over 70 years of age;
- o Female users ranged from 68% to 75% of total users;
- o Between 75% and 93% of users lived alone; and

- o The proportion of users who are functionally impaired ranged from 14% to 47%, socially isolated, 13% to 22%, and medically vulnerable but not socially isolated, 38% to 73%.

6. USER EVALUATION

Companies and organizations that monitor ERS in the Vancouver area were asked to supply the consultant with a list of names of users in order to choose a structured sample.

All ERS identified in the Vancouver area are monitored by private security companies. Security and confidentiality are trademarks of these companies and most refused to disclose the names of their clients. Some companies did agree to contact their clients on our behalf and request permission to release their names. To date, this process has not resulted in any interviews in the Vancouver area.

An opportunity became available to undertake interviews in Southern Ontario. Several "Lifeline" program operators, "Protect Alert", and Bomar Security Company (using "Linear" products) agreed to help arrange interviews. As a result, 16 "Lifeline" users, 5 "Protect Alert" users and 2 "Linear" users were interviewed. The major findings of the survey are:

6.1 PROFILE OF USERS

- o 83% female;
- o 80% aged 75 years and over;
- o 91% live alone;
- o 50% homeowners;
- o 22% severely functionally impaired and socially isolated;
- o 7% medically vulnerable and socially isolated; and
- o 70% medically vulnerable, not socially isolated.

6.2 USER EVALUATION

- o 57% had used their ERS in past year for a total of 20 emergency calls related to health and 8 calls due to error;
- o all users who had used ERS were very pleased with the response; and
- o all return calls had been made in less than two minutes and help arrived in less than ten minutes.

6.3 RESPONSE TO THE ERS TECHNOLOGY

- o all users found their ERS easy to use;
- o maintenance and appearance of all systems was related high;
- o comfort of wearing portable transmitter was rated extremely low; and
- o only 20% of users actually wore the device.

6.4 SECURITY

- o the users were extremely appreciative of any device that helped them remain in their home; and
- o all felt more secure and comforted that help was near.

6.5 ERS AS A MEANS TO MAINTAIN INDEPENDENCE

- o 30% of the respondents felt they would have to move into alternative accommodation if they did not have their ERS;
- o the ERS is only one part of a larger package of services necessary to assist the elderly to remain in their homes; and
- o demand on both informal and formal support networks remained high both prior to and during ERS use.

7. PRACTITIONERS' AND SUPPORT PROVIDERS' EVALUATION

Sixteen (16) key informants were interviewed to discuss their concerns about and interest in emergency response systems. The informants came from a wide variety of backgrounds with expertise and experience working with elderly clients.

Major points raised during the course of the interviews were:

- o ERS for seniors are useful and worthwhile;
- o ERS appear an effective way to reduce hospital stays;
- o while the elderly are fully capable of understanding the technology of ERS, they require a supportive environment to learn how to use ERS and follow-up is essential to ensure that the elderly user is properly trained;
- o there is a lack of coordination in providing shelter and health-care related support in public housing;
- o hard-wired systems have proved ineffective from an operational point of view;
- o twenty-four (24) hour staffing of an emergency response centre is essential;
- o systems that 'seize' the telephone line in such a way as to prevent use of the telephone line to make another call, are problematic;
- o persons who respond to emergency calls must be well trained and able to communicate properly with emergency dispatchers and the person initiating the emergency call;

- o remaining as independent as possible is highly desirable for the elderly and ERS are seen as a means of maintain independence; and
- o ERS should not be considered a substitute for those who need 24 hour care or for those who suffer from loneliness, isolation and anxiety.

Two groups of elderly were seen to be the most appropriate users of the ERS:

- o the medically vulnerable who require ERS on a temporary basis in response to a particular medical crisis, usually following hospitalization; and
- o seniors at risk but who are fully capable and who have regular companionship. In this case use is on a long-term basis.

8. ISSUES RELATED TO COST-BENEFIT ANALYSIS

The following points illustrate some of the problems encountered in undertaking a cost-benefit analysis comparing the use of ERS to institutionalization.

- o cost and benefits accrue to the actual ERS user, the user's family, the long term care system, the home care system, and the hospital system. How can each be considered in a valid way?
- o ERS are used for a variety of purposes, including health and personal safety. What proportion can we "assign" to each?
- o ERS is sometimes used on a short-term basis and sometimes on a permanent basis. How long does the user have to access to the device to have a cost attributed to the service?
- o ERS is not a direct substitute for institutionalization. It is used as part of a package of formal and informal support services.
- o Qualitative issues related to independence and security of the elderly are difficult, if not impossible, to quantify.

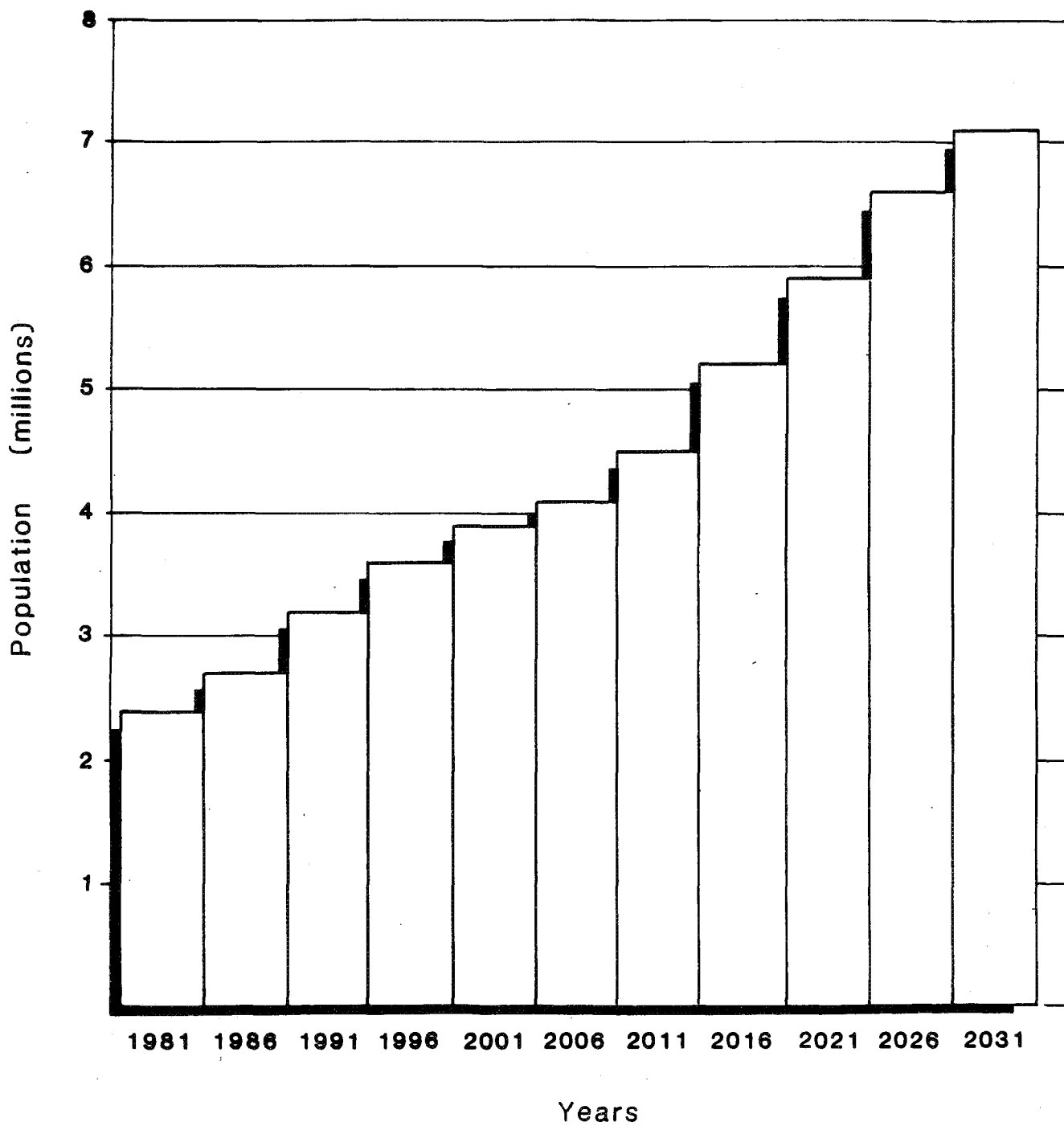
9. DEMAND FOR EMERGENCY RESPONSE SYSTEMS

The growth of the elderly population will affect the demand for ERS. Currently, approximately 6,000 to 7,000 elderly Canadians use emergency response systems. This represents only .2% of the estimated population aged 65 and over in 1986.

The population aged 65 and over is expected to increase to 41% between 1986 and 2006 for a total of 4,100,000 elderly (Statistics Canada). By 2031 this figure could increase to over 7 million. Figure 3 illustrates the growth in the elderly population.

While population increase is a major factor, other factors will affect the demand for ERS:

- o the cost of ERS (capital and operating cost to the user);
- o the provision of other services promoting independent living;
- o a real increasing shortage of institutional care accommodation;
- o marketing strategy used by companies promoting ERS; and
- o criteria used to determine who should use ERS.



