

Home Adaptations
for
Seniors
and
Persons With Disabilities

A Presentation by

*Luis Rodriguez
Research Division
Canada Mortgage and Housing Corporation*

to

*Health Care Providers
at the Lambton Health Unit*

14 October 1993

and

*Medical Professionals
at the Sarnia General Hospital*

15 October 1993

*Organized and Sponsored by
The Lambton Seniors Association*

Acknowledgements

This paper would not have been possible without the assistance of John Engeland of the Research Division of CMHC, the help provided by the Community and Association Relations Division of CMHC, the statistical data provided by both Statistics Canada and the Statistical Services Division of CMHC, and finally the information provided by many seniors.

I also want to take this opportunity to congratulate the Lambton Seniors Association for their contribution to their community. Over the past few years, they have been working hard to improve housing and support services for seniors. One example of their contribution is their effort and dedication in the successful completion of a recent study designed to examine the housing and transportation needs of seniors in Lambton County. Another example is the important role that they played in organizing the various events held in Sarnia during the second and third weeks of October 1993, including the demonstration of the CMHC Barrier-free Open House and the presentation of this paper.

Abstract

For many years, researchers in Canada have been concerned about why some seniors leave their homes unnecessarily and move into nursing homes or other institutions. One important reason frequently identified is the increasing limitations faced by seniors as they get older in carrying out the activities of daily living, such as taking a bath, cooking, and walking up and down stairs.

The problem is that while the overwhelming majority of seniors, including those who are frail or have disabilities, want to remain in their homes for as long as possible, most housing in Canada occupied by seniors is not designed to respond to their changing needs.

This paper examines some of the implications of the rapidly growing senior population in Canada. It identifies some of the most common problems seniors face in their homes and suggests how seniors can adapt their homes to overcome these problems. It also shows how seniors can go about identifying the types of adaptations that are best for them and suggests how health care and support service providers and the medical profession can help seniors remain in their homes for as long as possible.

Canada Mortgage and Housing Corporation
Société canadienne d'hypothèques et de logement

Canada Mortgage and Housing Corporation
Société canadienne d'hypothèques et de logement

TABLE OF CONTENTS

	Page
Growing Seniors Population	1
Why Seniors Move.....	1
Housing Occupied by Seniors.....	2
Seniors in Core Housing Need	5
Seniors with Disabilities.....	5
Common Problems Faced by Seniors in their Homes	6
Home Adaptations Can Help Seniors	7
Types of Adaptations that Can Help Seniors	7
Identifying the Best Types of Adaptations	11
First Approach	11
Second Approach	11
Third Approach.....	12
Opportunities for Health Professionals to Help Seniors	13

Growing Seniors Population

Canada is undergoing unprecedented demographic changes. The Canadian senior population in general - that is, all those 65 years of age or older - will increase significantly over the next 40 years. The number of people 75 or over will increase as well.

As **Figure 1** shows, close to 12 percent of Canadians are currently 65 years of age or older. By the year 2031, when the entire baby boom generation will be 65 years old or older, nearly 25 percent of the Canadian population will be seniors.

Growing Seniors Population		
	65 +	75 +
1991	11.6 %	4.7 %
2031	24.5 %	12.8 %

Source: Statistics Canada and Canada Mortgage and Housing Corporation

Figure 1

The demographic changes in Canada become clearly evident when we compare the population of seniors to that of people between 13 and 19 years of age. In 1971, there were almost twice as many teenagers as seniors. Today, there are as many seniors as teenagers. If current trends continue, by the year 2031, there will be nearly three times as many seniors as teenagers.

What is even more dramatic is that over the next forty years the most rapid growth in the senior population will take place in the 75 or older age group, and this will significantly increase the number of seniors who are frail or have disabilities.

As **Figure 2** shows, about 1.3 million Canadians are 75 years of age or older. If present demographic trends continue, by the year 2031 nearly 4.4 million Canadians will be in this age group.

Growing Seniors Population		
	65 +	75 +
1991	3.2 million	1.3 million
2031	8.4 million	4.4 million

Source: Statistics Canada and Canada Mortgage and Housing Corporation

Figure 2

Why Seniors Move

For many years, researchers in Canada have been trying to identify the reasons why some seniors leave their homes and move into nursing homes or other institutions. One of the most important reasons identified is the increasing limitations on their ability to carry out such day-to-day activities as taking a bath, cooking, and walking up and down stairs.

