

**EVALUATION ASSESSMENT REPORT:  
CMHC'S ACTIVITIES UNDER THE NATIONAL STRATEGY  
FOR THE INTEGRATION OF PERSONS WITH DISABILITIES**

**DRAFT**

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## 1.0 EVALUATION OF CMHC'S ACTIVITIES UNDER THE NATIONAL STRATEGY FOR THE INTEGRATION OF PERSONS WITH DISABILITIES

### 1.1 Introduction

An evaluation assessment report provides the terms of reference for program evaluation at Canada Mortgage and Housing Corporation. This assessment report is being prepared for the evaluation of the Home Adaptations for Seniors' Independence (HASI) program and the research, demonstration and professional advice initiatives undertaken by CMHC under the National Strategy for the Integration of Persons with Disabilities. It describes the background, design and delivery features, and current activities for both HASI and the research and demonstration initiatives. It also defines the critical issues to be considered in the evaluation and presents the analytical framework for addressing these issues.

### 1.2 Reasons for the Evaluation

The evaluation of CMHC's activities under the National Strategy for the Integration of Persons with Disabilities is undertaken for two reasons. First, as a condition in approving CMHC's activities under the National Strategy, Treasury Board required that a full evaluation of the activities be conducted and submitted by April, 1995. Second, because the Home Adaptations for Seniors' Independence (HASI) program is a pilot program, the evaluation could provide the basis for developing future policies and programs designed to foster housing accessibility for seniors with diminishing abilities. The evaluation is expected to begin in early 1994.

### 1.3 Scope of the Evaluation

The HASI program is designed primarily for seniors with "diminishing abilities"<sup>1</sup>(HASI Program Guidelines) and the research, demonstration and professional advice initiatives are targeted to persons with disabilities in general, including seniors. However, these two programs were intended to complement each other in terms of promoting the objectives of the National Strategy. The evaluation will focus on CMHC's activities funded under the National Strategy, specifically, the HASI program and the research, demonstration and professional advice initiatives. Evaluation of the inter-departmental initiative is outside the scope of this evaluation and will be conducted by HRD. A mid-term formative evaluation of the inter-departmental initiative has already been conducted. Other CMHC programs for persons with disabilities, for example, the Residential Rehabilitation

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<sup>1</sup> Throughout this report, the term "seniors" refers to persons 65 years, or over.

Assistance Program for persons with disabilities, RRAP(D), will not be reviewed since it is not part of CMHC's activities under the National Strategy. Similarly, CMHC's research, information and communications activities, which were not funded directly under the National Strategy, will not be reviewed in this evaluation.

The evaluation will assess whether CMHC's initiatives were the most appropriate response given the objective of the National Strategy and the needs of seniors with diminishing abilities, the performance of the programs in terms of design, implementation and results, and whether there are alternative ways to meet the housing needs of persons with disabilities. In other words, the evaluation will assess the relevance, success and cost-effectiveness of CMHC's activities under the National Strategy.

## 2.0 PROGRAM BACKGROUND

Since the announcement of Canada's declaration on the United Nations Decade of Disabled Persons in 1985, the government has initiated several measures designed to enhance the participation of persons with disabilities in the social and economic mainstream of Canadian society. One such initiative is the National Strategy for the Integration of Persons with Disabilities which was announced in September, 1991. This National Strategy is a five-year (1991-1996) \$157.9 million federal initiative involving eleven departments (following the federal government restructuring): Industry, National Library of Canada, CMHC, Human Resources Department, Health, Canadian Heritage, Indian and Northern Affairs Canada, Justice Canada, Transport Canada, National Transportation Agency, and Treasury Board Secretariat.

Helping persons with disabilities to live, work and partake in leisure activities independently is the main premise behind the initiatives. Improvements are being sought in "... employment and training; access to transportation, housing and communications; community integration; partnerships development, and information exchange and coordination" (1). Three overall objectives - equal access, economic integration and effective participation - have been established for the federal initiative<sup>1</sup>.

Under this federal initiative, CMHC has been allocated \$ 13.2 million to improve access to housing for disabled persons. There are two main activities being undertaken by CMHC in support of the federal initiative: a \$10.0M Home Adaptation for Seniors' Independence (HASI) pilot program to assist seniors with diminishing abilities to continue living independently in their own homes, and a \$3.2M research, demonstration and professional advice initiative for design and construction solutions to improve the living conditions of persons with disabilities, including the environmentally hypersensitive, regardless of age.

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<sup>1</sup>**EQUAL ACCESS:** taking strategic action in areas of federal responsibility that demonstrate leadership and establish benchmarks for the accessibility of persons with disabilities to goods, services and facilities required for daily life.

**ECONOMIC INTEGRATION:** taking measures to systematically alter policies and practices in order to remove barriers to training and employment for persons with disabilities.

**EFFECTIVE PARTICIPATION:** involving persons with disabilities and their organizations in petitioning and educating government, the general public and persons with disabilities themselves as the key to redefining their role in Canadian society.

There are a number of policy rationales which support the introduction of a program of home adaptations for seniors with diminishing abilities. First, survey evidence from Statistics Canada (7,9) indicates that 46% of Canada's population aged 65 and over have some form of disability, and among those aged 85 and over, approximately eight out of ten are disabled. Further, 81% of seniors with diminishing abilities have mobility and agility problems, i.e., they are limited in their ability to walk, move from room to room, carry objects for a short distance, stand for a long time, perform activities such as bending, reaching, getting in and out of bed and grasping objects.

From an affordability perspective, seniors with diminishing abilities are an appropriate target group. Generally, the majority of seniors with diminishing abilities have incomes substantially lower than non-seniors with diminishing abilities as well as other segments of the population. Data from Statistics Canada (19) indicates that 775,478 Canadian households with at least one person 65 years and over have incomes below the core need level.

Second, the population is getting older and consequently, there is a growing need to explore alternatives for adapting the housing stock to meet the needs of an aging population. At the 1988 conference on Housing for Older Canadians, it was observed that Canada has the second highest rate of institutionalization in the world (5). The need for appropriate housing options that are both preferred by older persons and capable of avoiding institutionalization was underscored. HASI has been developed as a pilot program in the search for more housing options for seniors with diminishing abilities. Under the program, grants for minor home adaptations are available to seniors with diminishing abilities who have difficulties performing basic activities of daily living such as walking, moving from room to room, carrying objects for a short distance, standing for a long time, and performing activities such as bending, reaching, getting in and out of bed and grasping objects.

Third, concerns about the home adaptation needs of seniors with diminishing abilities were raised at several important forums. This was one of the key issues raised during the public consultation on residential renovation conducted by CMHC between 1987 and 1989. Many people believe that there is a visible need to assist low-income seniors undertake minor home adaptations such as making light switches more accessible or putting in place safety features. A moderate amount of assistance was envisaged. Reference to the shelter modification needs of the seniors with diminishing abilities was made again during the national conference on housing for seniors in 1988. Here, the notion of improving the physical accessibility of housing for elderly persons as a means of helping them to continue living independently in their homes

was discussed. The need to adapt housing to help seniors age-in-place was reiterated at the provincial/territorial conferences on seniors' housing which CMHC co-sponsored with provincial/territorial agencies in 1990.

Finally, a number of recent studies on the housing needs of seniors and persons with disabilities (5,6,10,12,17) indicate that most of these people prefer to live in their own homes as long as possible. Extending the length of stay of seniors in their own homes recognizes this preference and relieves them of the trauma associated with relocation. This approach also has the advantage of reducing the potential cost of institutional care. In addition, recent evidence indicates that there are four main blocks of variables which affect the rate of institutionalization of seniors (14,16,10). These are the physical condition of the home itself, seniors' social needs, seniors' health condition, and the environmental condition of their neighborhood. The HASI program is directed towards improving the physical accessibility of the home and, to some extent, of the social element by helping seniors to live independently and to perform a range of daily living activities.

The need for research, demonstration and professional advice in the areas of housing design and construction for persons with disabilities was identified by organizations representing persons with disabilities (including the Canadian Rehabilitation Council for the Disabled and the Canadian Paraplegic Association). The information generated from the research, demonstration and professional advice initiatives could lead to greater awareness, affect the production or modification of housing units, and encourage further research on the needs of persons with disabilities. Further, through consultation with medical professionals and information dissemination to architects, designers and builders, the needs of persons with disabilities could be better integrated in their work. Consequently, persons with disabilities will be provided with a wider range of housing options and an increase in the supply of accessible housing.

### 3.0 PROGRAM PROFILES

#### 3.1 Program Objectives

##### A. HASI Program

HASI is a two-year demonstration program designed to assist households with at least one member who is 65 years of age or over, and has an age-related condition or diminished ability, to adapt their homes. The objectives of the HASI program are: "... to accommodate the older person's frailty and to facilitate independent living" (3). For administration purposes, these objectives have been operationalized as follows:

- ° to assist low-income seniors who have difficulties with daily living activities in the home to carry out minor home adaptations, and
- ° to assess whether minor home adaptations can facilitate and prolong independent living by seniors.

##### B. Research, Demonstration and Professional Advice

The following three objectives were identified for the research, demonstration and professional advice initiatives (3).

- ° CMHC will promote barrier-free housing in the architectural and construction industries,
- ° CMHC will research, develop and promote the adoption of construction techniques which permit conventional housing units to be readily adapted to meet a variety of needs of persons with disabilities, and
- ° CMHC will consult with the housing industry and groups representing persons with disabilities to sponsor a series of demonstration projects supporting the results of the research projects completed.

#### 3.2 Program Descriptions

##### A. HASI Program

HASI assistance is in the form of a maximum grant of \$2,500. To be eligible, applicants must be 65 years or over, have an age-related condition or diminished ability which can be alleviated by one or more eligible adaptations, have household income below the Core Need Income Threshold (CNIT) for the area in which they live, and be the only member of the household applying (2). Exceptions may be made to income



thresholds at the discretion of the Active Party to a maximum of 10 per cent of approvals.

Eligible age-related conditions or diminished abilities include mobility, agility, endurance, seeing, hearing, and mental capacity interfering with common household activities. Activities of daily living applicable to this program include getting in and out of the home, using the stairs, getting around hallways, using the kitchen, using the bathroom, getting in and out of bed/chair, using closets/storage area, doing the laundry, answering the door/using the telephone, and controlling light, heat, and ventilation.