SOURCE • Statistics Canada, 1985 (low growth scenario)

Figure 3
Population Projection
Population aged 65+ years
Canada 1981-2031

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 2

APPENDIX 2

LIST OF EMERGENCY RESPONSE SYSTEMS REVIEWED

APPENDIX 2

LIST OF EMERGENCY RESPONSE SYSTEMS REVIEWED

APELLO

Almicro Electronics
Winnipeg, Manitoba
(204) 885-4753

Blue Alert/Tele Alert
Nova Scotia
(902) 875-4707

Constant Companion/Medical Alert
Linear Corporation
Inglewood, California
(619) 438-7000

Distress Alert/Safety Phone
Alliance Security Systems
Cambridge, Ontario (and across the country)
(519) 623-2850

Insta-Call
Ypsilanti, Michigan
(313) 455-8899

Lifeline Systems, Inc.
Watertown, Massachusetts
(617) 923-4141
Toronto: (416) 897-0943
(800) 521-6870
Vancouver: (604) 946-4098

Medic-Alarm
Toronto, Ontario
(416) 922-1060

Medic-Call
Ottawa, Ontario
(613) 563-1935

ProtectAlert
Toronto, Ontario
(416) 928-2666

Rocco
Edmonton, Alberta
403) 453-3777

Security Alert
Orion Electronics Ltd.
Digby County, Nova Scotia
(902) 769-3059

Securus, Sentinel Medi Guard
DTI Security
Burnaby, B.C.
(604) 291-6454

SG-1, Emergi-Call
Miterton Corp.
Unionville, Ontario
(416) 475-2132

Skytech
Le Duc, Alberta
(403) 986-5717

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 3

APPENDIX 3
CANADIAN EMERGENCY RESPONSE
SYSTEM MONITORING SERVICES
(By Service Type)
JULY 1986

APPENDIX 3
CANADIAN EMERGENCY RESPONSE
SYSTEM MONITORING SERVICES
(By Service Type)
July 1986

1. STAND-ALONE

<u>Monitoring Agent</u>	<u>Number of Users</u>
Mr. Gessner Luther Home Winnipeg, Manitoba (204) 338-4641	17
Lila Letkonn Lodge Box 910 Carman, Manitoba ROE OJO (204) 745-6715	5
Barb Nixon Ponoka Family and Community Services Alberta (403) 783-4491	12
Cambridge Health Unit Winnipeg (204) 943-0948	5
Bently Hospital (discharge planning) Bently, Alberta (403) 748-4115	3
Cornation General Hospital Hospital Auxillary Cornation, Alberta (403) 578-3803	7
Wainwright Hospital Wainwright, Alberta (403) 842-3324	6
Saskatchewan Housing Corporation Regina, Saskatchewan (306) 787-4177	18 or 19

2. SECURITY COMPANY - REGIONAL/NATIONAL MONITORING

<u>Monitoring Agent</u>	<u>Number of Users</u>
Lloyd Jenkins Sentinal Medi Guard Systems 124 A 2nd Avenue North Saskatoon, Saskatchewan S7K 2B2 (306) 665-6632	150
Harry Stuart Protelik (F.A.S.T. monitor) Winnipeg (204) 949-1417	30-40
Tony Ashton Miterton Unionville, Ontario (416) 475-2132	ready to go on stream, no elderly users yet
Ted Chambers Manitoba Telephone Systems (204) 941-6449	F.A.S.T. fast telephone line, service over dialer, E.R.S. can have access to service for minimal charge. About 9 companies in Winnipeg area use F.A.S.T.
Brent Woodford Protect Alert Suite 400 - 2200 Yonge Street Toronto, Ontario M4S 3B9	1900
Dianne Smith Bomar Security and Investigations 222 Kings Street St. Catherines Ontario (416) 684-8371	50
Ronald Bidoka Global Alert Security System #113 - 8400 Main Street Vancouver, B.C. V5X 3L8	100
Ken Wells Medic-Alarm Metraphone Services 719 Yonge Street M2Y 1B2 (416) 922-1060	1250 - 1550
Compu-Scan Protection Ltd. 503 - 433 Main Street United Grain Growers Build. Winnipeg, Manitoba R3B 1B3 (204) 956-1520	17

3. SECURITY COMPANY - LOCAL MONITORING

Monitoring Agent

Number of Users

Phil Rogers
Tri West Communications
Winnipeg
(204) 783-2112 ext. 361

"Very few"

Frank Stranchan
TAS Communications Suite 200
275 Slater Street
Ottawa
K1P 5H9
9613) 237-6262

100 at monitoring station
50-100 at police station

Tom Ryan
T.A.S.
98 Bonaventure
St. Johns, Newfoundland
(709) 722-3742

no medical alert yet,
offers speed line service

Al England
Protect-a-life
7490 Royal Avenue
P.O. Box 80266
Burnaby, B.C.
V5H 3X5
(604) 435-4451

(no information)

Norman Prymack
Quality Security Systems
2876 Norland Avenue
Burnaby, B.C.
V5B 3A6
(604) 291-6465

10

Collin Hawker
Sigalert
885 West 3rd Avenue
North Vancouver, B.C.

50

Distress Alert
Bondray Protection Ltd.
Alliance Security
Sheldon Avenue
Cambridge, Ontario
N1R 6T6

500

Ann Durante
Astro Guard (Astro Alert)
103 - 5512 E. Hastings Street
Burnaby, B.C.

(no information)

Monitoring Agent

Number of Users

A.A.A. Alarm Systems
Room 300 - 138 Portave Avenue, E.
Winnipeg
R3G 0A1
(204) 949-0078

15

Fred Hill
Thunderbird Security Systems
3433 Kingsway
Vancouver, B.C.

(no information)

Dean Foster
Knills Alarms Systems
1602 Pemberton Avenue
North Vancouver, B.C.
V7P 2S6

150

Jane Harm
Chubb
1067 Richards
Vancouver, B.C.
(604) 681-7364

100

Al Cooper
Aztek Alarms
Medical Alert
3326 Henry Street
Port Moody, B.C.

(no information)

4. MONITORED BY SOCIAL SERVICE AGENCY

<u>Monitoring Agent</u>	<u>Number of Users</u>
Grace Runn Steveston Memorial Hospital Alliston, Ontario (705) 435-6281	4
Dorin Milner Dauphine and District Community Resource Board Manitoba (204) 638-9733	6
M. McAully Director of Social Work Cornwall, Ontario Hotel Dieu Hospital (613) 938-4240	4
Mr. James Boyle General Hospital Alberta (403) 689-3731	8
Linda Holdner St. Josephs General Hospital Vegreville, Alberta (403) 632-2811	8
Mrs. Bulther Border County General Hospital Milk River Alberta (403) 647-3500	30
Mrs. Jones St. Johns Hospital/Nursing Home St. Johns, Alberta (403) 723-3331	8
Joan Tari Guelph General Hospital Guelph, Ontario 115 Delhi Street N1E 4J4 (519) 822-5350	49

<u>Monitoring Agent</u>	<u>Number of Users</u>
Sherry Luft Drayton Valley and District Health Care Complex Alberta (403) 542-5321	21
Robert Hall Carston Hospital Carston, Alberta (403) 653-4411	15
Mr. Kuch (Director of Social Services) Royal Alexander Hospital 10240 Kingsway Edmonton, Alberta (403) 477-4410	70
Grant Hawker Regional Hospital 1802 - 9th Avenue, S. Lethbridge, Alberta (403) 327-4531	32
Dorreen Preece Red Deer Regional Hospital Red Deer, Alberta (403) 343-4422	90
Kari Parson Bethany Care Centre 916 18A St. N.W. Calgary, Alberta (403) 289-3701	270
Phylis Gates Douglas Memorial Hospital 3320 Bertie Street Fort Erie, Ontario L2A 1Z2 (416) 871-6600	15
Connie Tank West Lincoln Memorial Hospital 169 Main Street East Grimsby, Ontario L3M 1P3 (416) 945-2253	33

<u>Monitoring Agent</u>	<u>Number of Users</u>
Ruth Sabel Coordinator Lifeline System Port Colborne General Hospital Ontario, B.C. (416) 834-4501	19
Shirley Mann High River, Alberta (403) 652-2321	18
Lucille Barratte Royal Victoria Hospital 687 Pine Avenue West Montreal, Quebec H3A 1A1 (514) 842-1231	75
Anne Sparks Valley Vista Senior Citizens Complex P.O. Box 130, Main Street Springdale, Newfoundland (709) 673-3936	8
Head Nurse Sydney City Hospital Nova Scotia (902) 539-6400	2
Ray Reid Leduc, Alberta (403) 986-2261	10
Jack Ensign 5505 - 50th Avenue Witaskiwin, Alberta (403) 352-3371	16
Sue Ramsey Ganges, Salt Spring Island 537-4254 537-2440 has on order 20 units for seniors - September 1986	
Doris Rutlidge Medic Alert Pincher Crescent Health Unit (403) 627-3266	19

<u>Monitoring Agent</u>	<u>Number of Users</u>
Glorin Ellis Family and Community Services Statler, Alberta (403) 742-5591	30
Kriston Azelson Kenora Outreach c/o Pinecrest Home for the Aged 1220 Valley Drive Kenora P9N 2W7	5
Catherine Shaw Rainy Crescent E.A.R.S. Home for Aged Ft. Frances, Ontario (807) 274-9858	34
Sheila Thorsen Box 1165 Innisvail, Alberta TON 1A0 (403) 227-3532	50
Alf Moorish Rocky Mountain House Alberta (403) 845-3056	19
Art Nelson Clarsholm Hospital System Stavely Alberta (403) 549-2360	(no information)

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 4

APPENDIX 4
SURVEY OF ERS USERS

SURVEY OF E.R.S. USERS

INTERVIEWER: _____

DATE: _____

ADDRESS OF INTERVIEW: _____

NAME OF EMERGENCY RESPONSE SYSTEM: _____

(CODE # _____)

INTERVIEWER, PLEASE SAY THE FOLLOWING TO THE RESPONDENT:
(POINT TO THE DEVICE AND NOTE WHETHER THEY ARE WEARING THE PENDANT AND WHERE
THE RECEIVER IS LOCATED.)

THE PURPOSE OF THIS QUESTIONNAIRE IS TO HAVE YOU DESCRIBE THE EMERGENCY
RESPONSE SYSTEM THAT YOU HAVE IN YOUR HOME. IN PARTICULAR WE ARE
INTERESTED IN KNOWING WHETHER YOUR EMERGENCY RESPONSE SYSTEM ADEQUATELY
MEETS YOUR NEEDS AND WHAT ARE YOUR PREFERENCES AND ATTITUDES REGARDING
THIS SYSTEM.

I HISTORY OF E.R.S. USE

1. WHY DID YOU FIRST GET THE E.R.S.? (MORE THAN ONE ANSWER MAY APPLY)

- _____ My friends, family or relatives thought that I should have it
- _____ I wanted to come home from the hospital or nursing home
- _____ My doctor recommended it (or another professional, i.e.,
homemaker, please specify) _____
- _____ I now live alone (specify) _____
- _____ I want to remain living on my own
- _____ Other (specify) _____

2. NOW THAT YOU HAVE THE E.R.S., DO YOU:

- | YES | NO | |
|-------|-------|---|
| _____ | _____ | Feel more secure |
| _____ | _____ | Continue to go out |
| _____ | _____ | Feel confident that if you are in trouble, help is near
at hand |
| _____ | _____ | Think your friends and relatives feel more confident
about your living situation |
| _____ | _____ | Think you would be more secure and content in senior
citizens housing or in a nursing home |
| _____ | _____ | Feel confined to areas where the emergency signal will
work |

COMMENTS: _____

3. WHEN DID YOU HAVE YOUR E.R.S. INSTALLED?

- 0 - 3 months ago
- 4 - 6 months ago
- 7 - 12 months ago
- 1 - 2 years ago
- 2 - 3 years ago
- 3 years or more ago

4a. DO YOU HAVE ASSISTANCE PAYING FOR YOUR E.R.S.? YES NO

4b. IF YES, WHO HELPS YOU:

- Family or friends
- Non-profit organization (specify) _____
- Other (specify) _____

5. HOW MUCH LONGER WILL YOU CONTINUE TO HAVE THE E.R.S.?

- Until I recover from my present illness
- Until the end of the month
- Until the person I live with returns
- Always
- Until doctor (or another professional) says I no longer need it
- Other (specify) _____

6. IF YOU PLAN TO DISCONTINUE THE E.R.S. SERVICE, WHAT ARE YOUR REASONS?

- It is too expensive
- I do not need it any longer
- I am moving into another living situation (specify) _____
- I am changing systems (specify) _____
- It does not work very well for me (specify) _____
- _____
- _____

II USE OF THE E.R.S. FOR "EMERGENCY" PURPOSES

7. HAVE YOU EVER USED THE SYSTEM FOR AN EMERGENCY?

YES NO

IF YES, HOW OFTEN? _____

8. FOR WHAT PURPOSE AND HOW OFTEN DID YOU USE YOUR E.R.S. LAST MONTH?

Number of Times					
1	2	3	4	5	
___	___	___	___	___	Health (specify) _____
___	___	___	___	___	Environment (i.e. fire, specify) _____
___	___	___	___	___	Loneliness _____
___	___	___	___	___	Testing _____
___	___	___	___	___	Error _____
___	___	___	___	___	Forgot to reset the system (inactive alarm) _____
___	___	___	___	___	crime _____
___	___	___	___	___	Other (specify) _____

INTERVIEWER, PLEASE ASK RESPONDENT TO NOW THINK ABOUT WHAT HAPPENED THE LAST TIME THEY USED THE E.R.S.