The problem is that, while the majority of seniors - including those who are frail or have disabilities - want to remain in their homes for as long as possible, most housing occupied by seniors is not designed to accommodate their changing needs.

Seniors want to remain in their homes



Housing Occupied by Seniors

To better understand the housing situation of seniors, let's take a moment and examine the 1991 "Household Income, Facilities and Equipment Data Base". This data base, commonly known as the "HIFE Data Base," is based on a representative sample of 42,000 households selected by Statistics Canada in the ten provinces. Because this sample is too small to reflect the specific situation in Sarnia, the Ontario data will be presented here. However, it should be noted that the percentages in Figures 1 through 11 are very similar to those that apply to Sarnia.

According to the HIFE Data Base, 66 percent of Ontario households with seniors are homeowners. The remaining

34 percent are renters. As you can see in **Figure 3**, the percentage of owners decreases with age while the percentage of renters increases.

	Total No. Households	Percent by Tenure	
		Owners	Renters
65+	801,000	66 %	34 %
75+	287,000	57 %	43 %
65+ (Alone)	328,000	45 %	55 %
75+ (Alone)	163,000	43 %	57 %

Source: Statistics Canada, HIFE

Figure 3

As **Figure 4** shows, 62 percent of the households with seniors live in single, double or row houses while 37 percent live in duplexes or apartments. However, older seniors living alone are less likely to live in single, double or row houses than younger seniors.

	Total No. Households	Percent by Dwelling Type	
		Sgl/DbI/Row	Dup/Apt
65+	801,000	62 %	37 %
75+	287,000	52 %	47 %
65+ (Alone)	328,000	39 %	59 %
75+ (Alone)	163,000	40 %	60 %

Source: Statistics Canada, HIFE

Figure 4

Of those households with seniors living in single, double or row houses, 95 percent are owners. Interestingly, these percentages are relatively stable as age increases. (See **Figure 5**.)

	Total No. Households	Percent by Tenure	
		Owners	Renters
65+	498,000	95 %	5 %
75+	151,000	97 %	3 %
65+ (Alone)	129,000	93 %	7 %
75+ (Alone)	66,000	96 %	4 %

Source: Statistics Canada, HIFE

Figure 5

By contrast, only 17 percent of the households living in duplexes or apartments are owners, and as **Figure 6** shows, this percentage decreases significantly with age. Not surprisingly, almost all the seniors 75 years of age or older who live alone are renters.

	Total No. Households	Percent by Tenure	
		Owners	Renters
65+	294,000	17 %	83 %
75+	135,000	12 %	88 %
65+ (Alone)	194,000	12 %	88 %
75+ (Alone)	96,000	7 %	93 %

Source: Statistics Canada, HIFE

Figure 6

Percentage of Owner Households With Persons 65+ by Building Age

	Building Age		
	13 Years +	33 Years +	52 Years +
65+	88 %	57 %	26 %
75+	93 %	68 %	35 %
65+ (Alone)	92 %	68 %	39 %
75+ (Alone)	98 %	75 %	45 %

Source: Statistics Canada, HIFE

Figure 7

Like all Canadian housing stock, the housing occupied by seniors is getting older. As **Figure 7** shows, in 1991, 57 percent of the owner households with seniors in Ontario reported that they occupied dwellings 33 years old or older.

But it is even more important to note that this percentage is dramatically higher for households with seniors who live alone and are 75 years of age or older.

The situation for those who rent is different. As **Figure 8** shows, only 22 percent of the dwellings occupied by households with seniors are at least 33 years old.

Percentage of Renter Households With Persons 65+ by Building Age

Ontario 1991

	Building Age		
	13 Years +	33 Years +	52 Years +
65+	72 %	22 %	8 %
75+	73 %	21 %	5 %
65+ (Alone)	70 %	20 %	7 %
75+ (Alone)	71 %	20 %	5 %

Source: Statistics Canada, HIFE

Figure 8

According to the HIFE Data Base, about 7 percent of all the dwellings in Ontario occupied by households with seniors need major repairs while 11 percent need minor repairs.

