Comparison of Adult Day Services in Atlantic Canada, Maine, and Vermont

Lori E. Weeks

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Family and Child Development

Karen A. Roberto, Chair

Rosemary Blieszner

James Bohland

Michael J. Sporakowski

Pamela B. Teaster

September 11, 1998

Blacksburg, Virginia

Keywords: Adult day services, Atlantic Canada, Maine, Vermont

Comparison of Adult Day Services in Atlantic Canada, Maine, and Vermont

Lori E. Weeks

Karen A. Roberto, Ph.D., Chair

Abstract

Comparisons of aging services in Canada and the United States reveal similarities and differences in the structure and function of the two systems. In both countries, adult day services (ADS) is an integral component in the array of services available to older adults. In this study, I compared structural characteristics of programs, participant characteristics, and examined the National Adult Day Services Association classification model of ADS in demographically similar areas of Canada and the United States. Directors of 47 ADS programs in demographically similar provinces and states in Atlantic Canada, Maine, and Vermont responded to a mailed survey. Adult day services programs in each province and state exhibited some unique structural and participant characteristics. Statistically significant differences emerged between ADS programs in the two countries on the following structural variables: town population, center affiliation, center location, levels of government support, participant fees, organizational structure, hours of operation, months of attendance, hours attended per day, service frequency, and service provision. Participant characteristics that significantly varied between the two countries involved educational level and functional characteristics. A minority of programs exhibited a match between participant needs and services provided. However, very few programs belonged to the most mismatched category of providing core services to intensive level participants. The findings of this study support the importance of individual programs providing services appropriate to meet the needs of participants rather than adhering to a predetermined model of care.

Acknowledgements

I am greatly indebted to all of the older adults that have touched my life, made me think about aging in new ways, and influenced my decision to become a Gerontologist. In particular, I thank the participants and staff of the Virginia Tech Adult Day Services program whom I have had the privilege to work with for three years. To the directors of the Adult Day Services programs who participated in this study, thank you for your enthusiastic interest in my work. I am greatly indebted to Karen Roberto who served as the chair of my dissertation committee. Your hard work is greatly appreciated. To Rosemary Blieszner, James Bohland, Michael Sporakowski, and Pamela Teaster, thank you for serving on my dissertation committee and guiding me in conducting the research I needed to do. Thank you Karen Roberto, Marc Baranowski, and Heather Henry who served as to my academic mentors in my three degree programs. You each inspired me in my quest to become a practitioner, a teacher, and a researcher. To my friends Cara, Cecile, Mary, Saliha, and Sue, thank you for your friendship and support throughout the Ph.D. experience. Thank you Mom and Dad for supporting me in whatever decisions I make, no matter how odd they appear to be. To my business partners and siblings, Jeff and Gwen, thank you for encouraging me to finish my dissertation and for the wisdom to know what I am best at doing. Thank you little Emily and Joseph for teaching me about the other end of the life course. Finally, thank you to my Lord Jesus Christ for being the constant in my ever-changing life.

Table of Contents

TABLES

Chapter 1: Introduction

My goal in this research project involved a comparison of adult day services (ADS) programs in Atlantic Canada, Maine, and Vermont. In this chapter, I provide the context for ADS and present an overview of ADS in Canada and the United States. As I utilized a cross-national comparative approach to address the research questions posed in this study, I provide a description of this methodology and examine the previous applications of this methodology to ADS. I then present the services provided in addition to ADS in Atlantic Canada, Maine, and Vermont. Past research of service models, or categories, of ADS constituted a central component of this research. I examine the state of model research, the controversy surrounding model research, and the newly developed National Adult Day Services Association classification system. Finally, in this introductory chapter, I describe the research problem I addressed in this project.

Context for Adult Day Services

Few countries in the world exhibit as many similar characteristics as Canada and the United States. However, in both countries "... because certain health care issues are delegated, great variation occurs in health services for long-term care. Essentially, neither country has a national and universal long-term care policy" (Liebig, 1993, p. 23), yet discussion of the need for such policy is underway in both countries. Central to the policy debate is the balance between the values of individualism and collectivism in each country (Clark, 1995).

Canada

Peace, order, and good government are valued in Canadian society. All citizens have access to primary health care, and the health care system fosters equality, collectivism, and respect for government (Clark, 1991). The Canada Health Act requires universality, accessibility, comprehensiveness, portability, and public administration. The federal government has much control over taxes and also has the authority to set broad policy directions (Neysmith, 1994). Even so, health and social services are delegated as the responsibility of the provinces. The federal government controls the amount of money transferred to the provinces, but it has rather limited control over how the provinces utilize these monies (Neysmith, 1994).

In the 1980s, a long-term care policy debate in Canada centered around the undesirability of institutional services and the benefits of community based services (Neysmith, 1994). Even with this focused attention, community based services have not received adequate public financing (Neysmith, 1994). Government programs generally cover long-term care services in hospitals and nursing homes. However, "... non-institutional home and community-based services are covered only by a crazy-quilt payment system of public and private programs, as well as non-profit agencies and user fees for consumers" (Clark, 1995, p. 10). "A pattern of provincial autonomy results in significant variations in long-term care services and costs, similar to the United States"

(Liebig, 1993, p. 19). As a result, long-term care programs in each province differ in regard to their organization, coverage, and funding patterns (Neysmith, 1994). In addition, for-profit long-term care services are emerging (Neysmith, 1994). Some critics of the Canadian health care system suggest that it is too medically oriented and should provide more direct support for community-based programs (Clark, 1995). Engelmann (1988) stressed that in order to make the best use of health care resources, prevention, early intervention, appropriate treatment and rehabilitation should be emphasized. Community care services such as homemakers, transportation assistance, and ADS can assist in decreasing health care costs and reducing unnecessary dependency (Engelmann, 1988).

United States

Life, liberty, and the pursuit of happiness are central ideals in American society. Health and aging issues in the United States are shaped by "independence, autonomy, the application of principles, and a preeminent concern for individual rights" (Clark, 1991, p. 634). Although there are many benefits to individualism, rampant individualism can pose a significant threat to the ability to live together in a national community (Clark, 1991).

Medicare is the federal health insurance program for Americans age 65 or older and certain Americans of any age with disabilities. The Medicare program has two parts. Part A (hospital insurance) helps pay part of the costs of inpatient hospital care, limited care received in a Medicare-certified skilled nursing facility, home health care, and hospice care. Part B (medical insurance) is designed to cover physician services, outpatient hospital care, and lab services. Recipients are responsible for paying part of Medicare Part A benefits and they pay a monthly premium to receive Medicare Part B coverage (American Association of Retired Persons, 1996).

Medicaid is a means-tested entitlement program in the United States that provides health care and long-term care to low-income pregnant women, children, families, older adults, and persons with disabilities. Medicaid is state administered and financed jointly with federal and state dollars. Medicaid is the largest public health care program in the United States serving persons who have low-incomes (McCloskey & Holahan, 1995).

Medicare and Medicaid form the basis of health care for older adults in the United States. However, these programs do not provide complete coverage for health. Medicare only funds specific medical types of care and the program is designed to be rehabilitative, not long-term. Medicaid often funds community based long-term care services, but great variation exists between the states in coverage. In addition, as Medicaid is a means tested program, the majority of older adults do not qualify for coverage.

Adult Day Services

Similar types of health care and related services are available for seniors in both Canada and the United States. Adult day services is one type of service that is an integral component in the array of services available to older adults in both countries. In order to examine ADS in Canada and the United States effectively, it is necessary first to define specific terms. In this research, I used ADS to refer to all of the forms of adult day programs in Canada and the United States. In previous studies, researchers utilized the terms adult day care (ADC), day hospital, day support, or adult day health. Researchers also use various term to refer to those who utilize ADS such as clients, members, and customers. To reduce confusion, I chose to use the term "participants" throughout this research. In this section I provide an overview of the history and development of ADS in Canada and the United States.

Canada

The primary goals of ADS in Canada involve aiding social and physical functioning, providing respite for families, and helping people remain living in their own homes in the community (Chappell, Strain, & Blandford, 1986). The following definition provides a general description of ADS in Canada.

> The program by definition, is a health or social services program whose prime objective is a strengthening of the individual's ability to function within his or her own home or community. It is intended for those for whom attendance one or two days a week in an organized program is believed to provide the resource which maximizes independent living. (Chappell, 1983, p. 10)

In Canada, long-term care has great variation in terms of organization, payment, and service delivery models (Clark, 1995). However, the differences with regards to ADS are largely unknown as ADS research in all the provinces and comparative research between the provinces is lacking. Researchers examined ADS in the provinces of Alberta, British Columbia, Manitoba, Ontario, and Quebec. I found no published literature on ADS in the other five provinces in Canada (i.e., New Brunswick, Newfoundland, Nova Scotia, Saskatchewan, and Prince Edward Island). With the exception of Saskatchewan, these provinces make up the Atlantic Canada region.

Although I based my research on the current state of knowledge of ADS in Canada, I recognized that this literature may not be representative of ADS programs in the entire country. I prepared a summary of provincial-wide ADS studies conducted in Alberta, British Columbia, and Manitoba (see Table 1). I referred to these three studies throughout this research, and I presented specific details about these studies in the literature review in Chapter 2. I also presented findings from smaller Canadian ADS studies to supplement findings from the larger provincial studies.

Adult day services programs in Canada have existed for several decades. One of the first known Canadian ADS programs opened in 1959 in Toronto, Ontario

Table 1
Summary of Canadian ADS Provincial Studies

Province, Authors, Date, Title	Purpose	Sample, Methods	Conclusions
Alberta Kerr, Warren, & Godkin (1995). Adult day programs: Maintaining the health status and quality of life of Alberta's elderly people in the community.	To design and carry out an evaluation of the Adult Day Program Demonstration Project in order to draw conclusions and make recommendations on the role of day programs in the long term care system in Alberta.	N=14 centers. Surveyed directors, surveyed referral agency managers, analyzed participant records, interviewed participants and caregivers across five time intervals.	ADS allowed participants to maintain a sense of independence and quality of life, day hospitals assist in maintaining level of functioning
British Columbia Gutman, Milstein, Killam, & Lewis (1991). Adult day care centers in British Columbia: Their operating characteristics, activities and services, clients, and interface with the long term care program.	To provide information concerning activities and services, characteristics of participants, reasons for referral, reasons why referred participants do not attend, the referral process and the interface between ADS and long term care.	N=479 participants in 49 centers. Surveyed directors, analyzed participant assessment forms, and conducting focus groups with case managers and staff members.	Few special purpose centers, most attended one or two days a week, most programs had a wait list, few therapists are on staff, smaller centers have more participants who have dementia, the researchers made several conclusions about the referral process.
Manitoba Strain, Payne Dunn, Kampen, & Blandford (1997).An evaluation of adult day care in Manitoba: Final report.	To describe ADS programs, services, and population; to assess the impact of ADS on clients, caregivers, and utilization of other services, to examine the role of ADS within the Provincial Home Care Program.	Surveyed ADS directors (N=68) and government Home Care Case Coordinators (N=126); interviewed participants (633), caregivers (N=517), and Manitoba Health representatives (N=16); reviewed and analyzed Manitoba Health data	ADS programs in Manitoba are generally meeting specified goals of increased socialization for participants and provision of respite for caregivers.

(Patashnick, 1982). Other provinces typically began opening ADS programs in the late 1970s. In Manitoba, funding of the provincial-wide ADS program began in fiscal year 1979-1980, and 17 programs existed by 1980 (Chappell, 1983; Chappell & Blandford, 1983). By 1997, 68 programs existed in Manitoba (Strain, Payne, Dunn, Kampen, & Blandford, 1997). In Alberta, ADS programs have operated for almost 20 years. A total of five day hospitals and nine-day support programs exist (Kerr, Warren, & Godkin, 1995). In British Columbia, ADS became a government-funded program in 1979. By 1989, 49 centers operated in British Columbia (Gutman, Milstein, Killam, & Lewis, 1991).

United States

In the United States, the National Adult Day Services Association (NADSA) (formerly the National Institute on Adult Daycare [NIAD]) provides leadership in all areas of ADS. The most current definition for ADS in the United States comes from the NADSA Standards and Guidelines for ADS published in 1997.

> Adult day services are community-based group programs designed to meet the needs of adults with impairments through individual plans of care. These structured, comprehensive, nonresidential programs provide a variety of health, social, and related support services in a protective setting. By supporting families and other caregivers, adult day services enable participants to live in the community. Adult day services assess the needs of participants and offer services to meet those needs. Participants attend on a planned basis. (Murphy, 1997, p. 1)

The rather sparse provincial research conducted on ADS in Canada is in stark contrast to several national studies of ADS in the United States. A summary of the most pertinent national studies for this research is presented in Table 2. I utilized these five national studies throughout this research and supplemented them with state or regional ADS studies when applicable. Note that the United States studies are national studies (see Table 2) in comparison to the three Canadian provincial-wide studies (see Table 1).

In 1974, just 18 ADS centers existed in the United States (Weissert, 1977). In 1985, approximately 1,200 centers existed in the United States (Von Behren, 1986). By 1990, Zawadski and Stewart estimated that over 2,100 centers existed. Six years later, there were approximately 3,000 ADS centers in the United States (National Adult Day Services Association, 1996). Although the number of ADS centers is growing, this growth has not kept pace with other forms of long-term care**.** For example, researchers found 113 ADS spaces per 100,000 older adults as compared to 5,128 nursing beds per 100,000 older adults (Conrad, Hanrahan, & Hughes, 1990). Although ADS is a growing industry, it has probably not yet reached its zenith in size.

Generally, standards for ADS are enforced at state levels, but there is no mechanism to enforce national standards. In the United States, NADSA published standards and guidelines for ADS, but at the present time they are voluntarily subscribed to (Murphy, 1997). These standards and guidelines cover the areas of target population,

Table 2
Summary of United States Adult Day Services National Studies

Authors, Date, Title	Purpose	Sample, Methods	Conclusions
Conrad, Hanrahan, & Hughes (1990). Survey of adult day care in the United States	To describe the structural characteristics of ADS centers and the characteristics of ADS users in the U.S. and across the four U.S. census regions.	N=974 centers. Surveyed all ADS directors listed in NIAD Directory.	Great variability, demand and enrollment are low, centers are well-staffed and well-equipped, need improved staff training.
Mace & Rabins (1984). A survey of day care for the demented adult in the United States	To describe ADS, especially centers that provide care to participants with dementia.	N=346 centers. Surveyed directors of centers with at least one participant with dementia.	Importance of ADS in serving participants with dementia, underutilization of ADS, importance of respite for caregivers.
Sherrill, Reifler, Henry, & Myers (1992). Characteristics of dementia-specific day programs.	Purpose: To provide an overview of ADS centers represented in the grant applications to the Robert Wood Johnson Foundation Dementia Care and Respite Services (DCRS) program.	N=283 participants in 25 centers. Analyzed completed grant applications to the DCRS program.	Major Conclusions: Program consistency in operation and use of professional staff, variability in sources of funding and size of community served.
Von Behren (1986). Adult day care in America: Summary of a National Survey.	To create a Directory of all known ADS centers in the United States and create a database including funding patterns, census, participant demographics and functional information, type of services provided, costs, and staffing.	N=847 centers. Surveyed directors of ADS centers. Great range in programs from lack of guidelines, standards, and regulations.	Researchers presented a profile of a typical ADS participant and ADS program. However, in the absence of national and often no state guidelines, great diversity in participants and programs existed.
Weissert, Elston, Bolda, Zelman, Mutran, & Mangum (1990).Adult day care: Findings from a National Survey	To describe ADS after a decade of growth, to develop microcomputer software to improve center planning and program design.	N=60 centers. Surveyed directors, interviewed participants and caregivers.	Heterogeneity of population served, three models of centers, Medicare will decrease participant costs and increase utilization.

administration and organization, individual plans of care, services, staffing, facility, and program evaluation.

Cross-National Comparative Research

It is apparent that ADS in Canada and the United States is similar in a variety of areas. For example, the basic concept of ADS is similar in both countries as both countries provide day services to adults. One methodology that is useful in more closely examining ADS between the two countries is cross-national comparative research, very little research is available that utilized this methodology to examine ADS.

Description

Cross-national comparative research entails several criteria. These criteria involve the study of issues or phenomena in two or more countries in order to compare different socio-cultural settings using identical research instruments to gather secondary or new data (Hantrais & Mangen, 1996). As with other types of research, cross-national comparative research can be descriptive, evaluative, or analytical with descriptive usually being the first stage in a project (Hantrais & Mangen, 1996).

There are many reasons for undertaking cross-national comparative research. One of the most important is "... to establish sociological generalizations across societal and cultural differences using the method of comparative analysis" (Cogswell & Sussman, 1972, p 1). Essentially, in cross-national comparative research, similarities and differences emerge among countries (Cogswell & Sussman, 1972; Wiatr, 1972). The benefits of cross-national studies are many. Of benefit to researchers in different areas of the world are increased contact, improved communication, and mutual understanding (Nowak, 1972). Nowak (1972) suggested that such benefits could lead to the unification of theoretical thinking, methodology, and conceptual language in the social sciences. Some additional benefits of cross-national comparative research are a deeper understanding of issues of central concern to both countries, the identification of new research directions, suggesting new perspectives of data analysis, and the identification of gaps in knowledge (Hantrais & Mangen, 1996). In essence, cross-national comparative research is needed to attain a fuller understanding of social organizational issues (Fry, 1995).

The objectives of cross-national comparative research range on a continuum from descriptive to theoretical and the strategies range from pragmatic to theoretical. However, Wiatr (1972) stressed that this continuum is not totally dichotomous in that extremely descriptive studies can inform theory and extremely theoretical studies can also result in descriptive analyses. Wiatr (1972) scrutinized the controversy surrounding the importance of theory formulation versus data gathering in cross-national comparative research. In essence, the solution depends on the context of the specific research topic. In some areas, much data are available and theoretical formulation can be achieved. In other areas, however, very scant or no data are available resulting in very little theoretical

advancement. If the purpose of a study is to describe the differences and similarities among countries, the theoretical component does not need to be as strong as in the case when the objective is to test general hypotheses (Wiatr, 1972).

For any cross-national study, "... one should not underestimate the practical implications of strictly scientific results... because they have potentially a great indirect practical applicability" (Nowak, 1972, p. 8). Through utilizing a comparative perspective, even purely descriptive results can have a greater influence on policy makers than mono-cultural or mono-national studies. In addition, "... the theoretical consequences of cross-national or cross-cultural studies are usually (at least in principle) much more important, and the understanding of social mechanisms which may arise from such studies are much deeper than from the studies conducted in one country only" (Nowak, 1972, p. 9). Nowak (1972) supported cross-national research that simply compared different nations on different variables as a necessary exploratory step before developing more in-depth studies.

Application to Adult Day Services

Kane and Kane (1985) discussed the similarities and differences of providing care for older adults in Canada and the United States. However, to my knowledge, researchers have not directly compared ADS in Canada and the United States. Two research teams utilized cross-national comparative survey research to examine ADS in the United Kingdom and the Netherlands (Nies, Tester, & Nuijens, 1991) and in the United States and Sweden (Jarrott, Leitsch, Zarit, Berg, & Johansson, 1996). Jarrott and colleagues (1996) suggested that “By comparing day care across societies, we can learn more about how programs function, if they serve similar people for similar reasons, and if differences in social policy affect the programs’ organization” (p. 1). They examined the organization and administration of ADS programs that served participants with dementia. Similarities between the two countries are the age of participants and the length of attendance in ADS. Programs in the United States had higher rates of formal activities, more formal admission policies, and more highly qualified staff.

In the other available cross-national comparative study, Nies et al. (1991) compared ADS in the United Kingdom and the Netherlands to examine the influence of the policy context of ADS in each country. Using secondary data, the researchers examined care delivery systems; origins, policy, legislation; and development. In addition, these researchers examined objectives, transportation, facility, care and activities, staffing, organizational context, and participant characteristics. They found very different policy contexts in the two countries. In particular, variations in government support in the form of legislation and funding greatly influenced the development of ADS for both countries. A lack of planning for ADS in the two countries resulted in the uneven and uncoordinated development of services. Adult day services in both countries exhibited a lack of program evaluation. Programs in the Netherlands managed transportation services much more effectively than programs in the United

Kingdom. Although little cross-national comparative research focusing on ADS is available, such research can be very beneficial to the development of ADS.

> Clearly, further comparisons are needed, across Canada and other nations, to better define [sic] the operating characteristics of adult day care centers and the services they offer. Decision-makers need this information to access the nature, purpose and costs of adult day care, and its optimal role in Canada's Continuing Care system. (Gutman, Milstein, Killam, Lewis, & Hollander, 1993, p. 20)

With the many similarities between Canada and the United States, cross-national comparative research focusing on ADS in these countries can be of mutual benefit to both countries. As collecting data from a national sample in both countries did not prove feasible for this project, I conducted a study that focused on a portion of each country. I examined the region of Atlantic Canada because of the lack of ADS research in these provinces. I chose the states of Maine and Vermont for comparison in the United States because of the similarity in demographic variables between these two states and Atlantic Canada (see Table 3).

Service Availability

Adult day services is just one of the services available for seniors in Atlantic Canada, Maine, and Vermont. In order to provide some context for ADS in these areas, I examined the availability of hospitals, nursing homes, and assisted living/community care for older adults (see Table 4). As the Canadian Home Care Association does not collect statistics on all the home care agencies operating in Canada, I could not examine home care availability (L. Larsen, personal communication, February 16, 1998).

When comparing services in two countries, it is evident that service availability is quite similar. There is more variability between provinces and states than between countries. The availability of hospital beds is particularly similar between the two countries. Canadian seniors have slightly higher levels of access to nursing homes and assisted living/community care. Adult day services are more available to seniors in Maine and Vermont. This comparison is helpful in understanding that ADS does not serve as a substitute for a different type of service in one of the two countries. As with other human services, subgroups or types of ADS exist.