An assessment of the age-related conditions or diminished abilities is prepared by the applicant on the basis of a CMHC-provided form or by a qualified physiotherapist or social/health professional. The adaptations must be housing-related, permanent and of a minor nature. Both owner-occupied and rental residential properties are eligible. However, with rental properties, the applicants must obtain the written consent of the landlord.

Provinces/territories were invited to cost-share a part of the initiatives to avoid duplication of housing delivery networks, ensure administrative simplification, and facilitate links with provincial/territorial social service organizations which may be connected with the client group. The cost-sharing provinces/territories are being asked to provide input into this document and to cost-share the final evaluation. The cost-sharing provinces/territories are Newfoundland, Nova Scotia, New Brunswick, Québec, Saskatchewan, British Columbia, Northwest Territories and Yukon. The cost-sharing ratio is 75:25 (federal:provincial) everywhere, except for British Columbia, where it is 67:33. In the remaining provinces and on Indian Reserves, CMHC is delivering the HASI program unilaterally.

The HASI program is substantially different from the Residential Rehabilitation Assistance Program for the Disabled, RRAP(D), which CMHC introduced in 1981. The administration, target client group, and type and extent of eligible home modifications under the RRAP(D) program differ from those of the HASI program. Specifically, RRAP(D) is available to all age groups of disabled individuals (qualifying on the basis of having a disability) and covers the cost of major home modifications or repairs that assist persons with disabilities to live independently in their homes. Funding is in the form of forgivable or repayable loans to a maximum of \$10,000 for RRAP (D).

## B. Research, Demonstration and Professional Advice

This section of the report describes the research, demonstration and professional advice activities which were to be undertaken when the National Strategy was first introduced. The section entitled "program activity" gives an update of the status of these activities.

### I. Research

Two main emphases are encompassed in the range of projects included in the research component. The first addresses the needs of people with a range of disabilities (physical, visual, auditory, and cognitive), while the second addresses the need to provide housing with very clean air for people who are environmentally hypersensitive. Five themes are being developed under the research program on general disabilities, and three streams of activities under the environmentally hypersensitive program (Figure 1). The total budget allocation for the research component is \$2.5 million.

#### i) Research Program on General Disabilities

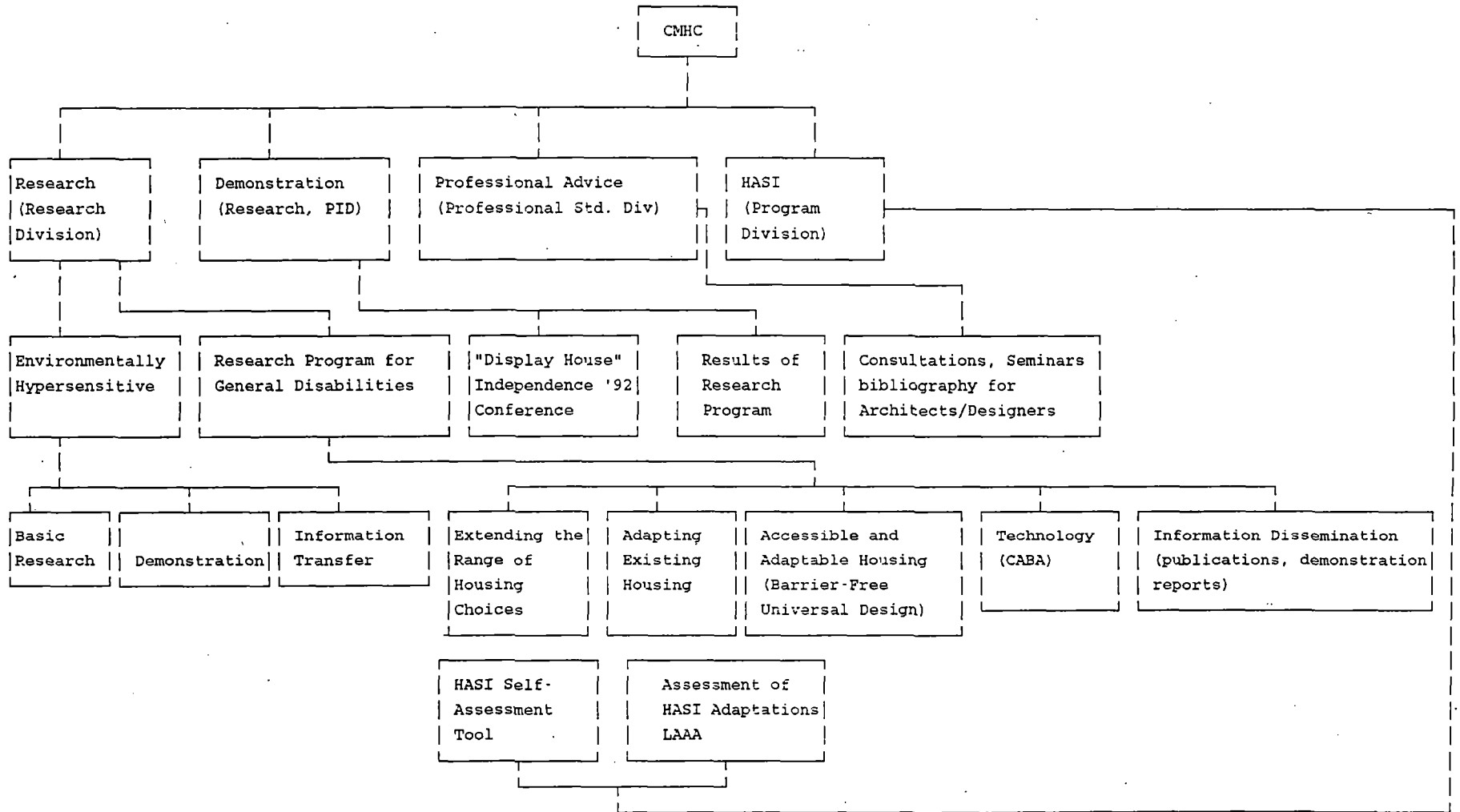
Theme I, "Extending the Range of Housing Choices", focuses on the special needs of persons with disabilities of all ages, in terms of providing them with a range of high quality choices and creative housing solutions. Research publications which promote the adoption of the housing choices have been developed. The target audiences for the publications are government agencies, the renovation industry, the housing industry (developers and builders), designers, support groups for persons with disabilities, medical professionals and persons with disabilities themselves.

Theme II, "Adapting Existing Housing", consists of two projects which are directly linked to the HASI program. The first project focuses on the development of a self-assessment tool for seniors to use to identify their activity limitations and the types of home adaptations they need. This instrument is being used in many provinces for the delivery of the HASI program. The self-assessment tool could potentially reduce program administration costs in addition to informing seniors of the range of home adaptations available to them.

The second project assesses the activities undertaken under the HASI and RRAP(D) programs. HASI and RRAP(D) are the two major CMHC programs designed to help persons with disabilities, or frailties, to achieve a more supportive physical environment. However, only HASI is part of the activities undertaken under the National Strategy. This project examines the comparative effectiveness of a wide range of adaptations funded by HASI and RRAP(D) in helping diverse client groups in their daily activities. The impact of home adaptations in enabling people to continue living in their own

Figure 1

C. M. H. C.'s Role in the Federal Initiatives for Persons with Disabilities



homes will be assessed. The study also examines the costs of different types of adaptations and identifies any problems or benefits associated with alternative ways of commissioning or carrying out modifications. This project is based on a survey of HASI and RRAP(D) clients across Canada. The information obtained through this HASI-RRAP(D) client survey will be utilized in the evaluation of the HASI program.

**Theme III, "The Concept of Barrier-Free and Adaptable Housing"** consists of research in the context of the aging population and the desire of persons with disabilities to live independently. The objective here is to encourage the housing sector to design more barrier-free environments and to increase the supply of dwellings that are easily adaptable to meet the needs of people with varying disabilities. Three activities comprise this research direction.

First, through national workshops and focus groups with agencies representing seniors and persons with disabilities as well as a literature review, a report which identifies the most significant features of barrier-free and adaptable design in housing has been developed. Generally, barrier-free and adaptable designs ensure buildings are accessible to people with varying disabilities, as well as creating barrier-free and safe environments for everyone, at all stages in their lives regardless of frailty or disability. Second, through industry participation, studies have been conducted to develop cost-effective ways of incorporating barrier-free and adaptable design features into different forms of residential buildings. Third, design competition, pilot-testing and demonstrations were undertaken using the most cost-effective and promising approaches from a design standpoint. This work is being done in cooperation with provincial/territorial housing agencies, non-profit groups and the private sector.

**Theme IV, "Technology to Assist Persons with Disabilities"**, involves CMHC's research to identify the types of technology (including automated building and smart house) that can assist seniors and persons with disabilities in their daily activities and enhance their comfort and safety.

**Theme V, "Information Dissemination, Demonstrations and Promotion"**, relates to the funding of publications, reports and demonstrations that have been produced and distributed based on the research work outlined under Themes I to IV.

ii) Research on Environmentally Hypersensitive Housing

Hypersensitive individuals react to extremely low levels of contaminants or to substances which are innocuous to the general population. Resulting health problems range from mild symptoms to complete debilitation. At present, there is no generally accepted medical definition of hypersensitivity and the underlying mechanisms are not well understood. There is

no reliable data available on the number of people affected. It is estimated that as much as 6% of the population has the potential to become hypersensitive. Residential environments are therefore extremely important, as they can either cause or exacerbate illness, or alternatively serve as a "refuge", relatively free of contaminants.

The objectives of this research are to develop cost-effective housing solutions for environmentally hypersensitive people and to promote ways of improving their access to suitable housing and employment opportunities. The research addresses ways of providing very clean indoor air through approaches designed to eliminate or minimize offgassing of construction materials, and remove contaminants from both the indoor and incoming air. It is anticipated that the research conducted and technology developed will not only increase the accessibility of housing to the hypersensitive but will also benefit the housing industry in terms of improved air quality and advanced mechanical equipment. This part of the program consists of three streams of activities, namely, basic research, monitoring/demonstration and information transfer.