Dwellings occupied by owner households need a larger number of minor repairs than do those of renters. However, as you can see in **Figure 9**, the percentage of repairs needed by both owners and renters varies little by age group or living arrangement.

Households with Persons 65+ Minor Home Repairs Needed

Ontario 1991

	Total No. Households	Percent by Tenure	
		Owners	Renters
65+	90,000	67 %	33 %
75+	29,000	66 %	34 %
65+ (Alone)	39,000	62 %	38 %
75+ (Alone)	17,000	66 %	34 %

Source: Statistics Canada, HIFE.

Figure 9

Another remarkable finding that emerges from the HIFE Data Base is that dwellings occupied by owner households need major repairs far more often than those occupied by renters. As **Figure 10** shows, 77 percent of the dwellings occupied by owner households need major repairs, while only 23 percent of dwellings occupied by renter households need major repairs. Interestingly, the dwellings of homeowners need major repairs more and more as they age, but aging renters need major repairs less and less.

Households with Persons 65+ Major Home Repairs Needed

Ontario 1991

	Total No. Households	Percent by Tenure	
		Owners	Renters
65+	53,000	77 %	23 %
75+	17,000	81 %	19 %
65+ (Alone)	19,000	56 %	44 %
75+ (Alone)	8,000	67 %	33 %

Source: Statistics Canada, HIFE

Figure 10

Seniors in Core Housing Need

According to the HIFE Data Base, 14 percent of all Ontario households with seniors are in core housing need. As **Figure 11** shows, 79 percent of these households are renters while only 21 percent are homeowners. "Core Housing Need" is defined by CMHC using three factors:

- The level of adequacy of the dwelling; that is, the physical condition of the dwelling. A dwelling is considered adequate when it does not have physical deficiencies, such as the need for major repairs or the lack of basic facilities.
- The suitability of the dwelling for the size of the household. A dwelling is considered suitable when the number of bedrooms in it is equal to, or greater than, the number of bedrooms required by the National Occupancy Standard.
- Affordability; that is, the cost of housing relative to available income. The only households included in **Figure 11** are those that spend 30 percent or more of their total income for their housing and are unable to rent an adequate and suitable dwelling for under 30 percent of their total income.

Seniors with Disabilities

It would appear that disabilities increase with age. According to Statistics Canada's 1986-1987 Health and Activity Limitation Survey, about 5 percent of children under 15 said they had some level of disability, compared to about 11 percent of adults aged between 15 and 64, and 46 percent of seniors. (See **Figure 12**.) Although the percentages of

the younger groups increased to about 7 percent and 13 percent respectively in 1991, the percentage of seniors who experienced some level of disability remained almost identical.

Households with Persons 65+ in Core Need with Affordability Problems

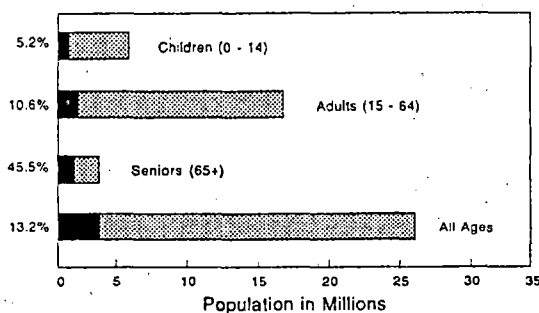
Ontario 1991

	Total No. Households	Percent by Tenure	
		Owners	Renters
65+	115,000	21 %	79 %
75+	58,000	20 %	80 %
65+ (Alone)	97,000	18 %	82 %
75+ (Alone)	50,000	20 %	80 %

Source: Statistics Canada, HIFE

Figure 11

Percentage of Canadians with Disabilities, by Age Group



Source: 1986-1987 Health and Activity Limitation Survey, Statistics Canada

Figure 12

Another important finding of this survey is that in 1991 about 85 percent of all Canadian seniors with disabilities said they lived in private households. However, they also said that as they got older, it became more probable that they would move into a building occupied by seniors only, or into an institution.

Common Problems Faced by Seniors in their Homes

Many of us wonder about the types of problems seniors face in their homes. The following tables, quoting seniors who participated in a recent survey in Manitoba, give a good idea about these problems. I should point out that the kinds of problems seniors identified in the Manitoba survey are similar to those that occur in Sarnia and elsewhere in Canada.