Models of ADS

In ADS research, investigators used the term "model" to delineate between different types of programs. The use of the word model, however, is misleading, as these ADS models do not meet the criteria of true models. They are not untestable metaphorical representations of reality that aid in the understanding of complex phenomena (Cavanaugh, 1993; Stevens-Long & Commons, 1992), but are classifications or categories of programs with very specific characteristics. I use the word model to discuss historical developments in this area of ADS research even though they are not true models. I also present the controversy surrounding ADS models research that

Table 3
Demographic Comparison of Atlantic Canada and Two New England States

Location	Total Pop.	Pop. Age 65+	Pop. Per Square Mile	Rural % of Pop.
Atlantic Canada				
New Brunswick	757,700[a]	13%[a]	28[b]	52%[c]
Nova Scotia	933,900[a]	13%[a]	46[b]	46%[c]
Prince Edward Island	134,600[a]	13%[a]	62[b]	60%[c]
Newfoundland	781,200[a]	10%[a]	4[b]	46%[c]
Totals/Means	2,607,400	12%	35	51%
New England[d]				
Maine	1,240,000	14%	40	64%
Vermont	580,000	12%	63	73%
Totals/Means	1,820,000	13%	52	69%

[a] Statistics Canada (1996)
[b] Statistics Canada (1993)
[c] Statistics Canada (1992)
[d] US Department of Commerce (1995)

Table 4
Services Available for Every Thousand Citizens age 65+

	Atlantic Canada					ME and VT		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Hospitals								
Number	0.29	0.19	0.32	0.46	0.29	0.25	0.23	0.25
Beds	32.19	12.28	32.35	40.98	28.04	27.89	30.36	29.40
Nursing Homes								
Number	0.66	0.29	1.60	0.40	0.92	0.72	0.69	0.73
Beds	42.56	31.78	114.00	22.40	66.82	51.84	55.09	54.24
Assisted Living/ Community Care								
Number	2.33	1.28	1.19	0.97	1.57	1.55	1.88	1.69
Beds	59.49	50.22	61.45	58.41	58.38	27.44	33.59	30.01
Adult day services								
Number	0.14	0.10	0.13	0.23	0.13	0.22	0.23	0.23
Spaces	2.13	1.54	1.98	3.43	2.01	3.28	3.66	3.49

Note. Based on number of facilities and number of beds per every thousand citizens age 65 and over. ADS spaces based on a mean of 20 spaces per center. Totals are calculated using the total results within each country and are not means of provincial and state totals. L.. T. Dorogi (personal communication, January 12 1998); Hall & Gaquin, 1997; Iseegobin, 1997-1998; M. Stephenson (personal communication, January 29, 1998); P. Pearson (personal communication, January 29, 1998).

focused on the problematic categorizing of ADS programs. Finally, I examine the newly developed NADSA classification system that involves multiple areas of service delivery and expands on previous ADS models to examine matching the services provided with the needs of the participants.

Model Research

When conducting research on ADS, the importance of defining the parameters of ADS becomes clear. For example, different names are used, programs have various emphases, and affiliations to larger organizations vary greatly. Even though much variability exists between programs, the specific service called ADS remains distinct from the multitude of other services for older and frail adults. From the very establishment of ADS in North America, researchers began to delineate models of ADS. Many researchers advanced various models, but no one universally accepted model emerged.

William Weissert and colleagues spent several decades developing one of the most familiar ADS models posited (Weissert, 1976; Weissert et al., 1990). Within this model, Weissert and colleagues (1990) described three basic types of ADS in the United States: Auspice Model I, Auspice Model II, and Special Purpose Centers. Essentially, Auspice Model I programs are more medically oriented than Auspice Model II programs which are more socially oriented. Special Purpose centers serve a specific clientele whereas a wider range of participants attend the other two types of ADS. Some examples of populations served by Special Purpose ADS are veterans, senior citizens who have dementia, and persons with AIDS. Weissert and colleagues (1990) found that 26.5% of centers in the United States ascribed to Auspice Model I, 62.2% ascribed to Auspice Model II, and special purpose centers made up the remaining 11.2%. This research group observed that "...day care is not one single entity, but as with hospitals and nursing homes is best characterized by subgroups of centers that are similar to each other and different from those of other subgroups" (Weissert et al., 1990, p. 9).

In Canada, what is often termed “day support” focuses on providing long-term social support for participants and their caregivers (Kerr et al., 1995). Thus, ADS in Canada is generally based on a social model as opposed to a medical model (Chappell et al., 1986). An examination of 49 ADS programs in British Columbia revealed that 53% of the programs belonged to Auspice Model I (Gutman et al., 1993). None of these programs fit into the special purpose category, but some programs provided services for specific populations on certain days. Also, many British Columbia programs did not easily fit into Weissert’s model. This model focused on affiliation with a larger organization and did not address affiliation with general hospitals, but 27% of the programs in British Columbia exhibited one of these characteristics (Gutman et al., 1993).

Other posited models of ADS incorporated various differentiating criteria. For example, Conrad, Hughes, and colleagues (1993) analyzed data collected from 774

centers. These researchers identified the following classes of ADS based on the intensity of services and activities provided: Alzheimer's family care, rehabilitation, high intensity clinical/social, moderate intensity clinical/social, general purpose, and low scoring where programs offered minimal services and activities. In this study, the results did not indicate a delineation between medical and social models. Another model specified three types of ADS services: social, medical, and a combination of both social and medical models (Bradsher, Estes, & Stuart, 1995). Neustadt (1985) described similar medical and social models as those advanced by other researchers, but added a health maintenance model as a combination of medical and social programs, but this model of ADS did not emphasize rehabilitation. In this model, participants attended ADS in order to avoid institutionalization, but not necessarily to regain their functional abilities.

Geriatric day hospitals are based on a related but separate model from ADS. The main distinguishing factor of day hospitals from ADS is that day hospitals provide more medical care and are often located within a hospital environment. Day hospital programs focus on more intensive on-site medical and rehabilitation assessment and treatment, and they may replace acute care services (Kerr et al., 1995). In the United States, very few geriatric day hospitals exist outside the Veterans Administration system. For example, only 7.9% of the 416 hospitals examined in a study of hospitals in every region of the United States operated day programs (Evashwick, Rundall, & Goldiamond, 1985).

From the research on models of ADS, it can be surmised that there are many variations of models of ADS with the most emphasis placed on medical and social programs along with a myriad of specialty programs. Kirwin (1986) indicated that medical or therapeutic model ADS programs existed from ten to fifteen years earlier than social models and there is thus a paucity of research on social model programs. Conrad, Hughes, and colleagues (1993) suggested that specialization occurs so that more effective and efficient delivery of care can be provided. With the many ADS models proposed, it is not surprising that controversy surrounds this line of research.

Controversy Surrounding Model Research

Although researchers continue to pursue various ways of classifying ADS, opposition to this line of research occurred on a national basis since the late 1970s (Von Behren, 1988). It is not that classification is considered detrimental to the development of ADS, but it is the specific classifications proposed that some researchers oppose.

> Classification of ADC centers would improve our ability to develop more accurate expectations/theories about how the various ADC classes function....Classification can also help evaluation researchers to clarify the nature of the centers they are studying and the generalizability of their findings. Additionally, it can help policy makers to target funding more effectively. (Conrad, Hughes, et al., 1993, p. S112)

The national ADS leadership prefers to describe ADS as a range of services provided in a variety of settings rather than discrete and separate models (Von Behren,

1988). Because of the variety of models of ADS posited, "...it seems reasonable to assert that there is no clear consensus that classes of ADC even exist, and there is even less consensus regarding their nature" (Conrad, Hughes, et al., 1993, p. S112). The problem with enforced classification is that it can segment centers and participants when programs should be responsive to the needs of participants (Conrad, Hughes, et al., 1993, p. S121).

It is evident that theoretical developments in ADS research are scant and deserve much more attention than they presently receive. The research presented on models of ADS is the most theoretically developed area of ADS. However, descriptive studies are integral to the development of these limited advancements. Clearly these developments in ADS research and theory are not sufficient in guiding further research in ADS. The new NADSA classification system takes into consideration multiple areas of service provision and extends previous models to take into account the needs of participants.

NADSA Classification System

In response to the controversy surrounding research on models, or categories, of ADS, NADSA developed a new classification system that encompassed the concept of the level of care that participants require and the level of service provided by the programs (Murphy, 1997). Researchers have not yet utilized this model. The basis of this model is that program and services provided need to meet the needs of participants. In Table 5, I outlined core, enhanced, and intensive levels for both participant care and services provided.

The NADSA classification system takes into account a variety of services such as health-related services, social services, and therapeutic activities. The main use of the NADSA classification system is to ensure that the needs of participants are being met in the programs that they attend. In essence, there should be a match between programs and participants. For example, a program providing core service should not enroll participants with intensive medical, psychological, or social needs. This classification system can assist ADS workers to "... clarify categories and provide a framework for making decisions on the target population and components of care" (Murphy, 1997).

Research Questions

In this introductory chapter, I provided evidence that ADS research in Canada is lacking. A national study of ADS in Canada is needed and research still needs to be conducted in many provinces. In particular, no research is available on ADS in Atlantic Canada. The whole area of models of ADS is a critical aspect of ADS research. Data need to be collected utilizing the newly developed NADSA classification system.

Thus, my first purpose in conducting this research involved profiling the structural and participant characteristics of adult day services in Atlantic Canada (New Brunswick, Newfoundland, Nova Scotia, and Prince Edward Island), Maine, and

Table 5
NADSA Classification System

	Participants	Services
Core	The participant who receives core services needs socialization, some supervision, supportive service, and minimal assistance with activities of daily living. This person may have multiple physical problems but is stable and does not need nursing observation or nursing intervention. There may be some cognitive impairment, but the resulting behavior can be handled with redirection and reassurance. This participant can communicate (though not necessarily verbalize) personal needs.	Services include assessment and care planning, assistance with activities of daily living, health-related services, social services, therapeutic activities, nutrition, transportation, and emergency care. No direct nursing, rehabilitative, or psychosocial services are provided.
Enhanced	The participant who receives enhanced services needs moderate assistance. He or she may need health assessment, oversight, or monitoring by a nurse; therapy services at a functional maintenance level; or moderate assistance with 1 to 3 activities of daily living. He or she may have difficulty communicating or making appropriate judgments or may periodically demonstrate disruptive behavior that can be accommodated - with increased skills or time on the part of the staff.	Services include assessment and care planning, assistance with activities of daily living, health-related services, social services, therapeutic activities, nutrition, transportation, and emergency care. In addition, some or all of the following may be provided: restorative, supportive, or rehabilitative nursing care on a moderate basis (that is, intermittent but not continuous); assessment and referral for psychosocial services and follow-through with recommended treatments in the plan of care; and physical, occupational, and speech therapy at a functional maintenance level.
Intensive	The participant who receives intensive services needs maximum assistance. His or her medical condition may not be stable and may require regular monitoring or intervention by a nurse. Rehabilitative or restorative therapy services may be needed. There may be a need for total care in one or more activities of daily living, or moderate assistance with more than three activities of daily living at the center, or a need for a two-person assist. The individual may be unable to communicate needs or may display behavior requiring frequent staff intervention or support – and even more skills or time on the part of the staff.	Services include assessment and care planning, assistance with activities of daily living, health-related services, social services, therapeutic activities, nutrition, transportation, and emergency care. Some or all of the following may be provided: restorative, supportive, or rehabilitative nursing care on a moderate basis (that is, intermittent but not continuous); assessment and referral for psychosocial services and follow-through with recommended treatments in the plan of care; and physical, occupational, and speech therapy at a functional maintenance level. In addition, some or all of the following may be added: intensive nursing services necessary for unstable medical conditions, therapies at a restorative or rehabilitative level; intensive psychosocial services; and specialized supportive services, as needed.

Vermont. As there is a lack of baseline data on ADS in these provinces and states, a basic profile of these programs is necessary at this point. My second purpose involved the utilization of the NADSA classification system of ADS to categorize ADS programs in Atlantic Canada, Maine, and Vermont. This classification allows an examination of the congruence between participant needs and the services provided in Atlantic Canada, Maine, and Vermont. The utilization of this model will aid in gaining a greater understanding of whether ADS programs address the needs of participants. The following are the specific research questions examined:

#1 What are the structural characteristics and participant characteristics of ADS in Atlantic Canada, Maine, and Vermont?

#2 How do the structural characteristics and participant characteristics of ADS program compare between the two countries?

#3 What needs do ADS participants have?

#4 What services do ADS programs provide?

#5 Is there congruence between the needs of participants and the services provided within individual programs?

#6 Are there predominant patterns of perceived participant needs and services provided within provinces and states, between provinces and states, and between countries?

Chapter II: Review of the Literature

In this review of the literature, I examine three major areas. First, I present research results concerning structural characteristics of ADS programs. The structural characteristics examined involved financial aspects, staffing, program availability, demand for ADS, and utilization. In the second part of this literature review, I examine several demographic characteristics of participants. Third, through reviewing literature concerning services provided and the functional characteristics of participants, I examine the two main components of the new NADSA classification system.

Structural Characteristics

Structural characteristics of ADS examined included financial aspects, staffing, program availability, demand for ADS, and utilization. The three financial aspects consisted of various funding sources, out-of-pocket fees charged to participants, and the daily cost of providing ADS. Staffing involved both the staff to participant ratio and the job titles of those working in ADS. Availability of ADS involved the hours that ADS programs operated per day and the number of days that programs operated each week. Demand for ADS involved an examination of the number of ADS programs in existence and the number of programs required to fill the need. Finally, I examined maximum capacity and waiting lists as aspects of utilization.

Financial Aspects

Funding sources, out-of-pocket fees charged and the cost of providing ADS composed three very interrelated aspects of ADS examined in the two countries. To aid in interpreting the comparisons of currency from two countries with different monetary systems from studies conducted over a period of several decades, I completed a two step process. First, I used the inflation rates in each country to convert each currency reported to 1997 dollars. Second, I converted all the Canadian currency to United States currency using the exchange rate in February, 1997. I selected the exchange rate during that month as I began data collection at that time. Thus, for ease of comparison between the two countries, all currency reported are in United States currency in February, 1997.

Canada. Researchers found a variety of funding sources for Canadian ADS programs such as government support, fees or donations from participants, community fund raising activities (Mitchell, 1993), United Way support, and private donations (Patashnick, 1982). However, researchers showed that the government provided the majority of financial support for ADS. For most of the 14 centers in an Alberta study, a substantial portion, if not all, of the funding for operations came from the government (Kerr et al., 1995). Results from this report showed that government support totaled 76.7% of revenue for ADS. In British Columbia, the government subsidized ADS for most participants (Gutman et al., 1991). Manitoba Health, a provincial government organization, paid approximately 84% of all ADS costs in Manitoba (Strain et al., 1997).

There is not a standard daily amount charged to participants in Canadian ADS centers and standards often did not exist even within provinces. In a study of all 49 ADS centers in British Columbia, directors in 45 of the centers charged participants a daily fee, but the fee charged ranged considerably across centers (Gutman et al., 1991). Directors in 8% of the centers in British Columbia charged no fees to participants. The fees charged ranged from $0.70 to $5.63 per day with 80% of the centers charging $2.11 to $2.81 per day. Almost half of the centers in the study also served participants paying privately. Private pay participants had various payment arrangements ranging from no charge to $36.59 per day. In Alberta, participants in seven of the nine ADS programs paid a program fee (Kerr et al., 1995). Similar in cost to the British Columbia ADS centers, the charge to ADS participants in Alberta ranged from no cost to $8.31 per day with a mean of $4.86 per day. This daily fee covered the cost of meals in six ADS programs and it covered transportation costs in two ADS programs. Unlike the fees charged to participants in Alberta and British Columbia programs, all participants in Manitoba paid a standard fee of $3.54 (Strain et al., 1997).

In one study of an individual program in Toronto, Ontario, the maximum fee for attendance per day totaled $29.71 (Patashnick, 1982). Although this amount may seem large in comparison to that charged in other provinces, the fees charged depended on individual ability to pay. Also, an elected council of participants decided upon fee increases and recommended changes to the center's Day Care Advisory Committee. In the event that participants could not pay the fees, the financial obligations fell upon spouses and adult children.

From the above studies conducted in Alberta, British Columbia, Manitoba, and Ontario, researchers indicated that ADS participants in Canada generally paid rather low out-of-pocket fees, which often amounted to less than $10.00 per day. Although knowing the daily charges for ADS is important, in order to compare this information to ADS programs in the United States, the actual cost of providing ADS per day is helpful. However, the availability of actual costs per day proved rather scant and contradictory data limits this type of comparison.

In three Canadian studies, researchers indicated the total daily cost involved in providing ADS. The cost per participant per day in Alberta totaled $71.17 (Kerr et al., 1995). In Manitoba, the total cost per participant day equaled less than $19.33 for 25% of programs, $19.33 to $25.77 for 41.2% of programs, and $25.77 for 33.8% of programs (Strain et al., 1997). In one ADS center in Ontario, the actual cost of providing ADS totaled approximately $59.41 (Patashnick, 1982). The actual costs of providing ADS services vastly differed from the fees charged to participants. The Canadian government made up the majority of the difference between fees charged to participants and the actual cost of providing ADS in Canada. However, Mitchell (1993) stressed that innovation in developing funding sources is integral in increasing the financial viability of ADS. Thus, government support and participant fees must be supplemented by other sources of revenue in Canadian ADS.

United States. Because varying structures of ADS exist in the United States, funding sources varied widely. In one study, private not-for-profit centers totaled 70% the 974 programs, public programs equaled 20%, and private for-profit programs made up 10% (Conrad et al., 1990). Thus, funding for ADS in the United States is a rather complex issue resulting in a patchwork of sources and methods of funding. Participant fees (29.2%); city and county funds, state matching grants, United Way Funds, and subsidies from a parent organization (23.5%), other state funds (22.2%), Medicaid (19.5%), philanthropy (12.2%), the Older Americans Act (8.4%), and private insurance (0.5%) comprise the major sources of funding (Bradsher et al., 1995). In some centers, participant fees and Medicaid formed the largest ADS sources of income (Von Behren, 1988). In general, approximately two-fifths of ADS funds came from non-government sources whereas local, state or federal governments provided three-fifths of funding (Von Behren, 1986). Medicaid currently constitutes an important source of governmental funding for ADS, and Medicare is a potential future source of funding for ADS. In fact, "A combination of Medicaid and Medicare funding could substantially increase access to and demand for this service" (Bradsher et al., 1995, p. 18).

Medicaid tends to be the largest single source of funds for ADS programs to draw upon. In one study, Medicaid accounted for more than a quarter of all ADS revenues as over one half of all centers received Medicaid funds (Weissert et al., 1990). Persons eligible for Medicaid benefits have the option to be subsidized to attend ADS in the following 35 states: Arkansas, Alabama, Arizona, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Minnesota, Mississippi, Montana, North Carolina, North Dakota, Nebraska, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Carolina, Utah, Virginia, Vermont, Washington, Wisconsin, and Wyoming (D. A. Himes, personal communication, September 9, 1996). Although over half of the states provided Medicaid funding for ADS, a large portion of ADS participants do not meet eligibility requirements for Medicaid (Bradsher et al., 1995). Only about 45% of all ADS participants are eligible to participate in Medicaid (Conrad et al., 1990; Von Behren, 1986).

As Medicare is a program accessible to all seniors in the United States, the potential benefits of the availability of Medicare funds for ADS are many. Conrad, Hanrahan, Wang, and Hughes (1993) outlined the following three factors that contribute to the growing perception that Medicare is needed to cover ADS: a) reducing hospital stays leads to a higher care needs for patients when discharged, b) Medicare home health care benefits may eventually run out, but the person needs care such as that provided by ADS, and c) the private-pay cost of ADS prohibits some participants from using the service and their condition deteriorates in the meantime. These authors suggested that the provision of Medicare funds for ADS will aid in filling in some of the gaps that currently exist in the long-term care options for older adults. Some ADS programs receive Medicare reimbursement for therapies and skilled services. As these services have to be provided directly by ADS employees and few programs employ highly skilled professionals, many centers do not qualify for Medicare reimbursement (Bradsher et al.,

1995). Weissert and colleagues (1990) found that just 2.4% of centers surveyed received some Medicare reimbursement.

In 1989, Senate Bill 524 that proposed to make ADS a Medicare benefit did not become legislation (U.S. Senate, 1989). The five categories of service requirements in this bill involved the following: services be provided directly (nursing care and medical social services), employment of a multidisciplinary team (registered nurse and social worker), services provided directly or indirectly (nutrition and speech therapy), program activities (therapeutic and social), other requirements (maintenance of health records and medical emergency procedures), and eligible participants (two activity of daily living impairments and in need of institutional care).

Conrad, Hanrahan, and colleagues (1993) utilized data collected in 1986 from 974 ADS centers in a national survey to determine if existing ADS programs complied with the Medicare requirements as outlined by Senate Bill 524. The researchers found that only 3% of the centers surveyed met all of the qualifications for Medicare reimbursement. Using four of the five general criteria, 13% of the centers qualified. In sum, the majority of ADS programs examined in 1986 did not subscribe to the medical model required by the proposed Medicare guidelines. These researchers recommended that Medicare funds become available to ADS programs instead of requiring programs to meet new regulations.

> If ADC is serving a large proportion of persons who are eligible for long-term care coverage and if ADC is considered preferable by these people to other long-term care modalities, why not support it through Medicare, rather than impose additional requirements with their added costs? (Conrad, Hanrahan, et al., 1993, p. 72)

Even though ADS as a Medicare benefit has been proposed for some time and the prospect of Medicare funding gains strength, very few specific ADS services are reimbursable under Medicare (Conrad, Hanrahan, et al., 1993; Von Behren, 1988). However, Medicare may prove to be an important source of ADS funding in the future. As not every adult receives Medicaid benefits, and ADS is not yet a Medicare benefit, private insurance policies may become important in covering ADS in the near future.