The first stream, basic research, evaluates building materials, develops and evaluates affordable building systems (e.g., floors, interior walls) and examines the performance of mechanical systems (e.g., heating, cooling air-purification and ventilation). The second stream is concerned with testing and demonstrating the research findings in new and existing projects. This is being done in close collaboration with builders and various housing agencies. A prototype of "clean" modular housing has been designed and constructed on the basis of present knowledge of low-pollution housing. This is being used to test and demonstrate the performance of building materials, mechanical systems and affordability. Guidelines for the design and production of modular units will be developed based on the findings. The third stream involves communicating the research findings to the housing industry (construction, materials manufacturers, architects), housing agencies, medical professionals, and to hypersensitive individuals.

#### I. Demonstration

Demonstration models have been developed and promoted for disabled clients by CMHC's Housing Innovation Division and Research Division based on the findings of the research initiatives. The budget for this activity is \$515,000. The major expenditure was for the design and construction of a 1000-square-foot demonstration project, the "Open" House, for the Independence 1992 International Congress and Exposition. The design of "Open" House highlights solutions to barrier-free living for persons with mobility conditions, vision and hearing impairments, and the environmentally hypersensitive.

### III. Professional Advice

The professional advice initiative was designed to raise awareness among architects of the design requirements involved in providing appropriate housing solutions for persons with disabilities. CMHC's Professional Standards Division was assigned the lead role in this component of the initiatives for which \$160,000 were allocated. Two major activities were planned under this aspect of the research initiatives. These were consultations with all provincial/territorial associations of architects to determine their information needs with respect to design requirements for persons with disabilities, and the development of a comprehensive bibliography of source material which lists the publications, product sources and standards available on design for persons with disabilities.

### 3.3 Program Delivery

#### A. HASI Program

Persons applying for assistance must complete an application form to determine their eligibility based on income, age and diminished ability. An accompanying self-assessment form, which may be completed by the applicants alone or with assistance from family, friends, volunteers or health/social service professionals, provides evidence concerning their type of disability and home adaptation needs. From these documents, the delivery office determines whether or not the applicant qualifies for a grant and, if so, gives an approval. The home adaptations work must be completed within three months of the final approval date. Follow-up monitoring on a random sample of ten per cent of completed projects is undertaken prior to disbursement. Recipients and/or other members of the qualifying household may also contribute an amount toward the minor home adaptations to be completed. For renters, this would involve expenditures by the applicants or their landlords. There are some variations to the delivery approach described above in some provinces.

The HASI program is being delivered by the provincial/territorial housing agency in Newfoundland, Nova Scotia, New Brunswick, Québec, Saskatchewan, British Columbia, Yukon and the Northwest Territories. The program is being delivered by CMHC in Prince Edward Island, Ontario, Manitoba, Alberta and on Indian Reserves.

#### B. Research, Demonstration and Professional Advice

CMHC's Research Division, Housing Innovation Division, and Professional Standards Division are responsible for implementing the research, demonstration and professional advice initiatives. Consultations were undertaken with agencies representing seniors and persons with disabilities, health and social service agencies, medical professionals, and various groups in the housing sector (architects, designers, builders, etc.). The communications strategy involved the use of publications, seminars, training workshops, design competition, demonstrations, focus groups and promotional activities.

Several publications have been generated by the research program on general disabilities. The publications highlight the wide range of housing choices available to persons with disabilities, provide definitions of barrier-free and adaptable housing, develop cost-effective ways of incorporating these design features, and support research on technology to assist persons with disabilities. Two books have been developed based on the research on environmentally hypersensitive individuals. The first was a guide to help

homeowners find sources of indoor air quality for themselves. The second book contains information on selected building materials relevant to building or renovating homes for hypersensitive individuals.

The "Open" House has been taken on a tour across Canada. The tour was designed to raise awareness at the community level and to provide a forum for the exchange of information, ideas and opportunities among the housing industry (builders, architects, designers), governments (provincial and municipal) and groups representing persons with disabilities. To facilitate this, workshops, seminars, focus groups, media events and other activities that promote and market barrier-free housing were undertaken. As well, an "Open" House guidebook describing the display and its special features and products was developed and distributed to visitors and by mail order. Surveys of visitors to the "Open" House were undertaken as part of the tour. While the "Open" House was funded through the National Strategy, the promotional tours were funded under other CMHC budget lines.

For the professional advice component, a comprehensive bibliography of source material for architects detailing the publications, product sources and standards available on design for persons with disabilities are being developed.



#### 4.0 PROGRAM ACTIVITY

##### A. HASI Program

Tables 1 through 3 profile the current state of activity under the HASI program at both the provincial/territorial and national level. Figures 2 through 4 give a graphical picture of the income, age and household size distributions of HASI clients across Canada.

Table 1 indicates that, 92.2 per cent of the applications received were approved across Canada. At the provincial/territorial level the approval rates are fairly close to the national average (92.2%) except for Manitoba and Alberta. Also, the actual costs of the adaptations exceeded the amount allowed by 7.6 per cent. Ontario, Saskatchewan and British Columbia registered the largest differences between the amount allowed and the actual costs of the adaptations.

Table 2 provides the frequency of the various categories of activity limitations among HASI clients across Canada. Limitations associated with endurance, agility and mobility are most prevalent among HASI clients. None of the clients had cognition difficulties or were environmentally hypersensitive (there were no recorded cases in these categories).

Table 3 presents a profile of HASI clients in terms of household income, household size, tenure, age distribution and the distribution of clients with incomes below the Core Need Income Threshold (CNIT) level. According to Table 3, across Canada, 59.6 per cent of HASI clients live in single households, 83.4 per cent own their own homes, and 94.8 per cent have household income below the CNIT level. In terms of their age, the clients are almost evenly distributed across the different age groups.

TABLE 1

HASI APPLICATIONS RECEIVED AND APPROVED, AMOUNT COMMITTED  
FOR ADAPTATIONS AND ACTUAL COST OF ADAPTATIONS BY PROVINCE/  
TERRITORY AS AT FEBRUARY 25, 1994

PROVINCE/TERRITORY	APPLICATIONS				PERCENT APPROVED	COMMITMENT AMOUNT	ACTUAL COST	ACT. COST MINUS COMIT. AMT
	RECEIVED	APPROVED	NOT APPROVED					
*NEWFOUNDLAND	159	154	5	96.8	\$312,156	\$312,785	\$629	
PRINCE EDWARD IS	29	27	2	93.1	48,923	54,936	6,013	
*NOVA SCOTIA	312	308	4	98.7	700,252	700,252	0	
*NEW BRUNSWICK	190	187	3	98.4	335,207	335,227	20	
*QUÉBEC	913	893	20	97.8	1,470,083	1,470,083	0	
ONTARIO	1161	1026	135	87.6	2,163,863	2,544,254	380,391	
MANITOBA	230	172	58	74.7	334,311	350,158	15,847	
*SASKATCHEWAN	205	194	11	94.6	343,614	408,105	64,491	
ALBERTA	300	250	50	83.3	502,093	534,240	32,147	
*BRITISH COLUMBIA	745	708	37	95.0	1,361,808	1,406,328	44,520	
*YUKON	11	10	1	90.9	24,544	24,544	0	
ON-RESERVE	271	252	19	92.9	550,307	624,905	74,598	
<b>CANADA</b>	<b>4526</b>	<b>4181</b>	<b>345</b>	<b>92.3</b>	<b>8,147,161</b>	<b>8,765,817</b>	<b>618,656</b>	
<b>%</b>	<b>(100)</b>	<b>(92.2)</b>	<b>( 7.8)</b>				<b>(7.59)</b>	

SOURCE: CMHC's Program Delivery System

\* Cost-Sharing Provinces/Territories

TABLE 2  
 DISTRIBUTION OF TYPE OF ACTIVITY LIMITATIONS  
 OF CLIENTS AND UNITS FUNDED UNDER HASI BY  
 PROVINCE/TERRITORY AS AT FEBRUARY 25, 1994

PROVINCE/TERRITORY	TYPE OF ACTIVITY LIMITATION							TOTAL	UNITS
	VISUAL	HEARING	MOB- ILITY	AGILITY	ENDUR- ANCE	OTHER	MISSING		
NEWFOUNDLAND	34	39	80	112	117	32	510	924	154
PRINCE EDWARD IS	1	0	14	22	19	4	102	162	27
NOVA SCOTIA	42	30	277	166	106	52	1175	1848	308
NEW BRUNSWICK	4	2	166	21	9	0	920	1122	187
QUÉBEC	195	112	722	721	647	356	2605	5358	893
ONTARIO	257	235	573	784	699	396	3212	6156	1026
MANITOBA	39	40	100	144	128	73	508	1032	172
SASKATCHEWAN	16	14	172	84	49	19	810	1164	194
ALBERTA	68	68	121	173	162	111	797	1500	250
BRITISH COLUMBIA	167	164	278	553	412	359	2315	4248	708
YUKON	2	1	8	5	3	0	41	60	10
ON-RESERVE	76	77	141	181	152	44	841	1512	252
<b>CANADA</b>	<b>901</b>	<b>782</b>	<b>2,652</b>	<b>2,966</b>	<b>2503</b>	<b>1446</b>	<b>13836</b>	<b>25086</b>	<b>4181</b>

SOURCE: CMHC's Program Delivery System

TABLE 3

DISTRIBUTION OF HASI CLIENTS BY HOUSEHOLD SIZE, HOUSEHOLD INCOME, CORE NEED AND HOME TENURES BY PROVINCE/TERRITORY AS AT FEBRUARY 25, 1994