Health Problems

- I can't walk well anymore.
- I had my hips replaced and both knees are not good.
- I have poor eyesight and weak legs.
- I have bad knees and arthritis.
- I become dizzy when looking up.

Table 1

Problems with Stairs and Steps

- My wife uses a wheelchair and the apartment is not adapted to this.
- I would like the washer and dryer on the main floor.
- Stairs are kind of a problem because the bedrooms are all upstairs.

Table 2

Problems with Kitchens

- Cabinets are too high or I am too short.
- There isn't enough storage space.
- I have difficulty reaching items on the second shelf of cupboards without using a stepstool.

Table 3

Problems with Bathrooms

- I have problems getting out of the bathtub.
- I can't stand up in the bathtub.
- The toilet is too low.

Table 4

Problems with Windows

- They are difficult to open.
- They are too high from the floor. If I sit in a chair, I can only see the sky.
- I have sliding windows, which have to be lifted out for cleaning. They are getting too heavy for me.

Table 5

Home Adaptations Can Help Seniors

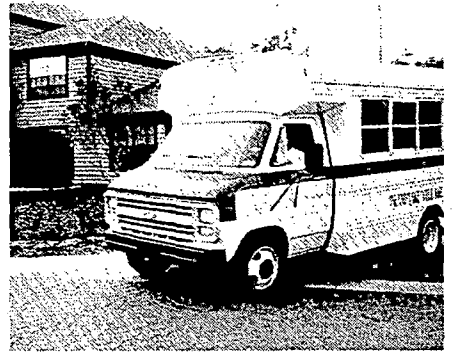
According to what seniors said in the Manitoba survey and other recent surveys across Canada, it appears that home adaptations can play an important role in alleviating or overcoming many of the problems seniors face in their homes. These findings, and the feedback I have received over the years from seniors who have adapted their homes, have convinced me that home adaptations can help seniors maintain their independence and increase safety, security and comfort.

It should be recognized, however, that home adaptations may be insufficient in some cases. In fact, some seniors will

be able to continue to live in their homes only if they have access to the kinds of support services they need.

This is particularly the case for seniors who live

alone and do not have the necessary support and help from family members or friends.



Types of Adaptations that Can Help Seniors

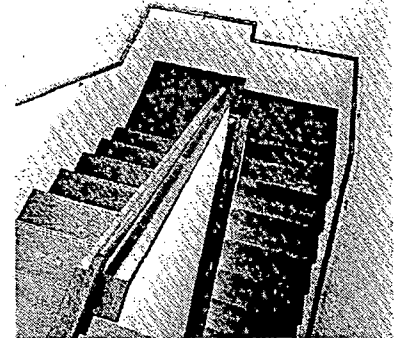
A wide variety of adaptations can help seniors. For example:



This handrail can make walking easier for people with mobility problems. It also adds to the decor of a home.



This handrail can reduce the incidence of accidents and assist people in moving about their homes.



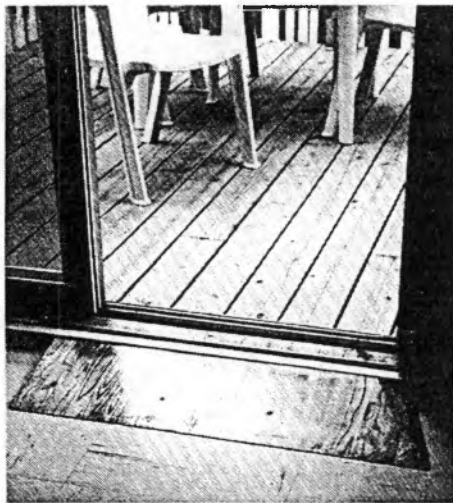
These handrails placed on both sides of the stairs, with bends and scrolls to indicate changes in direction or the end of the stairs, can make going up and down stairs much easier and safer.



This accessible pantry in the kitchen can add much useful storage space.