Two types of private insurance are pertinent to a discussion of ADS. These are long-term care insurance and health insurance. Private long-term care insurance protects against the potentially devastating costs of long-term care such as nursing home care. However, Weiner and Illston (1996) estimated that only about 4% to 5% of older adults purchased some kind of long-term care insurance. As private long-term care insurance becomes more available and comprehensive in scope, more persons are expected to purchase this type of insurance in the future. The ADS industry is preparing for these changes as "ADC standards for insurance coverage have already been developed by companies such as Travelers and Prudential for the American Association of Retired Persons' group long-term care coverage" (Von Behren, 1988, p. 3). Private health insurance currently plays a very minor role in funding ADS, as it provides just 0.5% of

revenues for ADS centers (Bradsher et al., 1995), but this type of insurance is more common in particular states. For example, researchers in Missouri found that 4.7% of revenues came from private health insurance (Wallace, Ingman, Snyder, Planning, & Walker, 1991).

In addition to the existence of very few ADS participants who pay for ADS through some type of insurance policy, very few participants in ADS are involved in a managed care plan. "...the effects of managed care on the elderly are unknown at the present time, but will be sure to impact the shape and nature of the long-term care delivery system" (Bradsher et al., 1995). There are approximately 25 Programs for All Inclusive Care of the Elderly (PACE) that function as ADS managed care programs (Gold, 1997). Evaluation of these programs will provide evidence of the effectiveness of ADS managed care. Managed care essentially integrates the delivery of care with the financing of care (Ansel, 1996). Medicaid managed care plans are becoming increasingly popular (Lutz, 1995), and as Medicaid is a significant funder of ADS in the United States, it is likely that many ADS participants who are Medicaid beneficiaries will be enrolled in managed care plans in the future.

Because structures do not exist in the US to fund the total cost of ADS, participants usually pay part or all of the fees associated with ADS. As in Canada, participant fees charged per day of ADS in the United States varied greatly. The type of program and the specific services provided may influence the amount of fees paid. One study showed that participants enrolled in different types of ADS paid different fees. Those enrolled in Auspice Model I centers paid a mean of $12.47 whereas other participants paid $4.03 for Auspice Model II centers (Weissert et al., 1990).

In a similar vein, participants in The Robert Wood Johnson Foundation's national demonstration of Dementia Care and Respite Services project paid according to the type of ADS service received (Henry & Capitman, 1995). For those providing care for persons with dementia, (N=213), the average amount billed for weekday care totaled $44.96 per day. For those caring for persons without dementia (N=99), the average amount billed for weekday care totaled $31.37. Results from an earlier report of 25 ADS centers in the Robert Wood Johnson project indicated that the range of undiscounted fees per day ranged from a low of $22.55 to a high of $81.17, and the mean for all centers totaled $39.46 (Reifler, Henry, Sherrill, Ashbury, & Bodford, 1992).

In a large national study, Von Behren (1986) found that many ADS centers included various provisions for charging participant fees. Some centers (N=105) charged no fees and simply accepted donations. Sliding fee schedules varied among centers: 67% had a minimum fee from no charge to $6.99; 23% had a minimum fee between $8.39 and $20.98; and 10% had a minimum fee of $22.38 to $55.95. Maximum per diem fees incorporated 57% of programs that charged between $43.36 and $55.95, and nine percent charged a maximum of $57.35 or more. The maximum per diem fee charged totaled $251.78. A total of 333 centers had just one fixed rate with a mean of $31.03. In another national study, Mace and Rabins (1984) also found a wide range of participant

fees varying from no charge to $81.85 with a mean of $31.73 per diem. In a state-wide study in Missouri, the mean private pay rate totaled $31.33 and about half of the centers charged from $29.01 to $34.82 per day (Wallace et al., 1991). Results from the above studies illustrated the wide range of fees charged to ADS participants in the United States.

As in the Canadian studies, few researchers in the US examined the total daily cost of providing ADS. In an early study of 10 ADS programs, Weissert (1976) found that the average cost of providing services per day totaled $111.29 for Model I centers and $53.10 for Model II programs. In a national sample of 60 centers (Weissert et al., 1990), total daily expenses ranged from a low of $12.45 to a high of $133.13 with 80% of costs ranging from $17.65 to $65.55 per day. Von Behren (1986) found that of 549 ADS centers, the unsubsidized average per diem cost totaled $37.77. When Von Behren (1986) included in-kind contributions in the daily costs, 310 centers reported an average per diem cost of $43.36. In one ADS center in California (Sands & Suzuki, 1983), the reported average cost for providing services per diem totaled $36.09.

Summary of financial aspects. Several trends resulted from the available literature with regard to funding sources, fees charged, and the cost of providing ADS. The funding mechanisms of ADS in each country differed. The government in Canada paid a larger proportion of ADS expenses than the government in the United States. Government sources constituted the primary funding source in Canada whereas participant fees made up a smaller proportion of income. In the United States, most funding for ADS came from participant fees and Medicaid. A variety of additional funding sources such as Medicare, managed care plans, and insurance policies may become more important in the future in the United States.

Standard out-of-pocket fees paid did not exist in either country. Because of higher levels of government funding, participants paid lower fees in Canada. In the United States, programs exhibited a greater range of fees paid by United States participants and participants paid more for services. Weissert and colleagues (1990) noted that 43% of participants in the United States paid for ADS entirely out of their own pockets. Research results indicated that most Canadian participants received some subsidization and very few paid for the entire cost for ADS out-of-pocket. Canadian participants generally paid less than $10 per day whereas United States participants typically paid $35 or $40 per day.

Although few researchers reported the total cost of providing ADS per day, research results indicated that United States participants paid closer to the actual cost of providing ADS. In the United States, the services provided, such as more medical services, influenced the daily costs. In both countries, participants generally paid less than it cost to provide services. In one United States study, the median revenue from all sources totaled $28.82 whereas the median cost per participant per day totaled $29.50 (Weissert et al., 1990). This amount translated into these centers operating at a median net loss of $1,815 per year.

Staffing

In this section, I examine two components of staffing: the staff to participant ratio and staff job titles. The staff to participant ratio is a measure of the number of staff members available to provide care for the participants. In ADS, this ratio is calculated by dividing the total number of participants by the number of staff members available at any given time. If this calculation yields 7 participants for each staff person, the ratio is presented as 1:7. Whereas calculating staff to participant ratios provides an indicator of the number of staff that are physically present in a center, an examination of job titles gives insight into the type of care that staff members are trained to provide.

Canada. No nationally agreed upon standard exists for the staff to participant ratio in Canadian ADS programs. In an Alberta sample, results showed 1:7 as the average staff to participant ratio and the ratios ranged from 1:2.2 to 1:15 (Kerr et al., 1995). In the Manitoba study, researchers presented the number of allocated spaces per week for each equivalent to full-time position (Strain et al., 1997). The median number of spaces available to each staff person equaled 27.6 and the mean number of days these programs operated totaled 3.1. Thus, a typical staff to participant ratio in Manitoba equaled 1:8.9.

In the three Canadian provincial studies, the researchers examined the staff positions filled in ADS programs. In British Columbia, the following resulted as the most common types of employees: administrator/coordinator (84.6%), program worker (69.2%), nurse (46.2%), and secretary/bookkeeper (46.2%). About 78% of the centers made regular use of volunteers (Gutman et al., 1991). Many Alberta ADS programs employed recreation therapists and/or recreation therapy aides, and registered nurses and/or nursing aides. Adult day services program volunteer hours totaled 43.6 hours per week (Kerr et al., 1995). In Manitoba, most programs employed a coordinator (94.1%), whereas about half employed an activity aide (52.9%) and 13.2% of centers employed a health care aide (Strain et al., 1997). The most frequently utilized consultants in Manitoba included Nurses and dieticians/nutritionists.

United States. In the United States, NADSA recommends that programs have two staff persons available at all times and a minimum staff to participant ratio of 1:6 with more staff members available if required by participant needs (Murphy, 1997). In addition, NADSA recommended that staff counted in the ratio should encompass only those who work on site, are actively involved in providing care, and are immediately available to meet the needs of participants. In one large national study, the staff to participant ratio of 1:6.4 came close to the NADSA standard (Conrad et al., 1990). In 25 ADS centers in the dementia program funded by the Robert Wood Johnson Foundation, the staff to participant ratio ranged from 1:1 to 1:8 with 1:4 as the most common ratio (Reifler et al., 1992). Mace and Rabins (1984) found that in providing ADS for persons with dementia, a staff to participant ratio of at least 1:5 proved ideal and that at least one professional staff member should be present at all times.

Researchers indicated specific job titles of ADS employees in very few United States studies. Von Behren (1986) found that ADS centers had a mean of 1.4 full-time administrative staff, 1.7 part-time administrative staff, 3.4 full time services staff, and 3.3 part-time services staff. Most programs involved 10 volunteers who worked a total of 123.3 hours per month. Conrad and colleagues (1990) also did not indicate the types of staff that worked in ADS, but like Von Behren (1986), the researchers indicated general categories of employees. Adult day services centers had a mean of 4.1 regular salaried employees. Including consultants, centers employed a mean of 4.6 persons. The mean number of volunteer hours per week totaled 31.9, 6.2% of centers utilized volunteers, and 63% of centers had students involved. Weissert and colleagues (1989) reported the types of staff employed in ADS. A typical center employed a nurse or social worker as the director in addition to an assistant director and some or all of the following employees: recreation/activity and nursing aides, nurses, therapists, custodial workers, van drivers, case managers, social workers, administrative personnel, and office staff.

Summary of staffing. In Canada, each staff person provided care for a few more participants than in the United States. Results from the available research indicated that most United States programs adhered to the 1:6 staff to participant ratio in accordance with the national standard. In contrast, 1:8 appeared to be the most prevalent staff to participant ratio in Canadian programs. One problem in collecting data of this type is that different studies presented questions differently. For example, it is difficult to compare ratios between studies if administrative staff are included in some ratios and not in others. Thus, the precise measurement of the staff to participant ratio is crucial in determining if similar or differing staff to participant ratios are maintained in Canada and the United States.

One problem with comparing studies in regards to staff qualifications is the various types of data reported that make it difficult to ascertain similarities and differences. The job titles are just one indicator of the personnel employed in ADS. If researchers examined the training and experiences of personnel, greater insight into the quality of employees working in ADS could be achieved. Evidence of general categories of employees such as administrative, direct care, and support personnel resulted in both countries.

Program Availability

Neither country has a requirement regarding the availability of ADS programs. Programs may vary in availability in two areas. First, the hours of operation per day can vary. One program may be open from 9 a.m. to 5 p.m. whereas another may be open only in the afternoon. Second, programs vary in the days of the week they are open. Programs may be open just a few days a week or every day of the week. Thus, great variation can exist in the availability of ADS programs measured through examining the hours open per day and the days open each week.

Canada. In Alberta, the hours of operation varied, but the average number of hours that centers operated per week totaled 33.3 (Kerr et al., 1995). The hours open per day ranged from 6.1 to 7.0. Just one program held evening hours on one weekday night. None of the Alberta programs operated on weekends (Kerr et al., 1995). In one rural Alberta program, the center opened just two afternoons each week (Hall, 1989). In British Columbia, 61.2% of programs opened five days a week, 8.2% opened four days a week, 12.2% opened three days a week, and 18.4% opened two days a week (Gutman et al., 1991). Most centers that opened five days a week served participants from 9 a.m. to 5 p.m. Those that opened for fewer than five days a week operated from four to eleven hours per day (Gutman et al., 1991). In Manitoba, programs operated an average of 3.1 days per week (Strain et al, 1997). The most frequent number of days open per week totaled five (29.4%) followed by two days per week (26.5%). The remaining programs proved to be quite evenly divided between opening one, three, or four days per week. In Manitoba, no programs operated on Sunday whereas just one opened on Saturday. Over 60% of the programs operated from Tuesday to Thursday whereas just fewer than 40% opened on Monday. In Manitoba, just under 6% opened at least one evening each week.

United States. In a national sample of 923 ADS centers, the mean number of hours open on weekdays totaled 7.8 (Conrad et al., 1990). In a separate study of 847 centers, the majority of centers opened Monday through Friday for eight or more hours a day and a small percent opened on weekends and in the evening (Von Behren, 1986). In a study of 240 programs, most opened from 8 a.m. to 5 p.m., Monday to Friday (Sherrill, Reifler, Henry, & Myers, 1992). Very few programs opened on Saturday (8%), Sunday (8%), or in the evening (2%).

Summary of program availability. From the three Canadian studies examined, results indicated that many ADS programs operated fewer than five days per week. Very few programs operated in the evening hours or on weekends. Although few studies examined reported the hours and days of operation in the United States, Monday to Friday totaled the standard days of operation. Although the majority of United States programs did not open in the evenings or on weekends, more programs opened during these times than in Canada. Also, the United States programs operated more hours per day. In sum, the United States programs appeared more accessible to participants in terms of the number of days of operation and the hours of operation.

Demand for ADS

Researchers have developed a method for determining the approximate number of ADS spaces needed in a geographical area based on the percentage of older adults, the percentage of those who could benefit from ADS, and the percentage of those who will actually use the service. For example, Travis (1993) indicated that about 15% of older persons in a given area might be impaired enough to need ADS, but only about 1.25% of this population are likely to use ADS. Thus, it is possible to determine the demand for ADS in an area.

In Canada, 12.0% of the population is over the age of 65 whereas 12.6% of the population in the United States is over age 65 (International Marketing Data and Statistics, 1996). These figures translate into 1,330,400 Canadians over age 65 and 13,045,000 Americans over age 65 (International Marketing Data and Statistics, 1996). Thus, using the 1.25% utilization rate and a mean of 20 participants per center, there should be 16,630 ADS spaces and 832 centers in Canada, and the United States should have 163,063 ADS spaces and 8153 ADS centers. It is currently unknown exactly how many ADS centers exist in Canada, but an estimate of 400 ADS centers can be made based on available studies. The most current number of existing ADS centers in the United States is 3000 (National Adult Day Services Association, 1996).

The above data provide an estimation of the demand that should exist for ADS centers in Canada and the United States. These calculations showed the existence of fewer ADS centers in both Canada and the United States than are needed to meet the demand. However, in the following section, I examine the actual utilization of ADS programs that already exist in Canada and the United States.

Utilization

Utilization of ADS involved several components. Capacity is the maximum number of participants a center can serve per day. Attendance is the actual number of participants served per day. Thus, the calculation of a utilization rate is possible though knowing the maximum capacity and attendance per day. The number of days per week participants attended indicates the amount of time participants spent in ADS. Finally, another indicator of utilization is the presence of waiting lists and the amount of time participants spend waiting for an ADS space to become available. Waiting lists exist when programs are operating at full capacity and there are additional people who want to use the service.

Canada. Adult day services programs in Alberta enrolled an average of 30.7 participants (Kerr et al., 1995). An average of just over 40 participants could be accommodated each day. Thus, the programs in Alberta operated at approximately 75% of capacity. In British Columbia (Gutman et al., 1991), the mean number of participants served per day totaled 13.6 with a range of 1 to 121 participants, but the researchers did not indicate the maximum number of clients who could be served per day. The median number of allocated ADS spaces per week in Manitoba totaled 19 and the median number of spaces used per week totaled 18 (Strain et al., 1997). Thus, Manitoba ADS programs operated at close to capacity. In fact, almost 80% served at least 85% of their maximum number of participants. Although the programs in Alberta and Manitoba operated at high capacity levels, this type of utilization rate does not account for the amount of time that each participant spends in ADS programs.

In Alberta, participants attended ADS a mean of 1.7 days per week (Kerr et al., 1995). In a qualitative study of 12 participants in six ADS centers in British Columbia, Shapera (1990) found that participant mean attendance per week totaled two days with a

range of one to three days. Researchers in the provincial British Columbia study supported these results as 1.7 totaled the mean number of days of attendance per week (Gutman et al., 1991). Most participants in Manitoba attended either one (57.4%) or two days per week (17.6%) (Strain et al, 1997). Thus, although researchers in Alberta and British Columbia showed that most programs served close to the highest possible number of participants per day, the participants generally attended just one or two days per week.

A good indicator of ADS utilization is the existence of waiting lists. Waiting lists show that a program is not only operating at capacity, but also additional participants could be served. In the Alberta study, 50% of the programs maintained waiting lists. Participants remained on the list an average of 14.2 weeks for ADS. Urban centers had longer waiting times than rural centers (Kerr et al., 1995). In British Columbia, 66.5% of all centers had a waiting list (Gutman et al., 1991). The number of people on the waiting lists varied from 2 to 46 and the waiting times ranged from 1 to 12 months. Although Gutman and colleagues (1991) did not indicate capacity levels for British Columbia programs, the presence of waiting lists for many centers indicates that the programs operate at high levels of capacity. In Manitoba, 42.6% of programs had waiting lists (Strain et al., 1997). The length of the wait ranged from 2 to 36 weeks and a median of eight weeks. The presence of waiting lists in many of the ADS programs in Alberta, British Columbia, and Manitoba indicated high utilization rates. Many participants remained on waiting lists for several months for the opportunity to attend ADS.

United States. Weissert and colleagues (1990) found that 85% of centers operated below their maximum capacity levels. Conrad and colleagues (1990) found that although centers tended to over-enroll participants, they still fell short of daily capacity by about four participants per day. In this study, mean daily attendance totaled 19.5 whereas the mean daily capacity totaled 23.9, so each program operated at about 82% of capacity. In a national study of 772 centers, Von Behren (1986) reported an average daily attendance of 19, but did not indicate the average daily capacity. In 1983, Mace and Rabins (1984) surveyed 346 ADS centers. At that time, the majority of centers operated at below capacity as 80% had vacancies. Thus, many ADS programs in the United States operated below capacity, but as shown below, the participants attended more days per week than in the Canadian programs.

The mean number of visits per week in a sample of 923 centers in the United States totaled 3.3 (S.D.=1.0) (Conrad et al., 1990). In another study, participants attended 3.4 days a week on average, and attendance ranged from one to six days per week (Weissert et al., 1990). Weissert and colleagues (1991) also found that participants at licensed or certified centers attended 3.8 days per week whereas those at unlicensed or uncertified centers attended 2.8 days per week. Von Behren (1986) found that participants attended approximately three days per week.

The percentage of centers with waiting lists totaled 29% in two national studies (Conrad et al., 1990; Mace & Rabins, 1984). Weissert and colleagues (1990) found that

a total of 43.5% of licensed or certified centers had waiting lists whereas 15% of other centers had waiting lists.

Summary of utilization. In the two Canadian studies that reported capacity levels, results indicated that the ADS programs operated at about 80% of capacity. However, in the United States studies, results varied in terms of capacity. The issue of utilization in terms of programs operating at capacity did not arise in Canadian literature. In the United States studies, though, underutilization is mentioned frequently as a problem.

Although the number of participants that Canadian centers can serve per day varied by province, these centers served fewer participants per day than United States centers. Participants attended ADS fewer days per week in Canada than in the United States. The mean number of days in attendance per week in Canada approximated one or two, and in the United States a mean attendance totaled three or four days per week. Fewer United States programs maintained waiting lists. Explanations for the differences in utilization between the countries are lacking in the available literature, but connections to funding of centers and daily fees charged are apparent. In the United States, Henry and Capitman (1995) found that caregiver dissatisfaction with the price of ADS decreased utilization of ADS.

Participant Characteristics

In this section, I examined the characteristics of participants attending ADS in Canada and the United States. These characteristics encompassed age, gender, marital status, living arrangements, education, and income.

Canada

Kerr and colleagues (1995) found that the age of clients in Alberta averaged 72.3 and over half of ADS participants already reached at least age 75. Neufeld and Strang (1992) provided a breakdown of age groups in an Alberta sample: 19% under 65, 28% age 65 to 74, 42% age 75 to 84, and 11% age 85 years and older. In a British Columbia study, the mean age of ADS participants totaled 78.9% and participants under age 65 totaled 6.1% (Gutman et al., 1991). Strain and colleagues (1997) found that in Manitoba, participants ranged in age from 33 to 100 with a mean age of 79.8 and participants under age 65 totaled 5.2%.

In the Canadian studies, the gender of participants varied by province. Females totaled 74.9% of the sample in Manitoba, 63.1% in British Columbia, and 59.1% in Alberta.

Results of studies in Canada showed that married or widowed participants constituted most of the population in Canadian ADS programs. The proportion of married participants ranged from 33% to 52.4%, and the proportion of widowed

participants ranged from 35.4% to 50% (Gutman et al., 1991; Kerr et al., 1995; Strain et al, 1997).

Results showed that 58.3% and 69.4% of participants lived in their own houses, and 33.3% and 17% lived in apartments (Kerr et al., 1995; Gutman et al., 1991). In addition, other living arrangements consisted of lodges (boarding homes) (8.8%), nursing homes (1.4%), and other arrangements (3.4%) (Kerr et al., 1995). In British Columbia, most participants lived with a spouse (37.8%) and others either lived alone (26.7%) or with children (24.5%) (Gutman et al., 1991). Very similarly, Alberta ADS participants most likely lived with a spouse (42.9%), whereas others lived with another family member (25.2%), lived alone (22.4%), or lived with someone other than a family member (8.2%) (Kerr et al., 1995). In contrast, most participants in Manitoba lived alone (69.6%) whereas 23.6% lived with one other person (Strain et al., 1997).

In both Alberta and Manitoba, fewer than 20% of respondents completed formal education beyond high school (Kerr et al., Strain et al., 1997). Almost 60% of Alberta participants completed at least some secondary training whereas less than 40% of Manitoba participants did do. Almost half of Manitoba participants completed elementary school or less. In the Canadian literature reviewed, the researchers did not report participant income. However, researchers in Alberta and Manitoba reported similar former occupations of participants of approximately 37% semi-skilled, 24% homemakers or never worked for pay, 22% professional or managerial, and 17% farmers (Kerr et al., 1995; Strain et al., 1997).