PROVINCE/ TERRITORY	HOUSEHOLD SIZE				HOUSEHOLD INCOME**				CORE NEED	TENURE		AGE			
	1	2	2+	(1)	(2)	(3)	(4)	(5)		OWNER	RENTER	65- 69	70- 74	75- 79	80+
*NEWFOUNDLAND	57	75	22	22	64	50	11	7	142	153	1	39	36	31	48
PRINCE EDWARD IS	15	8	4	5	16	5	1	0	27	22	5	7	7	8	5
*NOVA SCOTIA	233	71	4	26	202	73	7	0	290	305	3	89	81	65	73
*NEW BRUNSWICK	84	84	19	36	76	57	14	4	176	166	21	43	37	45	62
*QUÉBEC	587	277	29	238	483	141	28	3	892	570	323	224	250	200	219
ONTARIO	605	366	55	98	417	320	156	35	938	902	124	277	247	220	282
MANITOBA	108	57	7	29	85	49	8	1	167	148	24	25	27	53	67
*SASKATCHEWAN	84	106	4	30	77	64	22	1	181	170	24	53	42	40	59
ALBERTA	155	82	13	39	109	75	25	2	242	242	8	59	64	59	68
*BRITISH COLUMBIA	426	255	27	82	297	208	96	25	646	589	119	156	177	163	212
*YUKON	6	4	0	6	2	1	1	0	10	1	9	2	2	2	4
ON-RESERVE	131	90	31	84	107	47	12	2	249	219	33	86	74	39	53
<b>CANADA</b>	<b>2491</b>	<b>1475</b>	<b>215</b>	<b>695</b>	<b>1935</b>	<b>1090</b>	<b>381</b>	<b>80</b>	<b>3960</b>	<b>3487</b>	<b>694</b>	<b>1060</b>	<b>1044</b>	<b>925</b>	<b>1152</b>
<b>%</b>	<b>59.6</b>	<b>35.2</b>	<b>5.2</b>	<b>16.7</b>	<b>46.4</b>	<b>26.1</b>	<b>8.9</b>	<b>1.9</b>	<b>94.8</b>	<b>83.4</b>	<b>16.6</b>	<b>25.3</b>	<b>24.9</b>	<b>22.1</b>	<b>27.7</b>

SOURCE: CMHC's Program Delivery System

\*Cost-Sharing Provinces/Territories

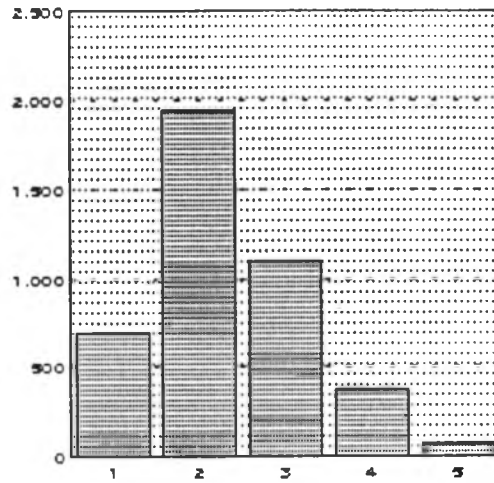
\*\* 1= \$0-10,000 2= 10,001-15,000 3= 15,001-20,000

4= 20,001-25,000 5= Greater Than \$25,000

CORE NEED = number of clients with incomes below the Core Need Income Treshold (CNIT) level for their area and type of dwelling.

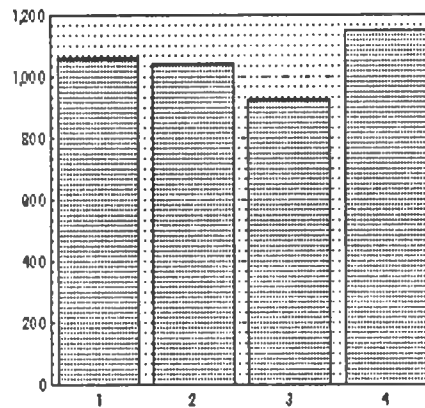
## PROFILE OF HASI CLIENTS ACROSS CANADA

FIGURE 2:  
INCOME DISTRIBUTION  
OF HASI CLIENTS



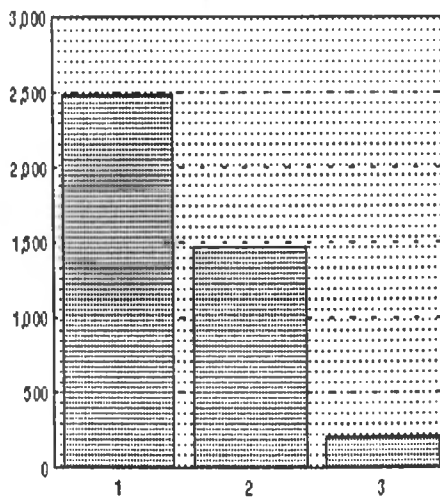
1=\$0-10,000  
2=10,001-15,000  
3=15,001-20,000  
4=20,001-25,000  
5=25,000+

FIGURE 3:  
AGE DISTRIBUTION  
OF HASI CLIENTS



1=65-69  
2=70-74  
3=75-79  
4=80+

FIGURE 4  
HOUSEHOLD SIZE  
DISTRIBUTION  
OF HASI CLIENTS



1=1 PERSON  
2=2 PERSONS  
3=3+ PERSONS

## B. Research, Demonstration and Professional Advice Initiatives

The following publications and activities profile the status of the research, demonstration and professional advice component of the National Strategy as of December, 1993:

### **Research on General Disabilities:**

- ° Focus Group Studies with seniors, older adults and persons with disabilities on barrier-free and adaptable housing have been completed. The report for this study is being prepared.
- ° The data for the publications on Technology for People with Disabilities has already been collected and two publications, one for consumers and one for the housing industry, are in the initial stages of preparation.
- ° The national survey of HASI and RRAP-D clients is currently underway. The design and development of the sample, the survey instrument and the pretest of the survey instrument has been completed.
- ° The CMHC "Open" House barrier-free demonstration home was presented at the first International Congress and Exposition, Independence '92 and was subsequently taken on a tour across Canada. Over 150,000 people visited the "Open" House at 32 different venues across Canada. The "Open" House guidebook accompanied the display. Surveys of visitors to the "Open" House were conducted.
- ° A barrier-free automated demonstration house is being constructed in Maple Ridge, British Columbia.

### **Research on Environmentally Hypersensitive Housing:**

- ° The "Clean Air Guide" was developed and twenty thousand copies were distributed across the country. The guide has now been reprinted. This guide is designed to help people identify sources of indoor air quality problems in their homes.
- ° The "Healthy Building Material Guide" is in its final phase of preparation. This guide provides information on the influence that building materials have on the indoor environment and is designed to assist in material selection. It describes 180 different materials.
- ° The "Healthy Mechanical Systems Guide" which describes preferred heating and ventilation systems is nearing completion.
- ° The "CMH4C" (Canadian Modular Housing For Canadians) house for the environmentally hypersensitive has been

built. This house incorporates many innovations in material selection, building practice and mechanical systems. The "CMH4C" house is currently located at CMHC National Office and will soon be open for demonstration. The Canadian Manufactured Housing Institute is involved in this project.

- ° Research is in progress on sick houses, and the effects of windows and pesticides on hypersensitivity.
- ° In terms of communication and information dissemination, presentations have been made in Sudbury, Toronto, Halifax, Montreal, Ottawa, Kitchener and Helsinki on housing for the environmentally hypersensitive. Other activities, including videos and collaboration with the Canadian Medical Association, are planned.
- ° Preparation will shortly commence on a training program to teach building inspectors how to identify residential indoor air quality problems and to inform them of the most affordable solutions.

## 5.0 PROGRAM LOGIC

The logic charts shown in Figures 5 and 6 link the activities of the HASI program and the research, demonstration and professional advice initiatives to the outputs of these programs. The direct and indirect impacts of the programs are also identified. The existence of the links depicted in the logic charts will be established empirically at the time of the evaluation.

Activities describes the activities which are to be undertaken in delivering the program. The activities associated with the HASI program include:

- ° filling out an application form which essentially asks for demographic information,
- ° filling out the assessment tool which is designed to help the applicants select the most suitable adaptation given their disability,
- ° selecting clients for assistance,
- ° clients submitting a contractor's bid describing the work to be undertaken and the cost for the work, and
- ° conducting spot checks to verify eligibility of clients who are granted conditional approval.

For the research, demonstration and professional advice initiative, the activities include:

- ° conducting research on housing solutions for persons with disabilities,
- ° demonstrating these solutions and providing advice, and
- ° information to the development and architectural community and consumers.

Outputs indicates the actual products of the program. The output of the HASI program is a maximum grant of \$2,500 for undertaking minor home modifications. The modifications should assist seniors with diminishing abilities to continue to live independently in their own homes. The output of the research, demonstration and professional advice initiatives includes published materials, reports, seminars/workshops, conferences, design competitions, the development of the HASI self-assessment tool, and construction and demonstration of the "Open" House, the "CMH4C" house and other examples of barrier-free and adaptable housing.

Direct Impacts describes those outcomes which can be directly attributed to the program outputs, and indirect impacts refers



to those outcomes which occur as a consequence of the direct impacts. One assumption of the HASI program was that by providing a grant for minor home modifications, the homes of seniors with diminishing abilities would become more accessible, and this will in turn help them to perform a wider range of daily living activities, which will, in turn, prolong independent living in their own homes. In essence, the direct impact of the HASI program on seniors with diminishing abilities are improved accessibility and prolonged independent living.

Further, it is anticipated that through the program the needs of seniors with diminishing abilities would become more evident to policy-makers, social service agencies, the housing industry, organizations representing persons with disabilities, housing researchers, etc. It is expected that over the long-term, this increase in awareness would lead to increases in the amount spent on accessible housing and more widespread adoption of barrier-free design and adaptable housing. Consequently, with improved accessibility, safety and independent living, it is expected that the cost to society for providing institutional care will be reduced. Also, it is likely that the program could lead to non-housing benefits such as improved quality of life and well-being, a greater sense of personal security, personal control and personal efficacy, and the ability to engage in a wider range of leisure activities. The direct cost of the HASI program was \$10 million.

It was anticipated that the research, demonstration and professional advice initiatives would lead to new knowledge about the housing needs of persons with disabilities, identify the most cost-effective ways of meeting these needs, and encourage further research through communication and dissemination of the research findings. Consequently, it is expected that over the long-term new design and construction practices will be adopted, new technology will be developed, products and processes of housing manufacturers and suppliers will change, and awareness among housing groups (designers, builders, architects, etc.) about the special needs of persons with disabilities will be increased. Finally, all this should ultimately lead to a general increase in the range of housing options for persons with disabilities, including seniors. The direct cost to the government for this set of activities was \$3.2 million.