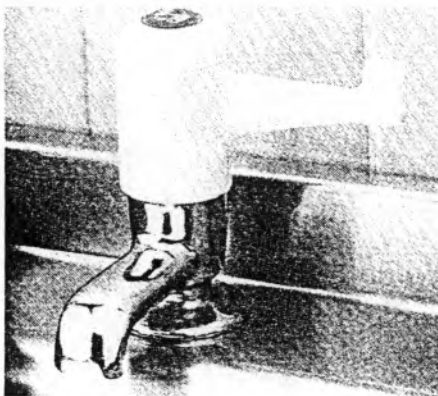
These new shelves positioned between counter tops and cupboards can be reached from a sitting position.



This ramp provides easy access to the deck for a person using a wheelchair.



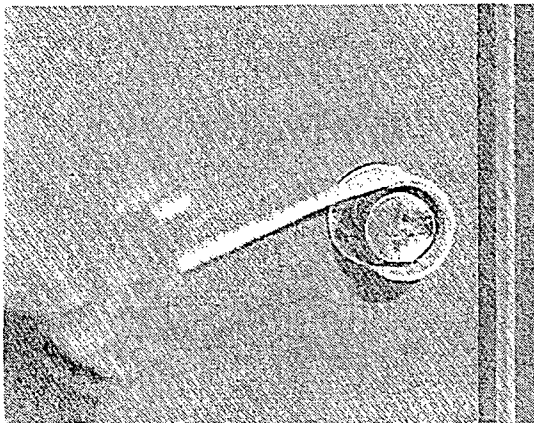
Portable steps and handrails can be used to surmount barriers such as high thresholds to balcony doors.



This portable lever can make older faucets much easier to use.



Lever-type faucets can be used by people who have difficulty operating conventional faucets.

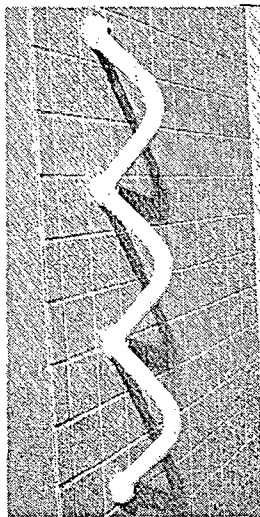


This add-on lever-type handle makes opening doors a lot easier.



Lever-type door handles are a lot easier to operate than conventional door knobs for a person with arthritis.

A wide variety of grab bars are available to assist people in carrying out a variety of daily activities. For example:



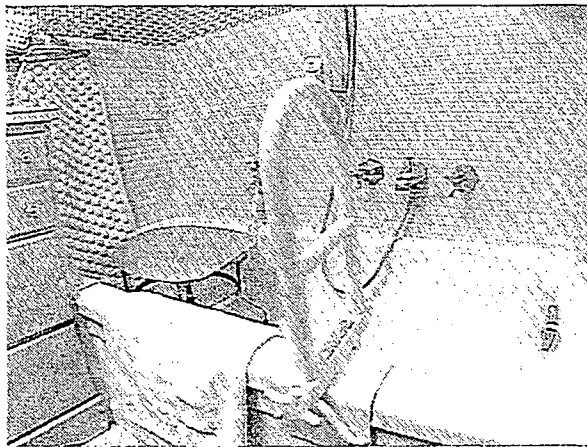
This multi-level grab bar can also reduce the difficulties and risks involved in entering or leaving bathtubs.



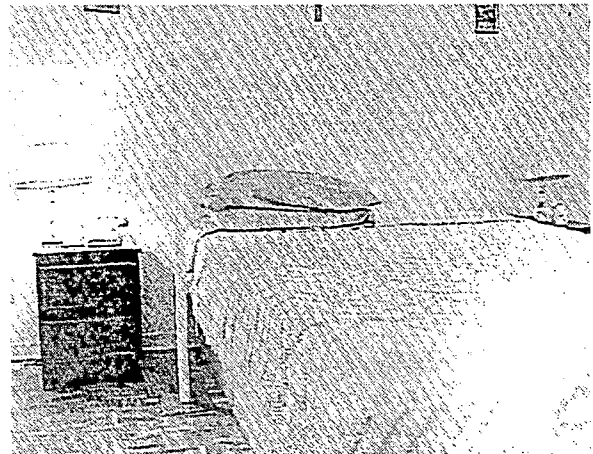
This portable seat inserts into the bowl.



The toilet can be mounted on a pedestal.