United States

Of 312 participants in 10 ADS centers in the Robert Wood Johnson Foundation project, the average age totaled 77.5 (Henry & Capitman, 1995). In a national study of 912 ADS centers, the mean age totaled 72 years (S.D.=11.0) (Conrad et al., 1990). Von Behren (1986) found a mean age of 72.9. Weissert and colleagues (1990) found a mean age of 77.7, excluding the 18% of participants under age 64.

In two large national studies, 68% totaled the proportion of female ADS participants (Conrad et al., 1990; Von Behren, 1986). Weissert and colleagues (1990) found a slightly lower proportion of female ADS participants at 63.8%.

Few researchers reported the marital status of ADS participants in the United States. Weissert and colleagues (1989) found that the proportion of married participants totaled 28.9%. In a study in Pennsylvania, Kirwin (1991) found that widowed participants made up 60% of the ADS population whereas married participants totaled 39%.

Researchers did not report the type of dwelling in which ADS participants lived, but they reported information on those that ADS participants resided with. Conrad and colleagues (1990) found that participants lived with children (29%), alone in the

community (20%), with a spouse (20%), with other relatives or friends (13%), alone in a congregate setting (7%), or in an institutional setting (7%). Von Behren (1986) found that 63.5% of participants lived with a spouse, relatives, or friends, 18.8% lived alone in the community, 12.3% lived alone in a congregate setting, and 4.4% lived in an institution. Kirwin (1991) summarized that 90.6% of the participants lived with others and the remaining 9.4% lived alone. Through interviewing 94 caregivers of ADS participants, Zimmerman (1986) found that most participants lived with a spouse or adult child and 14% lived alone.

Researchers did not provide the level of participant education in any of the United States studies reviewed and just one researcher reported participant income. Von Behren (1986) found an average participant monthly income of $478.

Summary of Participant Characteristics

In both countries, the mean age of participants fell between age 70 and age 80. One confounding factor concerning age involved whether participants who are younger than the typical ADS participant are considered in the analysis. Some researchers simply excluded younger participants from data analysis (Von Behren, 1986). Data should be presented in various age groups rather than as aggregate data. It is important to recognize that ADS provides care to younger adults and this area should be explored further. Little is known about participants under age 75 who utilize ADS services. Von Behren (1986) found that most younger ADS participants exhibited some type of developmental disability.

When comparing the sex of the participants across the Canadian provinces, the proportion of male and female participants varied greatly. The proportion of women ranged from 60% to 75%. United States programs enrolled approximately 65% women. Thus, it is unclear whether ADS in Canada served a similar proportion of women and men as in the United States.

In the available Canadian studies, equal numbers of married and widowed participants resulted. Little is known about the marital status of participants in the United States.

In Canada, most participants lived in their own houses or in apartments. Researchers did not report information on the type of dwellings in which US participants lived. Results varied concerning those members in participants households. In most studies in both countries, most of the participants lived with at least one person, but approximately 20% lived alone. However, in Manitoba, almost 70% of participants lived alone. Adult day services programs in Manitoba appear to target older adults who live alone.

In the Canadian studies examined, less than 20% of participants had completed formal training beyond high school and many had little formal training. Not surprisingly

because of their education levels, most Canadian respondents worked previously as farmers, homemakers, unskilled, or semi-skilled laborers. Researchers did not report the education or income levels of United States respondents.

NADSA Classification System

Although researchers have not yet utilized the classification system published in late 1997 (Murphy, 1997), many researchers examined the two main components of the NADSA classification system: services provided and participants enrolled. The services provided by ADS programs are rather difficult to compare across programs as no standard method of collecting and reporting these data exists. However, many researchers included information concerning the services that ADS programs provided. Researchers have also examined the second aspect of the NADSA classification system, the needs of the participants. The classification system is designed for use by individual ADS programs in that the services provided should meet the needs of the participants enrolled, and researchers generally reported aggregate data.

Services Provided

Researchers reported a variety of services that ADS programs provided. Most researchers examined both psychosocial services and medical services. In some cases, researchers utilized a model or categorical system to collect data on services provided.

Canada. In Alberta, the researchers gave a list of the services provided (Kerr et al., 1995). The following is a list of the services provided and the percentage of programs that provided each service: socialization (100%), case coordination (89%), recreational therapy (89%), nursing (78%), personal care (78%), nutritionist (67%), podiatrist/foot care (67%), caregiver support group (56%), occupational therapy (56%), physiotherapy (56%), physician (33%), pastoral care (22%), psychologist (11%), and pharmacist (11%).

In the British Columbia study, Gutman and colleagues (1991) divided services and activities provided into ten broad headings. The following is a list of these headings and some examples of the most frequently provided services in each category: health care (podiatry/footcare, nutrition counseling), personal care (personal grooming, taking clients on shopping trips), transportation (social events, shopping), social services (information and referral, counseling participants), therapeutic activities (exercise class, reminiscence therapy), recreational and social activities (arts and crafts, bingo, entertainment), educational programs (information about community resources, current events), participant volunteer activities (participation in running the center, doing volunteer work for other participants), quiet time activities (conversation, rest), and meals (meals at the center, snacks).

Strain and colleagues (1997) divided the services provided into four types. The following are the four service types and examples of services in each category: core

services (meals, exercise, arts and crafts, socialization, toileting), social services (music, baking, recreation, pastoral services), health services (medication administration, personal grooming), and specialized health services (baths, physiotherapy). The researchers then divided each program into one of four service clusters depending on the services provided in each type. Programs in Service Cluster I consisted of the fewest services provided and programs in Service Cluster IV provided the most services. Approximately a quarter of the programs fit into each service cluster.

United States. United States researchers utilized various methods for collecting information on services provided. Von Behren (1986) provided a list of services and asked whether staff provided the services, if contract personnel provided them, or if staff referred participants to other services. Services most commonly provided by staff included social services, nursing, recreational activities, exercise, and personal care. Contract personnel most often provided various therapies, transportation, and meals. Services most often referred included physician services, psychiatry, podiatry, and dentistry services. Sherrill and colleagues (1992) reported the most frequently provided services involve caregiver education and support, activity therapy, exercise, toileting, music therapy, and crafts.

Some researchers examined services in terms of a social or medical model. Whereas researchers did not list specific services, major groupings of services provided indicated types of assistance available. Weissert and colleagues (1990) developed a type of ADS classification partially based on the services rendered. In one study of 32 centers, nine belonged to Auspice Model I (medical model) and 23 belonged to Auspice Model II (social model) (Zelman, Elston, & Weissert, 1991). Bradsher and colleagues (1995) found that of 92 programs in five states, 34.8% operated on a social model, 19.6% operated on a health model, and the remaining 44.6% operated on a combination of social and health models.

Summary of services provided. Several researchers in both countries reported the types of services provided. Some researchers indicated the most common types of services provided whereas others included a more comprehensive list and only indicated if a program provided a service. In addition, some researchers categorized services into various topics that are helpful, but no standard method of categorization existed. Thus, these problems make a comparison of services provided in ADS in Canada and the United States difficult.

Participant Needs

In order to examine participant needs, I utilized results concerning various physical and mental health statuses. Researchers reported many different characteristics in varying levels of detail. Many researchers examined the degree of participant independence in activities of daily living and instrumental activities of daily living.

Canada. In Alberta, Kerr and colleagues (1995) examined medication usage, diagnoses, falls, substance abuse, psychiatric problems, ambulation devices, and activities of daily living. Participants reported using an average of five medications per day and almost 10% took more than 10 medications daily. Participants reported an average of 3.2 diagnosis with a range of zero to five diagnoses. Depression, cerebrovascular accident, hypertension, osteoarthritis, diabetes mellitus, dementia, Alzheimer's disease, and Parkinson's disease made up the most frequent diagnoses. Participants reported falling an average of four times in the previous year. Just over 5% of participants reported some form of substance abuse. Most reports of substance abuse involved alcoholism. A total of 35.3% participants reported a history of psychiatric problems. Canes (34.9%), walkers (11.7%), and wheelchairs (3.7%) formed the most common ambulation devices utilized. The following percentages of participants did not need assistance with activities of daily living: 83.4% for toileting, 78.2% for eating, 66.8% for dressing, and 61.1% for transferring.

Gutman and colleagues (1991) examined the following in British Columbia: medical conditions, medication consumption, communication ability, activities of daily living, instrumental activities of daily living, and mental health status. Participants most frequently exhibited circulatory diseases, musculoskeletal system diseases, nervous system and sensory organ diseases, and mental disorders. Over half (60.7%) of participants took one to four medications daily and 6.8% took eight or more per day. Most respondents wore glasses (89.4%) whereas just 15.2% wore hearing aids. Most participants spoke (87.2%) and heard (86.3%) unimpaired. Many participants did not need assistance with activities of daily living (83.9% for eating, 82.0% for transferring, 57.1% for dressing, 55.9% for toileting, 47.5% for ambulation, and 30.4% for bathing). Many participants also did not need assistance with instrumental activities of daily living (55.5% for using the telephone, 29.8% for taking medications and treatments, 18.4% for food preparation, 15.5% for travelling, 13.6% for housekeeping, and 11.8% for shopping). The following percentages of respondents received the highest mental health status ratings: 71.8% for reality orientation, 64.5% for comprehension, 58.2% for emotional stability, 56.1% for self-direction, and 41.1% for memory.

Researchers in Manitoba provided results concerning chronic health problems, basic and instrumental activities of daily living, cognitive impairment, and depression scores (Strain et al., 1997). Respondents reported a having a mean of 6.6 chronic health conditions of the 24 chronic health conditions examined. Arthritis (65.2%), eye trouble (48.7%), trouble with feet or ankles (48.0%), high blood pressure (44.7%), hearing problems (40.4%), and memory loss (37.3%) included the most common chronic health conditions. Almost 60% of participants required assistance with at least one basic activity of daily living. Activities requiring the most staff assistance involved bathing (58.0%) and dressing (21.0%). Almost all (97.5%) of participants required assistance with at least one instrumental activity of daily living. Whereas 52.3% of respondents showed no signs of cognitive impairment, the remaining 47.7% did show potential cognitive impairment. Over one-quarter (27.4%) of participants showed some signs of depression.

United States. Researchers from the United States often did not report the details of participants needs to the degree of detail that Canadian researchers did. Researchers did report results of dementia and activities of daily living.

Reifler and colleagues (1992) administered the Mini-Mental Status Exam to the first 450 enrollees in the Robert Wood Johnson Foundation project. This foundation supported centers to specifically provide ADC services to older adults with dementia. Participants had a mean score of 13.5 on a scale from 0 to 30. Thus, moderately demented described most participants. Conrad and colleagues (1990) found 40.2% of participants exhibited confusion or disorientation and that 20.6% exhibited Alzheimer's disease. Von Behren (1986) found 65.2% percent of participants exhibited cognitive impairment, 10.1% a developmentally disability and 7.6% disruptive behavior.

Of 312 participants in 10 Robert Wood Johnson Foundation ADS centers, the mean activity of daily living score totaled 4.05 on a scale from zero (less impaired) to a high of 12 (more impaired) (Henry & Capitman, 1995). Conrad and colleagues (1990) collected data on activities of daily living from center administrators. Results showed that participants exhibited slight dependence on total activities of daily living and moderate dependence on instrumental activities of daily living. The majority of participants required no assistance with activities of daily living. The particular difficulties and proportion of participants requiring assistance consisted of ambulation, 17.3%; transferring, 12.9%; bathing, 9.9% to 49%; dressing, 11.9%; grooming and hygiene, 45%; feeding, 16.4% to 21%; and urinary incontinence, 3.4% to 7.8% (Conrad et al., 1990; Von Behren, 1986; Weissert et al., 1990).

Summary of participant needs. Difficulties arise in comparing results between countries when researchers examined different variables in different ways. However, researchers generally reported results concerning cognitive disorders and assistance with activities of daily living and instrumental activities of daily living. Most participants performed activities of daily living independently. The researchers tended to report more participant medical needs as opposed to psychological or social needs.

However, ADS in both countries provided care to quite a large proportion of participants with dementia or some other type of cognitive impairment. It appeared that ADS programs in the United States provided care to more participants with dementia or other cognitive or behavioral problems as compared to those in Canada. Some programs specialized in providing care to people with dementia, especially in the United States. Adult day services in both countries provided care to participants with a variety of needs.

Summary of NADSA Classification System

Whereas many researchers in both countries examined services provided and participant needs, it is impossible to determine if individual programs are meeting the needs of participants. Analysis needs to be conducted on a program by program basis to determine if a match exists between the participants and services provided. The NADSA

classification system is designed for analysis at the program level and needs to be utilized at this level in future research.

Chapter III: Methods

In this chapter, I present the methods I used to conduct this study. First, I the describe the respondents, followed by the procedure used to gather the data, the instrument completed by the respondents, analyses, expert review, and limitations of the study.

Respondents

Respondents consisted of directors of ADS programs in the four Atlantic Canada provinces of New Brunswick (NB), Newfoundland (NF), Nova Scotia (NS), and Prince Edward Island (PE). Also, program directors in Maine (ME) and Vermont (VT) responded. I selected these four provinces and two states for several reasons. Many similarities in demographic characteristics existed such as total population, population age 65 and over, population per square mile, rural percent of population, and total number of ADS centers (see Table 3). Population per square mile varied the most among the provinces and states. The low population density in the province of NF largely influenced this dissimilarity. Newfoundland has vast areas where extremely few or no people live. The ADS centers that exist in NF are located in villages, towns, or cities similar to those in the other Atlantic Canada provinces. Thus, this difference in population density should not significantly influence the results of this study. In addition to these demographic characteristics, similarities existed in the type of services available to seniors in addition to ADS (see Table 4).

I also examined ADS in these particular provinces and states because I am familiar with the geographic region as I am from PEI, and I completed a bachelor's degree at the University of Prince Edward Island. Also, I resided in ME for three years while I completed a master's degree at the University of Maine. This familiarity aided me in interacting with ADS personnel and helped me to achieve an acceptable response rate for a mailed survey.

The respondents consisted of ADS directors in the six provinces and states. I contacted the government agency in each of the provinces and states responsible for administering or overseeing ADS and requested contact information for all the ADS programs. No such list existed in NS, so I sent letters to administrators of Nursing Home and Homes for the Aged and requested information on ADS programs. I mailed surveys to directors of all the 111 ADS programs identified in Atlantic Canada. I excluded 14 programs as 11 did not have any participants at the time of data collection, two operated day hospitals, and one operated in combination with another program. Of the 97 eligible programs, directors of 47 responded, for a response rate of 48% (see Table 6). Response rates ranged from 35% in VT to 75% in NF. A higher percentage of Canadian program directors responded (57%) than United States program directors (42%). However, because more programs existed in ME and VT, the number of surveys completed remained similar. Twenty-four directors responded in Atlantic Canada, and 23 responded in ME and VT. The reasons why the response rate varied between the provinces and

Table 6
Response Rate

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Potential programs identified	14	8	22	5	49	45	17	62
Ineligible programs	0	0	6	1	7	7	0	7
Eligible programs	14	8	16	4	42	38	17	55
Responding programs	7	6	9	2	24	17	6	23
Response rate (%) (Eligible programs/ responding programs)	50	75	56	50	57	45	35	42

states are unknown. Because I used nonrandom sampling procedures and less than 100% of the directors responded, the results can not be generalized to all ADS programs in the six states and provinces or to ADS programs in other areas.

Procedure

On February 19, 1997, I mailed survey packets to the directors identified to participate in this study. Each packet contained a letter of introduction, an informed consent form, a survey instrument, and a self-addressed and stamped return envelope. In order to encourage directors to participate in this study, each respondent had the opportunity to participate in a drawing to receive $50 for their center's activities program. Of the directors who returned a completed ballot with their completed survey, one from each country received a $50 check.

I requested that each respondent complete the survey and return it by mail within two weeks from the date they received the packet. Eleven surveys arrived between February 28 and March 10. I mailed a follow-up postcard to all those who did not respond by March 10. I utilized the postcard to thank the directors for responding if they had already done so, inquire whether another packet needed to be sent, and encourage response as soon as possible. A total of 25 surveys arrived between March 11 and April 14. Between April 14 and April 24, I telephoned all those who had not yet responded. I left voice messages for 36 directors and spoke directly with 34 directors. As a result of the telephoning process, I resent surveys to 17 directors. An additional 11 respondents replied between April 15 and May 16.

Nonrespondents did not complete formal follow-up procedures. However, when I telephoned the directors to encourage participation, a few gave reasons for nonresponse. One director operated a strictly social ADS program and refused to participate in a survey that included questions about medical services provided. Two directors indicated that they completed the surveys and mailed them back to me, but I never received them. Although I resent packets to these two directors, I did not receive completed surveys. Finally, I telephoned one program in a French region several times, but I did not reach anyone who spoke English.

Instrument

As no measure existed that specifically examined the research questions in this study, I developed a new instrument (see Appendix A) that incorporated components of two previously developed instruments and the NADSA classification system (Gutman et al., 1991; Murphy, 1997; Von Behren, 1986). Although the survey length totaled 15 pages of questions, it fell within the maximum page length Dillman (1978) recommended to avoid reducing the response rate. The final instrument consisted of four 11.5 X 16 inch pages printed on both sides, folded, and stapled in the middle to form a booklet.

The survey consisted of sections on center information, structural characteristics of programs, participant characteristics, program purposes, and policies. Center information involved questions on contact information, center affiliation or sponsor, and physical location of the center. The structural characteristics section included questions concerning financial information, services provided, staff to participant ratio, staff job titles, hours and days of center operation, capacity and waiting lists, and participant attendance. Participant characteristic questions involved items concerning age, gender, marital status, education, income, caregiver availability, living arrangements, functional ability, and other community and institutional services utilized. In the fourth section, directors indicated the purposes of their centers. Finally, the last section involved open-ended questions on program purposes, eligibility, the referral process, the admission process, and the regulatory system.

Analyses

Data analysis consisted of two parts. First, I created profiles of ADS in each province and state utilizing data on structural characteristics and participant characteristics. After creating six profiles, I examined major differences in ADS between provinces and states and between the two countries. For most variables, I calculated means, percentages, and standard deviations and presented the results in tables or charts.

Each program director provided information about the services their program provided. I grouped these 100 specific services into 11 categories: health, personal care, transportation, volunteer opportunities for participants, social services for participants, social services for caregivers, therapeutic activities, recreational and social activities, food, and individual activities. Administrators indicated whether their programs provided each service daily, weekly, monthly, on an as needed basis, or not at all. I analyzed the data on services provided in two ways. First, I examined the availability of each service (1=provided, 2=not provided). Second, I examined the frequency of service provision (4=daily, 3=weekly, 2=monthly, 1=provided as needed, 0=not provided). In order to facilitate analyses of the 100 services, I calculated mean total service provision and service frequency scores for each of the 11 service categories. These calculations made it possible to compare across service categories.

Second, I examined whether a match existed between the director's perceptions of participant needs and the services provided through utilization of the NADSA classification system. First, analysis took place at the program level. Within each program, I determined if a match existed between needs of the participants and the services provided. See Appendix B for details on how I coded program participants and services into core, enhanced, and intensive levels. Then, I examined trends in the level of participants and services at the provincial and state level. Finally, I examined patterns in the types of respondents served and services provided in each country.

Whereas examining aggregate data provides useful information on trends of participant needs and services provided, the strength of the NADSA model is the

utilization of the model at the individual program level. In this model, the level of services provided is examined in the context of the participants using the services. Three possibilities result when using the NADSA model: participant needs are matched by the services provided, participant needs are not being met by the services provided, and programs have the capability of providing services to participants with more intensive needs than their current participants have.

Expert Review

Development of the survey involved a two-stage expert review process. The first stage of the review involved the director of Virginia Tech Adult Day Services reviewing the survey. I discussed with the director any problem areas with the survey. Following this discussion, I revised the survey.

In the second stage of the review, one person knowledgeable about ADS in each province and state reviewed the revised survey. The reviewers in NB, PE, ME, and VT consisted of government employees. The respondents in NF and NS worked with individual ADS programs and completed the surveys because I could not identify a person overseeing ADS in the government. The following are the reviewer job titles: Program Consultant with Health and Community Services in NB, Coordinator for Outreach Services of a nursing home in NF, director of an Adult Day Program in NS, a Social Service Program Specialist in NB, Seniors Liaison for Health and Community Services in PE, Social Service Program Specialist in ME, and Independent Living Services Coordinator in VT. The expert reviewers did not actually complete the survey, but reviewed the survey for appropriate content. As a result of this second-stage of the review process, I refined the survey instrument again.

Limitations of this Study

The results of this study are not representative of all the ADS programs in the provinces and states included in this study. In addition, the generalizability of the findings to the other areas of Canada and the United States is not appropriate because the policies in each province and state vary. Finally, cost constraints limited this study to a mail survey, one follow-up post card, and one follow-up telephone call. The benefits of follow-up questions in-person or via phone interview are recognized, but were not feasible. Despite these limitations, the results of this study will provide new and useful information in guiding future research and program development of ADS in Atlantic Canada, ME, and VT.

Chapter IV: Results

In order to answer the first two research question, I provided an overview of the structural characteristics and participant characteristics of ADS in Atlantic Canada, Maine, and Vermont ADS programs. Then, I compared these characteristics between the two countries to determine the major differences in the programs. The remaining research questions dealt with the application of the NADSA classification system to the ADS programs.

