

***Everyday Technology and Older Adults: Friends or Foes?***  
*coordinated by the Nova Scotia Centre on Aging, Mount Saint Vincent University*

**Final Report- December 2001**

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***Everyday Technology and Older Adults: Friends or Foes?***  
***Project Partners & Advisory Board***

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## **Executive Summary**

The Nova Scotia Centre on Aging coordinated the 33 month project *Everyday Technology and Older Adults: Friends or Foes?* to examine the impact of technology on the day-to-day lives of older adults. The project focused on the areas of banking, telecommunications and accessing health information via technology. Funded by Population Health Fund, Health Canada, the project partnered with eight other organizations to conduct focus groups, in-depth interviews with older adults and industry representatives, as well as Town Halls across the country. The project produced two educational modules, a workshop guide, and a list of recommendations for industry. The module for industry and the recommendations can be used within industry for staff development and technology delivery planning. The module for seniors can be used by groups for educational sessions and reference. This report, presented in seven sections, provides a full description of all stages of the project.

**Section 1** describes the goal and project components, the background issues, the partners and advisory board, as well as offers a profile of the coordinating partner, the Nova Scotia Centre on Aging.

**Section 2** details the processes to implement the project, including focus groups, key informant interviews and Town Halls.

**Section 3** includes the findings and analyses from project activities, as well as the final reports from Third Age Centre, St. Thomas University and Seniors' Education Centre, University of Regina. Also included in this section is a comprehensive list of tips and strategies for dealing with everyday technologies.

**Section 4** presents eighteen recommendations targeted to industry. These were developed to aid industry in addressing the concerns voiced by older adults throughout the project.

**Section 5** describes the educational modules created for industry and older adults. The industry module features a series of short workshops designed to raise awareness within industry of the impact of technology on the day-to-day lives of older adults. The older adult module is designed to encourage and empower older adults in their daily encounters with automated technologies. Seniors' Education Centre also prepared a workshop guide.

**Section 6** describes the extensive dissemination activities that took place during the project and upon completion of the products.

**Section 7** is the conclusion. The report prepared by the project's evaluation consultant can be found in the appendices.

The *Everyday Technology and Older Adults: Friends or Foes?* project provided a constructive forum for the views of older adults to be expressed to industry. The project provided opportunities for older adults and industry to come together to discuss possible solutions and strategies. Dispelled by the project is the myth that older adults abhor technology and its advancement. Project findings support the view that older adults are willing learners if conditions of support and education exist. Older adults do not take issue with technology in itself but with the ways they are required to use it.

*Everyday Technology and Older Adults: Friends or Foes?*

**Final Report**

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## **Section 1: Overview of Project**

### ***1.1 Introduction***

The primary purpose of the *Everyday Technology and Older Adults: Friends or Foes?* project was to broaden our knowledge base of the experience and impact of technology in the day-to-day lives of older adults and to develop collaborative strategies, in partnership with industry, that maximize the benefits of technology while respecting human needs. Focusing on the areas of banking, automated telephone services, and access to health information, the project involved older adults in all aspects of the design, development, and evaluation.

It is true everyday technology can provide innumerable benefits and conveniences, as well as provide opportunities for continued learning and growth. In fact, mastering new technologies can be empowering and evoke feelings of accomplishment and satisfaction, as well as greater self-esteem.

Anecdotal evidence and our project findings indicate, however, that many older adults are turning away from services offered through automation. Individual sensory or mobility changes coupled with poor technology design, negative stereotypes of aging and older learners, cost of equipment, lack of training or education, and lack or unevenness of access are all significant barriers. It is critical that we address these barriers, particularly when technology has the potential to increase independence and improve the quality of life for aging members of our society.

The *Everyday Technology and Older Adults: Friends or Foes?* project provided a constructive forum for the views of older adults to be expressed to industry. The project also provided opportunities for older adults and industry to come together to discuss possible solutions and strategies. Our findings clearly indicate a communication gap exists between older adults and industry. We believe the project has made important steps in bridging this gap whether it be through the Town Hall meetings held across Canada or in the development and dissemination of educational modules for both groups. Our findings also dispel the myth that older adults abhor technology and its advancement. They support the view, instead, that older adults are willing learners if conditions of support

and education exist. Perhaps the simplest way to describe what we have learned is to say that older adults do not take issue with technology in itself but with the ways they are required to use it.

## ***1.2 Project Goal & Components***

### ***Project Goal:***

The goal of the *Everyday Technology and Older Adults: Friends or Foes?* project was to investigate and document the experience and impact of technology in the day-to-day lives of older adults and incorporate these findings into educational modules for older adults and industry, and into the development of a comprehensive set of recommendations for industry.

### ***Components:***

The goal of the project was achieved through the implementation of four components. The results of these four components informed the final phase which included the development of recommendations for industry, as well as the development of educational modules for both older adults and industry. This section briefly outlines the components while following sections of the report detail the activities and findings of the components individually.

### ***Component A:***

Component A provided opportunities through focus groups for older adults to share their experiences and concerns regarding everyday technology. Ten focus groups, including a pilot, were held throughout the province of Nova Scotia. Component A also included structured telephone interviews with older adults and industry. Sixty interviews were conducted with older adults and industry key informants.

The purpose of conducting the telephone interviews with older adults was to determine any adaptive strategies older adults might use to respond to the technological requirements in day-to-day living. The intent of the telephone interviews with industry was to identify any approaches that industry utilizes to address the needs of older adult consumers as they adapt to technological changes in services.

Component A was the responsibility of the coordinating partner, the Nova Scotia Centre on Aging (NSCA), in conjunction with the Nova Scotia partners who were involved in organizing the focus groups and identifying participants. A focus group manual and interview guides were developed by project staff and approved by the advisory board. Project staff analysed the results of the focus groups and interviews and prepared a summary report of the findings and themes.

Component A also included the development of a project Web page, preparation of articles based on the component's findings, and the initial development of a project evaluation strategy.

*Component B:*

This component was the responsibility of project partner, Third Age Centre, St. Thomas University, New Brunswick. The objectives of Component B were to conduct focus groups with older adults to determine their experience with everyday technology *specifically* related to accessing health information, as well as to consult with health information providers on these issues. Third Age also analysed and shared the results with NSCA project staff. NSCA project staff then incorporated these results into the broader project activities and products.

*Component C:*

This component was the responsibility of project partner, Seniors' Education Centre (SEC), University of Regina, Saskatchewan. SEC's objectives were to conduct focus groups in four communities, including First nations communities, in order to identify and document learning needs and barriers to access for older adults in rural areas. SEC then offered six educational workshops and prepared a workshop guide based on the learning needs identified in the focus group stage. SEC also distributed the workshop guide and evaluated their component of the project.

*Component D:*

This component was the responsibility of NSCA project staff and project partner, the Federal Superannuates National Association (FSNA). The component focussed on the planning and conducting of Town Halls across Canada. The results from previous components helped to inform the content and organization of the Town Hall meetings. FSNA hosted and organized the

events while NSCA project staff designed the format, publicity for the events, and assisted FSNA in whatever way was needed. NSCA project staff also analysed the results from the Town Hall “reporters”.

The Town Halls provided an important and constructive forum for the sharing of perspectives and expectations, as well as an opportunity for meaningful connections to be made between older adults and industry. The meetings also provided the opportunity for potential partnerships between older adults and industry to emerge.

*Final Phase: Development of Educational Modules & Recommendations*

NSCA project staff, in conjunction with the Adult Education program at Mount Saint Vincent University, *developed educational modules* for both older adults and industry. The intent of these modules is to address the gaps in communication between the two groups. Included with the module for Industry is a short video.

This phase also included *the development of recommendations for industry* that put a “human face” on technological advancements.

### ***1.3 Diagram***

## *1.4 Background*

The following discussion is adapted from the Introduction prepared for the **Writings in Gerontology, Seniors and Technology**, prepared by the Nova Scotia Centre on Aging (NSCA) and produced by the National Advisory Council on Aging (NACA), September 2001.

If we define technology as the “application of human knowledge and ingenuity to a task or problem” (NACA, Expressions, Vol. 12), it stands to reason that the current rate of technological innovation in our everyday lives should have virtually eradicated the ills that face our society. However, we know this is not the case. Although technology has certainly improved, extended, and enriched our lives, it has complicated and limited them in many ways as well.

From the joy of e-mailing a grandchild to the frustration of losing your way in a telephone menu tree, technology underscores just about everything we do. Commercial industry, financial institutions, and all levels of government are moving towards more and more automation of both services and access to information. As the aging population grows over the next thirty years, the positive as well as the negative effects of everyday technologies will be amplified. Issues of marginalization, access to services and social isolation are all associated with increasing automation and must be addressed now. As White and Weatherall point out, “If older adults are to play an equal part in our increasingly technological societies, then consideration must be made of the effect on and use of IT [information technologies] in their lives” (2000: p. 372).

A review of the literature related to older adults and technology reveals a multitude of articles and discussions related to older adults and computer use but scant reference to the use and impact of everyday technologies. The lack of formal discussion regarding everyday technologies represents both a critical void and an unbalanced focus within the literature.

Everyday technologies increasingly allow little choice in whether or not they are used, unlike the use of computers, internet and email which are clearly associated with certain determining factors. As Zimmer and Chappell indicate,

“... predisposing factors, such as age, education, income, place of residency, gender, previous experience with technology, and home ownership have been shown to be important determinants of technological utilization and hence likely receptivity” (1999: 223).

Unfortunately, there are not many statistics regarding older adults and their use of everyday technologies. However, Howatson-Leo and Peters point out the 1994 General Social Survey data indicate, “The elderly and those with low levels of education and income are at the greatest risk of being isolated by the ways in which services are provided” (1997: 26). Yet, latest statistics identify older adults as one of the fastest growing groups of consumers purchasing computer technologies and accessing the internet. Despite the “hype” surrounding this trend, the actual numbers are still quite low.

Interestingly, some research has indicated that age may not necessarily be a determinant of using or owning a computer. Income and educational levels, as well as an open and positive attitude towards technology, are identified as more significant determining factors. However, while thousands of older adults are discovering and maximizing the benefits of technology, many more are either choosing not to “connect” or struggling to gain access.

In addition, anecdotal evidence and subsequent project findings support the claim that many older adults, primarily those over the age of 70, are turning away from services offered through automation. One explanation for this side-stepping of technology may be found in the fact that today’s older adults have not had as much exposure and interaction with technology in their workplace or in their day-to-day transactions.

“Older adults of today have lived through a radical transformation of their technological environment.... Homes are now equipped with video cassette recorders (VCR’s), microwave ovens, satellite televisions, home alarm sensors, home computers and a barrage of communication devices, all unknown to today’s cohort of older adults while they were growing up” (Zimmer and Chappell, 222).

Although older adults as a group may not have had as much exposure to rapid technological development, it is important that they be recognized as a vital

consumer group which will purchase and access these technologies. Older adults contribute to the economy through purchases, donations, and unpaid labour and volunteer work. Statistics clearly show older adults are a population group “to be bargained with”. According to the most recent census data, older adults spend more on gifts and charities than other age groups (Lindsay, 1999). Seniors also tend to be the most loyal customers to a business if they receive fair service and respect.

The implications for older adults who are not able, or choose not to use everyday technologies or computers are not yet entirely clear. The question of what this will mean needs to be asked in our society. Certainly, there is evidence of a growing gap between those who have access to technology and those who do not - the “digitally divided”. Some feel that technology offers “opportunities for expanded access to and participation in the economic, social and cultural life” (Howatson-Leo and Peters, 1997). Those who do not use technological innovations will surely begin to fall behind or miss out on services. Successfully navigating the automated and technical world of business and government today requires familiarity, skill, and patience. The social consequences of a growing gap between the “techno-haves” and the “techno-have-nots” may further marginalize the very groups that stand to benefit the most from the “technological revolution”.

### ***1.5 Partnership & Advisory Board***

A national project of this size and complexity required the efforts of many different partners. The partnership succeeded in blending together community groups, provincial and national organizations, as well as university based research centres into a unified team dedicated to carrying out the objectives of the project. In fact, the majority of the project partners were involved in the initial stages of the design and development of the project. With eight partners across Canada it was possible to gain a country-wide understanding of the issues surrounding older adults and everyday technology.

Project partners held varying levels of involvement and responsibility. The Third Age Centre, St. Thomas University, New Brunswick and the Seniors' Education Centre, University of Regina, Saskatchewan were responsible for two components of the project (component B and C respectively) for which they were allocated project funds.

Four other partners, Canadian Pensioners Concerned NS, Federation of Seniors and Pensioners NS, Gerontology Association of NS, and the Seniors' Citizens Secretariat of NS, were involved in the focus group participant selection and the carrying out of the focus groups.

The Federal Superannuates National Association hosted Town Hall meetings across Canada drawing upon their wide network of contacts and expertise in consultations with the public. And finally, the Adult Education Program at Mount Saint Vincent University contributed, through the provision of two student practica, to the development of educational modules for both older adults and industry.

In addition to the partners' contribution to, or responsibility for particular components of the project, partners also served on the project's advisory board. The project's Advisory Board was also comprised of the Nova Scotia Centre on Aging (NSCA) project coordinator and project assistant, the Associate Director of the NSCA, and a retired banker. The Advisory Board provided feedback and guidance at all stages of the project, as well as reviewed project materials and products. The Advisory Board met by teleconferences at regular intervals during the project.

The NSCA acted as the coordinating partner for the project and was responsible for the day-to-day activities and overseeing the entire project, in addition to completing two components and the final phase.

### **1.5.1 Profile of Coordinating Partner- Nova Scotia Centre on Aging**

The Nova Scotia Centre on Aging (NSCA), Mount Saint Vincent University, was established in 1992 with the mandates of applied research, continuing education, and community outreach/consultation in age-related issues. NSCA strives to set standards of excellence in education and research on later life issues. Through its expertise and publications, it is a resource to university scholars, students, community-based researchers, practitioners, educators, government, service providers, senior and professional organizations, media and families across Nova Scotia. The main areas of expertise centre on issues related to family caregiving, continuing care and healthy aging. NSCA conducts local, provincial, regional and national projects in collaboration with a wide range of public and private sector partners, including other universities and volunteer groups. As well, contracts for evaluation research form a part of NSCA's work. The Centre has developed a sound reputation for producing high quality, relevant materials which link research to policy development and is committed to involving, at all levels, those most affected by an issue, and sharing the results of the work with those who can influence decisions. The blend of academic resources and community involvement characterizes the strength of the NSCA.

## **Section 2: Process**

### ***2.1 Setting Up The Project***

#### **2.1.1 Liaison with Partners**

Project Staff spent a considerable amount of time at the beginning of the project developing effective working relationships and good communication with all partners, as well as raising awareness of the project within industry. All partners were provided with a detailed synopsis of their involvement. Project staff also made presentations to a number of the partners' organization members regarding the project. This continued throughout the project in the form of updates. Teleconferences, involving all partners, were also held so partners could get to know one another if they had not had the chance to work together in the past. In addition, during this stage, all administrative aspects of project functioning were finalized and all expense forms, reporting procedures and protocols were developed and discussed with partners.

#### **2.1.2 Contacts with Industry**

The initiation of the project concentrated on building the foundation for the project in the years to come. Many contacts were made with important industry representatives, such as bank managers and customer service representatives, during this time. This included telephone conversations, a roundtable discussion and site visits.

#### **2.1.3 Environmental Scan**

A literature review was conducted during the course of the preparation of the proposal. Project staff widened this review and included a search of both the popular and academic literature on the subject including a scan of available training programs or resources on the subject. During the first few months project staff also conducted several ad hoc exploratory surveys as opportunities presented themselves. We decided it would be both interesting and informative to explore these situations in light of our project and found these endeavours to be useful in helping us to understand and define the issues and problems surrounding everyday technology and older adults. The following are three examples of such exploratory research.

*Bank Closure/Resident Questionnaire:*

Shortly after the project got under way, it came to our attention that a bank branch located on the ground floor of a downtown apartment building was about to close its doors, replacing its full service with an automated banking machine in the lobby. Because the building is primarily occupied by seniors we saw this as an exploratory research opportunity which fit into the mandate of our project which was to broaden our knowledge about the experience and impact of technology in the day to day lives of older adults.

We decided to survey the residents of this apartment complex on the impact of the closure on their lives and if and how their banking patterns would be affected. In addition, we wanted to ask this group of older adults about other aspects of their experience with everyday technology such as their level of comfort with automated banking machines and computers.

This survey captured a narrow snapshot of a small group of older adults and their experience with some everyday technologies. For more than half of those who responded to the survey, the bank closure will have a great impact on their day to day life. The finding that banking machines are mainly used for withdrawals, if used at all, corresponds to comments gathered from older adults at the Senior's Expo in Halifax.