9. AS YOU MAY HAVE USED YOUR E.R.S. MORE THAN ONCE LAST MONTH OR NOT AT ALL LAST MONTH, FOR WHAT REASONS DID YOU LAST USE YOUR E.R.S?

___ Health (specify) _____
___ Environment (i.e. fire, specify) _____
___ Loneliness _____
___ Testing _____
___ Error _____
___ Forgot to reset the system (inactive alarm) _____
___ crime _____
___ Other (specify) _____

10. DID YOU HAVE ANY DIFFICULTY GETTING THE ALARM TO WORK AT THE TIME OF THE LAST EMERGENCY?

___ YES ___ NO

11. IF YES, WAS IT BECAUSE:

___ You were not wearing your alarm (if yes, ask why) _____
___ You could not remember exactly what to do (if yes, ask why) _____
___ It was physically impossible (if yes, ask why) _____
___ Other (specify) _____

12. AFTER YOU PUSHED THE BUTTON, HOW DID YOU KNOW HELP WAS ON THE WAY?

___ Heard the telephone ring
___ Answered the telephone
___ Heard the monitoring device beeping or saw a light flashing
___ I did not know (Comment) _____
___ Other (specify) _____

18. DID YOU FEEL THE E.R.S. RESPONSE WAS:

<u>Yourself</u>	<u>Family</u>	
_____	_____	Efficient/good Comments: _____
_____	_____	Not the best Comments: _____
_____	_____	Poor Comments: _____

19. NOW I WOULD LIKE YOU TO RATE THE E.R.S. YOU HAVE UNDER THE FOLLOWING HEADINGS:

	<u>Excellent</u>	<u>Good</u>	<u>Neutral</u>	<u>Poor</u>	<u>Terrible</u>
Ease of use	_____	_____	_____	_____	_____
Comfort in wearing/carrying	_____	_____	_____	_____	_____
Maintenance	_____	_____	_____	_____	_____
Appearance	_____	_____	_____	_____	_____
Cost	_____	_____	_____	_____	_____
Weight	_____	_____	_____	_____	_____
Size	_____	_____	_____	_____	_____

20. ARE THERE ANY OTHER FEATURES OF THIS SYSTEM YOU WOULD LIKE TO COMMENT ON OR FEATURES YOU WOULD LIKE IMPROVED?

III SOCIAL CONTACTS AND GENERAL HEALTH

21. DO YOU HAVE A FAMILY MEMBER, RELATIVE OR CLOSE FRIEND THAT:
(Check as many as apply)

After you had E.R.S.	Before you had E.R.S.	
_____	_____	Phones you every day
_____	_____	That you can call at any time
_____	_____	That you could count on in a time of emergency
_____	_____	Visits you every day
_____	_____	Lives close by
		_____ one block away
		_____ 1-3 blocks away
		_____ 4-5 blocks away
		_____ 6+ blocks away
_____	_____	You provide a resource for if they have an emergency

22. SINCE YOU STARTED USING THE E.R.S. HAVE THERE BEEN ANY CHANGES IN YOUR HEALTH?

- No changes
- Less healthy
- More healthy

23. IF YOU DID NOT HAVE THE E.R.S., WOULD YOU:

- Move to seniors housing
- Move into a nursing home
- Move in with family or friends
- Have someone move in with you
- Remain living as you are
- Other (specify) _____

24. PLEASE DESCRIBE THE HOME SUPPORT SERVICES YOU USE NOW AND THE SERVICES YOU USED BEFORE YOU HAD THE E.R.S.
(Check as many as apply)

	Now	Before the E.R.S
Day Care (hours/week) (organization)		
Social/Recreation (hours/week) (organization)		
Homemakers (hours/week) (organization)		
Home Nursing (hours/week) (organization)		
Transport Assistance (hours/week) (organization)		
Meals on Wheels (hours/week) (organization)		
Handyman Services (hours/week) (organization)		
Other (Specify) (hours/week) (organization)		

25. IN THE LAST 12 MONTHS, HAVE YOU BEEN TO THE DOCTOR:

- More than once a week
- Once a week
- 2-3 times a month
- Monthly
- Every 2 months
- 3-4 times a year
- 1-2 times a year
- Not at all

26. HAVE YOU BEEN IN THE HOSPITAL IN THE PAST 12 MONTHS? IF YES, LENGTH OF TIME, EACH TIME.

- | | | | |
|----|-------|----|-------|
| 1. | _____ | 4. | _____ |
| 2. | _____ | 5. | _____ |
| 3. | _____ | | |

27. WERE YOU RELEASED EARLY BECAUSE YOU HAD THE E.R.S?

YES NO

How early? _____

28. IN THE LAST 12 MONTHS WERE YOU:

- In a long term care facility
- In respite care
- In convalescent care
- In seniors housing
- Other (specify) _____

29. WOULD YOU DESCRIBE YOUR PHYSICAL STRENGTH AND ABILITY TO GET AROUND AS:

- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Poor |
| <input type="checkbox"/> Good | <input type="checkbox"/> No answer |
| <input type="checkbox"/> Fair | |

30. WOULD YOU DESCRIBE YOUR OVERALL HEALTH AS:

- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> Excellent | <input type="checkbox"/> Poor |
| <input type="checkbox"/> Good | <input type="checkbox"/> No answer |
| <input type="checkbox"/> Fair | |

31. DESCRIBE THE EASE WITH WHICH YOU ARE ABLE TO HANDLE TASKS THAT ARE COMMON TO DAY-TO-DAY LIVING.

YOU CAN:	<u>EASILY</u>	<u>WITH SOME DIFFICULTY</u>	<u>WITH A LOT OF DIFFICULTY</u>
Prepare meals	_____	_____	_____
Do laundry, iron or sew	_____	_____	_____
keep care of yourself during minor illness	_____	_____	_____
Manage your finances (such as budget, taxes, paying bills)	_____	_____	_____
Dress yourself, personal appearance	_____	_____	_____
Take a bath without assistance	_____	_____	_____
Use public transportation	_____	_____	_____
Drive a car	_____	_____	_____
Feed yourself	_____	_____	_____
Go to the bathroom	_____	_____	_____
Go shopping by yourself	_____	_____	_____

IV DEMOGRAPHICS

32. AGE

- _____ Less than 55
- _____ 55-59
- _____ 60-64
- _____ 65-70
- _____ 71-74
- _____ 75-79
- _____ 80-84
- _____ 85-89
- _____ 90-95
- _____ 95+

GENDER _____ MALE _____ FEMALE

33. HOUSEHOLD SIZE: DO YOU LIVE:

- _____ Alone
- _____ With spouse
- _____ With children or relative
- _____ With friend
- _____ Other (Please explain) _____

34. HOUSEHOLD INCOME: THE TOTAL YEARLY INCOME OF EVERYONE WHO LIVES IN THIS HOUSEHOLD IS:

_____ \$ 0 - 4,999
_____ 5 - 9,999
_____ 10 - 14,999
_____ 15 - 19,999
_____ 20 - 24,999
_____ 25 - 29,999
_____ 30 - 34,999
_____ 35 - 39,999
_____ 40,000+

35. HOW LONG HAVE YOU LIVED IN THIS HOME?

_____ up to one year
_____ 1 year
_____ More than 1, less than 2
_____ More than 2, less than 3
_____ More than 3, less than 5
_____ More than 5, less than 10
_____ More than 10, less than 15
_____ More than 15, less than 20
_____ 20+

36. HOUSE TYPE (INTERVIEWER - DON'T ASK, JUST RECORD YOUR OBSERVATION)

_____ Single family home
_____ Duplex
_____ Row house/townhouse
_____ Apt. 5 stories
_____ Apt. 5 stories+
_____ Apt. with common dining room
_____ Self contained apt.
_____ Bedroom only
_____ Senior citizens' housing

37. SIZE
Apt. Studio

_____ 1 bedroom
_____ 2 bedroom
_____ 3+

House

_____ 1 bedroom
_____ 2 bedroom
_____ 3+

38. TENURE

Own
 Rent

39. IF YOUR RENT DO YOU?

Receive S.A.F.E.R.
 Live in a Co-Op
 Live in housing owned by province or government organization
 Receive a subsidy for rent
 Live in housing owned by a non-profit society

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 5

APPENDIX 5

KEY INFORMANT INTERVIEWS: PRACTITIONERS AND SUPPORT SERVICES

APPENDIX 5

KEY INFORMANT INTERVIEWS: PRACTITIONERS AND SUPPORT PROVIDERS

Loretta Abernathy
Homecare Services
Yellowknife, N.W.T.

Anne Amadson
Volunteer coordinator
Rainycrest Home for the Aged
Fort Frances, Ontario

Jim Crisp
Rent Supplement Program
B.C.H.M.C.
Burnaby, B.C.

Isabelle Didrikesn
Home Care
Wetoka Health Unit
Alberta

Ruth Edwards
Home Care Services
Paramed
Kitchener, Ontario

Mrs. G. Gates
Head Nurse
St. Elizabeth Villa
39 Rymal Road West
Hamilton, Ontario

Agnes Gelb
Administrator
Home Care Services
Guelph, Ontario

Elsie German
Researcher
Hamilton-Wentworth
District Health Council
Hamilton, Ontario

Carol Griffen
Senior's Programs Coordinator
City of Vancouver Health Department

Gloria Gutman
Gerontology Research Centre
Simon Fraser University
Burnaby, B.C.