Overview of ADS in each Province and State

I examined several structural and participant characteristics of ADS in order to develop a profile of ADS programs in each province and state. The structural variables examined were background information (Table 7), financial aspects (Tables 8 and 9), services (Tables 10 and 11), staffing (Tables 12 and 13), program availability (Table 14), and program utilization (Table 15). Participant characteristics examined included: age, gender, marital status, living arrangements, education, income, caregivers, and functional ability (Table 16). I highlighted the distinctive features of ADS programs in each province and state. Then, I compared similarities and differences of ADS programs between the two countries. See the corresponding tables for details on specific variables.

New Brunswick

Government programs and nursing homes sponsored over 70% of ADS programs in NB, and almost 60% of programs operated in nursing homes. As it is likely that governments operated many of these nursing homes, the government played a large role in providing ADS in NB. Although daily fees ranged from no charge to $6.44 per day, and a mean of $4.24 per day, three-quarters of participants paid a portion of these fees. In addition, just 1% of participants paid the full fees. In the other provinces and states, many more participants paid the full fees and fewer paid partial fees. Whereas public programs predominated in Canada and private non-profit programs predominated in ME and VT, many NB programs operated as private non-profit facilities (42.9%). Unlike the other provinces and states, NB ADS programs ranked very low on the availability of personal care services and the frequency of offering this type of help. In addition, of all programs, NB programs scored the lowest on total service provision and frequency. Although ADS programs in NB exhibited typical capacity levels, none of the programs maintained waiting lists.

Whereas the other provinces and states enrolled approximately 12% of participants under age 59, almost 50% of NB ADS participants belonged to this age group. In addition, almost 50% of participants exhibited developmental disabilities. Participants in NB attained the highest educational levels of the Canadian provinces. Whereas very few participants graduated from high school in the other Canadian provinces, 42.2% of the participants graduated from high school in NB.

Table 7
Center Background Information

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Year opened (mean)								
Earliest	1976	1976	1978	1980	1976	1979	1979	1979
Most Recent	1996	1983	1997	1988	1997	1997	1992	1997
Mean	1981	1979	1990	1984	1984	1989	1986	1988
Population (%)								
Under 2,500	57.1	33.3	33.3	50.0	41.7	11.8	0.0	8.7
2,500-9,999	0.0	50.0	44.4	50.0	33.3	41.2	50.0	43.5
10,000-99,999	42.9	16.7	11.1	0.0	20.8	47.1	50.0	47.8
100,000-499,999	0.0	0.0	11.1	0.0	4.2	0.0	0.0	0.0
Affiliation (%)								
Nursing home	28.6	100	22.3	0.0	41.7	43.8	0.0	31.8
Government	42.9	0.0	22.2	100	29.2	6.3	0.0	4.5
Other	14.3	0.0	11.1	0.0	8.3	37.5	33.3	36.4
No affiliation	0.0	0.0	11.1	0.0	4.2	0.0	66.7	18.2
Church	14.3	0.0	11.1	0.0	8.3	12.5	0.0	9.1
Hospital	0.0	0.0	11.1	0.0	4.2	0.0	0.0	0.0

Center Background Information: continued

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Physical location (mean)								
Nursing home	57.1	83.3	44.4	100	62.5	43.8	0.0	31.8
Community/ senior center	14.3	0.0	33.3	0.0	16.7	18.8	16.7	18.2
Other	14.3	0.0	0.0	0.0	4.2	31.3	50.0	36.4
Freestanding	0.0	16.7	11.1	0.0	8.3	0.0	33.3	9.1
Church	14.3	0.0	0.0	0.0	4.2	6.3	0.0	4.5
Hospital	0.0	0.0	11.1	0.0	4.2	0.0	0.0	0.0

n= 21-24 for Atlantic Canada, 19-23 for ME and VT

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 8
Funding Sources

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Government[a]	68.3	98.0	58.8	0.0	70.2	41.2	30.5	38.1
Participant fees	20.2	0.6	23.4	60.0	17.7	37.7	26.7	34.6
Other	7.7	0.0	17.8	40.0	10.3	12.6	30.3	17.7
Fund raising/grants	1.2	0.4	0.0	0.0	0.5	4.3	7.8	5.3
United Way	2.7	0.0	0.0	0.0	0.9	0.1	4.7	1.4
Private Donations	0.0	0.0	1.7	0.0	0.6	-	-	-
LTC Insurance	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.5

[a] In ME and VT included Medicaid, Title IV, Title XX, and Veterans Affairs. No directors reported Medicare funds. Medicaid funds accounted for 25.3% in ME, 10.0% in VT

n= 18 for Atlantic Canada, 21 for ME and VT

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 9
Participant Out-Of-Pocket Fees

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Same fees paid by everyone								
Yes (%)	57.1	100	66.7	50.0	70.8	0.0	0.0	0.0
N	6	5	8	2	21	16	6	22
Standard daily rate ($)								
Minimum	0.0	0.0	0.0	2.58	0.0	28.00	10.00	10.00
Maximum	6.44	2.58	12.89	2.58	12.89	76.00	38.55	76.00
Mean	4.24	0.64	5.07	2.58	3.47	54.50	26.89	40.69
SD	2.19	1.08	3.80	0.91	3.11	19.95	12.58	21.37
N	6	6	8	2	22	4	4	8
Sliding scale								
Yes (%)	20.0	0.0	22.2	0.0	17.6	11.8	83.3	30.4
Minimum	0.0	-	0.32	-	0.0	7.20	0.0	0.0
Maximum	7.09	-	9.02	-	9.02	none	38.55	none
N	5	6	9	2	22	17	6	23

Participant Out-Of-Pocket Fees: continued

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Portion of fees paid by participants (%)								
Full	1.0	20.0	67.4	75.0	39.7	43.1	28.2	38.9
Partial	77.6	20.0	17.9	0.0	31.5	33.7	55.3	39.9
No fees	21.4	60.0	14.7	25.0	28.8	24.4	16.5	22.2
N	5	5	8	2	20	15	6	21
Are fees charged (%)								
About right	100	100	44.4	100	76.2	75.0	16.7	59.1
Too little	0.0	0.0	44.4	0.0	19.0	6.3	66.7	22.7
Too much	0.0	0.0	11.1	0.0	4.8	18.8	16.7	18.2
N	7	3	9	2	21	16	6	22
Organizational structure (%)								
Public	57.1	83.3	33.3	100	58.3	18.8	0.0	13.6
Private non-profit	42.9	0.0	33.3	0.0	25.0	56.3	100	68.2
Private for-profit	0.0	0.0	11.1	0.0	4.2	18.8	0.0	13.6
Other	0.0	16.7	22.2	0.0	12.5	6.3	0.0	4.5
N	7	6	9	2	24	16	6	22

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 10
Rank of Services Frequency and Provision

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Individual	2, 1	1, 1	1, 1	1, 1	1, 1	2, 1	3, 1	2, 1
Recreational	1, 2	6, 3	2, 2	4, 4	2, 2	1, 3	2, 4	1, 3
Food	7, 3	6, 2	10, 4	11, 7	9, 3	5, 2	11, 3	5, 2
Therapeutic	4, 4	8, 7	4, 3	3, 3	4, 4	4, 4	1, 2	3, 4
Volunteer opportunities for participants	6, 5	9, 5	9, 9	2, 2	7, 5	9, 6	9, 5	10, 5
Personal care	11,10	5, 6	10, 8	5, 5	8, 6	8, 5	5, 8	8, 6
Education	10, 9	2,10	5, 5	6, 6	5, 7	7, 8	4, 7	7, 7
Social services for caregivers	3, 7	3, 8	3, 7	7, 8	3, 8	3, 7	10, 9	4, 8
Social services for participants	5, 8	3, 9	6, 6	7, 8	6, 9	6, 9	8, 11	6,10
Transportation	7, 6	9, 4	8,10	9,10	9,10	11,10	6, 6	11, 9
Health	9,11	11,11	7,11	10,10	11,11	10,11	7,10	9,11

Note. Service provision (P) is ranked on the mean number of programs that provide each service (yes or no). Service frequency (F) is based on how often the programs provide the service (daily, weekly, monthly, provided as needed, not provided. Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

n= 24 for Atlantic Canada, 23 for ME and VT

Table 11
Total Service Frequency and Provision Scores

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Provision								
Maximum=100	50.9	60.3	59.6	61.5	57.4	64.3	74.3	66.9
Frequency								
Maximum=400	111.7	141.2	119.8	132.0	123.8	147.4	173.3	154.2
% of Maximum	27.9	35.3	30.0	33.0	31.0	36.9	43.3	38.6

n= 24 for Atlantic Canada, 23 for ME and VT

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 12
Staff Categories

Category	Job Titles
Activities	Program Worker Activities Director Certified Nursing Assistant Recreation Therapist Art Therapist Music Therapist
Administrative	Administrator Coordinator/Director Assistant Director Social Worker Education/Training Coordinator
Support	Transportation Worker Secretary Cook
Medical	Registered Nurse Dietitian/Nutritionist Occupational Therapist Physical Therapist Speech Therapist Medical Doctor Psychologist/Psychiatrist Pharmacist

Table 13
Staffing

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Staff : participants								
Direct Care	1:2.3	1:2.6	1:2.0	1:5.3	1:2.5	1:2.0	1:3.1	1:2.3
All Staff	1:2.6	1:3.0	1:3.5	1:5.3	1:3.3	1:2.4	1:3.4	1:2.7
Staff categories (hours/week/center)								
Activities	43.2	29.0	52.1	0.0	46.1	58.5	79.4	64.2
Administrative	43.5	20.8	48.2	60.0	40.4	54.2	46.0	52.1
Support	24.3	7.6	25.6	0.0	18.9	29.7	40.0	32.9
Medical	6.7	0.0	23.5	0.0	12.1	5.9	27.0	12.3
# of employees per center (mean)								
Full time	1.7	2.0	1.4	0.5	1.6	1.6	5.0	2.6
Permanent part-time	1.4	1.0	1.5	2.0	1.4	2.4	2.5	2.4
Volunteers	0.7	0.5	3.5	2.5	1.9	7.8	24.7	12.4
Students	0.0	0.0	0.9	1.0	0.4	0.4	2.0	0.8
Temporary part-time	0.1	0.3	0.5	0.0	0.3	0.2	0.7	0.3

n= 15-18 for Atlantic Canada, 22 for ME and VT

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 14
Program Availability

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Days/year (mean)	225	315	194	250	227	241	223	235
% Open								
Monday	85.7	100	66.7	50.0	79.2	82.4	83.3	82.6
Tuesday	85.7	100	66.7	100	83.3	94.1	100	95.7
Wednesday	100	100	77.8	50.0	87.5	82.4	83.3	82.6
Thursday	85.7	100	66.7	100	88.3	94.1	83.3	91.3
Friday	85.7	83.3	77.8	100	88.3	82.4	83.3	82.6
Saturday	0.0	16.7	0.0	0.0	-[a]	5.9	16.7	8.7
Sunday	0.0	16.7	0.0	0.0	-	0.0	0.0	0.0
Hours open (mean)								
Monday	6.75	7.5	8.25	7.5	7.5	8.75	8.5	8.5
Tuesday	6.0	7.5	8.0	7.75	7.0	9.25	8.5	8.75
Wednesday	6.25	7.5	7.25	7.5	7.0	9.25	8.5	8.75
Thursday	6.0	7.5	8.0	7.75	7.5	9.25	8.5	8.75
Friday	6.0	8.0	7.5	7.75	7.25	8.25	9.25	9.0
Saturday	0.0	8.0	0.0	0.0	-	7.0	12.0	8.75
Sunday	0.0	8.0	0.0	0.0	-	0.0	0.0	0.0

Program Availability: Continued

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Open additional hours (%)	42.9	83.3	11.1	0.0	37.5	52.9	33.3	47.8

[a] Percentages and means not calculated because results are based on one program.

n= 18-24 for Atlantic Canada, 20-23 for ME and VT

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 15
Utilization

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Number enrolled (mean)	20.9	18.2	26.3	28.5	22.9	13.1	39.0	20.2
Maximum can serve per day (mean)	14.7	9.8	15.8	21.0	14.4	13.8	24.0	16.4
Daily attendance (mean)	9.4	8.7	10.8	15.0	10.2	8.2	21.5	11.6
Attendance Minus Maximum	5.3	1.1	5.0	6.0	4.2	5.6	2.5	4.8
Waiting lists								
Yes (%)	0.0	16.7	22.2	0.0	12.5	17.6	33.3	21.7
People (mean)	-	30.0	10.0	-	16.7	2.3	13.0	6.6
Weeks on list	-	24.0	3.0	-	10.0	8.7	8.0	8.5
Attendance (%)								
3+ days a week	34.3	55.3	22.6	34.0	33.8	52.1	50.3	51.6
1-2 days a week	65.7	41.3	74.5	66.0	63.9	45.8	43.0	45.0
<1 day a week	0.0	3.3	1.6	0.0	1.2	2.2	6.7	3.4
Attend full day	99.7	74.2	92.9	78.5	89.5	71.9	92.0	75.9
Months	20.4	11.0	5.3	6.0	12.7	21.1	37.2	25.6

n= 21-24 for Atlantic Canada, 20-23 for ME and VT

Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Table 16
Participant Characteristics

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Age								
Median	60-69	70-79	70-79	70-79	70-79	70-79	80-89	70-79
Mode	80-89	70-79	70-79	80-89	80-89	80-89	80-89	80-89
<59 (%)	48.6	11.3	15.7	15.0	21.9	11.7	10.7	11.4
Youngest (mean)	42.3	57.0	45.2	42.5	47.3	56.0	40.0	51.8
Oldest (mean)	79.7	87.7	88.8	84.0	85.7	88.0	93.0	89.6
Female (%)	62.0	64.5	62.9	41.5	61.2	71.6	62.3	69.0
Married (%)	18.0	13.7	10.4	16.0	13.6	20.1	15.7	18.9
Living arrangements (%)								
Live Alone	18.3	17.7	21.1	50.0	20.6	11.4	15.0	12.4
Institutions	9.4	0.0	15.5	4.0	8.8	1.4	0.7	1.2
Grade 12 (%)	42.2	3.2	19.5	2.0	20.3	67.2	53.0	63.0
< $20,000 (%)	100	100	97.3	-	99.2	94.7	89.4	92.7
Service use (%)								
Home health care	16.7	21.6	19.7	4.5	17.8	31.5	57.7	38.7
Transportation	33.3	0.0	5.8	16.5	10.5	25.8	33.5	27.9
Therapies	0.0	0.0	7.3	3.5	3.2	12.8	12.2	12.6

Participant Characteristics: continued

	Canada					United States		
Variable	NB	NF	NS	PE	Total	ME	VT	Total
Caregivers (%)								
Availability	88.0	87.0	58.8	83.5	75.6	90.2	71.5	85.1
Adult child	32.8	62.5	30.1	0.0	36.6	55.1	39.2	50.7
Spouse	8.3	12.3	15.0	16.0	12.8	20.8	15.7	19.4
Employed full-time	28.0	26.3	27.9	0.0	25.8	45.7	23.2	39.2
Employed part-time	3.8	0.0	8.1	7.0	4.9	7.5	29.2	13.7
Needs (%)								
General Supervision	51.4	30.5	44.9	10.5	39.3	70.7	37.3	61.6
Cognitive Impairment	27.2	16.7	38.3	9.0	27.2	71.4	46.3	64.5
Constant supervision	18.2	7.2	29.6	10.5	19.1	41.4	30.3	38.4
Developmentally disabled	48.0	12.2	16.0	24.5	23.0	7.7	15.5	9.8
Need help transferring	4.2	10.8	20.4	0.0	12.3	19.1	23.0	20.2
Incontinent	3.8	4.3	6.7	0.0	4.8	12.8	11.3	12.4

Note. Dashes indicate the data was not reported.
n= 16-23 for Atlantic Canada, 20-22 for ME and VT, except for income (n = 10 for Atlantic Canada and 14 for ME and VT
Note. Totals are calculated using the total results within each country. They are not means of provincial and state totals.

Newfoundland

With a mean opening year of 1979, the ADS programs in NF operated for the longest period of time of all the provinces and states. Nursing homes sponsored every one of the ADS programs in NF, and most operated within a nursing home. Government sources made up almost all of the funding sources for ADS in NF. The majority of the programs operated as public organizations. At a mean daily fee of less than $1 per day, these charges constituted the lowest of any province or state. Even though on average participants paid low daily fees, 60% of them paid nothing.

The ADS programs in NF operated the most days per year of any province or state. Some programs operated on Saturday. Only programs in NF opened on Sunday. In addition, over three-quarters of programs operated for additional hours as needed. A typical program had a capacity of just 10 participants per day. Although these programs served the fewest participants per day, they operated at the highest capacity levels with 9 of 10 available spaces filled each day. The NF programs maintained the highest number of people on waiting lists and these potential participants waited for the longest period of time for an ADS slot to become open.

The participants in NF programs appeared quite similar to participants in the other provinces and states. However, less than 4% completed grade 12. Prince Edward Island constituted the only province or state with fewer participants graduating from high school.

Nova Scotia

The ADS programs in NS operated half as long as the other Canadian programs. Whereas ADS programs in other provinces and states generally had one or two predominate affiliations, the programs in NS affiliated with a variety of organizations. Funding patterns also varied in that NS programs received less funding from government sources and relied more on participant fees than the other Canadian programs. Although still low in comparison with programs in ME and VT, participants in NS paid the highest fees of all the provinces. In addition, more participants in NS paid a higher proportion of the full fees than most provinces and states. Whereas public programs predominated in the other Canadian provinces, NS programs consisted of a balance of public and private non-profit programs and a smaller number of other types of programs. In comparison with the other provinces, NS programs utilized a higher number of medical personnel hours each week. Of all the provinces and states, ADS programs in NS operated the fewest number of days per year and they operated very few hours in addition to their regular hours. Participants in NS attended ADS fewer months than participants in other provinces and states.

Participants in NS ADS programs exhibited many characteristics similar to those of participants in other provinces and states. However, more participants in NS lived in

institutions. In addition, more participants in NS required constant supervision than those in other provinces.

Prince Edward Island

Only four ADS programs existed in PE, and two of these directors responded. Characteristics of these programs consisted of government sponsorship, nursing home location, and public organizational structure. Most respondents paid a standard rate of $2.58 per day. Only participants in NF paid lower daily fees. Programs in PE operated with the fewest staff members per participant of all other provinces and states. All staff worked in administrative capacities, although the programs also made use of volunteers and students. The two programs in PE exhibited the lowest utilization rates of any province or state. The programs operated with a mean of six empty spaces per day and neither program maintained waiting lists. In addition, participants attended ADS for comparatively few months.

Approximately 20% more men attended ADS in PE than in the other provinces and states. In addition, many more ADS participants in PE lived alone. At 2%, the fewer participants in PE completed high school than in any province or state.

Maine

A typical ADS program in ME had operated for fewer years than programs in VT and all of the provinces except NS. Affiliations, other than the typical nursing home or provincial government, consisted of elderly housing, city government, a health system, Area Agency on Aging, boarding home, and multi-level care facilities. Although nursing homes were the most common location for ADS programs in ME, they also co-located with senior centers, elderly housing, medical buildings, and boarding homes. Programs in ME exhibited the highest fees of all provinces and states charged to participants. Maine participants paid twice the amount of fees charged to VT participants. The programs in ME enrolled the fewest participants and the fewest participants attended each day.

Over 70% of the participants attending ADS in ME were female. The highest number of participants in ME completed high school, compared to those in VT and the provinces. Over 70% of the participants in ME required general supervision and over 70% experienced a cognitive impairment. As a result, a high proportion required constant supervision. Programs in ME served few participants with developmental disabilities.

Vermont

Unlike the programs in Atlantic Canada and ME, VT programs did not have any affiliation with either nursing homes or the government, and none operated from within nursing homes. Two-thirds of VT programs indicated no affiliation with an organization.

The remaining one third had affiliation and co-location with various organizations including a community services agency and a neighborhood housing group. One third of the facilities operated in freestanding buildings. Government grants, participant fees, and other sources of funding all provided important sources of funding for ADS in VT. These other sources of funding consisted of mental health programs, various types of grants, and the USDA food program. All of the VT programs operated as private non-profit organizations. Typical fees charged to participants in VT totaled much higher than the provinces, but about half those charged in ME. Many more programs in VT incorporated sliding fee scales and the directors felt that participants paid too little for ADS services than programs in Atlantic Canada or ME. Vermont programs scored the highest of any province or ME on total service provision and service frequency.

The VT programs ranked highest on the number of participants enrolled, maximum daily capacity, and daily attendance. Only NF programs had a higher utilization rate. In conjunction with the size of the programs, VT programs utilized the most personnel in activities, support, and medical capacities. Vermont programs employed the most full-time and part-time staff and utilized by far the most volunteers compared to the Atlantic Canada provinces and ME. Vermont programs consisted of the highest percentage of programs with waiting lists. Finally, participants in VT attended ADS for the longest period of time compared to the Atlantic Canada provinces and ME.

Participants in VT ADS programs shared many characteristics with those attending ADS in Atlantic Canada and Maine. However, slightly older participants attended ADS in VT. In addition, the majority of participants in VT utilized home health care in addition to ADS.

Comparison of ADS Between Provinces and States

In this section, I compare the responses of program directors from provinces with those from program directors in ME and VT. I examine the same categories as in the overview of ADS in each individual province and state: background information, financial aspects, staffing, program availability, utilization, services provided, and participant characteristics. I utilized descriptive and nonparametric statistics to determine if significant differences occurred between the two countries. I only reported the results where statistically significant differences resulted.

Background Information

A statistically significant difference resulted in the population of towns in which ADS programs existed $\chi^2(3, \underline{N} = 47) = 8.79$, $\underline{p} < .05$ (see Table 7). In Atlantic Canada, a higher percentage of the centers operated in towns with populations of fewer than 2,500 people. Most programs in ME and VT operated in towns with populations between 2,500 and 99,999.