*Halifax Seniors' Expo:*

At the 10<sup>th</sup> Annual Seniors' Expo in Halifax in July, 1999, where the Nova Scotia Centre on Aging had set up a booth, we approached seniors with a short survey designed to gauge their comfort and use of everyday technologies. Out of the 67 seniors who spoke with us: 23 use banking machines regularly, 21 use them occasionally, 34 never use banking machines. When asked about their experiences with computers: 37 stated they never use them, 13 occasionally and 8 use them frequently. Sixty three respondents were familiar with automated telephone service, 3 were unsure if they had encountered them and 1 person had not encountered this service. Fifty two rated their experience with automated telephone service as unsatisfactory, 12 stated they were satisfied and 4 felt the service was very good. Overall, issues of everyday technologies were a concern for the majority of the seniors we had the opportunity to speak with.

### *Mystery Shopping:*

Eight banks were visited in the Halifax metro area and eight in various locations between Halifax and Sydney, NS. The purpose of this “mystery shopping” was to assess signage and services targeted to seniors on site. This included a visual scan of the banking machine area, an assessment of the availability of senior specific or “sit down” service, and a perusal of promotional brochures to determine their target audience. Essentially, our goal was to determine the “senior friendliness” of the bank branches. We found some of the banks provided “sit down” service or a special teller area for seniors while others did not differentiate between ages but rather provided a designated counter for persons with disabilities. Often this area did not provide a chair. This information provided us with an “on the ground” understanding of availability and types of services.

#### **2.1.4 Development of Project Evaluation Plan**

By the end of the first quarter, project staff had begun work on the Evaluation Framework with the project’s evaluation consultant. The first step was to construct a Logic Model which identified background factors, project activities, external factors, immediate and overall goals/outcomes. The next step was to determine possible indicators and their measurement. The evaluation consultant also initiated dialogue with two of the project partners responsible for components regarding the evaluation plan and strategy. The remaining partners and Advisory Board were presented with a complete overview of the evaluation plan and were solicited for feedback during a teleconference.

## ***2.2 Component A***

### **2.2.1 Focus Groups**

Conducting focus groups to tap into the impact of everyday technologies on the lives of older adults was one of two central aspects of Component A. The other was conducting key informant interviews with older adults and industry representatives. The focus groups created forums for older adults to express their concerns and, at the same time, provided valuable knowledge of the impact of technology on older adults in their day-to-day lives.

The format of the focus groups was developed as soon as the initial setup of the project was in place. This included the creation and distribution of a Facilitator's Manual and appropriate questionnaires and forms (See Appendix 3). Questions to be included in the focus groups were discussed and developed at a brainstorming session with the Nova Scotia partners, Canadian Pensioners Concerned NS, Senior Citizens' Secretariat NS, Federation of Seniors and Pensioners NS and the Gerontology Association of Nova Scotia. The focus groups were then organized and conducted in conjunction with these four regional partners.

A total of ten focus groups were planned and conducted in towns and areas across Nova Scotia from Yarmouth to Cape Breton over a period of 2 to 3 months. The audio tapes of the sessions were then transcribed in their entirety and the analysis began. The transcripts were coded for themes and then summarized.

*Description of Focus Groups:*

As noted above, ten focus groups were conducted with the first being a pilot session which informed the subsequent approach, format and content and led to adjustments in the Facilitator's Manual. The focus groups were held in rural (3), small town (2) and urban areas (5) primarily in seniors' centres, legions, or church halls. On average, each session lasted 2 - 3 hours and 8 -10 participants took part. A break and light refreshments were provided mid-way. Project staff facilitated eight of the ten focus groups while representatives from partner organizations facilitated two.

All of the focus groups were transcribed with the exception of the pilot which was videotaped. We did not include the content of the pilot in our comparative analysis with the other nine focus groups because it focused as much on suggestions for improving focus group delivery and questions as it did on the topic of everyday technology and older adults.

The Facilitator's Manual provided a discussion guide with suggested questions to open each topic area. This allowed the discussions to be semi-structured, yet participant driven which meant that the identified topics as well as participants' concerns were covered in the session. In all focus groups, most participants

showed a high level of interest and engagement, often offering insightful and reflective comments.

The focus groups probed the three main areas of focus within the project: banking technology, automated telephone services and access to health care information via technology. Participants were asked to share their perspectives, experiences, adaptive strategies and expectations surrounding everyday technologies. At the outset of each session, participants were guaranteed confidentiality and were asked to sign consent forms. A pre-discussion questionnaire and an evaluation form were also filled out by participants, in addition to a post-discussion questionnaire which was sent out one month after the focus group and returned in a stamped self-addressed envelope.

The focus group participants expressed an appreciation for the opportunity to discuss how everyday technology was affecting their lives. Many noted the focus group discussion was useful to them and hearing that others also had concerns made them feel less alone. We believe the focus group format was a productive and reflective venue for sharing views and concerns and possibly fostering change. Many participants acknowledged a higher comfort level with everyday technologies after participating in the focus group. For a complete discussion of the qualitative analysis of the focus groups, as well as the quantitative findings, including frequencies of reoccurring themes, see Section 3 of this report.

### **2.2.2 Key Informant Telephone Interviews**

Besides focus groups, Component A included key informant interviews with older adults and industry representatives. (See Appendix 4 for the interview guide used with older adults and Appendix 5 for the survey guide used for key informants from industry.) In all we conducted 30 telephone interviews with older adults and 30 interviews/surveys with key industry informants.

For the older adults, we drew on the rich discussions that took place in the focus groups to shape our questions. We decided to construct a flexible ‘guided conversation’ rather than a set list of specifically ordered questions. This would allow interviewees to speak freely in their own terms about their concerns. At the end of the interview, we completed a ‘face sheet’ capturing the demographics

of the interviewee and after the interview noted emotional tone, particular difficulties and our own feelings.

Because we had a list of issues we wanted to address in the interview, we found this format allowed the participants to voice their central concerns and then, with some probing, the other areas. While conducting these interviews, we were able to target themes and ideas which had emerged during the focus groups as well as gather individual accounts of experiences with everyday technology. Again, we found that what we learned during these in-depth interviews with older adults was useful in developing the survey format to be used with key industry informants.

We conducted the key informant industry surveys once the older adult interviews were completed. This allowed us to address specific concerns expressed by older adults in the focus groups or interviews when we spoke with the key informants. For example, we were able to ask particular organizations or companies about services that we knew were problematic for some older adults. Although we had some common questions for the industry informants, we customized our survey questions according to the industry contacted.

Our informants ranged from government agencies, private companies and banks and included senior management as well as front line workers. All informants seemed genuinely interested in our project and many requested ongoing contact for the duration of the project, as well as a copy of the final report and other project products.

### ***2.3 Component D: Town Hall Meetings***

The purpose of the Town Halls was to bring together older adults and industry to work towards collaborative strategies and partnerships. The Town Halls presented the opportunity to provide an effective forum for the sharing of perspectives and expectations surrounding technology, as well as the opportunity for meaningful connections between older adults and industry. In addition, the Town Halls provided an important customer relations opportunity for industry.

As Component D of the project, the Town Halls were informed and shaped by the information gathered in the activities of the previously completed components

(focus groups, in-depth interviews with older adults and industry key informants, ad-hoc surveys and questionnaires). Analysis from these sources informed the format, focus and content of the Town Halls. The Town Halls provided an excellent opportunity to follow up on themes or issues which were previously identified. They also added to the foundation for the development of educational modules targeted to both older adults and industry.

As a partner in the *Everyday Technology and Older Adults: Friends or Foes?* project, the Federal Superannuates National Association (FSNA) agreed to host and organize Town Hall meetings in each province across Canada. FSNA's agreement to host the Town Halls was invaluable to the Town Hall organization and success as the FSNA had the ability to draw upon on a very wide network of contacts and their own regional directors. In turn, NSCA project staff offered logistical and coordination support. Project staff also completed all analysis of the Town Hall findings and reports.

#### *Town Hall Preparation:*

While the Town Halls were not slated to begin until Fall 2000, project staff began preparation for the upcoming Town Halls a full year ahead of time. The first step was for the project staff to establish that both FSNA and NSCA shared the same expectations and perceptions of the Town Hall meetings. Project staff were very impressed with FSNA's eagerness and interest in getting started on the planning early and their desire to provide well-organized Town Halls.

As a result of these discussions, project staff prepared a short pamphlet for all provincial representatives of FSNA to be involved in the Town Halls. The introductory pamphlet contained a section entitled "Some questions you may have about the Town Halls..." which outlined 13 questions and their answers covering issues from the purpose of the Town Halls, to refreshments, to the type of facility best suited to hold the Town Hall. Also included was a tentative timeline for the completion of Component D and a list of materials organizers would receive the following Spring for their Town Hall planning.

In Spring 2000, a detailed and comprehensive **Town Hall Moderator's Manual** was completed and distributed to FSNA provincial organizers (See Appendix 6). Presented in a binder format, the manual included a summary of the project to date, a general description of the Town Halls, three pages of logistical details for holding the Town Halls, an optional opening statement and an organizational checklist for the Town Hall moderator, as well as guidelines for the Town Hall reporter (note-taker). The binder also included appendices containing all the forms the organizers would need, such as audience comment sheets, expense forms, and project information leaflets.

The individual contact with the provincial representatives, along with the Moderator's Manual, proved to be invaluable in the successful planning of the Town Halls. It ensured uniformity of Town Hall format and recording of content. It also made the large task much less daunting for the provincial organizers. FSNA representatives found the manual to be very useful.

Over Summer 2000 many FSNA representatives began work on identifying panelists, a "reporter", and the appropriate location within their province for the forum. Project staff offered any assistance possible during this stage. Once the FSNA representative had made these decisions they would contact project staff about publicity and advertising materials for the Town Hall. Project staff designed a poster template to be posted in public areas.

#### *Conducting the Town Hall Meetings:*

Town Hall meetings were tentatively expected to be completed Fall 2000 and the analysis of the results completed that following winter. As expected, the Town Halls did take place early Fall. However, a few were pushed ahead to early winter because of organizational constraints. This situation turned out to be very amenable to the project's "reflection in action" approach. Time between Town Halls allowed project staff to reflect upon the results of each Town Hall and use the insight and information to better inform the next Town Hall whether it be in terms of format or identification of important themes to be followed up on.

In the end, eight Town Halls were completed. We had initially hoped a Town Hall would be held in every province as well as in the Territories. Attempts were made by FSNA in the remaining two provinces and Territories but for differing reasons it was not possible. Town Halls were held Summerside, Prince Edward

Island; Truro, Nova Scotia; St. John's, Newfoundland; Fredericton, New Brunswick; Ottawa, Ontario; Brandon, Manitoba; Watrous, Saskatchewan; and Victoria, British Columbia.

The pilot Town Hall was held in Summerside, PEI. Project staff were able to attend this session as well as Town Halls in New Brunswick and Nova Scotia.

*Description of the Town Halls:*

The Town Halls were held in predominately urban or small town areas but included many participants from outlying and rural areas. The Town Halls were advertised through newsletter notices, mailouts, newspapers, radio or posters. Town Hall venues ranged from legions, to senior centres, to hotel banquet/meeting rooms and were wheelchair accessible.

The length of the Town Halls ranged between 2 to 4 hours. The majority were held during the day, which seniors seem to prefer. The Town Hall usually included a moderator, "reporter", 3 to 8 panel members and the Town Hall participants/audience.

The Town Halls focused on the three main areas of interest to the project; automated banking and telephone services, and access to health information via technology. FSNA put tremendous effort into finding panelists from these industries. The health information technology sector proved to be more challenging in terms of identifying a speaker. However, FSNA organizers were both resourceful and creative in finding ways to bring the access to health information issues to the discussion without the benefit of a panelist.

The seating arrangements for the Town Hall were similar. There was a head table for the panelists and theater style seating for the participants. A few organizers chose to have round table groupings. Audience participation was encouraged from the beginning of the Town Hall; the participation was not only desired but critical to the success. It was explicitly expressed that the purpose of the Town Hall was to provide a forum for meaningful and constructive dialogue that would work towards establishing potential partnerships and uncover useful strategies. Both older adults and industry would have time to share their views, concerns, and ideas. It would not be technology "bashing" or industry "selling". Only in one or two cases did organizers have a problem with a panelist providing

a commercial on their company rather than dealing with the issues. FSNA organizers had prepared their panelists well and put a lot of effort into setting the appropriate tone for the session.

The preferred format for the Town Hall was to allow time for questions after each panelists' presentation, as well as an open discussion period at the end. Introducing a break half-way through the session also seemed to be appreciated. Participants used this opportunity to discuss with others what they had heard and decide which questions they would like to ask when the Town Hall session resumed. It also afforded the chance for participants to approach the panelists personally to discuss their idea or concern. The panelists remarked that the chance to mingle and discuss made the second half of the Town Hall more relaxed and engaging.

*Town Hall Participation:*

Participant turn-out at each session ranged from 17 to 110 people. The average number of Town Hall participants over the eight sessions was 45 people. We are pleased that a total of 358 people attended, not including panelists or organizers.

*Town Hall Reports:*

After the Town Hall, FSNA organizers forwarded all collected comment sheets, the notes taken by the "reporter", and their own reflections on the session. Once this documentation was received by the NSCA project staff, the project coordinator contacted the primary Town Hall organizer for discussion on the Town Hall proceedings and results. This information from these discussions was also added to the Town Hall findings.

A summary was then completed for each of the Town Halls outlining Town Hall logistics and the themes or issues that were significant in a particular session. From these summaries it was possible to draw comparisons between Town Halls and identify common themes or concerns. (See Section 3.3 of this report for a full discussion of the Town Hall findings)

## Section 3: Findings

### 3.1 Findings from Focus Groups

#### 3.1.1 Qualitative Analysis of Focus Groups

The first step in the qualitative analysis of the focus groups was an in-depth reading of all of the session transcripts. The second step entailed going back through the transcripts, making notes and identifying patterns and topics. During this process, we identified over 60 patterns, topics and “pre” themes.

Our approach to the thematic analysis was to identify themes in two ways. We sought those statements that occurred most frequently or were recurrent and also looked for those statements that were personally meaningful or explicitly important to a participant. Thus, themes were identified on both their frequency and intensity. After the identification of the patterns, topics and “pre” themes, we collapsed and sub-grouped them into twelve major themes. The following discussion represents the views and opinions shared with us by the participants about how everyday technology impacts their daily lives.

#### Major Themes and Frequencies:

	<b>Themes</b>	<b>Frequency</b>
1	Mistrust of technology and motives of banks and industry	317
2	Benefits of technology	257
3	Limitations of and barriers to using technology	208
4	Knowledge and perception gap	203
5	Self perception of older adults	191
6	Security and privacy/courtesy issues	191
7	Permeation of telephone technology	135
8	Technology has made life more difficult	102
9	Lack of awareness of means to acquire health information	66
10	Maintaining control, autonomy, resisting automation	60
11	Interest in and empowerment from learning about computers	37
12	Desire for social contact, concern that automation decreases it	23

## ***What We Have Learned From the Focus Groups?***

### *Benefits and Limitations:*

Interestingly, both the **benefits and limitations of everyday technology** were discussed with almost equal frequency by older adults with the benefits being mentioned more often. This, however, does not preclude the significance of the very real problems and concerns voiced by the participants about the impact of everyday technology on their lives. One of the most common limitations or barriers mentioned was the lack of education and support with new technologies. These findings dispel the common myth or stereotype that older adults abhor technology and its advancement. They support instead the view of older adults as willing learners if conditions of support and education exist. Older adults do not take issue with technology in itself but with the ways in which they are required to use the technology. *“I mean, what’s the point of having technology if the technology is not going to be understood and its not going to be helpful for us. I’m not against technology.”*

According to participants, the primary **benefit of technology** is the convenience it provides. Twenty-four hour access to banking machines and telephone banking were viewed as assets even by those who did not use them. For those who did use these technologies, primarily the banking machines and debit cards, they found not having to carry so much cash and having access to funds at any time was an enjoyable benefit. Most older adults, however, noted they did not use the banking machine late at night and carefully picked the area where the banking machine was located. Specific technologies were also named as benefits. Call display phone features, 911 service and cell phones were described as offering important safety and security benefits.

**Limitations to everyday technologies** were added costs, having to remember PIN numbers and codes and the way in which automation of services leads to lack of services specific to individual needs. Many reported frustration when they called automated menus looking for information and found the options given did not correlate to the reason or the specific query that initiated the call. *“I just wanted to get some simple information and we all know what we go through, this press number one and all that and I tried about three times and I finally gave up...all the numbers had nothing to do with the information that I*

wanted. *And just to speak to a person is an accomplishment....*”, “*The questions they [automated menus] ask you are not the questions you want answered.*”

Other limitations associated with technologies are the effects sensory or memory loss have on the ability to use these technologies. Even those who use the technologies on a regular basis recognize that it is not easy nor possible for everyone to use them successfully. “*Technology is good for some people.*” Many participants also felt technology is limited when there is no human backup or support if a problem arises, for example, if they used the ATM after banking hours and the machine did not give back their card.