Two caveats are in order at this stage. First, the extent to which the impacts described above can be attributed solely to the programs is an important issue which requires careful analysis and cautious interpretation of the results. Second, the full impact of the research and demonstration initiatives will only be realized over the long-term, therefore, their impact will only be partially measured and the results will only be preliminary. The links between activities, outputs

and impacts described above will be established empirically in the evaluation.

FIGURE 5: HASI LOGIC CHART

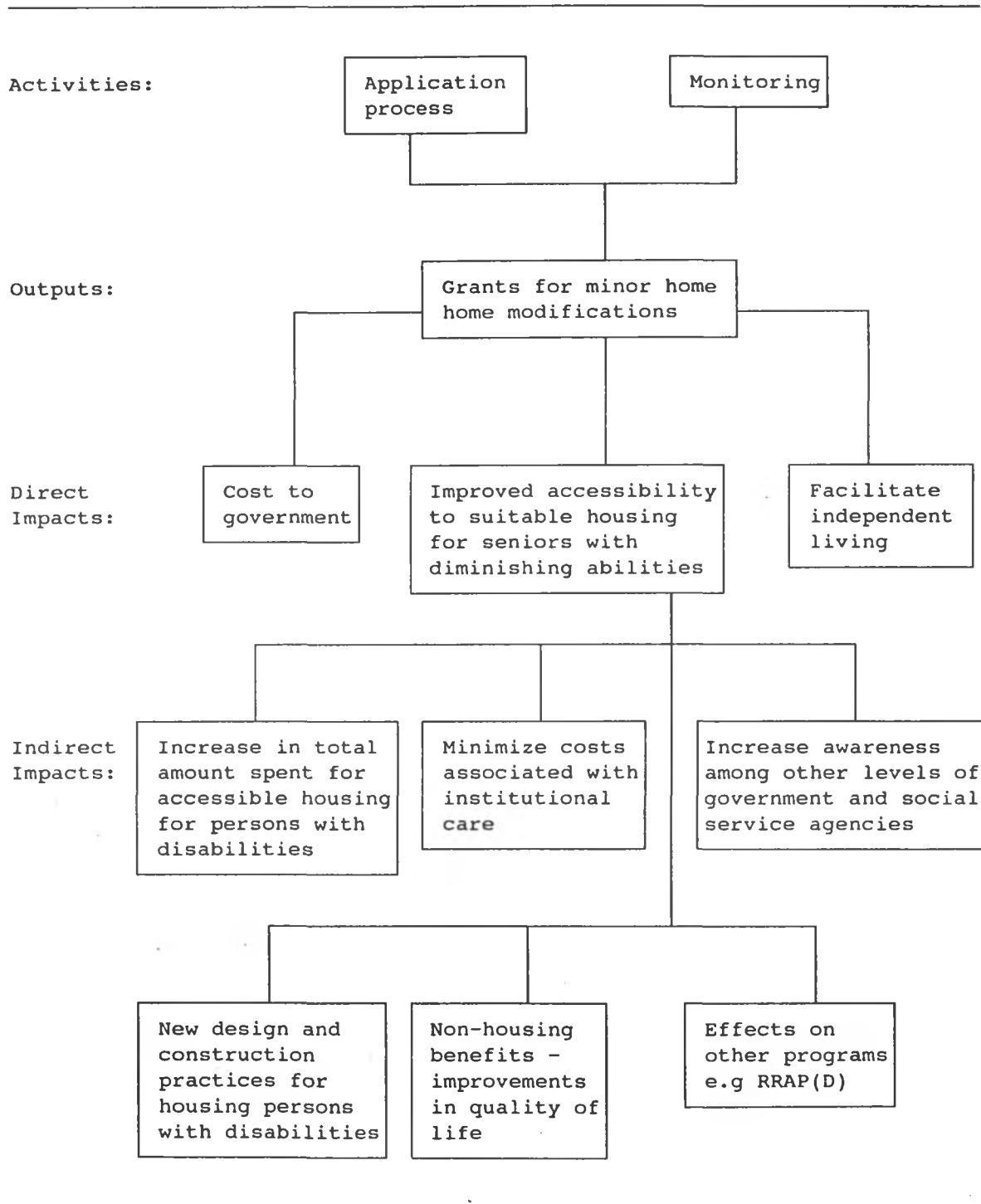
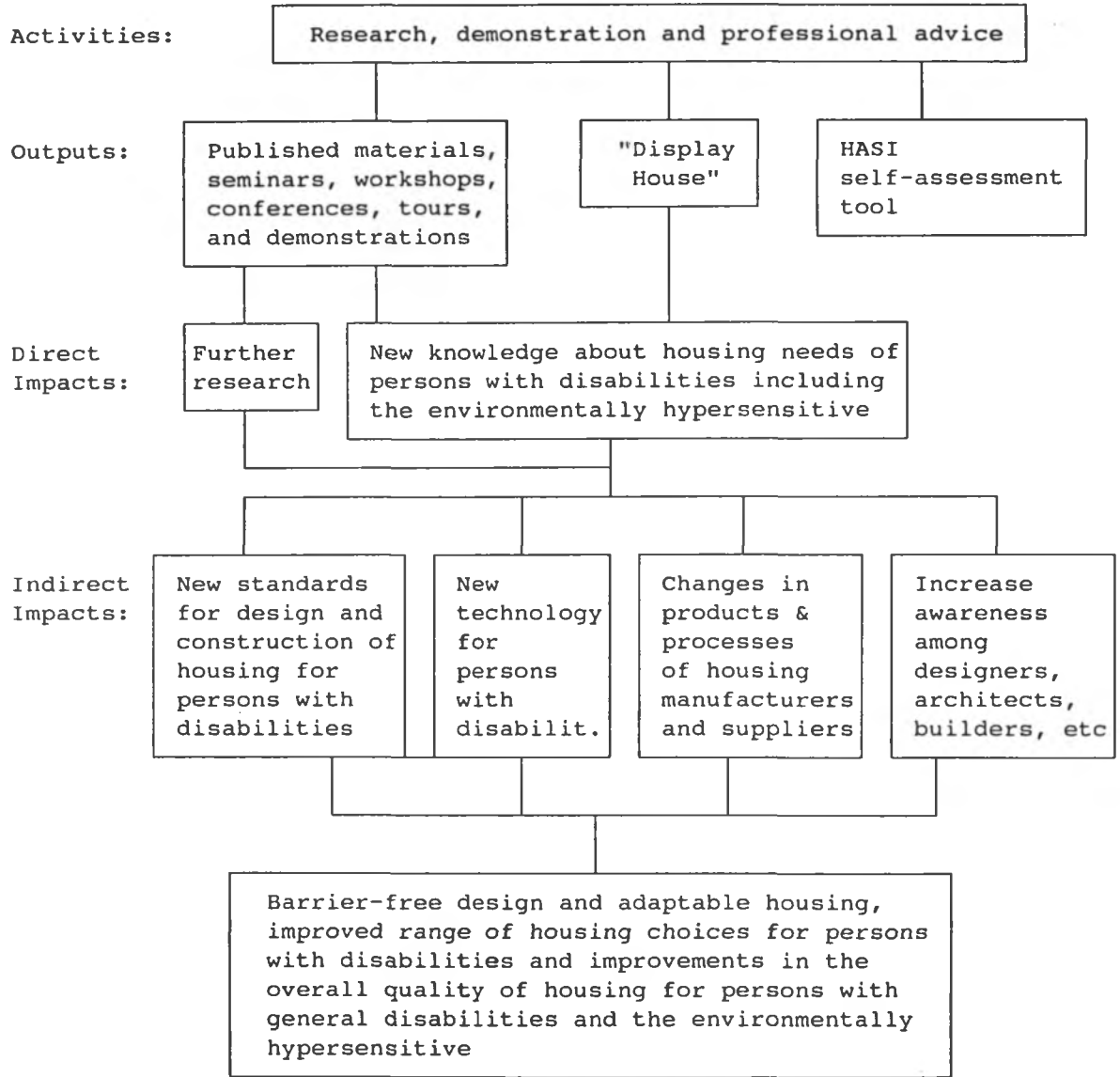


FIGURE 6: RESEARCH, DEMONSTRATION AND PROFESSIONAL ADVICE INITIATIVES LOGIC CHART



## 6.0 EVALUATION ISSUES

The evaluation issues developed for both the HASI program and the research activities are classified into three categories. The first set of issues assesses the continued relevance of the initiatives with respect to corporate and government-wide priorities as well the extent to which they address an actual need. The second set of issues evaluates the success of the initiatives in terms of meeting their objectives within budget and without significant unwanted outcomes. Finally, the cost-effectiveness issues examine the extent to which the design and delivery approaches utilized represent the most appropriate and efficient means of achieving the objectives relative to other alternatives.

### Relevance Issues

#### 1. Is there a need for the HASI program and the research, demonstration and professional advice initiatives?

The HASI program is targeted to households with at least one member 65 years of age or older, with diminishing abilities. To be eligible, the household income, of which the senior must be a member, must be below the Core Need Income Threshold (CNIT) for the area and type of dwelling in which they live. There is a ten per cent exception clause to the income limit.

The analysis will attempt to ascertain the number of eligible seniors with diminishing abilities, based on the Health and Activity Limitations Survey (HALS) by Statistics Canada, and CMHC's data bases used to estimate core housing need. The Health and Activity Limitations Survey is a national study in which respondents report on their living conditions, their state of health and on their degree of ease in accomplishing specific daily living activities. The evaluation will also attempt to ascertain whether the HASI program was the most appropriate intervention given the needs of seniors with diminishing abilities, whether there are other existing programs which can serve the needs of these seniors, whether these seniors have the means (e.g., equity) to pay for the adaptations, and whether they would have made the modifications without the program anyhow.

A wide range of disabilities are being addressed under the research and demonstration component. These include physical, visual, hearing and cognitive disabilities, and environmental hypersensitivity. Another major undertaking of the research initiative is to actively disseminate existing literature, source information and the results generated from CMHC research initiatives to a wide range of audiences. The audiences include persons with disabilities, support groups for persons with disabilities, housing industry, housing researchers, and medical/health professionals.

To properly assess the need for research and demonstration activities, the evaluation will determine whether the living conditions of persons with disabilities warrant research and demonstration, whether the types of clients targeted through the research and demonstration activities are those most in need of housing solutions, whether the information generated from these activities already exists or duplicates the efforts of other organizations or agencies, and whether the research and demonstration activities would have been undertaken in the absence of the program. This analysis will draw support from the findings of the current evaluation of CMHC's overall Research, Information and Communication (RIC) activities.