Murray Halkett
Director of Hospital Planning
Capital Regional District
Victoria, B.C.

Ester Hobmaier
West Country Family Services
Alberta

Constable Kean
City of Vancouver Police Department
Vancouver, B.C.

Karl Kinanen
Associate Professor
Gerontological Studies
McMaster University
Hamilton, Ontario

Pat Lewis
Nursing Supervisor
V.O.N.
Guelph, Ontario

Mrs. Mallory
Home Care
Fort Frances, Ontario

Joan Millard
Home Care Services
Paramed
Sarnia, Ontario

D.E. Paradon
Support Services
Vancouver Police Department

David Preston
Department of Health
Halifax, Nova Scotia

Shirley Richardson
Home Care Services
Calgary, Alberta

Ruth Sable
Director of Nursing
Port Colborne, Ontario

Susan Smith
Burlington Homemakers
Burlington, Ontario

Kay Stovold
President, West End Seniors Network
Convenor, City Council
Sub-committee on Senior's Health
Vancouver, B.C.

Dr. H. Wiebe
Family Doctor
Edmonton, Alberta

Brian Wingrove
Social Service Department
St. Paul's Hospital
Vancouver, B.C.

Terry Wood
RCMP
Yellowknife, N.W.T.

Bonnie Wright
Executive Director
Patient Services
Victoria General Hospital
Winnipeg, Manitoba

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 6

APPENDIX 6

REFERENCES: TECHNOLOGICAL INNOVATIONS

APPENDIX 6

REFERENCES: TECHNOLOGICAL INNOVATIONS

Anderson, P. (February 1985) "Alarmphone", Electronic and Wireless World.
p.41.

Beard, J. (May 1986) "Computers Respond to Doctors' Orders", New Scientist.
p.33.

Bell, T. (May 1985) "Robots in the Home: Promises, Promises", IEE Spectrum. p.51.

Bernard, J. (June 1986) "Looking at Lasers", Lasers. p.12.

Biancomano, Vincent (July 10, 1986) "Fibre Optics", Electronic Design.
p.75.

Birren, J., Livingston, J., and Robinson, P. (1983) Aging and Technological Advances. New York: Plenum Press.

Brody, H. (May 1986) "The Smartest House on the Block" High Technology.
p.61.

Business Week. (July 29, 1985) "A Radio Transmitter That Helps Mind the Children".

Canadian Medical Association (1984) Health: A Need for Redirection.
Ottawa: Print Action Ltd.

Cross, Thomas (March/April 1985) "Intelligent Buildings: The Business Case", Journal of Property Management.

Electronics. (April 28, 1986) "Low-Cost Picture Phone May Spark Business Use". p. 57.

Electronics. (April 28, 1986) "Micro-machining Etches a Microphone on a Chip" p. 24.

Engstrom, T. (February 1986) "Fibre Optics: Not Just for the Long Haul", High Technology. p.30.

Faris, J. (1983) "Technology Promises Increased Convenience and Challenges to the Nation's Elderly", Aging. p.12.

Fischetti, M., Horgan, J. and Wallich, p. (May 1985) "The Superstructure: Designing for High-Tech", IEE Spectrum. p.43.

Friedman, J. and Goodrich, J. (August 1, 1983) "Home Care and Telephone" Telephone.

Globe and Mail. (March 12, 1986) "Home Shopping Gets R & D Effort", p. B21.

Grayhurst, D. (March 16, 1985) "US Research Project Can Bring House Wiring Into Computer Age", Toronto Star p. 11.

Grossblatt, R. and Iannini, R. (June 1986) "Helium - Neon Laser" Lasers. p. 43.

Howlett, Karn (April 10, 1986) "Hightech Firms Finding Near Niches, Far Markets", Globe & Mail, p. B.13.

Jurgen, R. and Perry, T. (May 1985) "The High-Tech Home", IEEE Spectrum. p. 35.

Killmore, P. (July 1986) "Speech - Recognition Advancement Bring Cybernetics to the Board Room", Computer Design p. 114.

Kobb, B. (September 1986) "The New World of Communications", Communications p. 49.

- Mackinnon, Fred, Dr. (Fall 1986) "Community Support for the Elderly - An Advocate Responds", Senior World Quarterly Vol. 6, No. 3, p. 6.
- McLeister, Dan (April 1985) "First Smart House Results Predicted by July", Professional Builder.
- Moller, Keld (Winter 1985) "Denmark Explores Technology's Care Potential for Home", Aging International p. 8-9.
- Moss, Linda (October 28, 1985) "American Medical Alert Seeks New Market For Voice System", Crains New York Business p. 34.
- Orkan, M. (Winter 1985) "Use of Security Phones in Sweden", Aging International p. 9-10.
- Pyykkonen, M. (February 1986) "Networking With Lights", High Technology p. 60.
- Rose, G. (October 16, 1986) "It's Take Off Time for Speech Recognition", Electronics p. 87.
- Rosenburg, R. (October 16, 1986) "Telecommunications", Electronics p. 85.
- Rubin, P. and Scheweig, M. (September 1985) "The Long and Short of Video-Conferencing", Record p. 24.
- Sealfon, P. (June 1985) "Dialing by Sound", Science Digest p. 12.
- Sugawa, T. and Taylor, I. (May 1985) "Fibre Optic Technology in Japan", IEEE Electronics and Power p. 367.
- Under, Harlow (June 1985) "International Village Promotes Energy Saving", Canadian Building p. 35.

Vachon, B. (1986) Information On: Emergency Response Systems, Ontario:
Ministry of Community and Social Services.

Toronto Star. (March 16, 1985) "Hydro Develops Smart Circuit Panel".

The Vancouver Courier. (October 1, 1986) "Telephone of Future on Laser",
p. 36.

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 7

APPENDIX 7

KEY INFORMANT INTERVIEWS: TECHNOLOGICAL INNOVATIONS

APPENDIX 7

KEY INFORMANT INTERVIEWS: TECHNOLOGICAL INNOVATIONS

- o Marcia Decker/Dr. Reswick
Research, Rehabilitation, Development Service
Veterans Administration
Washington, D.C. 20420

(1 - 202 - 922 - 2367)
(1 - 301 - 962 - 2333)
- o G. Lesnoff
Centre on Aging
University of Massachusetts
Worcester, Massachusetts 01605

(1 - 617 - 856 - 0011)
- o K.G. Engelhardt
The Robotics Institute
Carnegie - Mellon University
Pittsburg, Pennsylvania 15213

(1 - 412 - 268 - 7691)
- o Kathleen McCormick
Behaviour Sciences Laboratory
Gerontology Research
Baltimore City Hospital
Baltimore, Maryland

(1 - 301 - 955 - 1291)
- o William Tenhoor
Administration of Aging
Washington, D.C.

(1 - 202 - 245 - 1269)
- o Dennis Labuda
American Association of Retired Persons
Washington, D.C.
20049

(1 - 202 - 662 - 4895)
- o Stanley Reizer
Institute of Technical Development
Oxford, Mississippi 38655

(1 - 601 - 234 - 0158)

- o Shirley P. Bagley
National Institute on Aging
Bethesda, Maryland 20892

(1 - 301 - 496 - 4000)
- o Emily Gomar
National Institute of Handicapped Research
Washington, D.C.

(1 - 202 - 732 - 1134)
- o Raymond Whitten
N.A.S.A
Washington, D.C.

(1 - 202 - 453 - 1913)
- o Geoffrey Thorne
Autumn Inc. Ltd.
Wooster, Ohio

(1 - 216 - 321 - 9007)
- o Brian Shorter
Engineering Department
Victoria General Hospital
Halifax, Nova Scotia

(1 - 902 - 428 - 2293)
- o Mark Kershey
Linear Technology Inc.
Burlington, Ontario

(1 - 416 - 632 - 2996)

THE STUDY OF
EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Appendix 8

APPENDIX 8

ANNOTATED BIBLIOGRAPHY OF CANADIAN LITERATURE ON
CANADIAN SERVICES FOR SENIOR CITIZENS

- A. Emergency Response Systems for the Elderly
- B. Canadian Home Support Services: A General Review
- C. Economics of Elderly Home Care
- D. Health Care for the Independent Elderly
- E. Home Care as an Alternative to Early Institutionalization
- F. Home Care Needs of the Canadian Elderly
- G. Informal Support and Elderly Home Care

A. EMERGENCY RESPONSE SYSTEMS FOR THE ELDERLY

Birren, J., Livingston, J. and Robinson, P. Editors (1983) "Evaluation of a Personal Emergency Response System" Aging and Technological Advances. New York: Plenum Press.

This paper documents the evaluation of the Emergency Alert Response System (EARS). EARS uses equipment from the Lifeline system, a system for connecting a telephone to a central emergency operator at a hospital. This study examines the effect of this technology on elderly subscribers, on their informal support system and on their relationship with their family. The results of the study show that the effects of the system were greater for the family than for the subscribers.

Dibner, A. (1985) Effects of Personal Emergency Response Service on Hospital Use. Watertown, MA: Lifeline Systems.

This paper reports on a recent research study that indicated that the Lifeline E.R.S. reduces acute care utilization. The research involved a study of hospital records of 70 subscribers of four Boston area lifeline programs. For E.R.S. subscribers, admissions decreased 26.4%, length of stay decreased 23.2% and emergency visits decreased 6.5% during the first year of Lifeline use compared to the preceding three years. These results are shown to be similar to a smaller study done in Edmonton, Alberta, Canada.

Faris, J. (1983) "Technology Promises Increased Convenience and Challenges to the Nation's Elderly" Aging. May-June: P. 12.

This article reviews new technological products for improved elderly communication, personal and household security, health care, finance management and food availability. The article concludes with recommendations for ways in which the elderly can ensure technology choices and related policies enhance their well-being.

Fernie, G., and Holliday, P., Metcalf, D., and Vachon, B., (1985) Technology as a Means of Enabling the Elderly to Remain in Their Homes. Toronto: Ontario Ministry of Community and Social Services.

Given the choices, older people seem to prefer staying in their homes. The objectives of this paper is to identify opportunities for technology to reduce the risk of institutionalization. The potential impact of the technology is also discussed. Home support needs are identified in this paper as a result of a survey of Weston District seniors in York, Ontario.

Gillies, M. (1981) "Alarm Systems Reassure Elderly". The Citizen.
January 6, Ottawa.

Presently, two electronic alarm systems, a 150 volunteer telephone assurance program and a postal alert system are giving Ottawa's frail elderly a positive sense of security and independence.

Hamilton, J., and Hizen, D., (1983) "Emergency Response Systems: An Overview". Journal of Applied Gerontology. December. Volume 2:
P. 70.