Center affiliation varied between the two countries, χ^2 (6, N = 46) = 12.37, p < .05). Nursing homes were a common affiliation for ADS programs in both countries (see Table 7). However, strong government affiliations also existed in Atlantic Canada. An assisted living/rehabilitation facility and a health system are examples of other types of affiliations. The center location also varied significantly between the two countries χ^2 (5, N= 46) = 9.28, p >.05. Approximately twice as many programs in Atlantic Canada operated in nursing homes than in ME and VT (Table 7).

Financial Aspects

Two statistically significant differences in funding sources resulted between the two countries. In Atlantic Canada, higher levels of government support for ADS existed than in ME and VT, MW(38) = -2.46, p < .05. Even after combining all of the sources of government support in ME and VT (Medicaid, Title IV, Title XX, Veterans Affairs), these sources totaled just 38.1% (see Table 8). In contrast, government support for ADS totaled 70.2% in Atlantic Canada. Notably, almost all of the financial support for ADS in NF came from government sources. Sources of revenue such as fund raising/grants, United Way, and private donations played a small part in funding ADS in both countries. The other financial area reaching statistical significance consisted of participant fees, MW(38) = -2.32, p < .05. Income generated from participant fees accounted for 18% of funding for ADS in Atlantic Canada whereas 35% of ADS funding in ME and VT came from participant fees (see Table 8).

The daily fees charged to participants varied between the two countries. In some programs, all participants paid the same fees whereas in other programs, participants paid according to their level of income. In Atlantic Canada, at least 50% of all programs charged participants the same fees whereas no programs in ME and VT charged the same fees for all participants MW(46) = -4.92, p < .001. The amount charged also varied significantly, MW(30) = -4.10, p < .001 with participants in Atlantic Canada paying much lower daily fees than those in ME and VT (see Table 9).

The organizational structure varied statistically between the two countries, χ^2 (2, N = 46)= 12.9 , p <.01. In Atlantic Canada, public programs predominated (see Table 9). Those who selected the "other" category in Atlantic Canada indicated their programs operated as both public and non-profit. Private non-profit programs predominated in ME and VT.

Staffing

No significant differences emerged between ADS programs in Atlantic Canada and the United States in any area of staffing (see Table 13). Staff to participant ratios, staff qualifications, hours per week that staff in various categories worked, number of employees, number of volunteers, and consultants were all similar.

Program Availability

Over 75% of programs in both countries operated from Monday to Friday, but significant differences resulted between the two countries in the hours the programs were open during the week. Maine and VT programs opened earlier than the Atlantic Canada programs on: Monday, MW(38)=-2.77,p<.01; Tuesday, MW(42)=-2.48,p<.05; Wednesday, MW(40)=-3.07,p<.01; Thursday, MW(41)=-2.67,p<.01; and Friday, MW(39)=-3.01,p<.01. The Atlantic Canada programs were open fewer hours per day, with a range of 6.0 to 8.25. In ME and VT, programs opened a range of 8.5 to 9.25 hours per day (see Table 14).

Too few programs were open on the weekends to conduct statistical analyze (see table 14). Just one program in Atlantic Canada opened on weekends. This program located in NF operated for 8.0 hours on both Saturday and Sunday. In ME, 5.9% of centers offered Saturday services and in VT, 16.7% did. No ME or VT programs operated on Sundays.

Utilization

A significant difference resulted between the two countries on the number of months that participants attended ADS, MW(30)=-2.10, p<.05. A much longer enrollment time existed in ME and VT than in Atlantic Canada (see Table 15). In Atlantic Canada, the mean length of enrollment totaled 12.7 months whereas participants in ME attended for a mean of 21.1 months and VT participants averaged 37.2 months of involvement (see Table 15).

The amount of time per day that participants attended ADS varied significantly between countries, MW(42)=-2.21,p<.05. Most participants attended for a full day as opposed to attending for less than half the hours a program operated (see table 15). In Atlantic Canada, 89.5% of participants attended for a full day whereas 75.9% attended all day in ME and VT.

Services Provided

In general, the programs that provided more services also provided them more frequently. Most programs in Atlantic Canada offered individual activities, recreation, and social services for. Transportation, food, and health care had the lowest frequencies. Similarly, in ME and VT, recreational activities, individual activities, and therapeutic activities were provided most often. Health care, participant volunteer opportunities, and transportation were lowest in frequency.

In Atlantic Canada, individual activities, recreational activities, and food service were provided most frequently and social services for participants, transportation, and health care were provided least often. A similar pattern emerged for the American programs. In ME and VT, centers offered individual activities, food, and recreational

activities most frequently and transportation, social services for participants, and health care least frequently.

A maximum total service provision score of 100 could be achieved if every program offered each of the 100 services (1=yes x 100 services). The maximum service frequency score of 400 could be achieved if each program offered each service daily (4=daily x 100 services). See table 11 for the total scores and the means for the two countries. Programs in ME and VT provided more services than in Atlantic Canada, MW(47)=-2.86,p<.01. In Atlantic Canada, the service provision score totaled 57.4% whereas in ME and VT, this score totaled 66.9%. In addition to providing a broader range of services, programs in ME and VT provided these services more frequently, MW(47)=-2.60, p<.01. In Atlantic Canada, the total service frequency score was 123.8 (31.0%), whereas in the United States it was 154.2 (38.6%).

Participant Characteristics

A statistically significant difference resulted in the educational level of participants in the two countries, MW(37)=-3.45,p<.001. Only 20.3% of Atlantic Canada participants completed grade 12 (see Table 16). However, 63% of participants completed grade 12 in ME and VT. Even though educational levels varied between countries, income levels remained similar. This similarity resulted as most evident in the extremely high proportion of participants in both countries with incomes of fewer than $20,000 per year.

In terms of functional characteristics of participants, programs in ME and VT served a more frail population than Atlantic Canadian programs (see Table 16). Significant differences resulted between the two countries on cognitive impairments, MW(44)=-3.54,p<.001; constant supervision, MW(44)=-2.44,p<.05; and general supervision, MW(44)=2.13,p<.05. Maine and VT programs served approximately three times as many participants with cognitive impairments (64.5%), twice as many participants that required constant supervision (38.4%), and a third more participants that required general supervision (61.6%) than participants in Atlantic Canada programs.

Summary of Comparison of ADS Between Provinces and States

Many differences resulted in both structural and participant characteristics of ADS programs between the two countries in this study. Differing background characteristics consisted of town population, center affiliation, and center location. Significant differences in financial aspects resulted in the amount of funding from participant fees and government support, the amount of fees that participants paid, organizational structure, and the percentage of participants that paid the same fees as all the other participants in the same program. Program availability differed in the hours that programs in the two countries operated each day. Utilization of ADS between the two countries differed in the number of hours of attendance per day and the number of months of attendance. Service provision and service frequency varied significantly

between the two countries. Finally, the significantly different participant characteristics between the two countries consisted of education level and functional characteristics including cognitive impairments, participants requiring general supervision, and participants requiring constant supervision. I now turn to responding to the remaining research questions dealing with the NADSA classification system.

NADSA Classification System

Utilizing the NADSA classification system, I first examined the level of participant needs and the services provided in each province and state. This involved aggregating data to determine general patterns. Second, I examined individual program data to determine if a match existed between participants and services at the individual program level.

Participant Needs and Services Provided

As shown in Table 17, most programs in both countries provided care for participants with the highest level of need. In fact, with the exception of NF, over 75% of all programs provided care for participants with intensive level needs. Almost all of the remaining programs provided services to participants with core needs. Very few programs in Canada and none in the United States provided care for participants with enhanced needs. However, in NF one-third of the programs provided care for intensive level participants, and the remaining two-thirds of the programs provided care for core level participants.

More distinct patterns resulted in the examination of services provided than participants served (see Table 18). In Canada, ADS programs in each province exhibited a balance between services in the core, enhanced, and intensive categories. However, more programs provided enhanced services followed by core services and then intensive services. In the United States, enhanced services also resulted as the most common category of services provided. However, many programs also provided intensive services whereas only a few programs provided only core services.

Congruence Between Participants and Services: Individual Program Level

Three possibilities resulted when using the NADSA model. These involved (a) participant needs matching the services provided, (b) participant needs not being met by the services provided, and (c) programs having the capability of providing services to participants with more intensive needs than their current participants have. I first present the results on individual programs and then compare the results within provinces and states, between provinces and states, and between countries in each of the three categories.

Match between participants and services. A match between participants needs and services offered is the best case scenario as the programs in this category are the

Table 17

NADSA Classification Results by Province and State: Participant's Needs

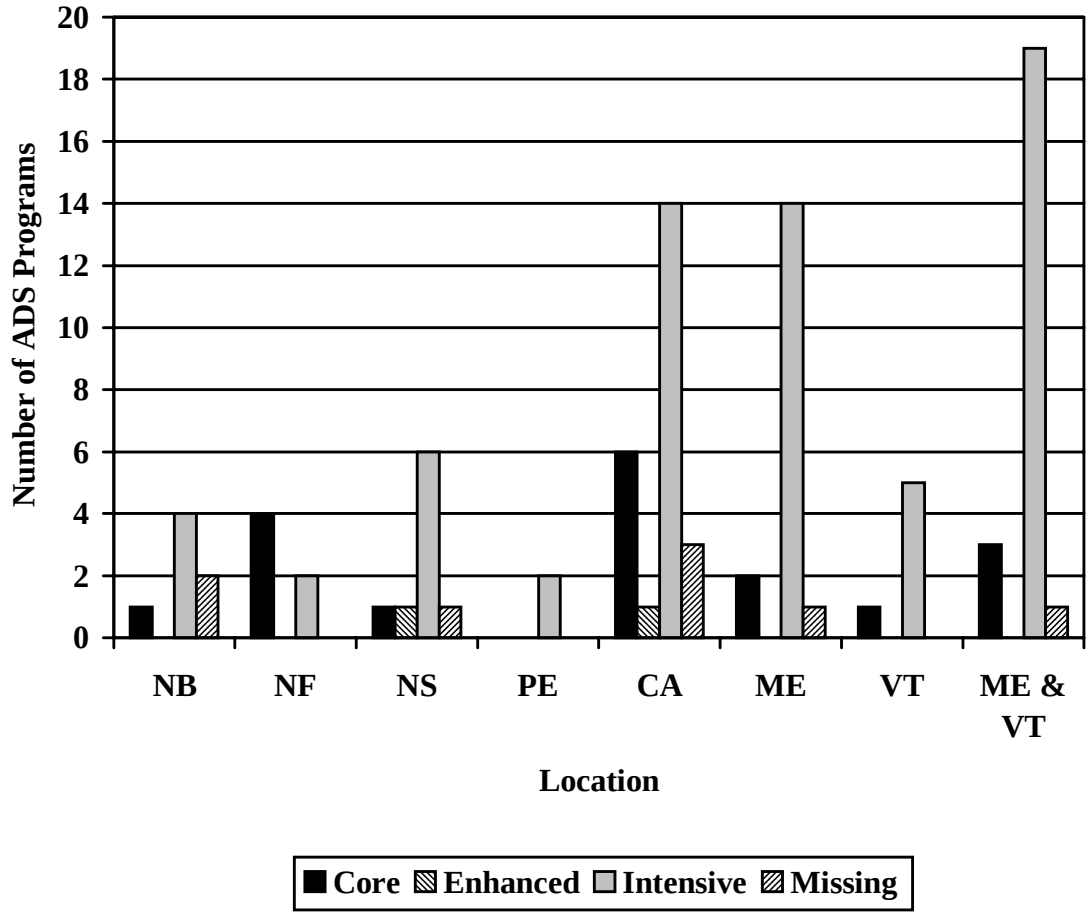


Table 18

NADSA Classification Results by Province and State: Services Provided

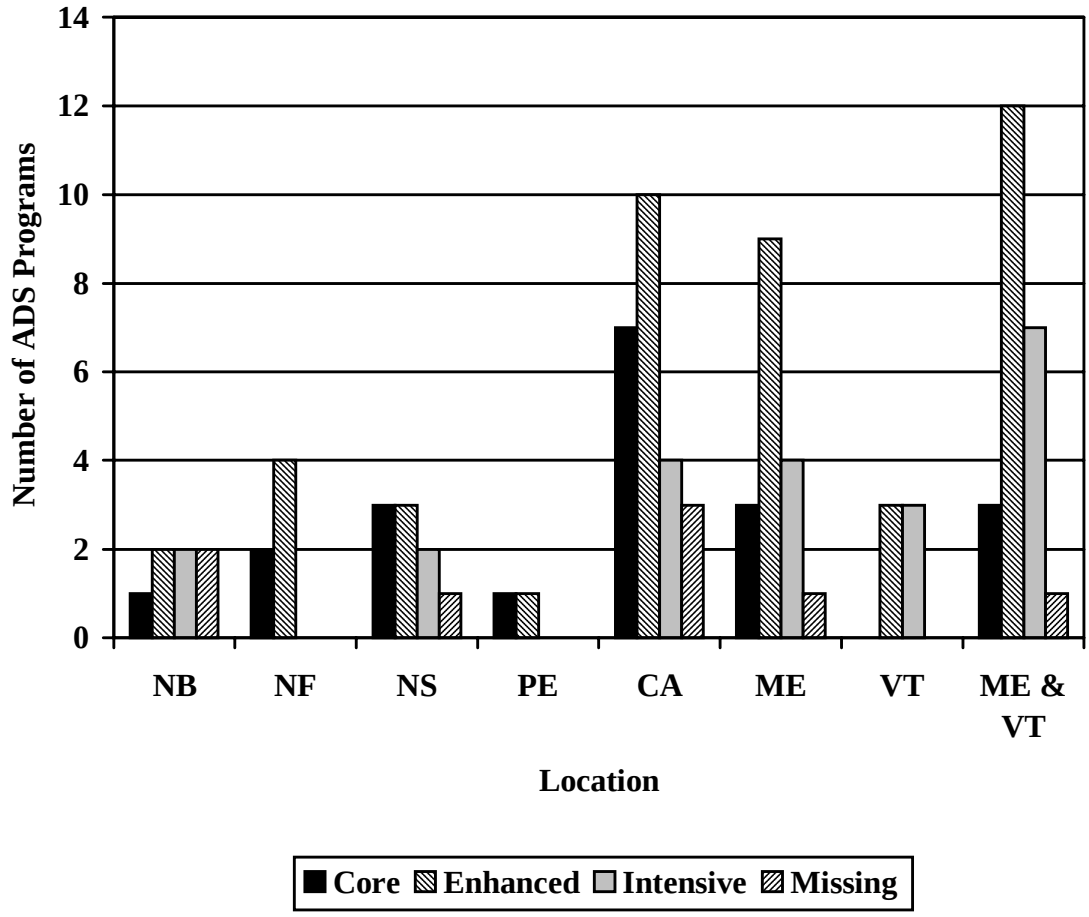
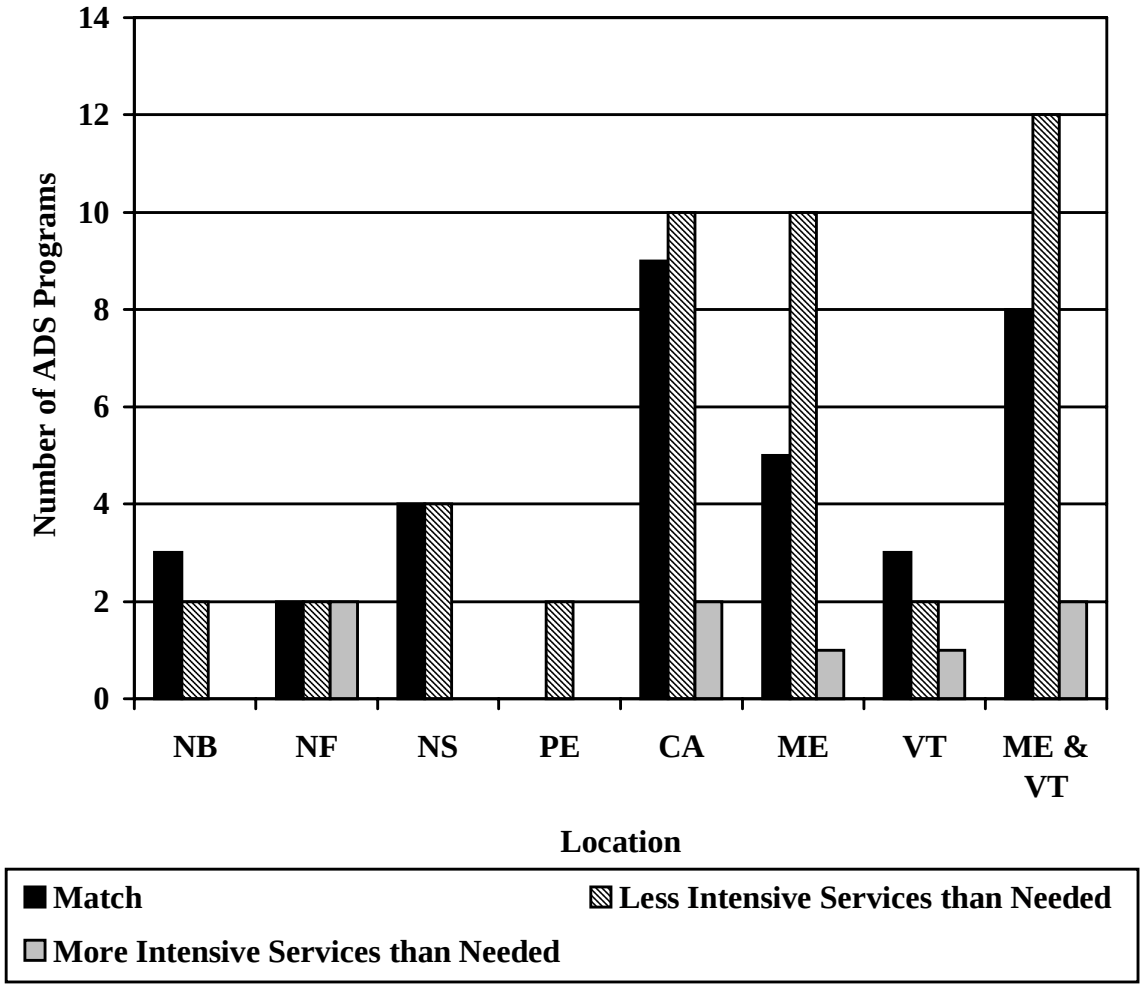


Table 19

NADSA Classification Results: Match of Participants and Services



most likely to be useful to participants and their families. Of the 43 program directors who provided responses to both components of the NADSA model, a match between services and participants resulted in 17 programs (40%) (see Table 19). Three types of matches consisted of core services and core participants (5), enhanced services and enhanced participants (1), and intensive services and intensive participants (11).

The programs in ME and VT included 7 of the 11 matches of intensive services and intensive participants. Programs in Atlantic Canada made up 4 of the 5 core level matches of services and participants. Thus, for those programs that exhibited a match between participants and services, intensive levels predominated in ME and VT whereas core levels predominated in Atlantic Canada.

Less intensive services than needed. The provision of less intensive services than are needed by the participants is the most critical resulting category in the NADSA model. Essentially, these programs did not provide appropriate services for the participants they enrolled. The biggest concern is in those programs that enrolled intensive level participants but provide only core level services. A total of 5 (11%) of the programs belonged to this most critical category (see Table 19).

Two other scenarios can result in the category of programs providing less intensive services than are needed. None of the responding programs provided core level services to enhanced level participants. However, 17 (40%) provided enhanced level services to intensive level participants.

No clear patterns resulted between countries as programs in both countries provided less intensive services than the participants required. The five programs of biggest concern (core services and intensive participants), operated in ME (2), NS (2), and PE (1). Seventeen programs located in each province and state provided enhanced services to intensive level participants. The location of these programs were 2 in NB, 2 in NF, 2 in NS, 1 in PE, 8 in ME, and 2 in VT.

More intensive services than needed. The third category in the NADSA model resulted when directors indicated that their programs had the capability of providing higher levels of services than the participants required. A total of 4 (9%) programs belonged to this category (see Table 19). Each of these four programs provided enhanced services to core level participants only. Only programs in ME (1), VT (1), and NF (2) belonged to this category. No programs in NB, NS, or PE provided more services than the participants required. No programs provided intensive services to core or enhanced level participants.

Summary of NADSA Classification System

Most of the ADS programs in this study provided care for participants with the highest, or intensive, level of need. The programs in Canada provided a balance of services at all three levels. In ME and VT, enhanced and intensive services

predominated. A perfect match of participant needs and services provided existed in 40% of programs. Approximately one half of programs provided less intensive services than needed by the participants. Very few programs provided more intensive services than participants required.

Summary of Results

Adult day services programs in each province and state exhibited some unique structural and participant characteristics. Statistically significant differences emerged between ADS programs in the two countries on the following structural variables: town population, center affiliation, center location, levels of government support, participant fees, organizational structure, hours of operation, months of attendance, hours attended per day, service frequency, and service provision. Participant characteristics that significantly varied between the two countries involved educational level and functional characteristics. Forty percent of programs exhibited a match between participant needs and services provided. However, very few programs belonged to the most critical category of providing core services to intensive level participants.

Chapter V: Discussion

In this chapter, I discuss the three main areas of this study. First, I discuss the trends of ADS programs at the provincial and state level. Second, I discuss the differences in ADS programs between the two countries. Third, I examine the NADSA classification system. Finally, I close with conclusions and suggestions for future research.

Overview of ADS in each Province and State

Results showed that ADS programs in each province and state exhibit unique characteristics. In NB, the private non-profit organizational structure more closely resemble those located in ME and VT than in the other Canadian provinces. In addition, the NB programs cater to a very large percentage of persons under age 59 with developmental disabilities. The NF and PE programs appear to be very entrenched and a stable government service. In contrast, NS ADS programs are still striving to become a government-supported service. High participant fees characterize the ME and VT programs in comparison with programs in the Atlantic Canada provinces. New and underutilized programs characterize Maine programs. Most VT programs operate without an affiliation to an organization and exhibit high utilization rates.