#### *Attitudes:*

Again and again, older adults voiced the opinion that automated technologies were invented and used to increase profits, not customer service and convenience. **Mistrust of automated technology**, in terms of how well it functions and industry’s intentions surrounding its use, was the most prevalent theme that emerged from the project. Some participants felt increased profits were the result of the replacement of human workers with machines. These participants seemed genuinely concerned about job losses as a result of technology and its impact. As participants stated: “*...you know the banks don’t necessarily change technology to convenience people. It’s to make more profit*”, “*It’s a convenience for corporations and they’re not real...*”, “*... the key to automated banking is the bottom line - money*”, “*Everyday technology, the way I see it, especially concerning banks, is a great effort to put bank tellers out of work.*”

Many participants’ perceptions of banks, private industry and government service departments is that they “just do not care” about individuals and use technology as a screen between themselves and their customers. A feeling of being let down by the industries that they had supported all their lives pervaded many of the comments.

Participants also expressed concern over how everyday technology actually works. Many recounted horror stories of botched transactions, “eaten cards” and endless phone loops. Some participants asked if anyone knew where the envelope actually went after being deposited in the banking machine. Does it just fall on the floor? Obviously, there is a significant need for more education

and explanation surrounding the use of everyday technologies. Logically, mistrust is fueled by the lack of understanding of how technology works.

While there were differing opinions on the benefits of everyday technologies, one aspect that was almost completely agreed upon was the widespread **permeation of telephone technology** into many other areas of everyday technology. Participants stated that the automation of telephone menus and services complicate and confound their search for information. Time and time again the older adults echoed the comment, *“For me the telephone is the worst.”* Accessing health information often requires phoning a number to gain information only to be faced with a barrage of choices. The problems with telephone banking were the ways in which the menus were designed and the automated voice going too quickly through the options. For many who attended the project’s focus groups, new automated telephone technologies were the most problematic. The following are some of the responses to automated telephone technology we heard: *“Frustration”, “Drives you nuts”, “Absolutely frustrating”, “It hasn’t helped me any”, “Horrible”, “Infuriating”, “Have automated technologies made your life easier?”- “No, worse”, “The only frustration I really have is the telephone” and “I find anything to do with a telephone with this new technology. I find it hard [to use]...probably because I have hearing loss....”*

The idea that **technology has not made life easier** also emerged from the analysis. Many older adults admitted that while there are conveniences with the new technology, it has not necessarily made life easier and in some instances has made it more difficult. One participant noted in regards to phoning a business for information and being required to use a menu, *“I truly think it is easier to write a letter.”*

Older adults’ **self-perception** of themselves and other seniors in terms of technologies and their use revealed itself as both a key theme and way to understand many of the issues surrounding the topic. Both positive and negative self-perceptions were evident. Some seniors were confident in their own and other seniors’ abilities to tackle the new technologies as evident in these statements *“...we’re not faced with a global economy but a global world and we have to move with it and it’s the way of the future. We don’t have any...choice in*

*that we have to learn, move on” and “...we can use technology...I mean we are not stupid...although some of it isn't relevant to us at this time...”*

On the other hand, some seniors expressed frustration at other seniors who refuse to attempt to use new technology. *“I don't feel a bit sorry for seniors who complain to me about standing in line at the bank...they can do something about it”* and *“technology is here...we have to learn to live with it...get with the times.”*

Some seniors also expressed negative self-perceptions of themselves and of their ability to learn new things and to use technology. *“I mean we are too old to be learning all this newfangled stuff. It's too much for us.” “It's fine for the younger people, they can grasp things a lot easier than the older people can....”* A number of times older adults described themselves as having different values or conducting their business in ways much different than younger generations. *“We solve problems much differently, I solve problems way differently than my kids. I get annoyed for the way they solve them...because we didn't have all this technology...”*

The idea that older adults “do things differently” came out in many of the comments during the discussions and revealed another theme centered around **courtesy and privacy**. Automated telephone services, including menu trees, call waiting and voice mail were perceived as discourteous and less mannerly towards the receiver. Some older adults felt uncomfortable when asked to leave phone messages on answering machines and saw this as indicative of declining social manners. As a participant stated, *“I don't talk to machines.”* Importantly, older adults point out that technologies such as cell phones and pagers that ensure our reachability at all times, while convenient, also invade our privacy and detract from quality of life.

Another common thread throughout the project was the expressed desire of many participants to **maintain control over their activities** and they saw their **resistance to automation** as crucial to this aim. Many felt this was important in **maintaining autonomy**. Letting machines do things for them was seen as relinquishing control to a certain degree.

### *Barriers and Gaps:*

Many older adults expressed frustration with not understanding the technological terminology and how to use the machines. However, many did voice willingness and desire to learn if educational support and guidance were available. *“The problem is we don’t understand that [technology] and we’re not given enough information to understand it. If we could learn more about it, probably we’d be a lot happier with it.”* Some seniors felt technology had advanced beyond peoples’ understanding and comfort level. They suggested we need to regain control over these technologies. *“So what I am saying is that...our technology is way ahead of where the average person is...this thing just took off like that, straight up and its leaving us way behind.”*

Linked to this **knowledge gap** is a **communication gap** that appears to exist between the older adults who participated in the focus groups and the industries identified in the project. These individuals believed industry was not doing enough to ensure they were comfortable and confident in using the new technologies. As one participant stated, *“...there should be more education done towards banking and whatever. The banks know what they’re doing but the people don’t know what the banks are doing.”* The **knowledge and communication gap** was also evident in the confusion surrounding the distinction between bank cards, debit cards and credit cards. *“Is the debit card the same as the ABM card?”*

Additionally, an **accessibility** gap is widening in society as a whole. Accessibility is directly affected by physical mobility, access to transportation, income and level of education. Many older adults admitted that the costs related to new technologies could be difficult and often beyond their means. Some also said their vision and/or hearing loss complicated or prevented them from easily using banking machines, computers, automated telephone menus.

Older adults repeatedly expressed a **lack of awareness of technologies enabling access to health information**. Some were familiar with the idea of looking for health information on the internet but when asked about their knowledge of telehealth initiatives in their region, most participants were unaware of the existence or use of any such initiatives. Again, this points to a knowledge gap between what older adults perceive and the actual technological reality. In fairness, this gap is partially due to the uneven spread of telehealth availability.

*Communal Concerns (Security, Privacy, Social Contact and Community):*

**Security issues** were a concern when using technologies such as banking machines. Even those older adults who use them on a regular basis and are comfortable doing so, caution against using the machines at night. *“I wouldn’t go in the middle of the night. You don’t know who is around.”* Evident in other comments, however, was the fear that in using technology, one becomes vulnerable to invasions of **privacy** and personal security. *“If they can’t get your PIN number maybe they get you when you come outside...I don’t want to be put in that position if I can avoid it.”* The fear associated with the privacy and security issues plays a role in people’s decisions to conduct their transactions through technological means.

There was also tremendous concern over the **lack of social contact** as a result of technology. Older adults clearly enjoy doing their banking with a teller. While many were using ABMs, telephone and internet banking, they still expressed interest in people having the choice to use a human teller. A few also raised the concern that reliance on technology and having access to services without having to leave our homes would have a negative impact on our health as we may become less physically active.

Consistently, older adults referred to their **concern for rural bank closures and lack of services such as cable and telephone in rural areas**. Over and over again older adults described situations in which members of their community were unable to get to the next town to do their banking or were dependent on others to take them there. They also described situations of risk where older people were keeping money at home because of lack of access to banking services. Many felt the recent spate of home robberies was reflective of this.

Perhaps the most significant underlying theme was the **concern for community and the changes technology would create**. This is a community issue as much as an individual one. When we think of the impact of everyday technology on older adults we tend to think of the impact on those who may have, for example, sensory impairments or difficulty reading, and thus, be more adversely affected by technology. We must also recognize that older adults, as a group, tend to be very concerned with maintaining social interaction and community involvement. We would assert that the majority of older adults are as concerned about how technology will change the everyday lives of their communities as about how it

will change their personal everyday lives, and how they individually conduct their business and interactions. Even those older adults who utilized technology a great deal (and there were many) expressed the concern that technology is changing the social fabric of our lives and relationships.

### **3.1.2 Quantitative Analysis of Focus Group Forms**

As each focus group was organized, we sent out welcome packets which included a 'Pre-Discussion Questionnaire' to the participants. Within a month following the focus group, 'Post-Discussion Questionnaires' were sent out to the participants with a stamped self-addressed envelope. Eighty-eight participants took part in the focus groups which were held throughout Nova Scotia in rural, urban and small town settings. The majority of participants were women.

Aside from basic demographic questions such as age, gender, educational level, income and health status, the Pre-Discussion questionnaires included questions on the participant's comfort level with 'everyday technologies' such as banking machines, debit cards, telephone banking, automated telephone services, voice mail, health information kiosks and phone-in lines. The Post-Discussion questionnaire inquired about changes in comfort level with these technologies as well as changes in actual usage, since attending the focus group. The following is a brief summary of the results of these surveys.

#### *The Pre-Discussion Questionnaire:*

The 70\* participants who responded to the Pre-Discussion questionnaire ranged in age from mid 50s to over 86, with the majority falling between 66 and 75. More females (52) than males attended (18) and most were in good or excellent health. The largest income bracket was \$30,000 or less (75%) with 18% in the \$31,000 - 50,000 range. Although 60% of the respondents were comfortable or very comfortable using banking machines, 29% were very uncomfortable. The remaining 11% had never used a banking machine or didn't respond to this query. These figures dropped slightly when it came to using debit cards and plummeted when it came to using automated telephone answering services. Only 31% felt very comfortable or comfortable with using this technology while 51% felt very uncomfortable. The remaining 18% had not used such technology or had not answered the question. These figures support one of the major themes which emerged in the qualitative analysis of the focus groups.(See Section 3.1)

That is, participants repeatedly expressed frustration with the prevalence of automated telephone answering systems and the permeation of telephone technology into other areas of day to day transactions.

\* Note: Of the 88 participants that took part in the focus groups 70 filled in Pre-Discussion forms giving an 80% response rate.

#### *The Post-Discussion Questionnaire:*

We were pleased at the high rate of return on our Post-Discussion questionnaire as well. Of the 80 that were sent out through the mail to focus group participants who had supplied mailing addresses, 63 participants responded (79% response rate). We were even more pleased to learn that 50% of respondents noted some change in their comfort level with everyday technologies since taking part in the focus group while 27% translated this into changes in actual usage, supplying written reports of attempts to master a new technology. Interestingly, several participants who reported no change in comfort level or usage made the comment that they were already very comfortable with most of the discussed everyday technologies. However, as was evident in the Pre-Discussion questionnaire, banking machines are used significantly more than any other technology discussed. For many older adults, other everyday technologies are not so easily used or taken advantage of.

### ***3.2 Findings from Interviews***

#### **3.2.1 Findings from Interviews with Older Adults**

Thirty older adults were contacted via telephone for an in-depth interview focussing on the impact of everyday technologies on their day to day lives. The interviews ranged in length from twenty minutes to approximately an hour. Of those contacted, seven had an income under \$25,000, sixteen fell in the \$26,000-50,000 range and one had an income between \$51,000 and 75,000. Three individuals stated their income as over \$75,000 and two gave no answer.

During the course of the interviews, we spoke to individuals who had never used a banking machine as well as others who were more advanced in their grasp and use of most technologies and for whom the questions in the guide seemed simplistic. In general, most participants recognized the potential and the

benefits of today's technologies but sometimes struggled to keep pace with the changes and their impact. As with other age groups, older adults vary in comfort levels with technology. Experience and comfort levels are directly linked with previous and current learning opportunities as well as other factors such as income, education and accessibility.

Overall, automated telephone menu systems seemed to cause more problems than other everyday technologies such as voice mail and automated banking. Some participants accepted voice mail but were adamantly opposed to automated menu systems. One man who is adept at using computers and all forms of banking technologies, including internet banking and e-commerce, expressed frustration with the current state of menu design used in these menu systems. He felt that most are poorly designed and create unnecessary complications for users. He made design suggestions such as: clearer menu choices, the streamlining of existing menus, an estimation of waiting time and an option early in the menu list to speak to a 'real' person.

Even though the use of automated telephone services has increased dramatically in the last fifteen years, there seems to be no standard format or set of regulations or guidelines governing the design of such systems. On the other hand, several participants actually felt that some automated telephone menu services systems had actually improved in the last two years.

It was obvious from the interviews that many older adults use strategies such as pressing '0' to get a 'real' person, thus bypassing the rest of the menu. Others admitted they simply hang up as they are unwilling or unable to enter the maze of choices offered. One participant pointed out that a major disadvantage of these menu systems is that she forgets what she is calling about by the time she actually gets a 'real person'.

Commonly expressed during the interviews was the opinion that automated telephone menu systems are impersonal and are set up to optimize the organization's time. Clients' time is seen as somehow more expendable. A suggestion from one participant advocated that the caller be informed of the estimated time when a representative will either come on the line or return their call.

From the interviews, it was clear that automated telephone menu systems are more difficult to use for seniors with vision problems because telephone key pads vary in size. In addition, for some older adults, the speed of speech in the menu can be too fast especially for those with hearing loss. Many older adults noted that it is easy to make a mistake when choosing a menu item. On the other hand, one participant suggested that getting an automated answering system in response to a call was better than hearing a continual busy signal.

More tolerance was expressed towards voice mail although some had negative comments. Some saw it as a tool - people's experience depended on how they used it and whether their messages are addressed promptly. Of course, when one leaves a message on voice mail, one has no control over how quickly a response happens. When a voice mail is left for someone and that person responds several hours or days later, the original caller may have difficulty remembering the details of the original call. This can occur because the original caller is simply engrossed in something else when the call comes through. It is important to note however that this experience is not necessarily limited to older adults. Many younger adults feel the same way.

It was also suggested that the prevalent use of voice mail actually caused delays in getting business done as callers become engaged in a game of telephone tag. On the other hand, if used correctly, voice mail can be a handy convenience. One example mentioned by several participants was the advantage voice mail provides when a phone line is tied up with internet connections. Voice mail will take messages and can even inform callers that the owner is on the internet.

Participants commonly asserted that they were not against technology per se but rather they felt that they just didn't need 'it'. Several participants followed this up with declaring that they would use 'it' if they had to, while another pointed out that many seniors may be missing out on some important services, in addition to other benefits associated with recent technological advances, if they chose not to use modern technological devices and systems.

### **3.2.2 Findings from Interviews with Industry**

The purpose of these telephone interviews was to gain information from various industries and organizations regarding their practices related to older clients. The

survey questions were targeted to a wide range of service providers, including financial service industries, telecommunication companies and government agencies, all of whom are incorporating increasing levels of automated technology in their service delivery. Besides banks and telecommunication companies the surveys included such organizations as the Retail Council of Canada, Canadian Bankers Association, Veteran's Affairs, Canada Customs and Revenue and Access Nova Scotia.

The informants ranged from bank managers, communications managers, teachers, secretaries, receptionists and call centre operators. As a result of such diversity, our survey forms contained questions common to all as well as questions individually tailored to each informant and their particular expertise. This approach makes it impossible to draw any general conclusions about industry's perspective on older adults' use of technology but it does provide insights into a particular industry's or agency's various applications of technology.

It became clear to us by the end of the interviews that there is not a standardized and consistent approach within and across industries to the changing needs of older adults in terms of technology training or equipment. In addition, awareness of older adults as a diverse and growing group of consumers fluctuated across industries with several key informants admitting that they did not know a lot about seniors and their issues.

*Financial Institutions:*

All of the five main banks, including the Credit Union, were called (Royal Bank, Toronto Dominion Bank, Scotiabank, Bank of Montreal, Canadian Imperial Bank of Commerce). In every case we spoke to an area manager or a marketing manager. With the exception of one, each manager did eventually return our call or was available at a prearranged time despite his/her busy schedules. All of the institutions noted that they served older clients and that the proportion of their older clients was close to that within the population at large (around 15%), although in certain geographic areas that figure is higher or lower.

Typically, all institutions provide some form of special service or products directed to older adults, including no-fee or low-fee accounts and sit-down service. Most stated that they did not have a formal policy specifically to deal

with older adults but instead, tried to be aware of their general banking needs. However, as one informant pointed out, each bank branch operates with a certain degree of autonomy in their day to day affairs so there is a certain amount of flexibility within the system.

One branch manager mentioned that they put out a periodic newsletter aimed at older adults. Also, the same bank mentioned that they had recently partnered with the Royal Canadian Mounted Police (RCMP) to sponsor a fraud awareness program for older adults. Another serves coffee and donuts to seniors during the period when government pension cheques are issued and there is a higher number of seniors in the bank. One manager noted that her organization tries to use older staff members (peers) in their dealings with older adults and is willing to send representatives to an older client's home if necessary to assist the client in carrying out her banking transactions.