This grab bar can be easily attached to or removed from any conventional bathtub.



This portable vertical pole can be used to assist people in lowering or raising themselves.

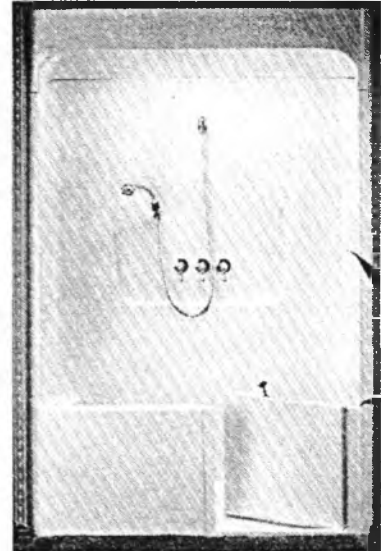
People who find it difficult or impossible to take baths in the conventional way can use a variety of adaptations. For example:



This portable bench can help a person take a bath while sitting.

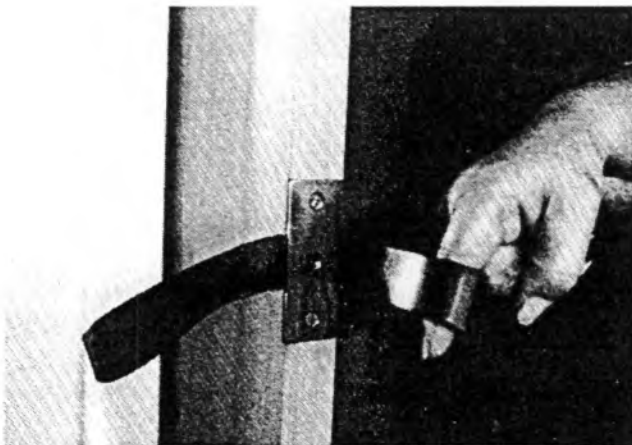


This hinged seat can help a person take a bath while sitting.

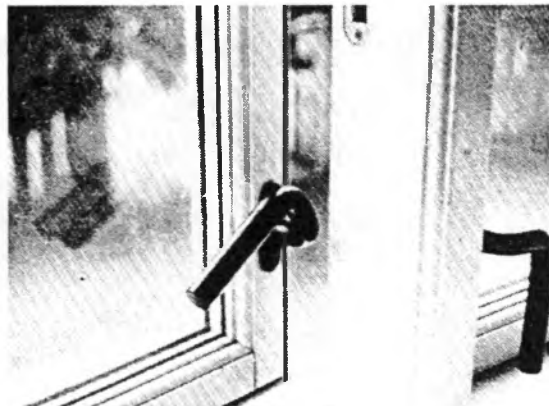


This bathtub with watertight gate enables a person with mobility problems to walk into and out of the tub.

People who have difficulty in operating conventional doors and windows can benefit from a number of adaptations. For example:



Lightweight sliding doors with easy-to-use hardware make rooms more accessible.



Lightweight windows with this type of handle are easy to open and close.

Identifying the Best Types of Adaptations

The types of adaptations that are most successful vary widely, depending on the seniors' individual circumstances, the physical characteristics of their homes, and the types of support services they need and can access. Depending on the situation, seniors can use three basic approaches to adapt their homes.

First Approach

Seniors can use their own judgement to find out what kinds of adaptations can help them carry out their daily activities. They can start by examining their homes in relation to the tasks they are having difficulty in carrying out. In some cases, a minor adaptation can make a big difference. For example, placing a rubber mat on the bottom of a shower stall can reduce the risk of slipping (see Figure 1), and using a mobile seat in combination with pull-out shelves can assist people with back problems in preparing food. (see Figure 2.)

Seniors should also consult with their family members or friends. Sometimes a second pair of eyes can spot something we have overlooked.