E.R.S.'s are useful aids for maintaining independence for the elderly. This article presents information on the development, background and use of E.R.S.'s.

Harper, I. (September, 1985) "Emergency Communication" in a Report to the Capital Regional Hospital District Hospital and Health Planning Commission on Housing Options for the Elderly in the Capital Region: Sheltered Housing and Other Alternatives. Victoria, British Columbia.

This chapter reviews emergency communications systems, presents requirements of systems and considers the necessary research questions to be asked when considering implementing an E.R.S. Generally, the E.R.S. increases the subscribers feelings of independence and security and postpones the need for institutionalization.

Koch, W.J. (1983-84) Royal Alexandra Hospital's Lifeline Program: Interim Report. Edmonton: Royal Alexandra Hospital, Social Services Dept.

This report provides an extensive outline of the Lifeline program development and implementation. Total operating costs, staffing, revenue etc. are all discussed. Further, the utilization of the system and public relations related to the system are also presented.

Koch, W.J. (1984) "Emergency Response System Assists in Discharge Planning" Dimensions in Health Service. Canadian Hospital Association. P. 30.

This article documents the role of E.R.S. in early patient discharge and prolonged senior independence. The research was conducted in Edmonton, where the oldest Canadian E.R.S exists.

Koch, W.J. (1984-85, 1985-86) Royal Alexandra Hospital's Lifeline Program: Annual Report. Edmonton: Royal Alexandra Hospital, Social Services Dept.

Both Annual Reports offer a detailed account of the progress and development of the Lifeline program; as well as research findings on the effect of Lifeline support on the well-being of patients and their utilization of hospital resources.

Sherwood, S. and Morris, J. (1981) A Study of Effects of an Emergency Alarm and Response System for the Aged: A Final Report. Boston, MA: Rehabilitation Centre for the Aged.

In this study, the Lifeline system was evaluated through a longitudinal survey of users and non-users. General results include the suitability of the Lifeline E.R.S. for independent seniors who are not totally functionally impaired but medically vulnerable and who have a well developed informal social support system.

Sterling and Associates (1986) Rainycrest Home for the Aged - Home Care Support Services. Ontario: Ministry of Community and Social Services.

The Ontario Ministry of Community and Social Affairs sponsored a pilot project in Fort Francis, Ontario at the Rainycrest Home for the Aged. The purpose of the project was to investigate the effectiveness of an emergency response system (Insta-call) in enabling elderly persons to maintain an independent lifestyle.

Vachon, B., Co-ordinator (1986) Information on: Emergency Response Systems. Ontario Ministry of Community and Social Services: Applied Program Technology Unit.

The staff of the Applied Program Technology Unit at the Ontario Ministry of Community and Social Services have compiled information on Emergency Response Systems. Products are discussed in generic terms and enable the reader to assess the systems presented. The document includes an appendix containing lists of products broadly applicable to the general area of emergency signalling.

B. CANADIAN HOME SUPPORT SYSTEMS: A GENERAL REVIEW

Beck, E. (1980) Profile of Older Persons in Alberta: Demographic Characteristics and Service Utilization. Staff Working Paper #1. Alberta: Social Services and Community Health Department.

In this working paper, a general profile of Alberta's elderly and their service utilization is presented.

Black, M. (1985) "Health and Social Support of Older Adults In the Community" Canadian Journal on Aging. Vol.4. No.4: P. 213.

Structured interviews were held with 48 London, Ontario (independent) elderly. The purpose of the interviews was to describe their formal and informal community support networks and to identify how components of the networks related to their physical, social and emotional health. With respect to their patterns of support, research conclusions indicate that family and relatives comprise the greatest percentage of total number of supports listed and greatest percentage of functional support and frequency of contacts.

Conrad, P. and Comulli, J. (1985) Perception of Home Care Services in Lunenburg County by Professionals and Consumers. Halifax: William Nycum Associates Ltd.

This project involved determining perceived need for and availability of various homecare services in three communities located within the Municipality of Lunenburg. Providers and users of services were surveyed. Implications of the survey results are discussed within the context of service information dissemination and coordination.

Davis, A. and Sorochan, M. (1984) The Development and Implementation of a Quality Assurance Program in the Provision of Homemaker Services to L.T.C. Clients. Vancouver, B.C.: Vancouver Health Dept.

In Vancouver, a Quality Assurance Consultant is responsible for monitoring homemaker service quality and contract adherence. The purpose for establishing standards and requirements for the homemaker service delivery is to ensure that the persons with long-term disabilities have the opportunity to remain in their homes as long as possible.

Dunnigan, S. (1985) Maintaining The At Risk Elderly Person At Home: An Expansion of Services by The Edmonton Home Care Program. Hamilton, Ontario: Canadian Association of Gerontology.

With the goal of preventing or delaying institutionalization, the Edmonton Home Care Program has expanded services to frail elderly persons living in the community. The Edmonton team has been able to demonstrate that elderly people who have health and social needs can be maintained at home, and in certain cases can even return home from long-term care facilities.

Ewanchyna, C., Collins, D., and Block, J. (1980) "A Ten-Point Model for Home Care Delivery" Essence. Vol. 3, No. 3: P. 143.

In this paper the ten components of Manitoba's Home Care Model are described. In 1974, Manitoba incorporated traditional models and innovative concepts into what is now their Home Care System. The ten components include: establishment of a central government office for funding; program planning and coordination; delivery at regional and sub-regional levels, through existing community-based Health and Social Development teams; eligibility determined by a multi-disciplinary assessment of need; accessibility through multiple entry; use and coordination of services of private and community agencies and volunteers; use of professionals; systematic data collection, monitoring and review; provision for a continuum of care; and a universal, no charge system.

Garret, L. and Hill, M. (1972) Community Care For Seniors Study. Vancouver: SPARC Committee on Aging.

This 1972 report identifies and analyzes all services and needs for services in all levels of community and institutional care for British Columbia's elderly. Data collection was extensive and involved surveying, service organizations, professionals, senior organizations and seniors. The major conclusion of the authors is the need to develop stronger community service support systems.

Hodge, G. (1984). Shelter and Services for the Small Town Elderly: The Role of Assisted Housing. Ottawa: Canada Mortgage and Housing Corp.

Seniors in nine small Eastern Ontario towns were studied to evaluate the effectiveness with which social housing meets the needs of the elderly. Interviews with residents documented community services used and illustrated that community support systems were not linked to formal housing or service providers.

Hoppenrath, C. (1981) A Citizen's Guide to Long Term Care in B.C. Vancouver: Social Planning and Review Council.

This guide describes the services provided by the B.C. Long-Term Care program for seniors who need assistance. The program provides services in seniors homes, in residential-care facilities and in extended care hospitals. The guide also lists available community services that are not provided under the long-term care program.

King, H. (1984) A Telephone Reassurance Service to the Elderly: An Evaluation. Ottawa General Hospital: Psychogeriatric Clinic.

With a telephone reassurance service, the elderly can be in daily contact with their community by telephone. This type of program is low-cost, requires low-technology and is staffed by volunteers. In this study, a profile of Montreal users was documented and implications for program practices were discussed.

Lambert, C. (1985) Homemaker Services in Canada: Survey 1985. Toronto: Canadian Council on Homemaker Services.

The purpose of this study was to collect information on Canadian homemaker services, to gather information about client groups served and to identify a representative sample of agencies with whom more in-depth studies could be conducted in the future. A brief analysis of the data is presented and comparisons with a similar 1982 study are discussed.

Macdonald, J.G. and Rose, A. (1985) Support Systems for the Autonomus Elderly in Ontario. University of Toronto: The Centre for Urban and Community Studies.

This study is one of three publications. The other two are titled "Factors Influencing the Quality of Life of Community-based Elderly, Part I - Literature Review" by R. Wallace, J.G. MacDonald and A. Rose, and "Factors Influencing the Quality of Life of Community-based Elderly Part II - Housing Conditions of the Elderly in Ontario" by A. Rose and J. MacDonald. The third report, as referenced above, looks at the informal and formal support systems and services for Ontario's elderly.

McPhee, M. (1977) Health Care or Health: The Development of a Plan to Address the Health Needs of the Elderly in British Columbia. Report S:1. University of British Columbia: Health Sciences Centre.

This report includes a review of provisions and legislation affecting the elderly at the federal and provincial level. The results of the review indicate that there is an inadequate comparative emphasis on community home service support. The author recommends that a special policy be drafted to help ensure the community home support service system is strengthened.

Mercer, M. and Kanopski, P. (1974) Report of a Study of the Home Services Delivered in Vancouver to a Selected Group of Citizens on the Day, and Week of May 28, 1974. Vancouver: The Greater Vancouver Society for Coordinating Home Services.

This report investigated the profile of service clients, reasons for seeking service and the features a homemaker service agencies. Recommendations include the coordination of home services in Greater Vancouver by Human Resources and the monitoring of services supplied by community agencies.

Phillips, J. (1984) Positive Planning for Future Facilities and Services for the Elderly. Victoria, B.C.: Victoria Institute of Gerontology.

In this report, using volunteers (including seniors), neighbourhoods appropriate for locating more senior services and facilities were identified. The paper also discusses the method used for identification of service location requirements and a general theory for positive planning for senior's services.

Ridley, M. (1985a) Elderly Residents In Ontario, An Overview. Ontario: The United Senior Citizens of Ontario and Minister for Senior Citizens Affairs, Senior's Secretariat.

Data from a survey administered to 864 elderly seniors in Ontario is presented in a series of 15 reports. The overview of these 15 reports discusses highlights from the research and develops the principle objective of the study which is to systematically examine the living situation of elderly persons who reside outside of institutional settings.

Ridley, M. (1985b) Elderly Residents In Ontario: Their Potential and Actual Use of Community Services. Ontario: The United Senior Citizens of Ontario and Minister for Senior Citizens Affairs Senior Secretariat.

This paper presents the community services findings from a general survey of 846 elderly persons in Ontario. The elderly's potential and actual use of services was measured by asking the seniors who they would contact for assistance should a situation arise and asking the seniors about their present use of services. The study provides demographic factors associated with both potential and actual service use.

Senior Citizens Bureau (1984) Older Persons In Alberta: Their Use of Programs And Services. Alberta Social Services and Community Health: Policy and Program Development.

This paper provides demographic data on Alberta's older population as well as information and available utilization and expenditure data on these programs and services. This paper is a brief overview and does not provide a detailed analysis of services and programs for Alberta's seniors.

Social Planning and Review Council of B.C. (1977) Committee on Aging. Task Force on Homemaker Service. Homemaker Service for Elderly Persons in B.C. Submitted to the Ministry of Human Resources. Vancouver, B.C.: SPARC.