Although all informants stated that bank personnel would gladly show older adults how to use the automated banking machines, training in this area is usually on the bank's terms and in response to individual requests. Despite these individual initiatives enacted by some of the financial institutions and the positive and upbeat response to our phone interviews, it seemed clear that any and all activities in the form of service to older adults are market-driven and on a per bank basis. Furthermore, training for the trainers is not readily available. One bank had created a training module for personnel which had been used regularly but was no longer being offered.

When asked, all respondents noted existing barriers within their industry and had ideas about improvements that could be made in their service delivery. One manager suspected that short term memory loss and other age related problems have a great impact on older adults' banking practices. He felt such issues are not adequately addressed within a bank's operational planning. Typically, older adults do not draw attention to their own 'inadequacies'. Another informant admitted that automated banking machines may not be useful or accessible to older adults and that perhaps telephone and internet banking might be more convenient and easier for them. However, one manager observed that communication via telephone with the bank or other any other institution seems to be a problem for many older adults.

All banks surveyed do measure customer satisfaction but do not differentiate the responses of different ages of clients, assuming that the general population's age proportions can be extrapolated to the customer satisfaction survey. One informant remarked that if older adults aren't satisfied with bank services, they should and often do complain to the bank. Clearly, financial institutions do not have an accurate sense of the ways older adults feel about how their banking needs are being addressed.

*Automated Telecommunication Services:*

The interviews also targeted service providers in telecommunication fields such as cable and telephone companies. Given the constant technological changes in these areas, as well as the public nature of the services they provide, it was important to connect with these companies.

It is interesting that in both the focus groups and interviews, older adults expressed strong dissatisfaction with 'automated voice response' (AVR) systems and voice mail answering systems which are widely used by these companies. Yet, most industry representatives that were surveyed did not seem to think that these systems presented any major problems for their older clientele.

One cable company representative admitted that although he felt that, in general, older clients were very satisfied with their service, he knew that automated answering "menu systems" and company voice mail were "not popular" with the older callers to his company. He suggested that "people have low expectations of cable companies" and would rather speak to a real person when contacting the company. And, although his company constantly reviewed their phone menu, he felt that their answering system was good but could be better. Planned changes to the menu system include separating commercial calls from residential calls and simplified menu choices.

Overall, he felt that the service his company provided was "well thought out and regulated" for all customers. He contended that 80% of calls are answered within seconds by the answering system. However, he noted that seniors were less likely to take advantage of their discount plan which offers reduced fees to customers who use preauthorized payment options. Many older adults, instead continue to pay their bills at the often inaccessible and inefficient payment

centres rather than paying their bills at newly authorized payment centres, such as drugstores and post offices.

One informant reported that his company has had requests to lower subscription rates for older adults. However, he stated, if this happened, then the general rates would have to be raised for the rest of the population. This informant went on to note that their rate was the second lowest rate in the country and that there is already a low markup on cable rates. Although this company did not single out older adults to measure their satisfaction with company service, the informant thought that their satisfaction level was excellent and that the number of older clients his company served was proportional to the general population.

In speaking to various government agencies, the proportion of older clients ranged from that which occurs in the general population, to one third of their clients and in one case, to a high percentage of clients. Overall, the agencies that were surveyed seemed to have a genuine commitment to serving older clients thoughtfully, efficiently and conscientiously. At least two government departments have initiated an answering system whereby phone calls are answered by a real person and another has a bank of volunteers to help older adults complete tax returns.

### ***3.3 Findings from the Town Halls***

#### **3.3.1 What did industry have to say?**

Many of the industry representatives' comments shared common themes. Despite their required attention to profitable business operations, almost all seemed concerned with older adults thoughts and views. A number of industry representatives stressed that it is difficult to make large changes at the local level and it is often only at the shareholder and executive management level that change can occur. Industry also made the important point that many of the key shareholders in the banks and companies are older adults.

Most industry representatives offered to do what they could locally and promised an open door policy to valid concerns and problems. In one province, a panelist openly conceded that his company could do more for older adults instead of primarily focusing on the 20 to 44 age range. He promised to go back to his

marketing department and raise these issues. He also suggested he would support reinstating the company's involvement in the provision and support of the Community Access Point (CAP) sites in his province so that older adults had greater access to computers and the internet. He concluded that it was good for him to come to the Town Hall and "be reminded of the 98% of customers, not just the 2% we often listen to".

Industry panelists felt technology had made their business and their customer service better. A tremendous benefit was seen in the reduced cost to the consumer due to technology. They did understand concerns with bank closures and service reductions, particularly in rural areas, but commented this trend is inevitable and beyond their control.

Interestingly, many industry representatives shared older adults' frustrations with voice mail and telephone menus. While they noted such systems are necessary to handle large volumes of calls, they admitted they, too, become confused with long menus.

The information and discussion offered at the Town Halls by industry was similar to what we found from our industry key informants in the in-depth telephone interviews. However, we found that in the one to one interviews industry representatives tended to be more open and frank. They appeared to be more cautious about their wording in the public forum as they recognized the Town Hall meeting constituted an important public relations opportunity.

After one Town Hall, project staff had the opportunity to continue the Town Hall discussion with two of the panelists. In this conversation, they were much more candid with us about their thoughts regarding service in rural areas. Both agreed that industry does not necessarily have a responsibility to ensure service to all areas. Instead, they suggested we should look to government subsidies for companies to provide infrastructure and service in communities deemed not "profitable" by industry.

### **3.3.2 What did older adults have to say?**

Consistently, older adults referred to their concern for rural bank closures and lack of services. Older adults described situations of risk where older people

were keeping money at home for lack of access to banking services. Many felt recent home invasions were reflective of this.

There was also tremendous concern over the lack of social contact as a result of technology. As in the focus groups and interviews with older adults, many older adults stated they enjoy doing their banking with a teller. While many were using ABMs, telephone and internet banking, they still insisted people should have a choice. A few also raised the concern that a reliance on technology would have negative impact on our health as we may become less physically active. They pointed to the research which describes higher obesity rates among children as a result of spending more time watching television, playing computer games, and surfing the internet.

Some older adults were concerned about their ability to remember PIN numbers. They also questioned the security of on-line or electronic transactions. Personal safety was also an issue when using ABMs. In addition, small print on drug labels was problematic and described as a barrier to accessing important health information.

Perhaps the most significant underlying theme of the Town Halls was the concern for community and the changes technology would create. It became obvious when reading the notes from the Town Halls, interviews, and the focus groups, that this is a community issue as much as an individual one.

### **3.3.3 Analysis of Town Hall Comment Sheets**

At the end of the Town Hall, participants were asked to complete a comment sheet to determine the relevance and usefulness of the Town Hall to them. They were also asked for any suggestions to improve subsequent Town Halls. Completion of these comment sheets was fairly low. Out of a total of 358 people attending the sessions, only 146 completed evaluation sheets. However, the majority of those who completed comment sheets resoundingly confirmed the Town Hall was both relevant and useful to them.

It was also evident in the comment sheets that it was frustrating and limiting for participants when the panel spent too much time presenting and there was not enough time for discussion. A few participants commented on the tendency to

use terms and abbreviations not common or obvious to others. “Information overload” was also possible after a number of presentations, so handouts and overheads were viewed as useful. Many participants indicated on the comment sheets, as well as verbally, that they would take home the written materials they had received and peruse them in their leisure. The comment sheets also reflected people felt “up-to-date” (a phrase used a number of times).

A number of participants noted on the comment sheets that they hoped there would be more such Town Halls and that they were an enjoyable and effective method for sharing information and large group dialogue. Two participants felt breaking participants down into smaller groups with a facilitator might be more effective and it would involve those who were reluctant to speak in front of the entire group.

The majority of the industry presentations were informative, educational and even enjoyable. Panelists seemed to try to interject personal anecdotes and experiences as a way of relating with their audience. When this was done it was always well-received and very effective.

In addition to voicing concerns, older adults showed interest in learning about technology. The Town Halls again supported our assertions that older adults do not abhor technology but may have issues with the ways in which they are required to use it. As one participant stated on his/her comment form in response to whether or not the session was relevant to them, “*Yes. I am 86 and was wondering how to get started*”.

*3.4 Final Report from the Third Age Centre,  
St. Thomas University, New Brunswick*

*Component B - Accessing Health Information  
Report Prepared By Sheila Laidlaw*

**Third Age Centre Project Staff:**

Local Project Coordinator: Sheila Laidlaw

Project Assistant: Tanya Leslie

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One of the main areas involving everyday technology which was investigated during this project has been that of access to health information. There are a range of situations which put individuals in a position where they have to interface with health information using everyday technology not the least of which is the growing amount of such information which is only accessible by technological means. The fact that seniors form one of the demographic groups most needing up-to-date information on developments and services in the health field makes it vital to gain an understanding of how and where seniors access such information.

Though we realized that computers are not the only tools involved in this process, we felt that the Third Age Centre was an appropriate organization to carry out this component of the project. We have been introducing older adults to the use of computers especially the use of e-mail and the Internet since 1996. We do, therefore, have some awareness of the levels of fear faced by many seniors when they hear the very word “technology” but we have also seen how quickly they grasp an ability to explore the Internet and discover all manner of information related to health and wellness.

The original objectives for Component B of *Everyday Technology and Older Adults: Friends or Foes?* called for the Third Age Centre, in conjunction with the Staff at the Nova Scotia Centre on Aging, to:

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- A) Conduct focus groups with older adults to:
- 1) determine their experience with everyday technology related to accessing
  - 2) understand their fears around the use of technology
- B) Consult with health information providers on these issues.

### **The activities projected to achieve these objectives were to:**

- ▶ Identify participants and organize focus groups with older adults;
- ▶ Develop questions for focus group discussions;
- ▶ Conduct focus groups;
- ▶ Consult with health information providers; and
- ▶ Analyze results and share with project staff at NSCA.

### **The outcomes anticipated were:**

- ▶ An understanding of the experience of older adults as they adjust to the increased self-responsibility for health which assumes an ability to access information;
- ▶ To understand health information providers' perception of older adults' needs;
- ▶ A venue for older adults to share fears which could then be addressed in the educational materials.

Unfortunately, by the time this project was funded and ready to roll an earlier project *Seniors Bridging the Medication Awareness Gap in Atlantic Canada* had just begun its second year which was concentrating on the Provincial level. As the N.B. committee for that project was also using focus groups of seniors and health professionals it did not seem appropriate to launch into another series targetting the same groups of people with topics close enough to cause confusion. A further regional project *Support for Informal Caregivers* was also on-going at the same time involving some of the same people and identifying some of the same issues.

We considered several options and decided to seek opportunities to distribute information about this new project by means of flyers and speakers. Every

opportunity was sought to make verbal presentations to community groups at their regular meetings to alert them to the project, seek their input and their later

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participation in focus groups. As is noted later we also added two on-line explorations of questions similar to these used in focus groups. By this means we were able to canvass two groups of seniors who are relatively computer literate and who added both a national and international flavour to our exploration of everyday technology and older adults.

In all the explorations and discussions involved in carrying out Component B it has been evident that the overall response to this question would bring most seniors down on the side of everyday technology being a friend of those seeking access to relevant and up-to-date health information. Certainly we did meet a few who claim that they will never touch any form of technology - almost as a matter of principle. One wonders how some of them have ever progressed beyond the slate and slate pencil they used when they first went to school so adamant are they against embracing technology! And these are usually intelligent, often highly educated seniors, retired professionals. Fortunately they seem to be a distinct minority.

It should be noted that all everyday technologies do not require direct computer intervention by seniors for them to have an impact on seniors' access to health information. We even heard about the benefits to health and diet of reading some of the books discussed on TV in the Oprah Winfrey show - certainly a friendly use of everyday technology! Some of the other health-related by-products of technology, such as the use of bubble-packs and the provision of computer printouts about prescriptions will be dealt with below from the point of view both of seniors and of pharmacists. It is clear, however, that the main "technology" discussed at all our sessions was the use of computers with a lesser emphasis on telephones.

One task we undertook prior to meeting with seniors to begin exploring their attitudes to the use of technology for accessing health information was to follow-up on one of the questions raised in the initial discussions of this project - the role of New Brunswick's self-service Information Kiosks. When asked about

these kiosks, Third Age Centre members suddenly realized that they hadn't seen any kiosks for some time even though there had been major publicity surrounding their initial introduction in 1996. It turned out that by the time this project began the "Kiosks" had all been removed after a "trial" period of about six months.

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Various staff members in the Service NB Department were interviewed as to what services and information had been available through the kiosks, who had used them and why had they been discontinued? The fact that Service NB was then a division of the Finance Department and listed as "Revenue Offices and Service NB" in government directories and phone books should have given us some clues as to the role of that division.

We were assured that the Kiosks were only a "temporary experiment" and that the main problem contributing to their demise had been the difficulty/impossibility of maintaining an up-to-date database. There were also some problems with trying to maintain reliable computer service to the kiosks. We had some discussions about the lack of effective public relations about the intent, content and locations of the kiosks, and more particularly about the lack of effective instructions on how to use the kiosks. In our discussions, we found that the staff members at Service NB were in full agreement with these concerns. There was good publicity about the fact that kiosks were being developed and tried out. There was, however, never any clear publicity about the range of services and information available. In addition it would have been helpful if the government had produced printed directions to explain the procedures to be followed in using a kiosk to supplement on-line instructions which pose particular problems for older adults. Many neither read nor think as quickly as they once did and find it very confusing to follow print and directional arrows when there seemed to be no consistency about where these were located from screen to screen especially when they were surrounded by moving ads and pictures of tourist attractions. In addition we expressed reservations about the fact that the only kiosks we saw were in gas stations, next to the bank ATM, with no possibility for sitting down as one explored the potential of the kiosk. The screen, though bright and colourful, was also very visible to everyone in the

store so would not have been appropriate for enquiries for which one desired any level of privacy - least of all in a rural or small town setting!

These Kiosks seem like a good idea that was still in a “half-baked” stage when introduced. As most kiosks were located in Irving gas stations they were not readily accessible or visible to any except car drivers. Had they survived longer AND become more useful to the public at large, I believe there would have been

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an effort made to increase and broaden the number of locations and the type of information covered.

I originally asked eight seniors, about use of kiosks but only one had even heard of the kiosks - but not seen one or used one. I then began asking the question of most seniors I met for a while. At least 20 would have been individually asked - many more as part of groups. Though we asked about them at many meetings we have encountered no seniors who successfully used these kiosks during their brief public exposure, and we seem to have been amongst the few who even tried, unsuccessfully, to circumvent line-ups in the Motor Licence Office by using the Kiosk! Anybody who recalled having seen a kiosk responded, as I had myself: “But I don’t recall having seen one recently.” I only had about six people who had actually tried using a kiosk - mostly just for the curiosity of seeing what they could do. Most of us found that the services offered were not what we needed at that time - and usually they involved a mail operation as well as use of the kiosk. For example, when applying for the renewal of a licence of any kind one could not place the order by credit card - but only by mail with a cheque. And the kiosk could not print licences anyway. It could only provide information on where to send the money and how much the fee would be. There was no health information apart from how to obtain a Medicare card. We were repeatedly assured by government employees that the joint Federal/Provincial Kiosks providing information on employment opportunities are heavily and successfully used - but those who use them have both the incentive and the motivation to do so and the material available is of direct relevance to their immediate needs!

Service NB is currently developing a new approach to the provision of information centres which they claim will be readily accessible to the public and will be housed where other government services and information are available. There will be 35 physical locations around the province to which enquirers can go or to which they can direct telephone enquiries, but more importantly a toll free number has already been provided for “ready access to Service NB staff.” Unfortunately all the problems many seniors hate when faced by such automated numbers are inevitably built into this service. The good thing is that the numbers to press for general enquiries or for Medicare information are very clearly announced close to the start of the recorded message! A further development about which Service NB is proudly distributing information is their web site

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which will soon be offering interactive on-line access to their services. The value of these developments for seniors wanting to access health information is likely to be limited by the scope of the information available. It is likely that the only health-related information available will be explanations of the provisions of, and conditions for, membership in the provincial Medicare and Drug Programmes. Even this will, however, be very useful for seniors IF access is easy, comfortable and well explained and if one can be guaranteed a level of privacy in access. These new services will be explored further as they are developed, for a report to later components of this project as it is our understanding that this new configuration of Service NB will clearly be dependent on the use of technology and will have direct potential for seniors wishing to carry out many non-health activities, such as renewing drivers’ licences on-line from the comfort of home.