2. If there is a need for these programs, then are their designs consistent with their objectives and do they logically lead to the achievement of these objectives?

This issue will determine the extent to which the design of the HASI program and the research, demonstration and professional advice initiatives facilitate the provision of the appropriate type and level of assistance to the target clients.

With respect to HASI, the relevance of the program design will be established by assessing whether the program was properly targeted, the extent to which the entry criteria of age, income, age-related condition or diminished abilities and dwelling adaptation requirements facilitated or inhibited utilization of the program by those who needed the grant, and the fit between the type and level of assistance provided and those needed by clients.

The research, demonstration and professional advice initiatives consist of a range of activities aimed at providing improved housing solutions and more housing options for persons with disabilities. The evaluation will consider the consistency between the needs of the target audiences and the issues investigated, the output generated, and the mechanisms used to promote and communicate the findings to the relevant target audiences.

3. Are the objectives of these programs consistent with the overall objectives of the National Strategy?

The overall federal objective of the National Strategy is to promote equal access, economic integration and effective participation in all aspects of society by persons with disabilities. This issue will examine the extent to which the HASI program and the various activities undertaken under the research and demonstration initiatives reflect these objectives.

Indicators of relevance of the design of the HASI program include improvements in the quality of housing and increased

independence of living among those served by the program. For the research and demonstration initiatives, possible indicators include increased public awareness of the needs of persons with disabilities, improvements in housing choices, the adoption of new design and construction practices, and new products and processes catering to the special needs of persons with disabilities.

#### ii) SUCCESS ISSUES

#### 4. Did the HASI program serve those seniors in need? If not, why not?

This issue will examine the extent to which the eligibility restrictions and delivery features facilitated or prevented those seniors in need from being selected for the HASI assistance. One indicator of successful selection is the extent to which HASI clients met program criteria in terms of age, income, the nature of disabilities and the nature of the home adaptations required. A general profile of HASI clients will be developed to facilitate the analysis.

In terms of the delivery features, the analysis will assess the extent to which clients found the program easy to access in terms of completing the application form and assessment tool, hiring a contractor, dealing with delivery staff, etc. Some indication of the ease of access can be obtained by analyzing the proportion of HASI clients who needed assistance with their application. The views of HASI clients, applicants and delivery staff will be solicited regarding other delivery features of the program. The appropriateness of the mechanisms used to promote the program will also be evaluated. Differences in eligibility conditions and delivery approaches across provinces may provide useful comparisons.

The evaluation will also assess the effectiveness of the HASI self-assessment tool in terms of helping clients to select the appropriate home adaptations given their difficulties and the difficulty or ease they experienced in using the tool. Another perceived benefit associated with the self-assessment tool is the possible reduction in administrative costs. The evaluation will consider the extent to which administrative costs were reduced by comparing the use of the HASI self-assessment tool with alternate assessment approaches employed elsewhere. For example, Saskatchewan and New Brunswick opted for an inspection process rather than a self-assessment method for identifying adaptations.

5. Did the HASI program effectively address the needs of the clients? If not, why not?

This issue examines the extent to which the HASI program effectively addressed the needs of clients in terms of the nature of adaptations allowed and of the level of funding provided. The question of the need for minor home adaptations versus other forms of assistance (e.g., wheel chairs) is addressed in the relevance section of the evaluation.

The HASI self-assessment form identifies home adaptations which are acceptable for funding under the program (e.g., the installation of grab bars in bathroom locations, installation of easy-to-operate window handles and locks, provision of more appropriate counter space arrangements, shelving, etc.). While there is some discretion in terms of eligible home adaptations in that clients can suggest their own ideas for home adaptations which may/may not be approved, certain types of home adaptations are excluded from the program. The evaluation will assess the appropriateness of the eligible adaptations to meet the needs of the clients. The extent to which HASI clients are satisfied with the work done will be assessed.

In terms of funding, the maximum allowable grant to cover the cost of required minor home adaptations under the HASI program is \$2,500. It is possible that this amount may be inadequate or may exceed the actual amount needed to complete all necessary minor home adaptations to improve access and facilitate independent living. The evaluation will determine the adequacy of the grant to cover the actual costs associated with the required adaptations.

6. To what extent do the adaptations performed under HASI assist seniors with diminishing abilities to continue living independently?

A growing number of housing researchers believe that simple design modifications to the home can reduce, postpone or avoid institutionalization (10,11,13). These minor home modifications may contribute significantly towards improving the sense of well-being and security of seniors. The HASI program is intended to assist seniors with diminishing abilities to live in their homes and carry out their daily activities on their own. For the purposes of this evaluation, independent living is operationalized as the ability to perform a range of daily living activities on one's own in one's own home. The ability to reduce, postpone or avoid institutional care (hospitalization, nursing homes, residential care or care-giving facilities) is an integral component of independent living. The extent to which community based support services contributed to seniors remaining in their own homes will be considered.



This analysis involves a comparison of indicators of independent living of clients before and after receipt of the grant assistance based on their recall. Indicators to measure independence of living include the current living arrangements of the seniors served, the match between adaptations made and loss of ability, improved access to existing facilities, and perceived reduction in risk (safety, security).

**7. To what extent has the HASI program reduced care costs for seniors with diminishing abilities?**

One implicit assumption of the HASI program is that by providing assistance to seniors with diminishing abilities to facilitate independently living in their own homes, there is a potential for significant cost-savings associated with their care. In fact, one U.K. cost analysis study of housing options for seniors (5) showed that the most cost-effective option was staying at home with a package of care (i.e., assistance with meals, shopping, laundry), the next was sheltered housing (19), and the most expensive options were residential care and institutional care.

In the case of HASI clients, the decrease in expenses may occur from a number of sources, for example, the reduction in the time required by friends, neighbors and relatives to assist the client with their daily activities, the decrease in the rate of entry of the clients to institutions, and the reduction in the requirement for community-provided social support services. The evaluation will attempt to assess the extent to which the costs associated with caring for seniors with diminishing abilities were reduced through participation in the HASI program. The measurement challenges and limitations involved in assessing the cost-savings associated with the HASI program are recognized. However, careful analysis, much of it qualitative, could provide useful insights on this issue.

**8. How much of a leveraging impact has CMHC's activities under the National Strategy had in increasing the amount spent on improving access to housing for persons with disabilities?**

In addition to the Federal government's funding of programs to remove physical, economic and social barriers for persons with disabilities, an intended impact of the National Strategy is the augmentation of overall funding by prompting others to contribute financially and/or through their expertise. The initiatives are expected to serve as an example and thereby encourage those who might not otherwise do so to invest in helping persons with disabilities. One leveraging objective of HASI is to encourage involvement of the provinces/territories in the program through additional resources and cost-sharing. It was also anticipated that some participating federal departments would collaborate with other government agencies, private organizations representing persons with

disabilities, private firms, organized labor, and persons with disabilities and thereby increase the total level of financial assistance, expertise or volunteer help for persons with disabilities.

The analysis will attempt to determine the level of resources contributed to CMHC's initiatives by the federal government, the provincial/territorial governments, clients, and other organizations, groups or agencies. More importantly, the analysis will investigate whether the contributions by provincial/territorial governments, clients, and other organizations, groups or agencies would have been made in the absence of CMHC's activities. That is, would the provinces/territories have introduced their own programs anyhow? Would the clients have made their modifications anyhow? Did the HASI program duplicate other provincial programs and thus "bump" them? Would the private sector have carried out the projects included in the research and demonstration initiatives?.

9. Did CMHC's activities under the National Strategy lead to increasing awareness about the housing needs of persons with disabilities?

In addition to being a housing improvement program, the HASI initiative is a communications vehicle to heighten public awareness about living conditions among seniors with diminishing abilities. The research and demonstration initiatives are also designed to heighten awareness regarding the housing needs of persons with disabilities in general. As referenced in the National Strategy document, "...the implied objective is to encourage others to support equal access to housing among persons with disabilities" (1).

For this analysis, "increased awareness" is measured as changes in knowledge, attitudes, and behavior among the public, provincial/territorial governments, agencies and organizations serving and/or representing persons with disabilities, and persons with disabilities themselves. Greater awareness may also be reflected through increases in the level of existing support services or the introduction of new programs for persons with disabilities. It was anticipated that as the public and other agencies became knowledgeable about CMHC's activities under the National Strategy, general enquiries about the programs would increase. And with an effective information dissemination strategy, the perceptions of the public, housing agencies, and organizations working on behalf of persons with disabilities would be altered due to greater familiarity with the housing choices available to persons with disabilities.

However, determining the extent to which CMHC's activities under the National Strategy led to increasing awareness will require careful analysis. This is because increasing

awareness may also be influenced by both past and current CMHC's programs outside the National Strategy, other federal and provincial programs, the activities of organizations and groups representing persons with disabilities, and efforts of persons with disabilities themselves.

**10. Does the HASI program provide non-housing benefits to clients?**

Recent survey data from Statistics Canada indicate that health and activity limitations appear to be very good predictors of the general sense of well-being among elderly Canadians (6). The housing literature indicates that the three main benefits housing developments can offer older people are security, independence and status, and that simple home modifications can provide these benefits (11). The HASI program will be evaluated to determine the extent to which it provided non-housing benefits to clients. These non-housing benefits include improvements in the quality of life and well-being of those seniors served, increases in their sense of personal control, personal efficacy and self-confidence, and their ability to engage in a wider range of leisure activities of their choice. This will be determined by measuring changes in the well-being/quality of life of the clients based on their recollection.

**11. Do the research and demonstration products meet the needs of the various targeted client groups and were they effectively promoted among these groups?**

A range of research and information products (e.g., models, publications, reports, workshops, focus groups) targeted to a variety of clients (disabled individuals, support groups, housing industry, other professionals, provincial/territorial and municipal housing agencies) have been identified under the research, demonstration and professional advice component of CMHC's activities. In addition, it was expected that the housing industry (builders, designers) and groups representing persons with disabilities would make direct inputs to these activities in order to identify and foster the provision of the most appropriate, creative and cost-effective housing solutions.