This report presents findings of a task force investigation into the implications of inadequate funding for homemaker services. That homemaker services were inaccessible to 'middle-income' persons was found to be unacceptable by all homemaker and service agencies surveyed. It was concluded that the homemaker service should be universally available at a minimum fee based on professionally assessed need.

Western Health Care Associates Ltd. (1981) A Review of Homemaker Services in British Columbia. A report submitted to the B.C. Ministry of Health: Home Care/Long Term Care Program.

The study presents the findings of an evaluation of the homemaker service program, a component of the long-term care program in B.C. The review focusses on the internal organization and cost of the service as well as on the types of services provided.

Zed, R. (Project Coordinator) (1985) Selected Support Services in Care Facilities Projects. St. John, New Brunswick: Loch Lomund Villa, Inc.

Four projects were evaluated. One of the projects was a "Seniors Out-Reach Program" that offers structural therapeutic, recreational and socialization programs to seniors, provides respite for the family and assists the elderly in coping with the outside environment. Seniors were interviewed to evaluate the effectiveness of the service program.

C. ECONOMICS OF ELDERLY HOME CARE

Clarfield, A.M. (1984) "After Medicare, Problems in Home Health Care in Quebec, Canada" Pride Institute Journal. Vol. 3, No. 3: P. 12.

In this paper, the Canadian Medical System is assessed in terms of approaches to the administration of home care services. Major problems in the system include: under-financing of medical services and inadequate co-ordination of services. The issue of home care cost effectiveness is also studied.

Collins, J. and L. Pickard. (1979) Health Costs and Health Status of Elderly People: How These Factors are Affected by Accessibility of Health Personnel and Health Education. A Report to the Health Promotion Directorates Vancouver: Summer Resources Fund.

In this study, the benefits and costs of preventive and curative health care in two Vancouver senior citizen's complexes are investigated. Generally, it was found that preventive health care for elderly people does not provide economic benefits as the ability to improve health is limited by the aging process. Preventive health care was found to have benefits in terms of health maintenance and perceived benefits and feelings of security. Regardless of where the senior lives, the senior still ages and health care is required.

Denton, F. and Spencer, B. (1980) "Health-care Costs When the Population Changes". In: Marshall, V. Ed. (1980) Aging in Canada: Social Perspectives. Don Mills: Fitzhenry and Whiteside: P. 232.

This paper contributes to an understanding of the way in which the costs of health care might be expected to vary in response to demographic influences. The matter of changing health care costs is extremely important given government trends in assuming a large portion of the costs. This paper provides two measures of the burden of health care; cost as a fraction of total output, and cost per capita. Changes in the cost of health care are predicted to be more affected by potential change in quality of service than by predicted change in population.

Dubé, P. (1982) The Costs of Contract Live-In Service. Vancouver, B.C.: Community Homemakers Service Association of Greater Vancouver.

This paper examines the future potential of a contract live-in homemaker service. The methodology of the study involved an informal survey conducted throughout B.C. of Home Support Service professionals. Contract live-in services are defined and analyzed and recommendations are discussed. A cursory cost benefit analysis compares live-in services to intermediate and extended care facilities.

Gross, M.J. and Schwenger, C.W. (1981) Health Care Cost for the Elderly in Ontario. Toronto: Ontario Economic Council.

This book reviews demographic, socio-economic and epidemiological characteristics of elderly persons in Ontario. The central theme of the book is health care costs for the elderly. This theme originated from recognition of two facts: (1) cost is a crucial variable in evaluating services to the elderly; and (2) too little attention has been paid to the economic aspect of delivering care to this group. Given that the elderly are the fastest growing segment of the population and very dependent on the social and health services provided by the government, the authors conclude that there is a need for economic evaluations of health care and services for the elderly.

Gutman, G. (1984) Innovations in Housing and Living Arrangements for Seniors - Part II: Changing Times and Needs. Simon Fraser University, Burnaby, B.C.: Gerontology Research Centre.

The cost-benefits of home equity conversion, rent subsidies and shelter allowances, and accessory and ECHO (granny flats) housing are discussed. This source of this information was a symposium on seniors housing alternatives at the 1984, Canadian Association on Gerontology Conference.

Hayes, C. and Hertzman, C. (1985) "Will the Elderly Really Bankrupt Us with Increased Health Care Costs?" Canadian Journal of Public Health. Vol. 76, Nov./Dec. P. 373.

With the projection of large increases in the elderly population, rising health care costs for the elderly have become a major issue. Two models for projecting health care costs are presented.

Harding, M. and Neysmith, S. (1984) Ageism and Health Costs: Reality and Implications. Toronto, Ontario: Faculty of Social Work, University of Toronto.

This paper uses Ontario provincial health statistics to focus on mechanisms for delivery and funding of health services in Ontario. Media and ministerial statements are used to assess theories and values behind current service structure and funding mechanisms.

Health and Welfare, Policy, Planning and Information Branch (1982) The Manitoba/Canada Home Care Study An Overview of the Findings. Ottawa: Health and Welfare Canada.

In 1977, the Dept. of National Health and Welfare and the Province of Manitoba used Manitoba data to compare the cost of home care to alternative institutional care. The important findings are presented in this overview.

Martin, J. and Powell, B. (1980) "Economic Implications of Canada's Aging Society" In: Marshall, V. ed. (1980). Aging in Canada: Social Perspectives. Don Mills: Fitzhenry and J. Whiteside: P. 204.

A global perspective on the economic problem of an aging society has two aspects: first, the development and planning of social and economic institutions for the elderly; and second, the problem of ensuring these institutions are fair and equitable. The paper explores these issues and reviews present social security systems for the aged and describes emerging pressures and problems.

Parbousing, J.C. (1985) Appropriate Utilization of the Emergency Department by the Independent Elderly. University of Calgary: Dept. of Community Health Sciences.

Increased costs of health care for the aged have resulted in the need to understand factors which influence appropriate, cost-effective utilization of health facilities. A random sample of 75 elderly, community-living emergency department utilizers was interviewed. Study findings included that those under 75 were more appropriate users of emergency services than those over 75. The implications of the study findings on geriatric health care policy, planning and practice are discussed.

Roos, N.P. (1984) "Aging and the Demand for Health Services: Which Aged and Whose Demand" The Gerontologist. Vol. 24, No. 1: P. 31.

The health care utilization of a large probability sample of elderly Manitoba's residents was traced. Findings suggest that most elderly are healthy and that they are low, infrequent users of health services. High frequency users of health care were the minority.

D. HEALTH CARE FOR THE INDEPENDENT ELDERLY

Arklie, M. et. al. (1985) "A Mobile Health Assessment Program for the Elderly" The Canadian Nurse. March: P. 27.

A health assessment program for the elderly in their own homes is designed to help maintain independence as long as possible. This is a descriptive study of 77 subjects who were 55 and over, who lived in their own homes or in seniors housing, who were not receiving any custodial care and who were interested in participating in the mobile health assessment program. Generally the elderly were very satisfied with the program. It was concluded that such a program, if staffed appropriately could be the primary mechanism for entry of the elderly into the health care system.

Astill-McNish, S., and Stevenson, P. (1984) "Nurses in a Day Hospital Evaluate Their Care" The Canadian Nurse. November. P. 41.

This paper evaluates a day hospital program at St. Boniface hospital in Winnipeg. Day hospitals, although problems exist, have the potential to assist the elderly to live independently.

Block, J., and Kaban, L. (1984) "Variations Between a Day Hospital's Team Assessments and Needs Perceived by Referral Source" Canadian Journal on Aging. Vol. 3. No. 3: P. 147.

An evaluation of the Day Hospital program at Seven Oaks General Hospital in Winnipeg is presented in this article. The evaluation confirmed that the day hospital meets the objective of being able to assess multiple factors, not just physical factors but social, spiritual, environmental etc., affecting the well-being of the elderly.

Burns, M. (1984) "Coordinated Community Health Services for the Elderly" Canadian Journal of Public Health. Vol. 75: P. 458.

This article discusses the first year of the City of Toronto's Department of Public Health Program for the Elderly at Risk. Subjects in the program used less hospital and physician services than would be expected. Individuals in both the program and the control group, assessed to be at an institutional level, usually remained in the community when they accepted and used home support services. The Toronto Elderly at Risk program involved public health nurse, health assessments, counselling, and consultations and referrals to home support services.

Cleary, F., and Pablo, R. (1982) "Parkwood Day Hospital: An Alternative for the Impaired Elderly". Canadian Journal of Public Health. Vol. 73, May-June: P. 176.

This paper presents a demographic and clinical profile of elderly patients admitted to a day hospital in London, Ontario. The implications of the day hospital as a viable alternative for care of the elderly are discussed.

Daly, S. et. al. (1985) "A New Role for Community Nurses in Geriatric Care". The Canadian Nurse. June: P. 50.

At the Edmonton General Hospital, five community nurses have been assigned to geriatric units for the purpose of bridging the gap between the institution and the community. Nurses can be employed to assist in discharge planning and to assist in returning the elderly to their homes as soon as possible. This liaison service helps coordinate hospital programs with community needs and provides an ongoing contact and monitoring of frail elderly in the community who have a high probability of hospital re-admission.

Flett, P., and Lost, J. (1980) "Evaluation of the Public Health Nurse as Primary Health Care Provider for Elderly People" In: Marshall, V. Ed. (1980) Aging in Canada: Social Perspectives. Don Mills: Fitzhenry and Whiteside. P. 177.

This paper presents results of a 1970's study on the role played by the public health nurses in seniors housing. The type of problems the nurses encountered are presented. The analysis suggests that the public health nurses' presence increased the morale and feelings of security for the elderly and it decreased doctors visits.

Gooding, B. (1984-85) Predictive Modelling for Participation in and Effects of Home Health Care. Montreal: McGill University.

The purpose of this study is to identify a predictive model for home health care participation and to use the model to evaluate effects of a home health care program on selected health and service related outcomes. The results indicate that the choice to participate in home health care is based on pragmatism and realism reflecting self-reported physical need and economic need and the availability of alternatives. Recommendations include that the public sector should encourage and support voluntary initiatives because the independent elderly tend to first exhaust existing social (informal) support networks. In terms of effects of home health care, it was the social aspects, not the aspects designed to improve the physical person, that had the greatest impact on the elderly well-being.

Hoffman, A. (1985) Elderly Residents In Ontario: Their Health Status and Use of the Health Care System. Ontario: Minister for Senior Citizens Affairs Senior Secretariat.

In this report the health data from the 846 elderly persons interviewed for a general Ontario study of the elderly are presented. Noteworthy in these findings is that 20% of the respondents who reported disabilities and 1% of the persons who reported difficulties related to personal care received no assistance. Almost two-thirds of the persons who had interfering health conditions received no assistance. Further, analysis of the respondents' use of health services indicated that only 11% of the respondents used community health care agencies. The older the respondents, the more likely they were to use community health care.