**A 1) Determining the experience of older adults with everyday technology related to accessing health information**

Methodology - Contacts with seniors

While the process of developing questions and strategies was proceeding, a number of opportunities were taken to conduct 14 information sessions to groups in Fredericton, Harvey, Moncton, Stanton Bridge, PEI and Ottawa and to

distribute literature about the project. (See appendix 1) In this way it was possible to generate some thinking about the use and potential of everyday technology in accessing health information in comfortable, non-threatening situations. These information sessions varied in length and format. In some instances situations occurred when a group of seniors were gathered informally and expressed interest in hearing more about the project and in providing their input to it. In addition, sessions often took the form of meeting with a group gathered for another purpose by seeking a slot on the agenda at a regularly scheduled group meeting. On these occasions older adults were invited to participate in later focus groups or to get in touch with the local coordinator of the project individually.

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Opportunities to distribute literature about the project were also sought and eight opportunities were taken in Fredericton, as listed in Appendix 2, and on these occasions some one-on-one conversations with seniors were also possible.

Though the topic for Component B of the overall project is specifically directed towards exploring seniors' attitudes towards sources of and access to health information, it quickly became clear during these initial contacts that seniors are interested in, and concerned about, many other aspects of everyday technology. Many still want to talk about the multi-faceted nature of everyday technology and about their fears of being "left behind" - which boded well for the Provincial Town Hall sessions on the wider aspects of this topic which occur in another Component of the project.

After a number of information sessions and the distribution of literature about the project to over 2000 people between August and October, 1999, we were ready to begin conducting the focus groups which were planned as the main activity of this component. In some instances, a focus group was held as a direct result of a newspaper advertisement; in others a group was convened following an announcement at one month's meeting of an organized group that the following meeting would take the form of a discussion on this topic. In a few

cases a focus group evolved over lunch - literally a round table discussion - between the morning and afternoon sessions of a workshop on a related topic. In a couple of instances people who had expressed an interest in the topic stayed behind after a session or workshop called for another purpose and participated in an impromptu focus group.

All in all 16 focus groups were held though three others had to be canceled because of snow storms. At all groups the participants were “older adults” - “seasoned citizens” - whose ages ranged from early 50's to early 90's. A few younger health professionals also participated though they were usually the subject of one-on-one interviews. Seniors who took part in focus groups were mostly fairly mobile and active with a whole range of needs for and interest in access to health information. See Appendix 3 for questions used.

Alongside this activity we added another element to our information-gathering by actually making use of the technology to circulate two enquiries on the topic by

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e-mail. Both messages went to an international group of older adults involved with life-long learning activities. Respondents also represented a mix of ages but besides the mobile and active seniors they included several who are housebound to some extent. The first of these on-line queries simply asked about purposes for which they used computer technology - as it was a given fact that all recipients of the message used e-mail to a greater or lesser extent. (See Appendix 4a) The second query consisted of a set of questions specific to the impact of everyday technology on access to, and attitudes towards health information, as listed in Appendix 4b.

#### Comments from and issues raised by seniors

Initial sessions with seniors usually began with general discussions of what people understand by the term “everyday technology” and followed by listings of the uses for which computers are used - without any reference to health issues in the questions. In both cases the responses “cover the waterfront” We had many predictable comments about the problems and benefits seniors face with, and

derive from telephones, VCRs and microwaves. But we also had comments about difficulties with washing machines and dryers (usually from recently widowed men!). But we also heard about voting machines and about the impact of technology on all forms of publishing - especially about the new sloppiness in editing newspapers and other documents by the use of functions such as “Spell Check” without sufficient human backup!

When general discussions, turned to computers, the main non-health use identified by seniors is e-mail - especially to grandchildren and former colleagues. Beyond that, however, the lists of non-health related uses of technology identified by seniors in person and by e-mail are extensive and vary widely. These include checking route maps for annual trips to Florida or Arizona, making hotel or plane reservations, publishing personal biographies and local histories, ordering books (“to save hunting for a parking space”), making personal Christmas cards, genealogy research, transferring family photos on-line to facilitate the creation of individualized books for grandchildren, to create videos or slide shows or to attach to e-mails, etc.

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After the initial general discussions, we asked what sources people use for health information. The first place most people turn to is still the family physician with an increasing dependence on the pharmacist. Several mentioned a health consultant and referred to the Medication Review Clinics conducted in New Brunswick by a Doctor of Pharmacy and presented both face to face and in distance education sessions. This was reported as a very friendly use of available technologies combining as it does visual illustrations, videos and voice segments including the opportunities for interactive questions and discussions. What also became clear in these discussions was the fact that once older adults are able to have access to computer technology at home or in centres such as Community Access Centres they really have begun to treat computers as an “everyday tool to enrich the everyday activities of life.”

When we got into health-related uses of common technologies one of the most frequent issues raised by seniors was the amount of information they had been

able to track down about their own health conditions once they had mastered accessing the Internet. In fact we heard of many examples - and have seen some in our own classes - of seniors who are already signed in to health-related sites on the world wide web within the first hour of an "Introduction to the Internet" Course. These are frequently the first Internet addresses seniors want to explore and many have been able to make productive use of this technology both to find information and also later to contribute by participating in "chat rooms" and other interactive opportunities.

How does this all benefit seniors and contribute to confirming their view of everyday technology as a friend rather than as a foe? Even when the checking has revealed that there are negative implications to a medical situation a frequent answer was likely to be: "At least now I have a better idea of what I am dealing with." But there have been many more positive comments. Time and time again we heard of people who had tracked down new information which they have later taken to their own physician. This often leads to a complete change, or at least a reassessment of current medications. It has also in a number of cases led to physicians being able to make a diagnosis of a situation which has been a puzzle, sometimes for years.

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As noted in the section on comments from health professionals, this can lead to mixed responses from doctors and other health professionals, but on the whole they appreciate any information patients are able to track down for them. Most physicians these days are so busy that they don't have time to pick up on every clue patients offer them and conduct full searches on multiple databases about every patient they see in a busy day. It was often suggested that physicians who are themselves computer literate are more ready to accept and follow up on suggestions from patients who bring questions and ideas derived from their own Internet forays. Physicians who are not computer literate or who are uncertain about the currency of their skills are no different from seniors in similar positions - they have a healthy suspicion of the unknown, especially when it might be seen as threatening their professional abilities.

“Chat rooms,” news-groups and discussion groups and “lists” have all been mentioned as having brought benefits to seniors seeking health information - and in some cases to those who are not actively seeking such information! We heard a number of examples of seniors who had found very helpful information totally by serendipity when looking for something else! One person who had been seeking dietary support for her particular physical needs to combat gluten intolerance, accidentally discovered that several “fast food” restaurant chains such as Wendy’s, use the Internet to list the specific diets for which the various dishes on their menus are appropriate - and inappropriate! In sharing this information with our focus group she heard from another participant about the list of dietary recommendations produced by Swiss Chalet. They both commented on how friendly they felt towards the technologies which allowed them to eat out in restaurants with their friends without having to subject the wait staff to an inquisition about the ingredients in their dishes. They just check the Internet before going out and know that there will not be a few hours of suffering after the meal - a real health benefit!

Many people did draw attention to the great need for careful selectivity before accepting as truth everything found over the Internet - even more care must be used, and checking carried out, than in trying to identify the truth and falsehood, or exaggeration in print material. It was generally agreed that this caveat did not set this form of technology into the “foe” category but it does call for careful assessment of the validity of sources being used. A number of people had

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already found databases such as the Canadian Health Network (CHN) which could be trusted as providing up-to-date and reliable information. At every discussion where this came up some participants left planning to “go straight home and try that out”!

One particular group for whom new technologies are rapidly becoming everyday technologies providing them with opportunities for enhanced quality of life, are seniors with disabilities. In a discussion on this it was enthusiastically agreed that finding ways to improve one’s quality of life was also part of getting improved access to health information. It is thrilling to share in the excitement of those with disabilities when they find and try out the assistive devices that are

now available for persons with hearing, speech or vision loss or loss of hand dexterity to enable them to access on-line sources of information. Phyllis Bentley of the One Voice (seniors') organization described some of these in a recent email:

“A Joist uses the mouth to puff or sip so as to click or drag a mouse across a screen. A software package converts printed messages to a headset worn by a blind person who sits in front of a dark screen, a deaf person converses with a deaf friend courtesy of a “relay” telephone service.”

Many seniors who cannot handle the mechanics of keyboarding - or who never learned to type - are enjoying all the benefits of sending email and searching the Internet by using voice recognition software. As one participant in a focus group asserted: “Nobody needs to learn to type nowadays when the software costs as little as \$150. and it is now very reliable.” A woman in her 70's who has been blind since she was a teenager assured us that the fact that not everyone like her uses computers daily, is more often a question of access and education, uncertainty and fears, than of refusal and denial. There is no question that these seniors have found a true friend in today's technologies.

An example of Canadian Internet activity by, with and for seniors is the one developed in Calgary by Shirley Barwise, a transplanted Maritimer, who is the “proud recipient of the City of Calgary's ‘Awesome Seniors’ Award’.” In Shirley's report “**When I'm 64 - Plugged in Seniors**” which she shared in 1998

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via the on-line seniors' newsletter *The Tale Spinner*, she offers some perceptive comments...

*The printing press and widely available reading material no doubt frightened an overwhelmingly illiterate population. New machinery providing new information is a scary thing if you do not have the skill required to make use of it. The only solution was to learn to read.*

*Here we have arrived at the dawn of a new millennium. Only just over two hundred years since the popularization of the published word, and look where that word has taken us. At this time in our history, a new force is being reckoned with. A new means of sharing and accessing information has emerged that is already reshaping culture. The Internet, the new information super-highway, has forged its way into our midst. We realize now, however, that the fear surrounding literacy two hundred years ago was much greater than the reality, so let us not fear, but take control of this new skill required of us.*

*As it is said, history repeats itself. Just as the printing press instigated a new skill and defined a new culture, so does the Internet. The Internet world offers an international array of similarly vital personalities. It is a place where you explore and enjoy minds, of the older seasoned ones. We are sort of rare old books filled with knowledge and various other stuff, but having gray covers. It may be difficult to get the older non-user to view obtaining or using a computer as one of life's rituals but it is definitely not impossible for seniors or the disabled. The Internet can be a window on the world, without leaving one's living room.*

*Seniors and high technology may seem like a contradiction; on the contrary. Most of us are now free from the hassle of raising children and earning a living. We now have time to broaden our horizons and expand our outlook on the world. We want to remain as active and independent as possible. This is a fact borne out by my research by simply listening to what elders themselves have to say. My question was: Is the Internet for seniors recreational only, or does it contribute to the wellness of seniors, and if so, how?" [and answers included:]*

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*Many seniors have specific health problems. My wife has two relatively rare conditions. For both she very much benefits from having joined mailing lists where people with similar afflictions discuss treatments, offer tips and support. She in turn can give advice to people in similar circumstances. Medical personnel also contribute findings on the latest research in many instances.*

*Even social or recreational natures are therapeutic for someone who is wheelchair bound and has no means of getting out at will. If it stimulates the mind and the mere action of learning how to operate a computer is applied, one cannot help but stimulate the desire to learn more and thereby encourage the desire to get up the next morning to continue with the learning process.*

*The 'Net' is one wonderful tool to use for health and keeping the mind occupied with things of a positive nature. I am forever grateful to it.*

*This type of thing has been used in several nursing homes in the States and it has been proven to awaken people's interest in life, increase their alertness, and give them a better outlook. It all goes under the heading of mental health. In the areas of brain activity it has also been proven to be beneficial. Recreational uses are certainly there. The overall facts are it keeps these people active and interested in living, not sitting around waiting to die.*

*Introducing seniors to the exciting new horizons the Internet offers is indeed one of the pleasures of my daily living. They contribute their wisdom to the world, while building self-confidence and well being, both mentally and emotionally.*

*Freedom is the most important attraction of the Net. Freedom to talk about any subject you want. Discrimination is nonexistent on the net. One can only be judged by words. It's a whole new way of talking things over. It's the gentle art of letter writing, back in a modern form.*

*Like whales, we too can communicate over distances we will never see - SO - LET'S - GET - GOING!*

The organization where Shirley is now Executive Director - Calgary Community Network Association's Seniors' Special Interest Group mounts a number of web

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pages that give a good picture of the nature of the information seniors are seeking and finding when they access the world wide web.

([http://www.calcna.ab.ca/senors/sen\\_index](http://www.calcna.ab.ca/senors/sen_index))

To this report, I also append a list of the questions I sent out to colleagues in the Universities of the Third Age electronic network and to fellow-subscribers to the *Tale Spinner* an electronic newsletter for seniors published in New Westminster, B.C. by Jean Sansum. Some samples of their responses confirm those heard in our local focus groups and other discussions and show that seniors are indeed turning to technology to find their health information.

The questions sent out by e-mail were also used in focus groups and individual interviews. Many seniors commented on how much more confident they feel in asking questions of their physicians and pharmacists, etc. when they have been able to precede the visit with a search “on the Web.” They also report that this experience has enabled them to ask better questions - and more significantly - to better understand the replies they get.

A number of new features and services have been developed in recent years by pharmacists. The concept and production of “bubble packs” and similar packaging by dose and date was made possible by technology. This a great blessing to many seniors enabling, some who might otherwise be forced to enter nursing homes or special care homes to have their medication use monitored, to be able to stay at home because they now have an automatic means of self-monitoring.

The information leaflets that many pharmacists are now distributing with each prescription they dispense have turned out to be a mixed blessing. Most seniors appreciate having a take-home version of what their doctor told them but about which they would no longer be clear when they reach home unless they had that piece of paper.

The negative side? Some seniors refuse to read the list of potential side-effects for fear that they will develop them just from the reading. On the other hand this also means that they will miss knowing that the side-effects which do occur are

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perfectly normal or, what is worse, that they are signs that the medication should be ceased and the physician re-visited.

The recent experiments being conducted by Dr. Tony Glascock are at the stage of seeking a source of funding to create a production model of the gadget they have so far only tested on a trial basis. Their work involves developing a “black box” computer set-up to monitor the regularity with which individuals administer their medication while trying to maintain an independent lifestyle at home and also to track changes in their habits such as eating, sleep, washroom use, etc. This will provide the doctor with a record that can identify potential problems as they are beginning to occur - but can also create an atmosphere of “Big Brother is watching you” which would have to be dealt with before this could become an everyday feature of healthcare.

A more simple use of technology is in a way seeking health information in reverse - or alerting someone else to an emergency. That is the increasingly common use of systems such as “Lifeline” in the home or “MedicAlert” tags that are worn on the person. These have certainly become common and accepted systems used with benefit by many seniors. They were frequently identified in discussions with a great deal of pleasure.

Housebound seniors and their caregivers frequently raised an issue that was also addressed in the *Support for Informal Caregivers* project. A need was identified for individuals and caregivers to have ready access to information about local services and facilities - preferably over the Internet which meant it would be available on demand 24 hours a day to those with computers at home or without charge in the daytime at Computer Access Centres, etc.

## **A 2) Understanding the fears of older adults around the use of technology.**

There is a substantial proportion of the senior population who have not yet been able to make full use of the opportunities others see in computer technology. Many of these people tend to show fear - fear of the unknown - rather than opposition to technology. One often detects an element of envy of those who speak so easily of their use of the Internet and other sources of information.

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From a number of the contacts we have made it is clear that the sooner that affordable and understandable opportunities can be provided for all seniors to access technology, the sooner will the use of technology become a feature of everyday life and a friend to all older adults (except of course the few exceptions described on page 4!). For these opportunities to be truly available to all, however, there are many related issues that have to be addressed, some of which will be touched on in these pages but others - such as the question of transportation - are beyond the scope of this project. One such issue is the development and provision of affordable senior-friendly instruction in the use and potential of computers. Our positive experience in this area is outlined in this section and the latest version of the curriculum we have developed is attached as an addendum to this report.

Our experience at the Third Age Centre in introducing seniors to the use and potential of computers has been very positive. Many seniors are extremely keen to find out how they can make use of computers and once their initial fears are surmounted most make very good students. It is however, very important to tailor the instruction to the needs of seniors. It is also essential to ensure that there is a sufficient number of instructors and mentors available to enable all questions to be answered as soon as possible after they arise. Instructors must also have the patience to repeat the same instructions ad infinitum while also resisting the temptation to demonstrate the next steps rather than standing back and verbally leading the student through the process.

We have found that older adults respond better to instructors who are themselves seniors or at least approaching retirement age! We try always to have a second resource person available if there are more than five in a class or if smaller classes are all total beginners. This support seems to give senior learners an added sense of security and helps begin the process of breaking down their inherent fear of computers.

When the Third Age Centre first began mounting courses on “Introduction to Computers and to Word Processing”, we spread the material in 2 hour sessions over five weeks for a total of 20 contact hours which included exercises and practice time. In consultation with our volunteer instructors, graduates of the courses and other potential students we have regularly reviewed the course

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material and format over the past six years. Now we offer several courses in what we refer to as “affordable bite-sized packages”. Each topic is covered in two two-hour sessions with at least one day in between the sessions. On one of the days between sessions an instructor is available at the Computer Access Centre to facilitate and supervise practice sessions. Currently we are offering “Exploration of Windows” as a very basic introduction to computers and what they can do.