As ADS is generally regulated at the state and provincial level, it is not surprising that within province and state similarities emerge. At the same time, the history, development, and level of government support of ADS varies greatly between provinces and states making ADS in each province and state unique. Although differences at the provincial and state level emerge, many significant differences also emerge between the two countries.

Comparison of ADS Between Provinces and States

The results indicate several differences in ADS between the two countries examined in this study. I discuss these differences in both structural characteristics of the programs and participant characteristics.

Background Information

Of the various background variables examined, several aspects relating to the location of ADS differ between the two countries. The provinces and states included in this study exhibit a similar proportion of rural and urban residents, and they include some of the most rural provinces and states in the two countries. Even though similar population demographics exist between Atlantic Canada, ME, and VT, more programs in Atlantic Canada operate in rural locations than in ME and VT. Potential problems of rural ADS programs in Atlantic Canada involve lower enrollments and fewer available services (Conrad, Hughes, et al., 1993).

Results indicated that twice as many programs in Atlantic Canada operate from within nursing homes than in ME and VT. As found in previous studies conducted in both countries (Kerr et al., 1995; Von Behren, 1986), nursing homes are the most common location for ADS programs. Nursing homes are a rather logical location for ADS as the government sponsors both ADS and nursing homes in some capacity in both countries. Shared physical and staff resources and shared programming are some benefits of ADS programs being located in nursing homes. Thus, it is not surprising that ADS programs often are found operating in nursing homes.

Although many structural and financial reasons exist to support the co-location ADS and nursing homes, many social and perceptual barriers exist. Adult day services participants are a distinctly different population from nursing home residents. In particular, ADS participants are younger, more likely to be married, less dependent, and less frequently mentally impaired than nursing home residents (Weissert, et al., 1990). These two distinctly different groups may not mesh well socially in the same environment. In addition, potential ADS participants may be more hesitant to attend a program in a nursing home for fear that it is a first step towards institutionalization. Because of these factors, the nursing home location of ADS programs may play a part in the utilization levels of ADS programs, particularly in Atlantic Canada.

Financial Aspects

Government support of ADS influences all of the financial aspects that differ in the ADS programs between the two countries. One of the most salient findings in this study involves the very low daily fees ADS participants in Atlantic Canada pay in comparison with the fees paid by participants in ME and VT. Previous researchers also documented similar findings in other parts of Canada and the United States (Gutman et al., 1991; Kerr et al., 1995; Reifler et al., 1992; Von Behren, 1986).

Although other forms of financial support for ADS exist in both countries, participant fees and government support total the two largest and approximately equivalent sources of funding for ADS in the United States (Bradsher et al., 1995; Von Behren, 1988), whereas government funding predominates in Canada over income from participant fees (Kerr et al., 1995; Patashnick, 1982). In this study, government funding for ADS programs in ME and VT approximates the level of government support found in previous American studies (Von Behren, 1988; Weissert et al., 1990). By determining the amount of funding allotted for ADS at the federal and provincial/state levels, the out-of-pocket fees paid by participants can be estimated. This inverse relationship between government support and participant fees is important in that it shows how policies that support government funding of ADS directly influence individual experiences of old age in the amount that participants and their families directly pay for ADS (Estes, 1991).

The public versus private operation of ADS in the two countries exemplifies the normative core societal values of collectivism in Canada and individualism in the United States (Clark, 1995). In Atlantic Canada, most programs operate as public organizations.

As the government provides a large portion of funding, it is understandable that most programs in Atlantic Canada operate as public organizations. Similar to previous findings (Conrad et al., 1990), private non-profit programs predominate in ME and VT. Although ADS in Canada is not a component of the Canada Health Act as it is non-institutional and community-based, these programs receive high levels of public funds. Equal access to services is valued in Canada whereas access to services in the United States is not generally considered a right of citizenship.

Program Availability

Programs in ME and VT operate more hours than in Atlantic Canada. Specifically, ADS programs in ME and VT open earlier in the morning than programs in Atlantic Canada. Previous research indicates that programs in Canada open fewer hours per day than programs in the United States (Conrad et al., 1990; Kerr et al., 1995; Gutman et al., 1991; Sherrill, et al., 1992; Von Behren, 1986).

This difference in the hours of operation suggest that the American programs are designed to meet the needs of working caregivers better by opening earlier in the morning and staying open later in the day. As the Atlantic Canada programs open a range of 6.0 to 8.25 hours, this amount of time probably does not accommodate caregivers with full-time employment. Very few programs in either country operate on weekends. Even though the programs in ME and VT could accommodate caregivers who work traditional hours, many people work outside of these hours. The hours of operation in either country exclude all those who do not work in traditional weekday jobs and those who work beyond typical business hours of a traditional 8 a.m. to 5 p.m. schedule. If adult day services is to be a viable option for working caregivers in any of the provinces or states examined in this study, programs must remain open more hours that also include the weekends.

Utilization

Significant differences did not occur in the number of empty ADS slots in the two countries. Even though participants pay relatively low fees to attend ADS in Atlantic Canada, even small out-of-pocket fees for ADS may be enough to deter participants from using ADS, as Canadians are not used to paying for health care services out-of-pocket. In a study conducted in California, researchers introduced a small co-payment for those utilizing Medicaid (Roemer, 1993). Even though the co-payment initiated a reduction in physician visits, prescriptions, and diagnostic tests, the hospital admission rate increased a few months later. In essence, the co-payment discouraged utilization of preventive services in the short-term, which resulted in more expensive treatment services in the long-term. Although participants pay much lower fees in Atlantic Canada than in ME and VT, a simple inverse relationship does not exist in Atlantic Canada between the fees paid and utilization as found ADS in the United States (Weissert et al, 1990).

Currently, Medicaid provides an important source of funding for ADS in the United States. However, problems exist within this system as not all participants are Medicaid eligible, Medicaid reimbursement is not available in all states, and Medicaid often reimburses programs at lower rates that it costs to provide ADS. Thus, examination of the Medicare system as a source of funding for ADS is needed. Policy makers should endeavor to reduce financial barriers in attending ADS because of the many benefits to participants and their family members (Hall, 1989; Kaye & Kirwin, 1990; Kerr et al., 1995; Mace & Rabins, 1984). In addition, some researchers suggest that ADS can delay or eliminate institutionalization that is a more costly form of long-term care (Conrad, Hanrahan, et al., 1993). Even though there are a multitude of reasons to make ADS a Medicare benefit, it is highly unlikely that this will occur as reduced public spending and increased privatization of services in the United States result from predominant individualistic as opposed to collectivistic values.

NADSA Classification System

Previous researchers classified ADS programs into various categories based primarily upon the services provided by the programs (Bradsher, et al., 1995, Conrad, Hughes, et al., 1993, Neustadt, 1985, Weissert, 1976; Weissert et al., 1990). The distinction between social and medical types of programs formed a common thread of this model research. A few major problems arise with this line of research, however, adult day programs generally offer a wide variety of services rather than one type of service. Also, simply categorizing ADS programs by the types of services provided does not take into account the needs of participants utilizing the service. By examining the multifaceted services provided and the corresponding needs of participants, the NADSA model (Murphy,1997) is very useful in examining ADS programs.

Through examining aggregate trends at the provincial and state level regarding the levels of participant needs and services provided, it is evident that the majority of programs enroll participants with the highest level of needs. However, relatively few programs appear equipped to provide the services necessary to meet their needs. These aggregate data should alert those overseeing ADS at the provincial and state levels that participants may be under-served and new services should be developed. This type of aggregate data is useful to a degree, but the most important utilization of the NADSA model is at the individual program level. The individual program data provides the best indicators of whether a program can meet the needs of participants who enroll.

Analysis of programs at the individual level yields three types: (a) those that exhibit a match between the level of services provided and the needs of participants who enroll, (b) those wherein the level of services does not meet the needs of participants, and (c) those capable of providing services to participants with higher levels of needs. Ideally, a match results between the services and participants who enroll, but just 40% of the programs in the sample achieved this match. Most of these matches occur at the intensive level. However, the level that the match occurs is less important than the existence of a match. As the NADSA model of matching services and participants is not

yet implemented, it is not surprising that just 40% of the programs in this study exhibit a match. As most of the matches occur at the intensive level, these programs should be able to respond to the needs of any participant who is an appropriate candidate for attending ADS.

A total of 51% of the programs do not provide services that meet the needs of participants. However, the largest disparity, namely intensive level participants and core level services, exists in just 11% of the programs. The remainder of the programs in this group provide enhanced level services to intensive level participants. Thus, many of the programs that did not achieve a match between participants and services provide the adjoining level of services. These programs are lacking in some, but not all areas of service provision. The high percentages of programs in this category clearly indicate that many programs need to become more responsive to participant needs. Services need to be developed that can provide adequately for the multiple needs of participants in attendance.

A third group of 9% of the programs provide more intensive services than the participants require. All of these programs provide enhanced services to core level participants. The participants in these programs are not at risk for having unmet needs. However, participant needs within these programs need to be analyzed to determine whether the current participants require some additional services or whether some services could be deleted. The availability of services not required by participants may increase the cost of ADS unnecessarily. Also, providing services that are not needed may contribute to increased dependency of participants. As the difference between services and participants in this category differ by just one level, major programs changes are probably not necessary.

Conclusions and Suggestions for Future Research

In this study, the sample consisted of a region of Canada and two states in the United States. It would be advantageous to conduct a comparison of ADS between the two countries that is representative of all ADS programs in both countries. In particular, no national study of ADS in Canada is available and such a study would provide insights into previously unexplored differences between provinces. In addition, Canada has no equivalent organization to NADSA in the United States. The feasibility of developing a similar organization in Canada should be examined as such an organization can provide broad policy directions and guidelines to aid in the development of ADS Canada.

In ADS programs in Atlantic Canada, ME, and VT, programs are commonly located in nursing homes. Utilization of ADS is rather low in both countries and co-location with nursing homes may be a contributing factor. Research that compares the positive and negative aspects of co-locating ADS and nursing homes could provide insights into the positive and negative aspects of co-location. Research may show that although benefits exist, the negative stigma that most adults have towards nursing homes has a significant negative impact on utilization rates.

Even though fees for ADS are very low in Atlantic Canada in comparison to ADS in ME and VT, differences in utilization patterns did not emerge. The connections between utilization and fees are more apparent in the United States. As Canadians have access to universal health insurance, any payment for services such as ADS may appear high. If sudden changes occur in the cost of ADS in either country, changes in participation could result. If public support for ADS in Canada were greatly reduced, very few participants would probably be willing to pay more for services. If Medicare began to cover ADS in the United States and the out-of-pocket costs greatly decrease, utilization may increase, but the Atlantic Canada results show that this might not occur. There appear to be more variables involved in utilization other than simply the amount of fees that are charged. Without further research on the effects of either greatly reducing or increasing public support within countries, it is difficult to predict the impact of changes in the fee structure on service utilization.

It will be prudent for ADS policy makers to monitor the development of managed care ADS programs such as those provided by the PACE program (Ansel, 1996; Gold, 1997) in the United States. As it does not appear likely that there will be drastically higher levels of public support for ADS in the United States, managed care may become an increasingly important factor in the provision of ADS. These programs strive to provide high quality services at lower costs but tend to be based on a medical model as opposed to a social model because of the provision of Medicare reimbursable medical services (Gold, 1997). It does appear that the development of ADS in the United States will be in a more medical direction.

Very few programs exhibit severe variations between the participants needs and services provided. Further research is needed to aid ADS directors in developing and integrating processes that will enable them to adapt services to provide for current and future participant needs. As each new participant is enrolled, the level of participant needs should be determined through a needs assessment to determine if adequate services are available or need to be arranged.

This is the first research project to utilize the NADSA classification system. The NADSA classification system is in essence a tool to measure the needs of participants and to adapt services to meet these needs. However, the NADSA classification system needs to be more detailed and explicit to allow researchers to accurately categorize services and participant needs into the three levels. The current tool is a very useful starting point, but requires further refining and testing to establish whether it is both reliable and valid. In the future, the NADSA classification system should greatly aid in ensuring that ADS programs are providing high quality care to participants.

References

American Association of Retired Persons (1996). Medicare: What it covers, what it doesn't [Brochure]. Washington, DC: Author.

Ansel, D. E. (1996, October). Managed care nitty gritty. Paper presented at the Adult Day Services Conference, Cincinnati, OH.

Bradsher, J. E., Estes, C. L., Stuart, M. H. (1995). Adult day care: A fragmented system of policy and funding streams. Journal of Aging and Social Policy, 7(1), 17-38.

Cavanaugh, J. C. (1993). Adult development and aging (2nd ed.). Pacific Grove, CA: Brooks/Cole.

Chappell, N. L. (1983). Who benefits from adult day care? Changes in functional ability and mental functioning during attendance. Canadian Journal on Aging, 2(1), 9-26.

Chappell, N. L., & Blandford, A. A. (1983). Adult day care and medical and hospital claims. The Gerontologist, 27, 773-779.

Chappell, N. L., Strain, L. A., & Blandford, A. A. (1986). Aging and health care, a societal perspective. Toronto: Holt, Reinhart and Winston.

Clark, P. G. (1991). Ethical dimensions of quality of life in aging: Autonomy vs. collectivism in the United States and Canada. The Gerontologist, 31, 631-639.

Clark, P. G. (1995). The moral economy of health and aging in Canada and the United States. Canadian-American Public Policy, 23, 1-47.

Cogswell, B. E., & Sussman, M. B. (1972). Advances in comparative family research. In M. B. Sussman & Cogswell, B. E. (Eds.). Cross-national family research (pp. 1-10). Leiden, Netherlands: E. J. Brill.

Conrad, K. J., Hanrahan, P., & Hughes, S. L. (1990). Survey of adult day care in the United States: National and regional findings. Research on Aging, 12, 36-56.

Conrad, K. J., Hanrahan, P., Wang, S., & Hughes, S. L. (1993). A Medicare adult day care model: Proposed criteria and available supply. Journal of Aging and Social Policy, 5(4), 51-75.

Conrad, K. J., Hughes, S. L., Hanrahan, P., & Wang, S. (1993). Classification of adult day care: A cluster analysis of services and activities. Journal of Gerontology: Social Sciences, 48, S112-122.

Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York, NY: John Wiley & Sons.

Engelmann, M. W. (1988). Canada's aging population: Implications for policy and practice. Canadian Home Economics Journal, 38, 121-124.

Estes, C. L. (1991). The new political economy of aging: Introduction and critique. In M. Minkler, & Estes, C. L. (Eds.). Critical perspectives on aging: The political and moral economy of growing old (pp. 19-36). Amityville, NY: Baywood.

Evashwick, C. J., Rundall, T., & Goldiamond, B. (1985). Hospital services for older adults. The Gerontologist, 25, 631-637.

Fry, C. L. (1995). Age, aging, and culture. In R. H. Binstock, & L. K. George, (Eds.). Handbook of Aging and the Social Sciences (pp. 117-136). San Diego, CA: Academic Press.

Gold, S. A. (1997). What's new in long-term care: Learning about PACE and other types of managed care. Workshop presented at the meeting of the Southern Gerontological Society, Norfolk, VA.

Gutman, G. M., Milstein, S., Killam, J., & Lewis, D. (1991). Adult day care centres in British Columbia: Their operating characteristics, activities and services, clients, and interface with the long-term care program. Vancouver, British Columbia, Canada: Gerontology Research Center.

Gutman, G. M., Milstein, S., Killam, J., Lewis, D., & Hollander M. J. (1993). Adult day care centres in British Columbia: Models, characteristics and services. Health Reports, 5(2), 189-207.

Hall, B. (1989). Adult day care: A viable community option. Community Alternatives, 1(2), 65-77.

Hall, G. E. & Gaquin, D. A. (Eds.). (1997). 1997 County and city extra: annual metro, city and county data book. Lanham, MD: Bernan Press.

Hantrais, L., & Mangen, S. (1996). Method and management of cross-national social research. In L. Hantrais & S. Mangen (Eds.). Cross-national research methods in the social sciences (pp. 1-12). London, England: Pinter.

Henry, M. E., & Capitman, J. A. (1995). Finding satisfaction in adult day care: Analysis of a national demonstration of dementia care and respite services. Journal of Applied Gerontology, 14, 302-320.

International Marketing Data and Statistics (20th ed.). (1996). London, England: Euromonitor Pic.

Iseegobin, I. (Ed.). (1997-1998). Guide to Canadian healthcare facilities (Vol. 5). Ottawa, Ontario, Canada: Canadian Healthcare Association Press.

Jarrott, S. E., Leitsch, S. A., Zarit, S. H., Berg, S., & Johansson, L. (1996, November). International comparison of day cares: Programs in Sweden and the USA. Poster session presented at the annual meeting of the Gerontological Society of America, Washington, DC.

Kane, R. L., & Kane, R. A. (1985). A will and a way: What the United States can learn from Canada about caring for the elderly. New York, NY: Columbia University Press.

Kaye, L. W., Kirwin, P. M. (1990). Adult day care services for the elderly and their families: Lessons from the Pennsylvania Experience. Journal of Gerontological Social Work, 15(1/2), 167-183.

Kerr, J. R., Warren, S., & Godkin, D. (1995). Adult day programs: Maintaining the health status and quality of life of Alberta's elderly people in the community. Edmonton, Alberta, Canada: Alberta Health.

Kirwin, P. M. (1986). Adult day care: An integrated model. Journal of Gerontological Social Work, 9(2), 59-71.

Kirwin, P. M. (1991). Adult day care: The relationship of formal and informal systems of care. New York, NY: Garland Publishing.

Liebig, P. S. (1993). The effects of federalism on policies for care of the aged in Canada and the United States. In S. A. Bass, & R. Morris (Eds.). International Perspectives on State and Family Support for the elderly (pp. 13-37). Haworth Press.

Lutz, S. (1995). For real reform, watch the states. Modern Healthcare, January 23, 31-35.

Mace, N. L., & Rabins, P. V. (1984). A survey of day care for the demented adult in the United States. Washington, DC: National Council on the Aging, Inc.

McCloskey, A., & Holahan, D. (1995). Medicaid acute care [Brochure]. Washington, DC: American Association of Retired Persons.

Mitchell, S. J. (1993). Adult day care: A means of enhancing quality of life. Unpublished master's thesis, University of Calgary, Alberta, Canada.

Murphy, M. B. (1997). Standards and Guidelines for Adult Day Services. Washington, DC: National Council on the Aging.

National Adult Day Services Association (1996, February). Adult day services fact sheet. Washington, DC.: Author.

Neufeld, A., & Strang, V. (1992). Issues in the evaluation of small-scale adult day care programs. International Journal of Nursing Studies, 29(3), 261-273.

Neustadt, L. E. (1985). Adult day care: A model for changing times. Physical & Occupational Therapy in Geriatrics 4(1), 53-66.

Neysmith, S. M. (1994). Canadian long-term care: Its escalating costs for women. In L. K. Olson (Ed.). The graying of the world: Who will care for the elderly? (pp. 163-188). New York: The Haworth Press.

Nies, H., Tester, S., & Nuijens, J. M. (1991). Day care in the United Kingdom and the Netherlands: A comparative study. Ageing and Society, 11, 245-273.

Nowak, S. (1972). The strategy of cross-national survey research for the development of social theory. In A. Szalai, & R. Petrella (Eds.), Cross-National Comparative Survey Research: Theory and Practice (pp. 3-47). Oxford, England: Permagon Press Ltd.

Patashnick, M. (1982). Adult day care: A mutual support community. In P. Moffatt (Ed.), Proceedings of social work clinic day: June 10 and 11, 1982 (pp. 22-36). Toronto, Ontario, Canada: Baycrest Center for Geriatric Care.

Reifler, B. V., Henry, R. S., Sherrill, K. A., Asbury, C. H., & Bodford, J. S. (1992). A national demonstration program on dementia day centers and respite services: An interim report. Behavior, Health, and Aging, 2(3), 199-206.

Roemer, M. I. (1993). Primary health care and hospitalization: California and Cuba. American Journal of Public Health, 83, 317-318.

Sands, D., & Suzuki, T. (1983). Adult day care for Alzheimer's patients and their families. The Gerontologist, 23, 21-23.

Shapera, L. E. (1990). Meeting the nursing care needs of the elderly in the community: Clients' perspectives on adult day care. Unpublished master's thesis, University of British Columbia, Vancouver, British Columbia, Canada.

Sherrill, K. A., Reifler, B. V., Henry, R. S., Myers, A., K. (1992). Characteristics of dementia-specific day programs. Pride Institute Journal of Long Term Home Health Care, 11(3), 14-19.

Stevens-Long, J., & Commons, M. J. (1992). Adult life. (4th ed.). Mountain View, CA: Mayfield Publishing Company.

Strain, L. A., Payne, B. J., Dunn, N. J., Kampen, K. A., B, Blandford, A. A. (1997). An evaluation of adult day care in Manitoba: Final report. Center on Aging, University of Manitoba, Winnipeg, Manitoba, Canada.

Travis, S. S. (1993). Commonwealth adult day care technical assistance manual.

U.S. Senate (1989). Medicare adult day health care amendments of 1989. Washington, DC: Senate Bill S.524, 101st Congress.

Von Behren, R. (1986). Adult day care in America: Summary of a National Survey. Washington, DC: The National Council on the Aging Inc., National Institute on Adult Daycare.

Von Behren, R. (1988). Adult day care: A program of services for the functionally impaired. Washington, DC: The National Council on the Aging Inc., National Institute on Adult Daycare.

Wallace, S. P., Ingman, S. R., Snyder, J. L., Planning, M., & Walker, G. K. (1991). The evolving status of adult day care: Evidence from Missouri. Pride Institute Journal of Long Term Home Health Care, 10(4), 30-37.