This issue will involve an evaluation of CMHC's research and demonstration activities in terms of:

- ° the extent to which appropriate groups were consulted and provided advice in terms of research directions, design and technological priorities, and cost-effective housing solutions for clients,
- ° the relevance of the research activities to the needs of the different client groups,

- ° the timeliness of the information transfer activities,
- ° how effectively the information obtained from the research and demonstration initiatives was communicated to the target audiences,
- ° the extent to which there is a need for CMHC to market information regarding persons with disabilities will be determined, and
- ° whether the research conducted under these initiatives meets or exceeds generally acceptable levels of rigor and accuracy, and whether the products generated represent reasonable value for money.

12. Has CMHC been successful in its efforts to encourage the adoption of these techniques in the housing industry?

One of the motivations for conducting basic research on housing for persons with disabilities, producing demonstration models, and communicating this information to various audiences is to encourage builders and designers to adopt appropriate design features and technical innovations in the production of housing for persons with disabilities. While it is recognized that some of these techniques are more likely to be adopted over the long run and therefore their effect may not be fully measurable by the time of the evaluation in 1994, it is important to have some understanding of their perceived effects. The evaluation will ascertain the extent to which the information provided through the research and demonstration component is being used by clients.

iii) COST-EFFECTIVENESS ISSUES

13. What is the most cost-effective way to finance the HASI program?

When determining the most cost-effective financing mechanism the aim is to select the option which offers an equivalent improvement in housing conditions for seniors with diminishing abilities at the lowest cost. In this evaluation, several options for financing the HASI program will be considered. These options include a loan mechanism and a subsidy program where the client contributes an amount towards the cost of the adaptations.

Any such options should be considered within the context of the assumptions and objectives of the program, the cost to administer the program, the physical conditions and needs of the client group, the ability and willingness of the client group to make the adaptations in financial terms, and the cost to society if the modifications are not undertaken. These

various dimensions are intricately linked and will influence the design of, and participation in, the program.

For example, if the level of financial resources allocated to the program includes administrative costs, then any financing option which increases administrative costs will effectively reduce the amount available to clients. Reducing the number of people which can be served by the program may run counter to the objectives of the program. In a similar vein, given the characteristics of the client group (low-income seniors with diminishing abilities and possibly limited financial resources), it is unlikely that they would make the adaptations on their own in the absence of regulations or without some incentive. Although preliminary statistics (7) suggest that some seniors are property-rich but cash-poor, this does not necessarily mean that they can easily finance a loan for the modifications. Even if they are willing and have the resources (equity) to finance the modifications, the cost of securing a loan, given their age and ability to repay, could deter them from making the investment. Finally, the failure to undertake the adaptations could potentially lead to increased social costs associated with support services and institutionalized care for an aging population.

**14. Are there more cost-effective ways to deliver the HASI program?**

The evaluation will assess the cost-effectiveness of the HASI program by comparing it with alternative delivery mechanisms such as: (a) delivering the HASI assistance as an independent program, (b) as part of other existing programs, for example, RRAP (D) or the Homeowner RRAP programs, and (c) either sharing or transferring the responsibility for program delivery and administration to provincial/territorial health care/social service agencies/departments. Interest in the HASI program by these agencies/departments is evident through their informal assistance in the administration of the HASI program by distributing information, by counselling their clientele in its operation, by referring those potentially eligible for a grant to apply, and by helping in the completion of applications. In addition, the extent to which HASI duplicates/overlaps other existing CMHC or provincial/territorial programs as well as the possibility of integrating HASI with other CMHC or provincial/territorial programs such as RRAP(D), Homeowner RRAP, etc. will be explored.

**15. Would it be more cost-effective to provide greater responsibility and part of the costs for the research and demonstration activities to clients themselves?**

The approach to research and demonstration adopted under the National Strategy reflects CMHC's current approach under directed research programs. The views of clients (i.e., industry, provincial and local departments, agencies and

regulatory bodies, interest groups) are solicited to identify their needs for research and technological development. CMHC then acts as an intermediary, contracting-out the research and disseminating the results to the appropriate target clients groups. The alternative method would involve directly providing the research funds to the client groups to conduct the appropriate research activities and encourage the technological development in the area of housing for persons with disabilities. Through the provision of direct grants or research funding, others (e.g., academics, other levels of government, private industry) would be encouraged to carry out research and technological development to address the housing needs for persons with disabilities. The relative merits and cost-effectiveness of these alternative approaches will be considered using techniques similar to the current Research, Information and Communications (RIC) evaluation.

## 7.0 METHODOLOGY

The preceding section identified the issues which will be addressed in the evaluation of CMHC's activities under the National Strategy. This section of the assessment report discusses the proposed approach for conducting the evaluation. It is divided into two parts. The first part presents the data collection aspect of the evaluation and the second part describes the analysis plan which identifies the analytical methods to be employed to examine the issues.

### A. Data Collection

The main data collection components of the evaluation are:

- client survey;
- program officer survey; and
- case studies/focus groups/interviews.

#### **Client Survey**

A critical component of the data collection will be a HASI client follow-up survey which is being carried out by the Research Division in consultation with the Program Evaluation Division. This is a planned component of the research initiative within the National Strategy for the Integration of Persons with Disabilities. This survey will provide evidence on the extent to which HASI met its objectives of assisting the seniors with diminishing abilities to retain independence, and the extent to which other impacts and effects exist.

The survey also includes a sample of RRAP(D) clients for comparison purposes. The sample of HASI clients is stratified by province/territory and, to be eligible for selection, the clients must have had the modifications in place for at least six months. However, because of the relatively small population of HASI clients, the sample consists of all the clients in all of the provinces and territories except for Ontario where two-thirds of the clients are sampled.

#### **Program Officer Survey**

This survey will involve CMHC's field staff and provincial/territorial delivery staff. This survey is intended to capture the views and experiences of delivery staff on various issues related to the administration of the HASI program. The objective of the survey is to identify those features of the program which inhibited or facilitated use of, and participation in, the program by seniors with diminishing abilities seniors. The program features which will be explored through this survey include the application process, selection criteria, targeting, program promotion, difficulties

associated with getting the work done, and the quality of the work done.

#### **Case Studies/Interviews/Focus Groups**

In addition to the survey-based data, the evaluation will utilize qualitative data through case studies, interviews and focus groups. Case studies and interviews will be conducted with representatives of the various stakeholder groups. These stakeholders include (not in order) disabled individuals, support groups representing persons with disabilities, housing industry representatives, housing researchers, provincial social service and health care departments/agencies and CMHC's National Office staff. Focus group studies will be held with HASI clients. The data collection techniques described here will also be used for the research and demonstration components.

#### **Other Methods**

In addition to the various data collection methods described above, use will also be made of CMHC's administrative data files for the HASI program, files from the Housing Innovation Division and the Research Division on their various projects, survey data obtained from the "Open" House exit surveys, and Statistics Canada's HALS and HIFE databases.

#### **B. Analysis Plan**

The Analysis Plan in Appendix 1 lists all the evaluation issues, and for each issue, describes the proposed methods for assessment, identifies the indicators/measures that will be used as well as the data sources to be used.



ANALYSIS PLAN: "PERSONS WITH DISABILITIES INITIATIVE"

HOME ADAPTATION FOR SENIORS' INDEPENDENCE PROGRAM  
AND RESEARCH, DEMONSTRATION AND PROFESSIONAL ADVICE ACTIVITIES

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indicators/Measures</u>	<u>Data Sources</u>
<b>A. <u>Program Relevance</u></b>			
1. Is there a need for the HASI program and the research, demonstration and professional advice initiatives?	-Examine survey data to estimate the number of seniors households needing home adaptations by type of adaptations.	-Characteristics of target population, e.g., age, gender, household size, composition and tenure, income level, and difficulties with daily living activities	-HALS/HIFE databases 1986/1991 Census data Core Need estimates
	-Literature Review of housing research on persons with disabilities	-Gaps in knowledge and technological development as a function of age, gender, household size and tenure, dwelling type, adaptation needs, and diminished ability.	-Literature review and interviews with CMHC NO Staff
	-Document current housing problems faced by persons with disabilities	-List of outstanding housing needs	-Interviews with CMHC NO staff, representatives of support groups for persons with disabilities and the housing industry, and literature review

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indicators/Measures</u>	<u>Data Sources</u>
<u>A. Program Relevance (con't)</u>	<p>-Assess the need for housing information of groups serving/representing persons with disabilities (i.e., housing industry, housing researchers, support groups for persons with disabilities)</p>	<p>-Population size and profile of user groups, e.g., affiliation, level of knowledge of issues related to housing for persons with disabilities, preferred form of communication, etc.</p> <p>-Existence and utilization of other information sources on housing for persons with disabilities, e.g., trade journals, popular media, word of mouth, community networks serving persons with disabilities, newsletters.</p>	<p>-Interviews with CMHC NO staff, representatives of support groups for persons with disabilities, housing researchers, and housing industry representatives</p> <p>-Lists of other information sources and interviews with representatives of the housing industry, support groups for persons with disabilities, and housing researchers</p>

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indicators/Measures</u>	<u>Data Sources</u>
<b>A. <u>Program Relevance (con't)</u></b>			
2. If there is a need for these programs, then are their designs consistent with their objectives and do they logically lead to the achievement of these objectives?	<p>-Compare the distribution of the program budget to eligible households by province and territory</p> <p>-Assess whether the entry criteria resulted in the selection of those who needed the grant</p>	<p>-Compare the characteristics of HASI clients, e.g., age income, nature of diminished ability, etc with those of the eligible population</p> <p>-Number of commitments by province/territory</p> <p>-Compare the characteristics of HASI clients, e.g., age income, nature of diminished ability to those of the population in need</p> <p>-Profile of HASI applicants that were not approved and reasons for non-approval</p> <p>-Compare take-up rates of HASI and RRAP(D)</p>	<p>-HIFE/HALS databases Census data, Core Need estimates, Administrative data</p> <p>-Administrative data</p> <p>-HIFE/HALS databases Census data Core Need estimates Administrative data</p> <p>-Administrative data and Interviews with Program Officers</p> <p>-Administrative data</p>
	<p>-Assess the extent to which the design of each element of a selected subset of the research initiatives can logically achieve the objectives of the set of initiatives</p>	<p>-Consistency between selected research output, demonstrations developed communication vehicles used and the housing needs of groups serving and/or representing persons with disabilities</p>	<p>-Interviews with CMHC NO staff, researchers, and representatives of support groups for persons with disabilities</p>