This can be followed by one or more of...

- ▶ Introduction to Word Processing - Word Perfect;
- ▶ Introduction to Word Processing - Word;
- ▶ E-mail and the Internet; and
- ▶ Spreadsheets and we are developing one more on -
- ▶ Scanning and Photoshop - sending your photos by e-mail or putting them in your books.

Every time we publish announcements of upcoming courses “To help break down your fear of computers” the phone rings off the wall and the same thing has happened each time we have had press coverage of events such as the opening of our new Computer Access Centre for seniors.

Many different reasons contribute to the reluctance felt by seniors who are not computer literate to become computer users - not all of which relate to fear of technology. We have found there are those who face technology with a genuine trepidation - they are convinced that one stroke of the key will destroy all their data, cause the computer to self-destruct or - worst of all - shut down the world wide web. They have heard all manner of horror stories but nobody ever mentions the “undo” command in the same breath! That’s one of the first bits of advice we share!

Then there are those who never had occasion to use computers during their working life though all their family members and friends do. Former colleagues keep urging them to take the plunge and buy a computer or accept a “cast off” from someone who is upgrading. Without developing a certain comfort level

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with computers and an awareness of their capabilities why would they make that investment or accept that gift?

Then there's the third category - those seniors who know they will never be able to afford a computer of their own so why should they learn how to use one? After all isn't it like learning to drive? If you don't have the opportunity to practise between classes and after the classes are over, you need to re-learn it all each time you have a chance to use a car or a computer!

For each of these categories of seniors we have found that affordable senior-friendly courses break down fears and open up new horizons. This is especially true when supplemented by computers to which they have supervised access with little or no charge after their courses are completed to work on their own projects or develop new interests.

Bringing seniors together in small groups for these courses also provides them with an opportunity to share their fears with others who have the same qualms about computers. But it has also given them time to share interesting world wide web addresses with one another during their coffee breaks.

A report by David Crary in San Francisco reports on the new lease on life available to nursing home residents when they are offered the opportunity to explore email and the Internet.<sup>1</sup> Besides reading this article, I also attended a session on this same topic from a Canadian perspective at the 1999 Annual Conference of the Canadian Association on Gerontology.<sup>2</sup> Not only did the seniors reported on have improved access to health information but they also enjoy an enhanced level of health and quality of life in general. As Clark noted:

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<sup>1</sup> CRARY, David Nursing home residents finding window to life through e-mail. Internet 1999 Nando Media copyright. <http://www.techserver.com/noframes/story/0,2294>, SAN FRANCISCO/ Nov. 21, 1999. <http://www.nandotimes.com>

<sup>2</sup> CLARK, Fiona and SILVIA M. STRAKA **Internet Access for frail seniors. The connections experience.** Montreal, McGill Centre for Studies in Aging. 2000.

“Providing [frail seniors] with access to computers and the Internet can help them narrow the gap between themselves and society, enhancing their self-esteem and reducing social isolation. In addition a computer program promotes mental health by providing the opportunity to learn new information and skills.”<sup>3</sup>

As David Lansdale, a geriatrics expert from Stanford University in California describes it in a *Daily Gleaner* article (December 4, 1999) about frail seniors in nursing homes:

“People who master the technology gain confidence that spreads into other aspects of their lives, and many take pride in helping teach the skills to their fellow residents.”

**B) Consulting with health professionals on the use of everyday technology to enhance access to health information for seniors**

Methodology - Health Professionals including Government staff members

Several discussions on the impact of technology on their service to seniors were initiated with physicians, pharmacists and nurses including Extra Mural Hospital staff and Discharge Nurses in hospitals in both Fredericton and Moncton. In addition to discussions with staff in Service NB indicated above, we also met with staff of the provincial Department of Health and Community Services - since re-named as the Department of Family and Community Services. These meetings were usually one-on-one and took place in both Fredericton and Moncton, though there was also an interesting round table lunch discussion in Moncton involving current and retired pharmacists and pharmaceutical manufacturers, as well as a nurse and a couple of seniors. It was also possible to include an interview with Dr. Tony Glascock from Philadelphia when he was in Fredericton for meetings of those who had served as Visiting Chairs in Gerontology at St. Thomas University. When he had been in Fredericton

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<sup>3</sup>Clark. p.1.

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previously, Dr. Glascock had often spoken of his analyses of the health needs of older adults and of his own research into creative uses of technology to meet these needs. We explored the current stage of his work towards developing friendly uses of technology to help seniors and their physicians monitor the regularity of administration of medications and the signs of potential changes in medical conditions.

### Comments from and issues raised by health professionals

Many of these have already been identified above. There are, however, several further comments that are valid for inclusion here. It should be noted that all the health professionals to whom we spoke see enormous benefits to them and to their clients by the increasing use of a variety of forms of technology. This is confirmed by Professor Alejandro Jadad, chief of McMaster University's health information research unit in an editorial in the *British Medical Journal* quoted in the *Daily Gleaner* of October 1, 1999 where he claims that:

“Internet presents an opportunity to strengthen the relationship between patients and doctors but not before both change somewhat.

“At some point, patients may have to learn more about their own conditions than their clinicians,” Jadad says. “That’s because, for them their case is their only case. For the clinician, their patient’s case is just one of many... The ideal would be for the health provider to look at the well-informed patient as an ally, not a threat.”

“Jadad believes the future doctor-patient relationship will be a hybrid of virtual knowledge and face-to-face contact.

“He is developing a tool to achieve that happy balance: a Web-based coaching system that patients can use to find out everything they want about their conditions before they see their doctors.”

Similarly in relation to using technology to provide health information to seniors, one pharmacist claims that there has been a total reversal in the training for and practice of his profession since he first began to practise. When he was trained the pharmacist was forbidden to give any information to the customer - “we

dispensed and distributed - period!" Now "we have up-to-date reference books, web sites and handouts and are expected to be able to explain all aspects of each

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prescription to the inquiring client." He also described how the databases that pharmacies are now able to maintain on the clients they serve, will automatically flag prescriptions that are "contra-indicated" in conjunction with other medications the customer is using - whether or not the prescribing doctor knew that the patient was using the other medication.

Pharmacists getting this kind of message on their system will phone a prescribing physician before filling a prescription. There may be another medication which would achieve the same purpose without causing the potential conflict. In this way, between them physicians and pharmacists frequently change the medication being supplied by use of database and telephone. The databases are kept up-to-date right to the minute with the latest alerts issued by Medical Associations and other experts so that potential problems can be averted - probably long before either of the professionals concerned will have received the print version of the notice, far less had time to read it.

The NB Health system is also programmed to enable consultants in the Department of Health and Community Services to alert physicians and pharmacists when they suspect clients have been "shopping-around" to obtain multiple prescriptions. The basis for these recommendations is the record of prescriptions for which the province is responsible for payment under the various drug programmes that they administer. I understand this only happens occasionally - but it is certainly a potential use of technology that will generate very different reactions from the various players involved! It is also thought to be more often implemented for younger people rather than seniors. The Province has been exploring a whole range of projects with a view to "streamlining" the system and "preventing abuse." One experiment which had the potential of including coded information on Medicare cards virtually identifying one's whole medical history has just been cancelled because of concerns about privacy. We will have to wait to see what further uses of technology get developed there and can only hope that the needs and interests of the individual - seniors and others - are the top priority.

None of the individuals with whom I spoke had direct experience with telephone information “after-hours” services staffed by nurse practitioners and /or doctors though many felt that these services will have a great role to play in the provision

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of health information if the number of doctors continues to shrink and if hospital emergency services continue to reduce their hours of service. The potential uses of “nurse practitioners” are currently being studied by the Province of N.B. The success of this type of telephone health-information service in other provinces, in the UK and the US, some serving the general population and others specifically geared towards seniors has been documented in a recent article in *The Canadian Nurse*.<sup>4</sup>

Another use of technology which has begun to be used with a great deal of success, particularly in rural areas and small towns, is the electronic transfer of a patient’s vital signs to a larger centre where a specialist can review them and advise the local physician. Again this is not an example of a senior using technology to access health information directly, nor can one yet describe such systems as everyday technology. But they certainly provide an opportunity for the patient to receive the benefit of health information at a distance by the use of techniques which in themselves are fairly common but which are being combined to provide sophisticated information transfer and analyses. The individual benefits by not having to travel long distances and possibly wait for many months for a consultation with a specialist. There is, however, also a downside to this in that rural communities fear that availability and use of this technology will lead to more closures of small local hospitals or at least to reduced hours of service there.

### Summary

As noted in several places, the majority of seniors who have had the opportunity to use technologies to seek and use health information are most enthusiastic

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<sup>4</sup>MacMaster, Elsie et al “Health Information Telephone Service for Seniors” in *The*

*Canadian Nurse*. March 1999, pp. 38 - 41.

about the experience. All who mentioned universally available services such as television applauded a whole range of programmes - documentaries rather than soap operas being preferred - for their information potential! Several people commented favourably on the programmes which explain the body's functioning or which show actual operations. Though one person who watched a hip

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replacement on the screen commented that she was glad she saw it "after rather than before"!

Health professionals in all fields are also pleased with the improved and often innovative services they are now able to provide with the support of various technologies. All in all the impact of technology as a means of procuring and providing health information is viewed very favourably by most seniors especially as it reaches the stage of being everyday and almost commonplace in its availability. Almost universally we found the answer to the initial question to be "friend not foe" when the task in hand for seniors was accessing or providing health information.

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**Appendices for Third Age Report**

Appendix 1 - Information Sessions:

W = women, M = male

i) Fredericton:

September 3, 1999 Informal dinner gathering - adult educators and mature students (M.Ed)	8W
September 7, 1999 Municipal Seniors' Advisory Committee	7W 3M
September 15, 1999 Trefoil Guild (Retired Guide leaders)	15W
September 16, 1999 Third Age Centre Board	10W 5M
October 1, 1999 Support for Informal Caregivers group	5W 2M
October 6, 1999 Pine Grove Nursing Home Volunteers	35W 15M
February 9, 2000 NB Convergence on Community Capacity Building post conference round table	12W 6M
February 14, 2000 Crime Prevention discussion group	6W
February 16, 2000 Policy Forum MCEWH (post conference)	10W
February 27, 2000 Forum discussion Group	9W 7M

ii) Harvey: September 8 Medication Awareness Committee 5W

iii) Moncton: Med. Awareness Workshop (French) 12W 6M

iv) PEI - Stanton Bridge - October 2 CFUW  
(Canadian Federation of University Atlantic Council Women) 100 W

v) Ottawa: November 4 Canadian Network for the Prevention of  
Elder Abuse 5W 5M

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Appendix 2 - Literature Distribution:

Date	Event	Location	*Approx. Numbers
1999 -Sept. 1	TAC Newsletter mailed to approx.		1200 addresses
Sept. 17	TAC Barbeque	Southside Superstore	c250 (400)
Sept. 24	TAC BBQ	Northside Superstore	c150 (300)
Sept. 30	10 <sup>th</sup> Anniversary	TAC Holy Cross STU	50
Oct. 2/3	CFUW		100+
Oct. 7	Seniors Appreciation Day	Regent Mall	50+
2000 -Feb. 1	TAC Newsletter mailed to approx.		1200 addresses

\* Where 2 numbers are quoted the first is the approximate number who took literature - the second figure is total attendance some of whom read but did not take material.

Newsletters from the Third Age Centre go to both individual seniors and to seniors' organizations, and both of these issues contain announcements and reports of the project.

Appendix 3 - Focus Group Questions:

What do you think of when you hear the word "Technology"?  
What kinds of "Everyday Technology" have you/do you use?

Turning to health:

Where and how do you get health information? From whom?

Does technology ever play a role in your access to information?

Does technology every affect the type of information you get from others?

Has technology had any other impact on health or health information for older adults? Has this been good or bad?

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Appendix 4a - Initial E-mail Questions:

To seniors on University of the Third Age discussion group (U3A)

- 1) What is your main reason for using a computer?
- 2) For what other purposes do you use it?

Appendix 4b - Also addressed to U3A subscribers (two months later) and to subscribers to the *Tale Spinner* electronic newsletter:

- 1) What sources do you use for health information?
- 2) Has the advent of technology helped/hindered/broadened your access to health and dietary information?
- 3) Has technology improved the levels and types of information you receive from others - e.g. professionals such as physicians, pharmacists, etc?
- 4) Has technology raised/changed the level or nature of questions you are able to ask health professionals?

*3.5 Final Report from Senior's Education Centre,  
University of Regina, Saskatchewan*

*Component C: Older Rural Adults  
Report Prepared by Kerrie Strathy and Lisa Sisson*

**Project Team:**

Don King, Ruth Blaser, Laura Burkhart, Kerrie Strathy and Lisa Sisson

**Background**

The University of Regina's Seniors' Education Centre worked with the Nova Scotia Centre on Aging, Mount Saint Vincent University to implement the Population Health Fund, Health Canada funded project "Everyday Technology: Friends or Foes?". The goal of the project was to "broaden our knowledge base about the experience and impact of technology in the day to day lives of older adults and to develop collaborative strategies, in partnership with industry, that maximize the benefits of technology while respecting human needs".

**The Seniors' Education Centre had primary responsibility in two lead areas:**

1. To research and document the learning needs of older rural adults, including First Nation and Metis persons, related to technology.
2. Design, deliver, document and evaluate learning opportunities based on the identified learning needs of older rural adults.

The desired outcome was "... the empowerment of older adults to use technology to their advantage, thus improving their health and well being."

**Activities Carried Out:**

In order to achieve these goals the Seniors' Education Centre:

- Held focus groups in 4 communities – Fort Qu’Appelle, Moose Jaw, Star Blanket First Nation and Assiniboia in early 1999 (There were a total of 41

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people, including 18 First Nation and Metis people participating in these sessions).

- Held focus group sessions that examined past experience with technology and identified new technologies that participants wanted to learn more about.
- Learning needs from these focus group discussions were documented through report prepared June 1999.

*The focus group process included:*

- Talking about everyday technologies such as ABM’s, touch tone phones, automated phone services, and access to health care information
- Viewing the video, “Pushing all the Right Buttons: Seniors and Technology”
- Reviewing the language and concepts of computer technology, including e-mail
- Looking at some Internet sites
- Considering what everyday technologies participants wanted to be more comfortable with and the problems they faced using technology

*Recommendations arising from the focus groups:*

- Design, deliver and implement training workshops [3-4 hours] to be held in each of the focus group communities focusing on skill development related to ABM’s, touch tone phones and VCR’s.
- Computer and e-mail skill development – determine resources in place with regard to computer and e-mail training in each community; with community partners/hosts determine next steps for computer and e-mail training.

- Document the process
- Evaluate the process

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According to the focus groups, the priority areas of interests were: ABM's, touch tone phones, and VCR's. Some participants also indicated interest in computers and e-mail.

Following the determination of learning needs SEC planned, implemented and evaluated a series of six workshops to bring together seniors in selected communities to learn more about new technologies. The SEC Project Coordinator worked with SaskTel [the provincial telephone service provider] and Credit Union Central [the coordinating body for all Credit Unions in Saskatchewan] to plan and deliver these workshops. She also worked with local community hosts to organize the logistics for the workshops.

*The Everyday Technologies addressed in these workshops were as follows:*

- Automated Banking Machines
- Telephones
- Access to health information services via technology

*Workshops were held in:*

Assiniboia	January 18, 2000	(15 participants)
Moose Jaw	January 20, 2000	(34 participants)
Fort Qu'Appelle	January 24, 2000	(0 participants)
Gordon First Nation	September 12, 2000	(8 participants)
Lemberg	September 25, 2000	(11 participants)
Raymore	September 26, 2000	(7 participants)

The project coordinator recruited the community hosts. Their duties were to assist with the logistics of the workshops and to promote the workshops within their communities and surrounding areas.

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In each workshop the everyday technologies of ABM's and touch-tone phone services were demonstrated. Internet and e-mail were briefly discussed. All workshop participants viewed the video, "Pushing all the Right Buttons: Seniors and Technology". Presenters included staff from local Credit Unions who used "hands-on" demonstrations wherever possible in the workshops. All workshops were evaluated positively. Older adults participating in the workshops indicated they would appreciate a simple "hands on" introduction to e-mail and the Internet.

*Recommendations arising from the workshops were as follows:*

- To deliver these workshops in other rural communities
- That future workshops use the "community host" model since this will help give the workshop credibility within the rural community
- Workshops start later in the afternoon to accommodate schedules of rural seniors.