Malkin, S. and Baker, H. (1980) "An Evaluation of Early Hospital Discharge to Home Care Services" Canadian Family Physician. March: P. 368.

This study examines the effectiveness of the early discharge system on 3628 convalescing patients who were transferred from hospital to home care services. Deaths and re-admissions were due to re-appearance of complicating factors, and not due to inadequate discharge planning or insufficient home services. The results suggest that the early discharge program was successful.

Rushton, R. (1983) Adult Day Care: An Alternative to Early Institutionalization. Toronto: Canadian School of Management.

26 questionnaires were sent to Coordinators of Adult Day Care Programs in B.C. and to the Long-Term Care Nurse assessors who refer clients to day care and 40 questionnaires were sent to clients in two local programs. The data collected indicated that adult day care program can provide an alternative to institutionalization for the elderly and physically disabled. The day care program along with other home support services, can prolong independence.

E. HOME CARE AS AN ALTERNATIVE TO EARLY INSTITUTIONALIZATION

Béland, F. (1984) "The Decision of Elderly Persons to Leave their Homes" The Gerontologist. Vol. 24, No. 2: P.179.

This study researches the question of what influences the decision of elderly persons to leave their homes. A fundamental assumption of a home support program is that the elderly with functional impairments will require institutionalization if there are no home support services. Three random samples of francophone urban elderly are used to test this assumption. Results indicate that housing conditions, cohabitation with children and sickness explain part of the variance of the wishes of elderly persons to leave home whereas functional impairment is not related to the wish to leave home.

Bernstein, M. and Stephens, M. (1984) "Social Support and Well-being Among Residents of Planned Housing" The Gerontologist. Vol. 24, No. 2: P. 144.

This research paper documents social support networks for 44 residents of two planned housing facilities. Using structured interviews, the amount and sources of social psychological and material support experienced by health and independent elderly was examined. The nature of relationships between characteristics of these networks and the residents well-being is presented.

Berry, E., Haramia, J., Moscovitch, S. and Nebocat, S. (1980) The Situation of Old People Prior to their Placement in Congregate Care. Graduating Paper. University of British Columbia: School of Social Work.

This study explores the factors precipitating placement in congregate care. Elderly were surveyed as to their awareness and use of community services prior to placement. Three living arrangements were typified: a) older persons living alone; b) those alone who have relative support and c) those living with relatives. The type of living situation has a direct influence on the timing for placement in formal care.

Blackie, N. and Gutman, G. (1984) Innovations and Housing and Living Arrangements for Seniors. Simon Fraser University, Burnaby: Gerontology Research Centre.

In Chapter 3 of this document, the need for support services is discussed in relationship to level of impairment. Second, housing options available to elderly Canadians are presented and international shelter alternatives for the elderly are compared.

Bona, W. and Payne, C. (1984) Dartmouth S.H.A.R.E. - Senior Housing at Reduced Expense. Dartmouth, N.S.: Dartmouth Senior Citizens Service Centre.

This paper presents a major literature review on home sharing and information from over 100 shared housing programs in the United States. An evaluation of Dartmouth S.H.A.R.E. is also discussed.

Brown, O. and Hampton, C. (1980) Care of the Elderly in the Westman Region. Brandon, Manitoba: Brandon General Hospital.

In this report, a plan is proposed to meet the increasing demand for health care services of an aging population. This report describes existing Westman, Manitoba services and explores a range of housing and living alternatives.

Goldstein, S., Iwanow, V. and Smith, D. (1985) Staying At Home. East York, Ontario: Leaside United Church Senior Citizen's Housing Committee.

This study explores the housing options and needs of a group of elderly Leaside United Church members. The Leaside United Church Senior Citizens' Housing Committee surveyed 442 elderly households to determine if any seniors would be moving within the next few years and to determine the types of housing and services they would require or want if they moved or the services they would required if they remained living where they were.

Grant, P. (1985) "Who Experiences the Move Into a Nursing Home as Stressful? Examination of the Relocation Stress Hypothesis Using Archival, Time-Series Data" Canadian Journal on Aging. Vol. 4 No. 2: P. 87.

The relocation stress hypothesis is tested. Results indicate that 82.7% of new residents in four Saskatchewan nursing homes were not distressed by the move. If they were stressed prior to entrance or had behavioral problems prior to admission, they did experience psychological distress on admission but even then, their distress dropped over an eight month period.

Gutman, G. (1980) "The Elderly at Home and in Retirement Housing: A Comparative Study of Health Problems, Functional Difficulties and Support Service Needs. In Marshall V.W. (Ed) (1980). Aging in Canada - Social Perspectives. Don Mills, Ontario: Fitzhenry and Whiteside, Ltd.

In the Comox-Strathcona Regional District, 811 persons (60+) living at home and 90 living in retirement houses were asked health, mobility and general functional questions. They were also asked about the support services they were using. Those in homes had greater physical disabilities than those living in the community. Implications of the data for service and housing planning for the elderly are discussed.

Harper, I. (1984) Housing Options For the Elderly in the Capital Region: Sheltered Housing and Other Alternatives. Victoria, B.C.: Capital Regional Hospital District Hospital and Health Planning Commission.

This document provides a list and description of the major housing projects in the Capital Region for the elderly and provides information about elderly housing in Canada, United States, Great Britain and in Europe. Major housing alternatives reviewed include: sheltered housing/granny flats; peripatetic warden; dispersed emergency alarm systems and grants and loans for home impairments. Recommendations are made to the Capital Regional Hospital District for a housing strategy for Victoria's seniors.

Hoffman, A. (1985) Elderly Residents in Ontario: Their Housing Situation and Their Interest in Various Housing Options. Ontario: Minister for Senior Citizens Affairs Seniors Secretariat.

This paper presents the housing situation and preferences of the 846 elderly persons who were interviewed in an Ontario survey. Only 5% of respondents had plans to move and of the 5%, 40% were interested in senior citizens apartments. If given a choice when faced with a care need, 57% indicated an interest in staying home with community services and family to assist them.

Jackson, J. (1985) "Factors Associated with Institutional Care of the Elderly" Canadian Journal of Public Health. Vol. 76, July/August: P. 255.

This paper epidemiologically outlines the factors affecting development and utilization of institutional care for the aged. Problems in obtaining adequate data and in identifying and measuring important facts are also discussed.

Kelly, J. and Towler, H. (1984) "The Community Care Alternative" Proceedings of the Second National Conference on Gerontological Nursing. May 22-25. Winnipeg, Manitoba: Winnipeg Convention Centre.

This paper describes the long-term care and home care programs under the direction and funding of the Continuing Care Division in the Ministry of Health in British Columbia. The price to the senior and a description of both the home and institutional services is discussed as is the role of the institutional and home care nurse.

Macdonald, G. and Rose, A. (1984) Factors Influencing the Quality of Life Community-Based Elderly Part II: Housing Conditions of the Elderly in Ontario. University of Toronto: Centre for Urban and Community Studies.

This paper explores the issue of quality of life of community-based elderly. Data on housing conditions from a study of 706 urban and rural elderly in southern Ontario is examined. A major conclusion is that policy makers have to be aware of community support services required by residents of senior citizen housing and independent housing.

Mackenzie, S. and Wekerle, G. (1985) "Reshaping the Neighbourhood of the Future as We Age in Place" Canadian Woman Studies. Vol. 6, No. 2: P. 69.

This article discusses the role the womens' movement can have in shaping how and where women live out their old age. Women are challenged to envisage the places they might want to spend their later years. They must understand the existing situation for retired women and subsequently develop solutions and alternatives for housing of the future elderly woman. They must become involved in creating a desired environment for aging in place.

Rapelje, D. (1984) Home Sharing. Thorold, Ontario: Municipality of Niagara.

In this paper, the Niagara Home Sharing program is described. The program offers an alternative to institutional living as well as an alternative to living alone in the community. A profile of users and some case histories are also presented.

Schwenger C.W., and Gross J.J. (1980) "Institutional Care and Institutionalization of the Elderly in Canada" In: Marshall V. Ed. (1980) Aging in Canada: Social Perspectives. Don Mills: Fitzhenry & Whiteside.

That institutional care of the elderly should be considered only as a last resort is a principle spoken more than practiced in Canada. This paper calls for reducing our institutionalization of the elderly and to simultaneously foster an increasing variety of non-institutional alternatives.

Shapiro, E. and Tate, R. (1985) "Predictors of Long Term Care Facility Use Among the Elderly" Canadian Journal on Aging, Vol 4, No. 1; P. 11.

This research uses data from the Manitoba longitudinal study on aging to assess the impacts of 28 health status and socio-demographic variables on admissions into nursing homes. A key finding is that socio-demographic characteristics are better predictors than health or physical problems of institutional placement.

F. HOME SUPPORT SERVICE NEEDS

Auger, J. (1981) Vancouver's Older Citizens: What Their Needs are and How They are Met. Vancouver: Social Planning and Review Council.

This report describes and examines the food, shelter, income and health needs for older persons in the Greater Vancouver area. Questionnaires were administered to seniors and to service providers. Results of the survey indicate that the majority of the elderly are able to satisfy their everyday needs with the aid of the various non-institutional support systems.

Baker, P. (1985) The Needs of Seniors in Greater Victoria. University of Victoria: Department of Sociology.

A needs survey was conducted to assess problems experienced by the population aged 55 and over in Victoria. A total of 642 individuals were interviewed. The major needs as perceived by the elderly were: health, transportation, income, home repairs, housework, loneliness, leisure activities, financial planning, preparing meals and housing. Having a low income, and being divorced or separated were the strongest predictors of problems.

Berland, J. (1980) Needs of the Elderly in South Vancouver. Graduating Paper. University of British Columbia: School of Social Work.

This paper describes a study of a public housing project in South Vancouver. The study was initiated by the South Vancouver Neighbourhood House. Two of the major conclusions are that knowledge of services is the key to encouraging their use and loss of contact with family and friends can lead to loss of an ability to function well.

Bernstein, M. and Stephens, M. (1984) "Social Support and Well-being Among Residents of Planned Housing" The Gerontologist. Vol. 24, No. 2: P. 147.

This research documents the social support network for 44 residents of two planned housing facilities, using structured interviews. Generally, social networks involved persons outside of the housing facility. The more healthy were less isolated. The findings have implications for social support and social intervention theory.

Chappell, N. (1985) "Social Support and the Receipt of Home Care Services" The Gerontologist. Vol. 25, No. 1.

This paper represents results from a survey of 400 elderly long-term home care users and 400 elderly non-users of home care in Metro Winnipeg. This paper explores whether users of home care services differed from non-users in terms of need, in terms of availability of, interaction with, or

satisfaction with, informal social support; and in terms of assistance received from their informal networks. It was found that users of home care were less healthy, less active and had fewer social supports available to them.