Weiner, J. M., & Illston, L. H. (1996). The financing and organization of health care for older Americans. In R. H. Binstock & L. K. George (Eds.), Handbook of Aging and the Social Sciences (4th ed.) (pp. 427-445). San Diego, CA: Academic Press.

Weissert, W. G. (1976). Two models of geriatric day care: Findings from a comparative study. The Gerontologist, 16, 420-427.

Weissert, W. G. (1977). Adult day care programs in the United States: Current research projects and a survey of 10 centers. Public Health Reports, 92, 49-56.

Weissert, W. G., Elston, J. M., Bolda, E. J., Zelman, W. N., Mutran, E., & Mangum, A. B. (1990). Adult day care: Findings from a national survey. Baltimore, MD: The Johns Hopkins University Press.

Wiatr, J. (1972). The role of theory in the process of cross-national survey research. In A. Szalai & R. Petrella (Eds.). Cross-national comparative survey research: Theory and practice (pp. 347-372). Elmsford, NY: Permagon.

Zawadski, R., & Stuart, M. (1990). ADC growth uneven, but impressive. NCOA Networks, 2, 9.

Zelman, W. M., Elston, J. M., Weissert, W. G. (1991). Financial aspects of adult day care: National survey results. Health Care Financing Review, 12(3), 27-36.

Zimmerman, S. L. (1986). Adult Day Care: Correlates of its coping effects for families of an elderly disabled member. Family Relations, 35, 305-311.

Appendix A

Instrument

Survey of Adult Day Services in Canada and the United States

Participating States and Provinces:

Maine
Vermont
New Brunswick
Newfoundland
Nova Scotia
Prince Edward Island

Lori E. Weeks
1201A Lakewood Drive
Blacksburg, Virginia, USA, 24060-2004
Phone: 540-961-2534, Fax: 540-231-7012
E-mail: Lhatvany@vt.edu

I. Center Information

Center Name: _____

Street Address: _____

City or Town: _____ Population of City or Town: _____

Province or State: _____ Postal Code/Zip Code: _____

Phone Number (___) _____ Fax (___) _____ E-mail Address: _____

Year Center Opened _____ What is your job title? _____

Are you willing to answer follow-up questions in the future?

1 Yes
2 No

Center affiliation or sponsor:

1 Nursing home
2 Hospital
3 Church
4 Community/senior center
5 No affiliation/freestanding
6 Government
7 Other: Please indicate _____

Physical location of your center:

1 Nursing home
2 Hospital
3 Church
4 Community/senior center
5 Freestanding
6 Other: Please describe _____

II. Structural Characteristics of Programs

A. Financial Information

1. Are all participants at your adult day services center charged the same daily fees?
   1 Yes: If yes, what amount? $_____
   2 No: If no, please explain: _____

2. What is the standard rate that your participants are charged:
   $_____ per day and/or $_____ per hour

3. Do participants pay daily fees on a sliding scale?
   1 Yes: If yes, please give the range of fees paid: $_____ to : $_____
   2 No

4. How many participants at your center:
   ___ pay the full cost of the service
   ___ pay the partial cost of the service
   ___ pay no out-of-pocket fees for the service

5. Do you feel that the amount of out-of-pocket fees participants pay are:
   1 too expensive
   2 about right
   3 too little

6. What is your total operating budget, including in-kind support?
   $ _____

7. Please indicate the percentage of funds for your program that comes from each source.

%	Canada	%	United States
_____	Government support	_____	Medicaid
_____	Participant fees	_____	Participant fees
_____	Fund raising/grants	_____	Title III: Older Americans Act
_____	United Way	_____	Title XX: Social Services Block Grant
_____	Private donations	_____	United Way
_____	Long-term care insurance	_____	Long-term care insurance
Other:		_____	Veterans Administration
_____	_____	_____	Fund raising/grants
_____	_____	_____	Medicare
_____	_____	Other:	
100%=Total		_____	_____
		_____	_____
		_____	_____
		100%=Total	

8. Which of the following phrases best fits the organizational structure of your center?
   1 Public
   2 Private For-Profit
   3 Private Not-For-Profit
   4 Other: _____

B. Services

Below is a list of services provided by some centers. Please indicate how frequently, if ever, your center presently offers these services by circling the most appropriate number. Circle number 4 if you do not regularly provide a service, but do provide it for participants on an individual basis as needed. If you do not provide a service, circle number 5. If you offer any services not listed, add them in the space provided at the bottom of each section.

1=daily, 2=weekly, 3=monthly, 4=provided as needed, 5=not provided

1. Health Services Provided at Your Center			
Review participant medications	1 2 3	4	5
Administer medications	1 2 3	4	5
Monitor compliance with medication schedule	1 2 3	4	5
Nutrition counseling	1 2 3	4	5
Podiatry/foot care	1 2 3	4	5
Dental care	1 2 3	4	5

1=daily, 2=weekly, 3=monthly, 4=provided as needed, 5=not provided			
Vision screening	1 2 3	4	5
Hearing screening	1 2 3	4	5
Change medical dressings	1 2 3	4	5
Arrange medical appointments	1 2 3	4	5
Provide emergency alert services (e.g. life line)	1 2 3	4	5
Provide/arrange for Medic Alert bracelet or necklace	1 2 3	4	5
Obtain equipment for participants (e.g. eye glasses, adaptive clothing)	1 2 3	4	5
Maintain participant equipment (e.g. eye glasses, adaptive clothing)	1 2 3	4	5
Other health care services: Please specify	1 2 3	4	5
2. Personal Care Services Provided at Your Center			
Bathing	1 2 3	4	5
Personal Grooming	1 2 3	4	5
Mending or altering participants' clothes	1 2 3	4	5
Taking participants on shopping trips (e.g.) groceries or clothing	1 2 3	4	5
Other personal care services: Please specify	1 2 3	4	5
3. Transportation Services Provided at Your Center			
Transportation for medical appointments	1 2 3	4	5
Transportation for shopping	1 2 3	4	5
Transportation for social/recreational events	1 2 3	4	5
Transportation to and from the center	1 2 3	4	5
Other transportation services: Please specify	1 2 3	4	5

1=daily, 2=weekly, 3=monthly, 4=provided as needed, 5=not provided			
4. Volunteer Opportunities for Participants			
Doing volunteer work for the community	1 2 3	4	5
Doing volunteer work for other participants	1 2 3	4	5
Participant input in running the center	1 2 3	4	5
Other participant volunteer activities, please specify:	1 2 3	4	5
5. Social Services Provided to Participants			
Counseling	1 2 3	4	5
Telephone check for participants	1 2 3	4	5
Set up participant telephone network	1 2 3	4	5
Participant advocacy	1 2 3	4	5
Visit participant in his/her own home	1 2 3	4	5
Follow-up participant after hospitalization	1 2 3	4	5
Discharge planning	1 2 3	4	5
Pastoral services	1 2 3	4	5
Operate special interest groups (e.g. stroke, diabetes)	1 2 3	4	5
Letter reading and/or writing for participants	1 2 3	4	5
Other social services: Please specify	1 2 3	4	5
6. Social Services Provided to Families and Caregivers			
Counseling	1 2 3	4	5
Caregiver support group	1 2 3	4	5
Information and referral to other services	1 2 3	4	5
Coordinate various agencies involved with participant	1 2 3	4	5
Locate suitable housing for participants	1 2 3	4	5

1=daily, 2=weekly, 3=monthly, 4=provided as needed, 5=not provided			
Liaise between participant and other social services	1 2 3	4	5
Social opportunities	1 2 3	4	5
Education	1 2 3	4	5
Represented on center's advisory board	1 2 3	4	5
Discharge planning	1 2 3	4	5
Other social services provided to families/caregivers: Please specify	1 2 3	4	5
7. Therapeutic Activities Provided at Your Center			
Training/retraining in activities of daily living	1 2 3	4	5
Physiotherapy (e.g. rehabilitation, assisting in mobility)	1 2 3	4	5
Art therapy	1 2 3	4	5
Music therapy	1 2 3	4	5
Sensory stimulation	1 2 3	4	5
Reminiscence therapy	1 2 3	4	5
Reality orientation	1 2 3	4	5
Management of incontinence/toileting	1 2 3	4	5
Teach menu planning and cooking skills	1 2 3	4	5
Exercise class	1 2 3	4	5
Whirlpool therapy	1 2 3	4	5
Stress management	1 2 3	4	5
Swimming	1 2 3	4	5
Other therapeutic activities: Please specify	1 2 3	4	5
8. Recreational and Social Activities Provided at Your Center			
Arts and crafts	1 2 3	4	5

1=daily, 2=weekly, 3=monthly, 4=provided as needed, 5=not provided			
Baking and cooking as a social activity	1 2 3	4	5
Games	1 2 3	4	5
Intergenerational Activities	1 2 3	4	5
Visiting entertainment at the center	1 2 3	4	5
Pet visits to the center	1 2 3	4	5
Pet care at the center	1 2 3	4	5
Physical recreation (e.g. bowling, recreation)	1 2 3	4	5
Gardening	1 2 3	4	5
Computer activities	1 2 3	4	5
Outdoor activities (e.g. walks, picnics, barbecues)	1 2 3	4	5
Special meals (e.g. holidays, birthdays)	1 2 3	4	5
Participant socials	1 2 3	4	5
Social activities involving family members	1 2 3	4	5
Day trips	1 2 3	4	5
Activities involving community groups	1 2 3	4	5
Other recreational and social activities: Please specify	1 2 3	4	5
9. Food Provided at Your Center			
Breakfast	1 2 3	4	5
Lunch (noon)	1 2 3	4	5
Dinner (evening)	1 2 3	4	5
Snacks	1 2 3	4	5
Take-home meals	1 2 3	4	5
10. Educational Programs Provided at Your Center			
Current events	1 2 3	4	5

1=daily, 2=weekly, 3=monthly, 4=provided as needed, 5=not provided			
Information about community resources	1 2 3	4	5
Preventive health measures	1 2 3	4	5
Safety in the home	1 2 3	4	5
Financial planning	1 2 3	4	5
Wills	1 2 3	4	5
Living wills	1 2 3	4	5
Other educational programs: Please specify	1 2 3	4	5
11. Quiet Time Activities Provided at Your Center			
Rest	1 2 3	4	5
Conversation	1 2 3	4	5
Reading	1 2 3	4	5
Watching TV/videos	1 2 3	4	5
Other quiet time activities, please specify:	1 2 3	4	5

Check the category your program <u>best</u> fits into. Select only one.

_____ <u>Level of Care 1</u>: Provide assessment and care planning, assistance with activities of daily living, health related services, social services, therapeutic activities, nutrition, transportation, and emergency care. Do not provide direct nursing, rehabilitative, or psychosocial services.

_____ <u>Level of Care 2</u>: Provide assessment and care planning, assistance with activities of daily living, health related services, social services, therapeutic activities, nutrition, transportation, and emergency care. Also provide restorative, supportive, or rehabilitative nursing care on a moderate basis, assessment and referral for psychosocial services and follow through with recommended treatments in the plan of care. Provide physical, occupational, and speech therapy at a aintenance level.

_____ <u>Level of Care 3</u>: Provide assessment and care planning, assistance with activities of daily living, health related services, social services, therapeutic activities, nutrition, transportation, and emergency care. Also provide intensive nursing services necessary for unstable medical onditions, therapies at a restorative or rehabilitative level, intense psychosocial services, and specialized supportive services as needed.

C. Staff to Participant Ratio

1. How many persons in the following categories do you have working at your center? Include approved but unfilled positions.
   full-time paid _____
   permanent part-time paid _____
   temporary paid/casual _____
   volunteers (non-student) _____
   students _____

2. What is the average number of total staff members, volunteers, and consultants **present** at your center each **day**? __

3. At any given time, what is the average number of staff members, volunteers, and consultants who **work directly with** participants at your center? _____

4. What is the average number of participants that attend your center each **day**?_____

D. Staff Qualifications

Please indicate the number of hours per week that paid staff members, volunteers/in-kind, and consultants work at your center in the following positions:

Position	Staff	Volunteer/ In-Kind	Consultant
Administrator			
Coordinator and/or Director			
Assistant Director			
Program Worker (Attendant)			
Activity Director			
Transportation Worker			
Registered Nurse			
Certified Nursing Assistant			
Dietitian/Nutritionist			
Cook/Dietary Aide			
Social Worker			
Secretary/Bookkeeper/Receptionist			
Education/Training Provider			
Art Therapist			
Music Therapist			

Position	Staff	Volunteer	Consultant
Occupational Therapist			
Physiotherapist			
Recreation Therapist			
Speech Therapist			
Medical Doctor			
Psychiatrist/Psychologist			
Pharmacist			

E. Hours and Days of Center Operation

1. What is the approximate number of **days** your center is open each **year**? _____

2. Write in the hours your center is regularly open each day:

		From ___ AM To ___ PM
1	Monday	_____
2	Tuesday	_____
3	Wednesday	_____
4	Thursday	_____
5	Friday	_____
6	Saturday	_____
7	Sunday	_____

3. In addition to your regular hours, do you offer additional times such as evening, weekend, or overnight hours?
   1 No

   2 Yes: If yes, please describe _____

   _____

   _____

   _____

F. Capacity and Waiting Lists

1. Does your center have a waiting list?
   1 No

   2 Yes a) How many people are currently on the list? _____
   b) What is the average waiting time before a space becomes open?____

2. What is the maximum number of participants you can serve per day? ____

G. Participant Attendance

1. On average, how many per week do participants attend your center? _____

2. What is the minimum number of days participants attend your center each **week**? _____

3. What is the maximum number of days participants attend your center each **week**? _____

4. What is the average length of time in **months** that participants attend your center? _____

5. How many participants attend your center a:
   _____ full day
   _____ partial day (less than half the hours your center is open)

6. How many participants attend:
   _____ 3 or more days a week
   _____ 1-2 days per week
   _____ Less than one day per week

7. Do certain groups of participants attend on certain days? For example, do participants with dementia attend certain days?
   1 No
   2 Yes: If yes, please explain: _____

   _____

   _____

8. When participants are discharged from your center, approximately what percent are discharged to the following:

%	
_____	1 Hospital
_____	2 Nursing home
_____	3 Boarding home
_____	4 Senior housing
_____	5. Own private home
_____	6. Other: Please specify _____

100% = Total

III. Participant Characteristics

A. Enrollment How many participants do you currently have enrolled?

B. Age

1. Based on your total number of participants enrolled, how many participants at your center belong to the following age groups?

____ 1 under age 49	____ 4 70-70
____ 2 50-59	____ 5 80-89
____ 3 60-69	____ 6 90+

2. What is the age of the oldest participant currently attending your center? _____ years

3. What is the age of the youngest person currently attending your center? _____ years

C. Gender: What number of participants at your center are female? _____ years

D. Marital Status How many participants at your center are currently married? _____ years

E. Education

To the best of your knowledge, how many of participants at your center completed the following education levels

____ 1 < grade 8
____ 2 completed grade 8-11
____ 3 completed high school
____ 4 some college
____ 5 completed at least a four year degree

F. Income

To the best of your knowledge, indicate the number of participants at your center that have the following amounts of income per year.

____ 1 0-$4,999
____ 2 $5,000-$9,000
____ 3 $10,000-$14,999
____ 4 $15,000-$19,000
_____ 5 $20,000-$29,000
_____ 6 $30,000-$39,000
_____ 7 $40,000 or more

G. Caregivers

1. How many participants at your center currently have a primary caregiver, that is a person who provides the majority of care for a participant outside your center? _____

2. Indicate the number of primary caregivers of participants at your center that belong to the following categories:

____ 1 Spouse
____ 2 Adult Child
____ 3 Friend
____ 4 Other, please indicate relation to participant
_____

3. How many primary caregivers are employed

____ 1 Full-time
____ 2 Part-time
____ 3 Not employed

H. Living Arrangements

What number of participants at your center currently live

____ 1 Alone in the community
____ 2 With family members in the community
____ 3 In senior housing
____ 4 In an institutional setting

I. Functional Characteristics of Participants

1. What number of participants at your center:

____ 1 Are incontinent (require changing during attendance)
____ 2 Are cognitively impaired
____ 3 Require general supervision
____ 4 Require constant supervision
____ 5 Have a developmental disability
____ 6 Are behaviorally disruptive
____ 7 Are reliant on a cane or walker
____ 8 Use a wheelchair
____ 9 Need assistance to transfer

2. How many participants at your center have the following levels of need?

_____ Socialization, some supervision, supportive service, and minimal assistance with activities of daily living
_____ 2 Moderate assistance
_____ 3 Maximum assistance

J. <u>Other Services Utilized</u>

How many of your participants currently use the following services in addition to those connected to your center?

____ 1 Home health care
____ 2 Homemaker/chore services
____ 3 Nursing home
____ 4 Therapies (e.g. physical, occupational, speech)
____ 5 Transportation (other than for adult day services)
____ 6 Area Agency on Aging (United States)
____ 7 Other, please specify: _____

IV. Purposes

What are the purposes of your center? Of the purposes you circled yes, please rank them from the most important to the least important with 1 indicating the most important and 11 indicating the least important.

Purpose	Yes No	Rank
1 Provide respite for caregivers	1 2	
2 Allow participants time away from caregivers	1 2	
3 Allow caregivers to remain in the workforce	1 2	
4 Increase social opportunities of participants	1 2	
5 Rehabilitation of participants	1 2	
6 Decrease the rate of decline of participants	1 2	
7 Extend the length of time participants can live in the community	1 2	
8 Make a profit	1 2	
9 Train personnel to work in ADS	1 2	
10 Conduct research	1 2	
11 Other: Please specify	1 2	

V. Policies

Please send me copies of any written policies that exist for your center, such as an operations manual. If the written policies answer the following questions, you do not have to write in the answer. If you are not able to send written policies, please answer the following questions to the best of your knowledge about your center. If you do not know the answer, or no policy exists, please state this.

1. What is the purpose and/or mission of your program? Describe your program.

2. Eligibility

a) Who is eligible to receive adult day services?

b) If more persons are eligible for services than available spaces, how are admission decisions made? Are participants ranked according to some criteria? If so, please state the criteria. If another selection process is used, please explain.

c) Please describe any other policies regarding participant eligibility in your program.

3. Referral

a) Who can refer potential participants to adult day services? Circle all that apply.

1 Self referral
2 Medical personnel
3 Social services personnel
4 Family members
5 Other: _____

b) For participants who need to be certified for reimbursement prior to admission, how much time lapses between referral and admission?

c) Please describe any other referral policies your program has.

4. Admission

a) What types of assessments are conducted for participants to be admitted to adult day services?

b) What information is needed for admission? For example, medical or financial information or availability of caregivers.

c) Please describe any other admission policies at your center.

5. Describe the regulations that you have to adhere to at the local level.

6. What are some of the problems you have experienced in dealing with the regulatory system? Do these problems hamper your ability to provide services?

THANK YOU FOR YOUR ASSISTANCE WITH THIS PROJECT!

Appendix B

NADSA Classification Coding Sheet

Participants

(combination of questions I.1 and I.2, survey page 11)

Using this coding scheme, I divided the participants into the three levels. The highest level of participant needs with any percentage of participants determines the level. For example, if one program has one-third of the participants in each level, the final level is intensive. The rationale for this is that if any participants in a center have maximum needs, maximum services need to be available, even if the services are needed for just a few participants.

Core: percent of participants that directors indicated needing socialization, some supervision, supportive services, and minimal assistance with activities of daily living

Enhanced: percent intensive - percent core = percent enhanced

Intensive: the higher percentage of:
- Require maximum supervision
- Maximum assistance

Services

(Combination of questions B.1, B.5, and B.7, survey pages 2-5)

In each service category, each program is classified based on the number of individual services provided. The frequency of the service provision is not part of this analysis, only if the program provides the service or not. Because the NADSA classification system takes into account each of these three areas, the lowest level of services provided determines the level. For example, if one program provided intensive level health services and therapeutic activities, but enhanced social services, the resulting level is enhanced.

Service Category	Core	Enhanced	Intensive
Health Services	0-5	6-9	10-14
Social Services (participant)	0-3	4-6	7-10
Therapeutic Activities	0-4	5-8	9-13

Vita

Lori E. Weeks

Education

- Doctoral of Philosophy: Department of Family and Child Development Virginia Tech, 1994-1998.
- Graduate Certificate in Gerontology: Center for Gerontology, Virginia Tech, 1994-1998.
- Master of Science: Human Development, University of Maine, 1992-1994.
- Bachelor of Science: Home Economics, University of Prince Edward Island, Canada, 1987-1991.
- Secondary Teaching Certificate: University of Prince Edward Island, 1987-1991.

Professional Experience

- Director: Rosewood Residence, Hunter River, PEI : March, 1998 to present
- Graduate Research Assistant: Center for Gerontology, Virginia Tech, 1996-1997
- Graduate Assistant: Virginia Tech Adult Day Services, 1994-1997
- World Wide Web Home Page Development: Department of Family and Child Development, Virginia Tech, 1996
- Summer Workshop Coordinator: McNair Scholars Academic Achievement Program, University of Maine, 1993-1995
- Intern: Eastern Agency on Aging, Brewer, Maine, 1993-1994
- Graduate Teaching Assistant: Department of Human Development and Family Studies, University of Maine, 1992-1994

Awards

- Virginia Association on Aging Outstanding Student Award, 1996
- Merna M. Monroe Scholarship, Alpha Beta Chapter of Kappa Omicron Nu, University of Maine, 1994
- Mrs. Chester S. McLure Memorial Prize, University of Prince Edward Island, 1991
- Gertrude Cotton Memorial Trust full tuition scholarship, University of Prince Edward Island, 1987-1991
- Doris M. Anderson Home Economics Academic Merit Prize, University of Prince Edward Island, 1990
- Canadian National Exhibition 4-H Academic Scholarship, 1988

Memberships

- Canadian Association on Gerontology
- Gerontological Society of America
- National Council on the Aging
- Prince Edward Island Association of Licensed Community Care Facilities