### **Material Production**

As follow-up to the workshops, the Seniors' Education Centre developed a "Facilitator's Workshop Guide". Its purpose is to assist future workshop facilitators to present information about everyday technologies such as ABMs and touch-tone phone services in a manner that is engaging, participatory and encouraging. The guide was developed based on the outcomes of the rural workshops. Sections of the guide include: Introduction, Organizing a Workshop, Facilitating a Workshop, and Evaluation. (See Appendix 10 for a copy of the guide)

Based on input from the workshops participants, the Seniors' Education Centre produced 1000 copies each of 3 leaflets:

- Using Automated Banking Machines, A Guide for Older Adults
- Making the Telephone Work for You, A Guide for Older Adult

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- Using Computers for E-mail and the Internet, A Guide for Older Adults

Leaflets were distributed to workshops participants, seniors organizations, community centres, credit unions, banks, etc.

### **Follow-up Survey of Workshop Participants**

The Seniors' Education Centre conducted a post-workshop evaluation a year after the workshops were held to determine the extent to which participants were using the new technologies compared to their use in advance of the workshop.

Questionnaires were sent out to all workshop participants, and results of the questionnaires indicated that:

- Many of the workshop participants had never used ABMs before. After the workshop they indicated they used ABMs "sometimes" or "often". Two respondents indicated they still have not used an ABM. Another respondent indicated that her community does not have an ABM; therefore, she can only use the ABM when she is in the city.
- Most workshop participants indicated that they had never paid bills over the phone. Two respondents indicated that they paid their bills over the phone "sometimes" as a result of the workshop. Others indicated that they still are uncomfortable with paying their bills over the phone. One person said, "If we all pay our bills over the phone, jobs at the banks will be lost."
- Workshop participants indicated that they had used automated phone services (bus schedules, high way conditions, etc.) "never" or "sometimes"

prior to the workshop. After the workshop they indicated that they are using these services “sometimes” or “often”.

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#### **Conclusions**

Activities carried out through the Seniors’ Education Centre met the goals of the project. Through focus group discussions SEC documented the learning needs of seniors with regard to new technologies. This information was used to develop and deliver a series of workshops to address these learning needs in five rural communities in Saskatchewan. A Facilitator’s Workshop Guide was also developed to assist others to conduct similar workshops in future.

SEC established partnerships with SaskTel, Credit Union Central and local Credit Unions to develop and deliver the series of workshops on new technologies. Participants rated the workshops highly because they covered areas of interest and because of the opportunity they provided for hands-on application of new technologies, like ABMs. SaskTel and Credit Union staff also provided assistance with the written leaflets that were prepared to enable even more seniors to learn how to use these new technologies.

The post-workshop survey indicated that some participants increased their use of ABMs following the workshop. Some participants also started making payments over the telephone and increased their use of automated telephone services. A few workshop participants indicated that they are still reluctant to use new technologies for a number of interesting reasons including the fear that use of banking machines will lead to the loss of jobs at banks.

The three leaflets developed as part of this project have been well received by the seniors we have distributed them to. Leaflets were also distributed to a number of people who work with seniors at meetings attended by SEC staff and volunteers in the last two months. As a result of distributing samples of the

leaflets we have several requests for additional leaflets that are being distributed through community centers, health facilities and other places seniors go.

### ***3.6 Strategies and Tips for Coping with Everyday Technologies***

The following is a listing of the tips and strategies which emerged from the comments shared with the NSCA project staff throughout the project.

#### **3.6.1 Automated Banking Machines (ABMs)**

- Your bank card is the key to your accounts. Keep it in a safe place and never let anyone use it.
- Notify your financial institution or credit card centre as soon as possible if your bank card or credit card is lost or stolen. Most institutions have 1-800 telephone numbers and/or 24hr service for lost or stolen cards.
- Change all of your passwords immediately if you think someone else knows them.
- Never disclose your PIN to anyone. No one from a financial institution, the police or a merchant should ever ask for your PIN.
- Use your hand and body to shield others from seeing you enter your PIN number at the banking machine.
- Remember: Take your time when making automated bank transactions as you may be responsible if you make an entry error at an ABM or retail debit terminal.
- If you have any questions about using the ABM or are unsure of how to use it, ask for help at the reception or customer information desk of your bank. Banks have indicated that they are happy to assist you or provide you with a demonstration.
- Your bank may have a wallet-sized reference card for using the bank machine. This will guide you step by step through the process.
- Each bank has different rules about how much money you can take out at one time or when deposits will be credited.
- Always check your transaction receipt or record right away to be sure it is correct. Remember to always keep it for verification with your bank statement or passbook update. Report any errors immediately.
- If depositing cash to the machine, ensure that your deposit envelope is no more than 1/2" thick, otherwise it may jam the machine.
- Remember, if you make a mistake while keying in your transaction you can press ‘Cancel’ or ‘Correct’ to start over or change a command.
- Do not deposit coins.

- Always conduct your ABM transactions when and where you feel most secure. If you are uncomfortable about using the machine for any reason, do it later or go to another location.
- After finishing an ABM transaction, remember to take your card, cash and transaction record. Do not move away from the machine until you have put them safely away in a pocket or purse.
- Be aware of “white label” ABMs sometimes set up in stores or restaurants. They usually only provide cash withdrawal at a higher service fee than bank associated ABMs.
- If you have any problems while using the ABM, get help as soon as possible so that the bank can solve them for you.
- If there is a problem receiving money from the machine, check your receipt and then contact the branch or bank. There may also be a written message on the screen advising you of the action to take.
- ABM robberies are not common, but if it should happen, remember that your safety comes first. Report the incident to the police and to your bank.

### **3.6.2 Telephone Banking**

- When accessing telephone banking, remember to have your bank card handy. You will need to key in the number in order to use telephone banking.
- Have a piece of paper and pen handy to note down any information that you are looking for and to record the transaction or reference number of the banking transaction you are performing by telephone banking.
- If you have any questions or require assistance you have the option to speak to a customer service representative.
- Each of the banks offers the option of having a customer service representative guide you through your telephone banking transaction. This will help you to become familiar with using the technology.
- At any time you may hang up or press a number for immediate assistance. The machine does not care how many times you call to hear the menu or hang up because you become confused at the number of choices.

### **3.6.3 Internet Banking**

- In order to use Internet banking for the first time you will need to register. Follow the instructions on the screen.

- Have your bank card in front of you in order to sign on to internet banking.
- Enlarge your computer screen for easier viewing by clicking the middle button on the upper right hand corner of your Internet browser.
- Be sure to record the reference or confirmation number. It is the record of your transaction and provides verification should any problems arise. You may also have the option to print a summary of your transaction/s.
- Keep your account information and password a secret and do not use passwords that incorporate your name, telephone number, address or birthdate or those of any close friend or relative.
- Once you are logged in, you should see a small “locked” padlock on the bottom left or right corner of your screen. If the padlock appears to be unlocked, this indicates an insecure site and you probably will not be able to proceed. Call your bank representative for help with upgrading your browser’s security.
- Upgrade your browser as required to keep up with browser encryption technology.
- Never leave your computer screen unattended while working with internet banking. Close the program completely if you are stepping away from your computer.
- Don’t send any of your account information through e-mail.
- Check the security information section of your financial institution’s web site regularly for updated security information. Every bank web site contains this information.
- Find out how to clear your browser’s cache after a banking session. Check the help option on your computer to find out how to do this for your specific browser. Or ask at your bank for their tips on internet security.

#### **3.6.4 Automated Telephone Menus and Services**

- Have a pencil and paper handy when you make a call that you know will be answered by a menu (a list of choices offered by an automated message system). Beforehand, write down your main points so that if you have to wait until your call can be answered, you won’t forget them. Have account numbers and/or identification numbers handy.
- Make your call when you have a block of time and will not be interrupted.
- Listen to all of the choices first, noting any that seem to fit your inquiry.

- Even if '0' is not offered as an option to speak to a representative, try pressing it anyway.
- If the menu choices seem unnecessarily complicated or too long, let the company know. Menus are sometimes poorly designed and the choices not clearly explained. Be patient with yourself and just hang up if you become confused. The machine does not care how many times you hang up or call back!
- Remember: When you are calling a government agency, utility, oil or telephone company it is important to be organized ahead of time. You may require certain information such as: account numbers, identification numbers, and your social insurance number.
- The type of information you require will depend on the type of call you are making. If it is a company or utility and you are requiring information concerning your bill, have the statement in question with you. It may also be a good idea to keep your wallet handy in case additional information is required.

### **3.6.5 Voice Mail**

- When setting up your own home voice mail and recording your answering message, don't tell callers you are not home, or let them know that you live alone.
- When leaving a message on someone else's voice mail system, mention the time and date of your call.
- Sometimes jotting down the important points of your call can simplify the task of leaving a message when you know your call will be answered by voice mail.
- When reviewing or replaying your messages, have a pen and paper handy to jot down any important information.
- If you miss an option, often there is an option to repeat all of the menu options at the end of the list.

### **3.6.6 Computers**

- Check out your local branch of Telephone Pioneers. They are usually listed in the phone book. This is a group of retired telephone employees that sometimes conduct computer training sessions or sell low priced reconditioned computers.

- Go to your local public library for lists of organizations and possible computer training sessions, as well as free internet access.
- Some universities are associated with Third Age Learning centres and may offer courses specifically designed for older adults.
- Locate a Community Access Point (CAP) site near you and drop in to see what's happening. There may be a nearby senior centre hosting a site where volunteers help seniors get connected.
- Don't feel that you have to rush out and buy an expensive machine right away.
- Call your provincial or territorial seniors government organization or secretariat to obtain information on what is available in your area.
- Check within your circle of family and friends. Chances are a grandchild or friend may be able to give you a few lessons.
- Visual and audio enhanced programs, ergonomic hardware and speech recognition software that can convert speech to text are becoming more widely available.
- If you have decreased vision, hearing or mobility there may be a device that can facilitate computer use for you.

### **3.6.7 Searching for Reliable Health Info Online**

- What the internet can provide you with is information that will prepare you for your visit to the doctor. Your doctor may also be able to direct you to specific internet sites to provide you with more in-depth information on health concerns.
- On any web site, the information should be current, with the last update of the web site noted.
- There should be clearly stated cautions on the site that the information is not a substitute for visiting a physician.
- Any commercial sponsorship or fees should be clearly stated.
- Check with your physician, local seniors organization or provincial/territorial department of health for listings of reliable web sites.
- Look for the author's name, professional standing and contact information.
- Any information should be current, relevant to you and reflect a broad view health.

## Section 4: Recommendations for Industry

### Attitudes

1. Myths abound that older adults abhor technology. The truth is older adults do not have a problem with technology per se but rather with the ways in which they are required to use it, particularly if it is difficult to use or it does not meet their needs. When a problem is reported with a technology we tend to assume the problem is with the user and it becomes a challenge to resist the temptation of this assumption.

**We Recommend: Industry examine attitudes towards older adults and their use of technology.**

2. Many misconceptions also surround the reliability of technology. Over and over, we hear of botched transactions and computer errors. While these errors do occur, they are usually the exception to the rule. However, negative accounts of problems with a technology can become exaggerated as they are repeated. Linked to the development of negative stereotypes of technology is the lack of information and education available on how particular technologies work. Lack of understanding of the technology and its functions can lead to both confusion and misconceptions.

**We Recommend: Industry develop strategies to dispel myths and negative stereotypes of technology.**

3. International and national principles exist for ensuring that older adults' needs and priorities are addressed. These sets of principles act as a conceptual guide and help to frame an informed and respectful guiding philosophy towards older adults.

**We Recommend: Industry incorporate the core principles for promoting the overall health and well-being of seniors put forth by the National Framework on Aging and the United Nations Principles for**

## **Older Persons in the development of their guiding philosophy and approach to older clientele.**

### **Design & Collaboration**

4. Any technology, whether it be a computer mouse or an ABM, must address and compensate for physical and cognitive changes relevant to aging. Vision, hearing, memory, agility and mobility loss can have a great impact on how we use technology.

There is a fairly substantial body of specific and comprehensive information related to designing and developing technology and services for older adults. The process of evaluating and improving your technology so that it is successfully used by older adults does not mean starting from scratch. The Canadian Standards Association is in the process of completing the document “Design for Aging” which acts as a guide and tool for addressing the needs of seniors when designing and providing products, services and environments that are used by older adults. There are a multitude of excellent resources to guide design and development such as Health Canada’s publication, “Communicating with Seniors: Advice, Techniques and Tips” and the “Senior Friendly” resources and literature. Contacting local community organizations that represent persons with disabilities is another source for information and policies regarding both universal and specific design guidelines.

**We Recommend: Industry utilize existing guidelines that address the design and development of products, services and environments that are used by older adults.**

5. Studies clearly show older adults do not respond to products and services that single them out as having special needs or as being “different” from the rest of the population. The key message is that any improvements to technology for older adults will improve technology for everyone.

**We Recommend: Industry use universal design that is inclusive and better accepted.**

6 & 7. While there are differing levels of design and service, it is important all potential users of a technology be consulted whenever possible. Involving users in needs assessment surveys, focus groups, pilot testing and evaluations of technologies and related services is critical to ensuring successful adoption. Local seniors' organizations can help to identify participants for focus groups and pilot testing.

**We Recommend: Industry make every attempt to involve older adults in the design and development process of a technology or related service beginning with the needs assessment and following through to the evaluation of the technology.**

**We Recommend: Industry establish a relationship with local seniors' organizations.**

8. Older adults are not a homogeneous group. It is important to remember that learning styles and preferences can vary significantly.

**We Recommend: Industry develop and deliver technology training opportunities that are "peer to peer" as well as intergenerational.**

### **Banking**

9. Older adults are more familiar with traditional banking practices as newer technology-driven banking options (ABMs, telephone, internet banking and automatic bill payment) have only become mainstream in the last number of years. Therefore, a concrete business strategy for reaching older clientele would be to demonstrate clearly to older adults what the newer banking options can offer them.

**We Recommend: Industry demonstrate the benefits of a technology to their older clients.**

10 & 11. Although automated banking machines (ABMs) are designed primarily by two companies, IBM and NCR, machines vary considerably from bank to bank. There is also a significant difference between the older and newer versions of ABMs within the same bank. Print size, the color and layout of the screen and the required order of the transaction can be very different. Many older adults describe the encounter with a different bank machine menu and layout as confusing and intimidating. They admit the transaction would be less stressful if they knew what to expect and did not have to worry about making a mistake because they were unfamiliar with the machine. Familiarity often results in trust and comfort.

**We Recommend: Industry standardize automated banking machine menus and layouts.**

**We Recommend: Industry adhere to the CSA standard “Barrier-Free Design for Automated Banking Machines” (B651.1-01) released in 2001, as well as the more general CSA standard CAN/CSA-B651 on Barrier-Free Design. Both documents focus on improving accessibility for seniors and persons with disabilities.**

***ABM menus could be greatly improved with:***

Large, clear type

Non-glare screens

Ensuring the buttons on either side of the screen match up with the choices featured on the screen

Clearly marked card, envelope and transaction slip slots

Increasing the size and darkness of the print on transaction slips

Including an option to allow the user to slow down the process of the transaction or increase time to respond

Fewer options at once

Better feedback on errors and how to correct them

Including a telephone with a direct line to a customer service representative

12. “Training” ABMs are an important educational tool for instructing older adults how to use the ABM. These “training” machines allow older adults to try out and practice transactions without having to worry about making mistakes

with their own accounts. Older adults describe this as much preferable to a brief one-on-one lesson with a customer service representative in the bank machine lobby area. Learning how to use the ABM with a line-up of customers behind you is very distracting and intimidating.

**We Recommend: Industry offer learning opportunities to older adults by taking these “training” ABMs to seniors’ centres and retirement complexes.**

13. Older adults frequently cite concerns for personal safety as a primary reason for not using ABMs or for using them only in the day or when accompanied by someone they trust. Statistics clearly show older adults as a group tend to feel more vulnerable to crime than their younger counterparts. Thus, the issue of personal safety when using an ABM should be further addressed. Having the machine and the entrance to it visible from the street, installing monitored security cameras and placing a security guard in the bank machine area in the later hours of the evening are listed by older adults as critical and reassuring improvements to ABMs.

**We Recommend: Industry improve and increase surveillance and security measures in automated banking machine areas.**

*Many older adults indicate they do prefer to interact with a human teller when doing their banking. This preference cannot be changed with the implementation of one or even an entire set of recommendations. The key may lie instead in emphasizing and ensuring the benefits of banking technology in conjunction with providing clear and comprehensive training.*

### **Telecommunications**

14. Recent proposals to raise billing rates to rural telephone customers are of concern. As it is, rural customers pay the same for telephone service as their urban counterparts, often without the benefit of services like high-speed internet.

Raising the rates would further raise the cost to the Information Highway and access to health information.

**We Recommend: Industry ensure telephone rates do not disadvantage rural customers.**

15. Barriers are sometimes unwittingly set up because of “unfriendly” automated telephone menus or AVRs (automated voice responses). A regular review of your menu is critical to ensure the menu is always easy to understand and use.