Connidis, I. (1985) "The Service Needs of Older People: Implications for Public Policy" Canadian Journal on Aging. Vol. 4, No. 1: P.3.

In a survey of 400 Ontario elderly residents, only 96 required community services. The provision of home care by family and friends, reduces the demand for more formal care. Policy makers cannot become overly dependent on this informal support system, for as our population continues to age and as more woman enter the work force, the system of informal care will not be as available. Encouraging home care as an alternative to institutionalization may only escalate care costs if the services provided are ones that the 'family' currently provides or ones that meet previously unmet needs.

Gfellner, B. (1984) "Home Sweet Home": Self-perceptions of Requirements for Independent Living. Brandon, Manitoba: Brandon University, Psychology Department.

265 community dwelling elderly were interviewed to determine their perceived and anticipated needs for successful aging. The sample demography matched the Statistics Canada profile of the elderly. Major results of the study include that generally the seniors were active and that 51% required home maintenance and help with daily living duties to maintain their independence.

Goldberg, M. (1977) Strathcona Community Study. Vancouver: Strathcona Community Resources Board.

The social needs and resources of residents of the Strathcona area in Vancouver are examined. The major report findings suggest that resources for senior citizens need to be expanded and that more services for non-english speaking residents be provided.

Grimes, M., Moss, M and Lawton, M. (1985) "The Changing Service Needs of Older Tenants in Planned Housing". The Gerontologist. Vol. 25, No. 3: P. 258.

This paper compares five federally assisted housing projects; the services provided and the general health and well-being of the residents. Recommendations are made as to how to attain greater service provision congruence.

Havens, B. (1980) "Differentiation of Unmet Needs Using Analysis by Age/Sex Cohorts" In: Marshall, V. Ed. (1980). Aging in Canada: Social Perspectives. Don Mills: Fitzhenry and Whiteside: P. 215.

This paper presents the methodology used for the Aging in Manitoba field survey of 5,000 elderly and their needs.

Havens, B. (1984) Met and Unmet Needs Over Time of Respondents Age 65 and Over - Aging in Manitoba '83. Winnipeg: Manitoba Department of Health.

Data was gathered to update the 1971 and 1976 Aging in Manitoba: Needs and Resources reports. Approximately 2,854 Manitobans were interviewed and 700 service agencies were interviewed. A comparative analysis highlights those met and unmet needs that have remained constant and those which have undergone major changes during this time period.

Hoffman, A. (1985a) Elderly Residents in Ontario: The Experiences of Those Who Are Frail. Ontario: Minister for Senior Citizens Affairs Seniors Secretariat.

This paper concentrates on the distinguishing characteristics of one segment of population surveyed for the general interview of Ontario's elderly. Frail respondents used health care and home support services more than the non-frail yet 668 of the frail, if given a choice, would prefer to remain in their homes with the assistance of home support services.

Hoffman, A. (1985b) Elderly Residents in Ontario: Income Group Differences. Ontario: Minister for Senior Citizens Affairs Seniors Secretariat.

This paper presents the income situation of the 846 elderly persons who were interviewed in an Ontario survey. Findings in the study indicate significant differences in the demographic characteristics, living situation and preferences among income groups. As income decreases, the tendency to live alone and to have fewer social contacts and support systems also decreases. The lower the income the more likely the choice to spend additional income on improved housing and living conditions.

Johnson, S. (1981) A Picture of the Downtown Eastside: Needs and Services. Vancouver, B.C.: North Health Unit, City of Vancouver Health Department.

In the Downtown Eastside area, one-third of the population is elderly. Service agencies are interviewed to identify and describe key service needs, identify gaps in the services and to recommend future directions.

Meiners, D.J. (1967) Home Services for the Aged. An Experience Survey to Assess the Need for Home Care Services in the West End Area of Vancouver. MSW Thesis. University of British Columbia: School of Social Work.

Home care services as a viable alternative to institutionalization for the West End area of Vancouver are examined in this study. Service needs were identified and a research interview schedule, to be used in future studies, was also developed.

Robinchaud, A. (1985) Survey of the Needs of the Elderly in New Brunswick. University of Moncton: Centre for Studies on Aging.

28 elderly in New Brunswick were surveyed to identify their demographic characteristics and living conditions, state of health, social status, financial status, psychological condition and degree of respondent independence. Parametric analysis was used. Target populations were identified and implications for governmental policies are discussed.

Snider, E. (1982) "The Needs of Health and Related Community Agencies Serving Elderly Families" Canadian Journal of Public Health. Vol. 73, March/April: P. 119.

This article discusses the needs of community agencies serving elderly families. Generally, agencies were found to be uncoordinated and there was little integration of services. It was concluded that if the present nature of agency relationships continues as is, the quality and quantity of services for elderly families will become more ineffective and insufficient.

Storm, C., Storm T. and Strike-Schurman, J. (1984) "Obligations for Care: Beliefs in a Small Canadian Town" Canadian Journal on Aging. Vol. 4, No. 2: P. 75.

80 Maritime woman aged 18-25, 30-45, 50-65, and 65-85 years were interviewed to explore their perceptions and obligations for assistance of elderly with physical, financial and psychological needs. Results indicated that children have a strong obligation to assist if possible, and the obligation of government was also strong for all but psychological needs. Siblings, friends and the church were also a common source of assistance. The elderly themselves believed they had a responsibility to provide for themselves.

Tilquin, C., et al. (1980) "The Physical, Emotional, and Social Condition of an Aged Population in Quebec" In: Marshall, V. Ed. (1980). Aging in Canada: Social Implications. Don Mills: Fitzhenry and Whiteside: P. 222.

A survey of Montreal's Southshore seniors was done within the framework of a research project aimed at creating instruments for the evaluation of older people's needs. This chapter presents a preliminary analysis of data collected from over 1,000 respondents from both within and without the institutional social service network.

G. INFORMAL SUPPORT AND ELDERLY HOME CARE

Abu-Laban, S. (1978) "The Family Life of Older Canadians" In: Marshall, V. Ed. (1980). Aging in Canada: Social Perspectives. Don Mills, Ontario: Fitzhenry and Whiteside: P. 125.

Family relationships provide major sources of interpersonal support and warmth for all ages, however the nature of this support changes over the life course. This paper examines the characteristic features of family life for the elderly. The need to understand the pattern of family life for elderly is important, for it has direct bearing on the existence or non-existence of informal social support systems that are necessary to maintain elderly in their homes.

Aronson, J. (1985) "Family Care of the Elderly: Underlying Assumptions and Their Consequences" Canadian Journal on Aging. Vol. 4, No. 3: P. 115.

This article explores the debate between the traditional view that families take care of their elderly and the more contemporary view that care of the elderly is a responsibility of the government or formal sector. Through a review of the literature the role of men and women in caregiving is also explored. The results of this research have implications for the development of social policies.

Béland, F. (1984) "The Family and Adults 65 Years of Age and Over: Co-residency and Availability of Help" Canadian Review of Sociology and Anthropology. Vol. 21, No. 3: P. 302.

Policy makers have assumed that governmental agencies have been left with the responsibility and task of supporting the elderly. What was once a task of the extended family is no longer. Through a survey of non-institutionalized elderly, it was concluded that governmental agencies should see themselves as supporters of family involvement with elderly members and not surrogates for the family.

Canadian Mental Health Association. (1985) Coping with Care Giving at Home: Finding Help for Your Relative and Yourself. Vancouver: Shaughnessy Hospital.

The Canadian Mental Health Association has produced a brochure to assist caregivers in identifying home support services that ease their burden. Non-profit and profit home services for households or caregivers and professional help are available within most Canadian communities.

Coutts, J. (1983) "The Role of the Volunteer Sector" Rehabilitation Digest. Vol. 13, No. 4: P.5.

the author argues that there is a need for recognition and for private and government support for the work of the Canadian volunteer. The role of the volunteer is seen to be valuable in terms of potential and present contribution to Canadian economy and society.

Gallo, F. (1982) "The Effects of Social Support Networks on the Health of the Elderly" Social Work in Health Care. Vol. 8, No. 2: P. 65.

This paper presents a study of the relationship between the health of the elderly and their social support networks. Specific characteristics of the social support network were identified and measured to determine which characteristics have the greatest impact on the elderly's health. The major finding is that there is a high statistical correlation between social support networks and health.

Hoffman, A. (1985) Elderly Residents in Ontario: Social Contact Providers of Assistance and Requests for Additional Assistance. Ontario: Minister for Senior Citizens Affairs Seniors Secretariat.

This paper focusses on social contacts and the roles these contacts play in providing assistance to the 846 elderly persons interviewed. Only 28 of the respondents indicated they had neither visited nor had phone contact with family members or friends. The significant role played by family members and friends in assisting the elderly in the community is evident in this study.

Mohide, E.A. and Pringle, D. (1985) "The Family Caregiver Burden in the Community: Critical Appraisal of the Literature" Canadian Association of Gerontology Conference.

Nurses are increasingly recognizing the need to focus more attention on the "hidden patients" - those family caregivers who experience burden as a result of their efforts to maintain impaired relatives in the community. The objective of this paper is to highlight methodological issues in past studies of caregivers. On the basis of this methodological review, recommendations are made for future research and program development of the support services for the caregivers.

Nelson, G. (1982) Support for the Aged: Public and Private Responsibility" Social Work. Vol. 27, No. 2: P. 137.

This paper recommends that government intervention in the care of the elderly should not compete but complement the roles that the family and community play in caring for the elderly. The case of the aged is both a private and public responsibility.

Novak, M. (1985) Social Correlates of Caregiver Burden. Winnipeg, Manitoba: University of Winnipeg.

A questionnaire was administered to 100 persons who provide care for a spouse with senile dementia. The major conclusion of this study was the need for the caregiver to receive help and relief from formal and informal support systems.

Paré-Morin, L. and Stryckman, J. (1985) Keeping Elders at Home: The Contribution of Informal Caregivers. Quebec: Community Health Department, St. Sacrement Hospital.

The contribution of family members or friends in enabling the senior citizen to remain at home is often an essential resource. A sample of 25 elderly and one person from each elder informal support system was interviewed in order to develop a means for early detection and help of potential problems due to the support of the informal network wearing thin.

Wister, A. (1985). Living Arrangements and Informal Social Support Among the Elderly. Waterloo, Ontario: University of Waterloo.

A survey of 454 seniors living in non-collective households assists in determining whether living alone, with a spouse, or others affects 'types' of informal support. Results indicate that living arrangements have a greater impact on instrumented informal support (assistance with specific tasks) than on either affective peer or affective family support. Implications for social policy and future research are discussed.