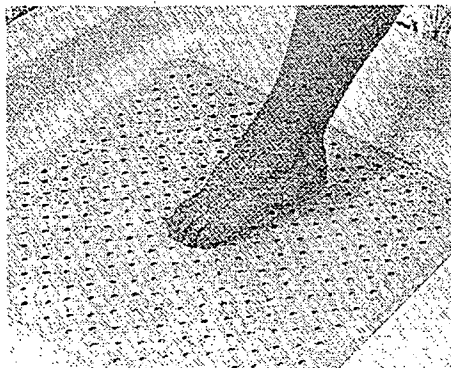


Figure 1



Figure 2

Second Approach

Seniors can use a number of publications designed to help them identify the difficulties they are experiencing and become familiar with the types of adaptations that could help them overcome these difficulties. For example, a new video and a self-assessment guide recently produced by CMHC could be very useful. (see Figures 3 and 4.)



Figure 3

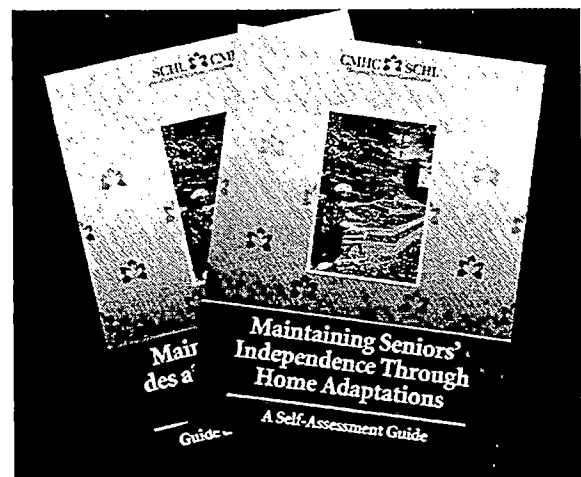


Figure 4

In the video, seniors and professional consultants present a wide variety of successful adaptations and discuss how seniors can adapt their homes to help them carry out daily activities and increase their safety and comfort. The video can be purchased for \$9.95, or borrowed from CMHC's Canadian Housing Information Centre, 700 Montreal Road, Ottawa, Ontario K1A 0P7.

The guide is an easy-to-follow self-assessment tool that can help seniors identify the adaptations that are best for them. Copies of the self-assessment guide are available free of charge from CMHC.

Third Approach

Seniors can also use what is known as the team approach. Under this approach, seniors consult with professional experts, such as an occupational therapist (see Figure 5), a design consultant and a contractor. (see Figure 6.) The team carries out a comprehensive assessment of the situation - analyzing the individual's health, home and preferences, as well as the available budget and resources - and works out a plan to implement the necessary adaptations.



Figure 5



Figure 6

The CMHC publication *Maintaining Seniors' Independence: A Guide to Home Adaptations* can be a useful tool in carrying out the assessment. (see Figure 7.)



Figure 7

It is particularly important to use the third approach when the selection of adaptations is complex, or when the adaptations need to be custom-designed to individual needs. In both cases, an occupational therapist can play a crucial role, not only in identifying the most effective adaptations to compensate for the limitations or disabilities of seniors, but also in advising seniors how they can continue to carry out the activities of daily living as independently as possible.

Opportunities for Health Professionals to Help Seniors

Both home adaptations and support services can enable seniors to maintain independent lifestyles in their homes. Health care providers and the medical profession, therefore, can play a key role in any of the three basic approaches to home adaptations. What they know about the individual needs of seniors and about the resources available to seniors in the community is very important in the process of home adaptations, simply because they are the first people seniors want to consult.

The population is aging, and most seniors want to stay in their homes for as long as possible. In the face of the economic constraints of our times, health care providers and the medical profession will probably have to continue to identify, examine and implement new and effective ways of providing the types of support services required by seniors.

In examining new and effective ways of providing the necessary support services, the need for a coordinated approach among the various ministries, departments and sectors involved becomes very apparent.

Because one of the most rapidly growing portions of our senior population is the group 75 years old or more, health care providers and the medical profession might have to concentrate more than ever on the needs of seniors who live alone and have multiple or chronic disabilities.

The medical profession might also have to learn more about seniors' housing needs and preferences and about the options to meet them. It will be equally important for medical schools to examine possible training needs to respond to the expanding role of the medical profession in the provision and management of geriatric care in the community, outside institutions.

Finally, all members of a team - occupational therapists, health care providers, the medical profession, and seniors and family members - might have to share more and more knowledge, responsibilities, and resources so that they can together develop the best ways for seniors to remain in their homes safely and comfortably, and as independently as possible. All of us will benefit from this approach.