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indicators/Measures</u>	<u>Data Sources</u>
<u>A. Program Relevance (con't)</u>			
	-Look for signs of improved housing quality. Creation of a data base on households and housing characteristics of persons with disabilities	-Improvements in the range of housing choices for persons with disabilities	-"Open" House survey data and interviews with representatives of support groups for persons with disabilities
	-Look for indications of increased public awareness and support for persons with disabilities	-Level of general knowledge among the public, support groups for persons with disabilities, and the housing industry	-"Open" House survey data and interviews with housing industry representatives, and support groups for persons with disabilities, housing researchers CMHC NO staff and Program Officers
3. Are the objectives of these programs consistent with the overall objectives of the National Strategy?	-Assess the extent to which HASI and the research and demonstration projects undertaken logically lead to improved accessibility and greater participation in a wider range of activities by persons with disabilities	-Views on the extent to which independent living has increased, quality of housing has improved and the level of general knowledge among the public, support groups for persons with disabilities, other government agencies and the housing industry regarding housing for persons with disabilities has increased	-HASI client group survey, interviews with clients of research products and "Open" House survey data

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indications/Measures</u>	<u>Data Sources</u>
<b>B. <u>Program Success Issues</u></b>			
4. Did the HASI program serve those seniors in need? If not, why not?	<p>-Compare the characteristics (age, income, disability, etc.) of HASI clients with program criteria</p> <p>-Assess the extent to which the eligibility restrictions prevented people with diminishing abilities from being served by the program</p> <p>-Assess the extent to which the self-assessment tool led to the selection of the appropriate home adaptations</p> <p>-Assess the extent to which the self-assessment form was "user-friendly"</p> <p>-Assess the extent to which seniors found the program easy to access</p>	<p>-Profile of HASI clients</p> <p>-Compare the take-up rates of HASI and RRAP(D) where there is no age restriction</p> <p>-Profile of HASI applicants who were not approved for funding</p> <p>-Opinions of delivery staff</p> <p>-frequency of requested adaptations which were not covered in self-assessment tool</p> <p>-Number of seniors who needed help in completing the self-assessment tool.</p> <p>-Client satisfaction with the self-assessment tool</p> <p>-Client satisfaction with program delivery and design features as well as promotion mechanisms</p>	<p>-Client survey, Administrative data, HIFE/HALS databases, and Census data</p> <p>-Administrative data</p> <p>-Administrative data</p> <p>-Interviews with Program Officers, administrative data and client survey</p> <p>-Administrative data, client survey and interviews with Program Officers</p> <p>-Client survey and case studies/focus groups with clients</p>

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indications/Measures</u>	<u>Data Sources</u>
<b>B. Program Success Issues (con't)</b>			
5. Did the HASI program effectively address the needs of the clients? If not, why not?	<p>-Examine the types of adaptations requested versus those permitted</p> <p>-Assess the appropriateness of the permitted adaptations given the conditions of the clients.</p> <p>-Ascertain the relative importance of home adaptations to other needs not requiring physical adaptations</p> <p>-Determine outstanding home adaptation needs of clients and whether these are covered under HASI</p> <p>-Determine the proportion of clients who contributed over and above \$2,500 and the amount of the contribution</p>	<p>-Requested vs. permitted home adaptations</p> <p>-Nature of clients diminished abilities</p> <p>-Other outstanding needs not related to home modifications</p> <p>-Need for home adaptations to attain independence of living</p> <p>-Actual cost of home adaptations</p>	<p>-Administrative data</p> <p>-Client survey, case studies/focus groups with clients and literature review</p> <p>-Client survey and interviews with representatives of support groups for persons with disabilities</p> <p>Client survey and Case studies/focus groups with clients</p> <p>-Administrative data and client survey</p>

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indications/Measures</u>	<u>Data Sources</u>
<b>B. <u>Program Success Issues (con't)</u></b>			
6. To what extent do the adaptations performed under HASI assist seniors with diminishing abilities to continue living independently?	<p>-Comparison of the housing and living conditions of program clients before and after receiving assistance</p> <p>-Determine whether types of adaptations carried out are logically linked to facilitating independent living</p> <p>-Estimate the relationship between independent living and home adaptations</p>	<p>-Enhancement in access to existing facilities</p> <p>-Perceived reduction in</p> <p>-Risk (improved safety and security)</p> <p>-Match between adaptations made and the clients' diminished abilities outcomes</p> <p>-Attendant care needs and services required</p> <p>-Living arrangement outcomes</p> <p>-Increased participation in leisure and social activities</p>	<p>-HASI client survey</p> <p>-Literature review and interviews with housing researchers and support groups for persons with disabilities</p> <p>-Client survey</p>

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indications/Measures</u>	<u>Data Sources</u>
<b>B. <u>Program Success Issues (con't)</u></b>			
7. To what extent has the HASI program reduced the costs associated with caring for seniors with diminishing abilities?	-Ascertain the average time and dollar expenditures for clients' care before and after receiving assistance	-Average time spent by friends, neighbors or relatives  -Medical care expenses and associated services  -Costs of selected senior care facilities	-HASI client survey  -HASI client survey  -Statistics Canada
8. How much of a leveraging impact has CMHC's activities under the National Strategy had in increasing the amount spent on improving access to housing for persons with diminishing abilities?	-Duplication of existing programs and introduction of new forms of assistance by the prov./terr./social support agencies  -Cost-sharing of HASI by provinces and territories  -Determine the amount of funds clients contributed for carrying out the work	-Dollar value of newly introduced programs or services -Increased resources for existing programs/services  -Cost-sharing arrangement with provinces/territories  -Money spent by client households	-Interviews with Program Officers, CMHC NO staff, and Prov./terr. housing agencies  -Administrative data  -HASI client survey



<u>Issue</u>	<u>Method of Analysis</u>	<u>Indications/Measures</u>	<u>Data Sources</u>
<b>B. <u>Program Success Issues (con't)</u></b>			
9. Did CMHC's activities under the National Strategy lead to increasing awareness about the housing needs of persons with disabilities?	-Changes in knowledge, attitudes and behavior of public, govts., housing groups, organizations representing persons with disabilities, etc.	-Increases in requests for information about persons with disabilities -Increased familiarity/awareness of housing and living conditions of persons with disabilities	-Interviews with Program Officers and CMHC NO staff -Interviews with representatives of support groups for persons with disabilities and housing industry
	-Changes in the level of resources committed to programs designed to promote issues relating to persons with disabilities	-Resources committed to new programs/services	-Administrative data from prov/terr/munic. housing agencies and CMHC
10. Does the HASI program provide non-housing benefits to clients?	-Improvements in overall quality of life of clients before and after participation in the HASI program	-Client responses to quality of life indicators (e.g., sense of personal control, efficacy, etc.)	-HASI client survey

<u>Issue</u>	<u>Method of Analysis</u>	<u>Indications/Measures</u>	<u>Data Sources</u>
<b>B. <u>Program Success Issues (con't)</u></b>			
11. Do the research and demonstration products meet the needs of the various targeted client groups and were they effectively promoted to these groups?	<p>-Operationalize Client Need/Satisfaction</p> <p>-Determine if products satisfactorily met clients' needs</p> <p>-Appropriateness of communication strategies used to gather and disseminate information</p>	<p>-Client satisfaction</p> <p>-Usefulness and relevance</p> <p>-Understanding of products</p> <p>-Quality and plausibility</p> <p>-Gaps between products and clients' needs</p> <p>-Client satisfaction</p> <p>-Client satisfaction</p> <p>-Timeliness of information</p> <p>-Quality of presentation</p> <p>-Success of consultations: number and types of groups consulted, quality and timeliness of input received, and extent to which input is reflected in products</p>	<p>-Literature review</p> <p>-Interviews with support groups for persons with disabilities, housing industry, housing researchers, and "Open" House survey data</p> <p>-Interviews with groups involved in consultations and users of products, "Open" House survey data, and Administrative data</p>
12. Has CMHC been successful in its efforts to encourage the adoption of these techniques in the housing industry?	<p>-Examine the extent to which design elements and features are being adopted</p>	<p>-Increase use of barrier-free designs, adaptable housing and various products e.g., mechanical systems, ventilation systems in new and existing housing for persons with disabilities</p>	<p>-Interviews with housing industry, housing researchers, support groups for persons with disabilities, CMHC NO staff, "Open" House survey data and HASI client survey</p>

<u>Issues</u>	<u>Method of Analysis</u>	<u>Indicators/Measures</u>	<u>Data Sources</u>
<b>C. Cost Effectiveness Issues</b>			
13. What is the most cost-effective way to finance the HASI program?	-Compare the costs for delivering home adaptations through a loan mechanism, a subsidy, or grants	-Program administration costs: time, salaries and overhead; -Amount of grants committed	-Administrative data
14. Are there more cost-effective ways to deliver the HASI program?	-Compare the administrative costs of delivering HASI as a stand alone program and as part of existing programs, e.g., Homeowner RRAP or comparable programs managed by prov/terr.	-Program administration costs: time, salaries & overhead for the HASI, HO RRAP, RRAP (D) -Costs of comparable programs administered by prov./terr.	-Administrative data from CMHC, prov/terr housing agencies
	-Compare delivery costs of HASI to estimated costs for delivery by public health/health care/social service agencies/departments	-Actual and estimated program costs	-Administrative data from CMHC, prov/terr. housing agencies.
15. Would it be more cost-effective to provide greater responsibility and part of the costs for the research and demonstration activities to clients themselves?	-Compare the costs of doing the research, information and communication activities in-house with the cost of providing funds directly to clients to conduct/contract the research	-Cost if CMHC does research -CMHC research/contract administrative costs	-Administrative data and interviews with CMHC NO staff PROST/contracts
	-Pros and cons of cost-sharing research, information and communication activities	-Research and administrative costs -Research relevance, timeliness, quality, -Management issues -Leveraging -Impacts on clients Research	-Administrative data, PROST/contracts and interviews with CMHC NO staff, housing researchers, housing industry, other clients and key informants.

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