**We Recommend: Industry develop and implement quality control strategies for automated telephone menus and build in scheduled review of menus.**

***An effective and user-friendly automated menu would include:***

A feature which informs the caller of the estimated wait time for their call to be answered by a representative

A “Shallow and Deep” menu. Only offer two to three menu choices at a time and then go to the next level of choices rather than offer all choices at once

The option to repeat the menu again especially if there are a number of choices

An “0” operator option (In fact, older adults indicate they actually prefer the “0” option to be announced before other menu choices)

Instructions and menu choices that are spoken clearly and slowly

A system that provides for TTY/TTD users

And instructions at the beginning of the menu to the caller to have a pen and paper handy

***Accessing Health Information through the Internet***

16. Often one of the largest barriers to accessing the net for older adults is simply being unable to manipulate their computer or mouse. The mouse, for example, does not compensate for stiff, shaky or arthritic hands. Better software and hardware design is critical.

**We Recommend: Industry develop technological products and services which compensate for age-related changes.**

17. Web site accessibility is also key. Remember good web design goes beyond large font and lots of white space. There is a multitude of resources available in print or online on accessible design.

**We Recommend: Industry design web sites to be accessible and easy to use.**

18. Third-party evaluation and review of a web site is a good idea. The Canadian Health Network, for example, has comprehensive and stringent guidelines that can be followed to ensure reliable web sites.

**We Recommend: Industry conduct routine evaluations of their web site's accessibility and content preferably through a third party.**

*Note: If a business or company would like to get involved in improving access to the internet for older adults, supporting local Community Access Points (CAP sites) or donating reconditioned computers are excellent initiatives.*

## ***Summary of Recommendations:***

### *We Recommend...*

- Industry examine attitudes towards older adults and their use of technology.
- Industry develop strategies to dispel myths and negative stereotypes of technology.
- Industry incorporate the core principles for promoting the overall health and well-being of seniors put forth by the National Framework on Aging and the United Nations Principles for Older Persons in the development of their guiding philosophy and approach to older clientele.
- Industry utilize existing guidelines that address the design and development of products, services and environments that are used by older adults.
- Industry use universal design that is inclusive and better accepted.
- Industry make every attempt to involve older adults in the design and development process of a technology or related service beginning with the needs assessment and following through to the evaluation of the technology.
- Industry establish a relationship with local seniors' organizations.
- Industry develop and deliver technology training opportunities that are "peer to peer" as well as intergenerational.
- Industry demonstrate the benefits of a technology to their older client.
- Industry standardize automated banking machines.
- Industry adhere to the CSA standard "Barrier-Free Design for Automated Banking Machines" (B651.1-01) released in 2001, as well as the more general CSA standard CAN/CSA-B651 on Barrier-Free Design. Both documents focus on improving accessibility for seniors and persons with disabilities.
- Industry offer learning opportunities to older adults by taking "training" ABMs to seniors' centres and retirement complexes.
- Industry improve and increase surveillance and security measures in automated banking machine areas.
- Industry ensure telephone rates do not disadvantage rural customers.

- Industry develop and implement quality control strategies for automated telephone menus and build in scheduled review of menus.
- Industry develop technological products and services which compensate for age related changes.
- Industry design web sites to be accessible and easy to use.
- Industry conduct routine evaluations of their web site's accessibility and content preferably through a third party.

## **Section 5: Development of Educational Modules**

The information gathered throughout the project in the focus groups, interviews with older adults and industry, Town Halls, and our partners' components informed the development of two educational modules, one for industry and one for older adults. Both modules were conceptualized and created based upon what was learned over the first two years of the project.

In addition, a workshop guide was developed by the Seniors' Education Centre (SEC), University of Regina, which is included in the appendices of this report (See Appendix 10). The objective of the workshop guide developed by the SEC is to increase capacities of older adults to use automated banking machines and automated telephone services. The guide assists the workshop facilitator in presenting information about everyday technologies in a manner that is engaging, participatory, and encouraging. The workshop guide is based on a series of half-day workshops offered to aboriginal and non-aboriginal older adults in rural Saskatchewan during January and September of 2000 by the SEC.

NSCA project staff were responsible to prepare the two educational modules for industry and older adults. However, as part of their partnership commitment to the project, the Adult Education Program at Mount Saint Vincent University, arranged for two graduate students to contribute to the development of the modules as a practicum component of their degree.

The project's Advisory Board were provided with a detailed outline of the modules which they approved. Project staff, with the help of the two graduate students, developed the content of the modules while a graphic designer was engaged to ensure the modules would be attractive, well-organized and professional. Both modules are available in English and French.

The modules are intended to be disseminated to contacts made over the course of the project within industry and in the senior community. The modules designed for older adults will also be placed in community libraries and with seniors' organizations.

## ***5.1 Industry Module***

“*Getting Connected: A Resource for Industry*” is an educational module designed to raise awareness of the impact of technology on the day-to-day lives of older adults. The purpose is to provide those industries, which increasingly offer automated services, with educational tools as well as concrete guidelines and strategies, to improve and strengthen connections between themselves and older adults. This module is relevant to a wide array of industries such as banks and telecommunication companies. The module is intended to serve as a resource in making improvements to existing technologies and in developing guidelines for future designs. The module provides a rationale for why industry must pay attention to older consumers’ needs and concerns, as well as recognize them as a significant consumer group. In fact, the module points out that seniors are often the most loyal customers provided they are treated with respect and fairness.

The module includes a summary of the findings from the “*Everyday Technology and Older Adults*” project in order to share with industry what their older clientele has said about everyday technologies and services. Throughout the course of the project, industry representatives have expressed a keen interest in learning more about older adults’ use and perceptions of everyday technologies. They often acknowledged that more needs to be learned about their senior clientele, particularly in the area of technology. “*Getting Connected: A Resource for Industry*” will help to provide insight and information in this area. In addition, the module also features a comprehensive listing of recommendations designed specifically for industry based on the findings of the “*Everyday Technology and Older Adults*” project, as well as a useful resource section which includes tips for reaching and working with older adults.

The module also provides a series of short workshops designed to be offered in a “Lunch and Learn” format. The entire series could also be offered in a Professional Development day. The purpose of the workshops is to raise awareness within industry of the impact of technology on the day-to-day lives of older adults. The intent is to stimulate reflection and dialogue on how technology currently meets the needs of older adults and to seek out possible solutions and strategies to ensure technology truly serves people equitably. The

workshops are designed so they can be offered to management and front-line personnel alike. A video is also provided with the module for industry.

### **5.1.1 Video**

Created with seniors, the video accompanying the module features a series of vignettes which portray everyday experiences with technologies. Commenting on these vignettes is a studio panel comprised of concerned seniors who share their thoughts, reflections and concerns regarding everyday technologies. The video is intended to stimulate dialogue within industry groups and it is suggested in the module the video be utilized when delivering the first workshop. The video provided an excellent opportunity for older adults to share firsthand how technology affects and enriches their lives.

To produce this video, project staff worked with Mount Saint Vincent University's Distance Education Department. This partnership proved to not only be productive but also very cost-effective.

## ***5.2 Older Adult Module***

*“Getting Connected: A Resource for Older Adults”* is an educational module designed to encourage and empower older adults in their day-to-day encounters with automated technologies such as automatic banking machines (ABMs), automated telephone menus, as well as online banking and online searching for health information.

The module is a direct response to the frustration and concern expressed by many older adults regarding the growing permeation and increasing speed of everyday technologies in their lives. By providing tips, strategies, and instructions for using everyday technologies, the module works to “demystify” an increasingly automated world. For example, included within the “Introduction to Electronic Banking” sub-section of the module are important definitions, safety and security reminders for ABMs, instructions for how to use an ABM or direct debit, tips for telephone and internet banking, as well as many other useful practice ideas and information.

The purpose of this module is also to provide concrete information and tools which older adults can use in getting their concerns heard in order to work successfully with the industries which are increasingly offering automated services. The section of the module that deals with this is entitled, “Helpful Resources for Connection” and it provides suggestions for effectively voicing concerns, as well as a Town Hall Resource Guide. The use of the Town Hall method within the larger *Everyday Technology and Older Adults: Friends or Foes?* project was so successful and well-received that it seemed an obvious choice to include tips and instructions for planning a Town Hall event that brings together older adults and industry for constructive dialogue and the search for possible solutions or adaptations.

## **Section 6: Dissemination**

From the beginning of the project, we were aware that a focus on dissemination and sustainability was a goal and also key to the project's success. It was very important to all partners that the momentum created by the project between older adults and industry was maintained. The list of recommendations generated by this project, as well as the educational modules for both older adults and industry, will serve as excellent resources well into the future. While the recommendations and modules serve as the most visible dissemination vehicles, the project encompassed many more opportunities for sharing findings and raising awareness of the issues.

The project proposal outlined a number of dissemination activities including educational modules, recommendations, articles, and a final report. However, project staff were able to take advantage of many more dissemination activities due to a high level of interest and inquiry regarding the project. Project staff were invited to attend and participate in consultations and conferences as the work of the project became known and recognized. Whenever possible, project staff prepared presentations for interested groups, and in the process, gained a wider understanding of the issues through dialogue with others. The many contacts initiated by project staff with seniors' organizations and industry were integral to the project's visibility. The following section outlines several of these dissemination activities.

### ***6.1 Conferences and Related Events***

#### *Canadian Association on Gerontology Conference (CAG) Edmonton:*

In October 2000 project staff and partners presented in a roundtable session at the CAG conference. Presentations were made by Don King, Sheila Laidlaw, and Jeannine Jessome. Although time did not allow for in-depth presentation, key themes that have emerged from our analysis were shared with the participants. There were approximately 40 attendees at our session. After the presentations, there was a roundtable discussion. There were many comments and questions from the audience. All seemed profoundly concerned with the issues and stayed afterwards to continue the dialogue.

*International Conference on Technology and Aging: Quality of Life (ICTA)  
September 2001:*

The intent of the ICTA conference was to “explore how the technological revolution can contribute to a positive quality of life as we age” (ICTA, Program Highlights). We were very pleased when the organizers of this conference asked us to become involved in the proceedings. At their request, we submitted an abstract for a workshop session and a Seniors Day Presentation. The purpose of the workshop was to present the set of recommendations for industry that have emerged from the findings of the project. The intent was to also create a forum for the discussion and validation of these recommendations.

As this conference was unforeseen when the budget was prepared for this project, we did not have the funds to attend. Population Health Fund, however, graciously granted additional funding to secure our attendance at the important conference. Unfortunately, we were unable to attend the conference due to the events of September 11, 2001 as the conference was planned for the 12<sup>th</sup>-14<sup>th</sup> of September. However, we did not want to miss the opportunity to conduct our workshop on the Recommendations, as well the Seniors’ Day platform presentation on tips and strategies for using everyday technologies. Through teleconference, we were able to present our information and discuss our findings with participants in Toronto. Although we did miss important networking opportunities, we were pleased to follow through on our intention to present the project.

*Seniors for Literacy Committee:*

The project coordinator was asked to participate in a committee which steered the work of a project funded by the National Literacy Secretariat and was administered by the Senior Citizens’ Secretariat of Nova Scotia. The project investigated the issues surrounding older adults and literacy in the province of Nova Scotia and was an obvious link for the project due to the inherent literacy assumptions of everyday technologies.

*Partners in Technology:*

In July, 1999, we participated in a brainstorming session, Partners in Technology Project, hosted by Nova Scotia Department of Community Services. Also invited were Industry Canada, the Nova Scotia Technology and Science Secretariat, Human Resources Canada, other government agencies involved in

community services, non-profit organizations, as well as the head of the Dalhousie University Computer Science Department. The purpose was to discuss linking low income Nova Scotians to technology, specifically access to computer services and the internet. The discussion focused on identifying existing barriers and potential strategies to overcome them. Our participation drew attention to the specific circumstances of older Canadians. We were able to bring to the table some of the issues and learnings that were emerging from our project.

*Roundtable Discussion:*

To explore safety and security issues related to older adults and banking technology, a Roundtable discussion with the Halifax Regional Municipal Police, the Royal Canadian Mounted Police, and the banking industry, was conducted during the second quarter of the project. Because we were aware that older adults, particularly those over 70, tend to avoid services offered through automation, we wanted to explore the implications of turning away from banking technology. In fact, it often results in seniors keeping money at home. We found this concern to be shared by RCMP, regional police and banking representatives so we decided to host a Roundtable to discuss the issues. We found there was a high level of sensitivity and concern among industry representatives as well as a desire to address these important issues. From these discussions, follow up consultations and key informant interviews resulted.

*Connectivity Workshop:*

Early in the project we identified Industry Canada as an important contact for our project and on several occasions met with various representatives. Therefore, we were pleased to be invited by Industry Canada to participate in a three day Seniors' Connectivity Workshop held in Ottawa in November 1999. This workshop, the first of its kind in Canada, was sponsored by the Information Highway Applications Branch of Industry Canada in collaboration with the Division of Aging and Seniors, Health Canada. The purpose of the workshop was to bring together informed participants from across Canada to collectively develop a national strategy for connecting seniors to the Information Highway. Attending the workshop enabled us to make valuable contacts with other organizations and individuals with similar interests and concerns regarding older adults and technology. Throughout the workshop we had the opportunity to

share our project information and experiences, as well as our questions and concerns.

The task of connecting older adults to the Information Highway shares many of the same issues and barriers as does connecting older adults to “everyday technologies”. From our experience with our focus groups, we felt that we were able to bring the voices of older adults to the workshop discussion. A beneficial end result of attending the workshop has been the ongoing dialogue with the participants via email whether it be comments on the draft of the strategy or a sharing of information on older adult and technology issues.

## ***6.2 Project Presentations***

At the beginning of the project, project staff attended (whenever possible) partners’ annual general meetings (AGMs) in order to inform the membership of the project and its planned activities. Project staff also delivered reports during the Senior Citizens’ Secretariat’s semi-annual provincial consultations. During the course of the project, staff attended subsequent AGMs and provided updates and findings to the organizations. Project staff were invited on five occasions to speak about the project with community college and private trade school students enrolled in gerontology related programs. As well, project staff hosted a display booth at two Seniors’ Expos. The project coordinator also travelled to Ottawa, at the request of the National Advisory Council on Aging (NACA), to present the project and outline the NSCA’s proposed plan to work with NACA on a *Writings in Gerontology* centered on the issue of seniors and technology which was later approved by the Council and completed. Information was also disseminated at the following conferences; the International Association on Gerontology (July 2001), the Gerontological Nurses Association of Nova Scotia (2001) and the Alzheimer Society of Nova Scotia (2001).

## ***6.3 Web Page and Newsletter***

Project staff developed the content for a web page to showcase the project and then worked with a web developer to create a user-friendly source of information. A few people passed on favourable comments regarding the web

site but many more seemed to prefer receiving project information from the two newsletters which were published and mailed out to a contact list of approximately 300 individuals and organizations. The newsletters provided an update on project activities and findings.

#### ***6.4 Articles and the Writings in Gerontology***

Seven articles prepared by project staff were featured in local community newsletters and seniors' organizations publications. The most significant writing on the project was the work done by the NSCA, in conjunction with the National Advisory Council on Aging (NACA), on the "*Writings in Gerontology*" issue entitled **Seniors and Technology**, volume 17, which was published and released by NACA September 2001.

Collaborating with NACA to produce the "*Writings*" was a dissemination goal from the beginning of the project. Project staff kept NACA abreast of the project's activities and findings and in the last year of the project proposed to NACA a possible partnership. After a presentation was made to the Council in Ottawa, it was decided NACA would make this a priority. The NSCA put out a call for proposals, participated in the selection of authors, and contributed to the editing of the volume. The NSCA also prepared the Introduction and the first article. It was gratifying that the Council recognized the work of the project and chose to involve us in such a publication. To have findings from our project included in the "*Writings*" is certainly a critical means of dissemination for the project. The first print run for this volume was twenty thousand issues.

#### ***6.5 Federal Provincial Territorial Initiatives***

*Federal/Provincial/Territorial Initiatives:*

During the last year of the project, we were approached by the *Federal/Provincial/ Territorial Day-to-Day Technology Working Group* to research and develop educational resources which would address the growing technological learning gap between older adults and industries offering increasingly automated services. To this end, one of the project staff took on the additional role of coordinating this work. A series of Fact Sheets were developed and work has

begun on creating a Resource Kit Framework, both of which have evolved out of the findings of the *Everyday Technology and Older Adults: Friends or Foes?* project.

Besides exploring the advantages and disadvantages of a range of everyday technologies, the Fact Sheets demystify and dispel myths about older adults' use of technology. As a public education tool, they will be disseminated nationally by the Federal/ Provincial/ Territorial Ministers' offices and should be widely available to all older adults. The Resource Kit Framework will outline and recommend a format for a kit that will identify and gather together resources aimed at older adults and industry in raising awareness of the issues that face an aging population in an increasingly automated world. The Framework will be adaptable to the various regions across Canada.

## **Section 7: Conclusion**

Project findings indicate attitude rather than age could be the deciding factor in whether or not older adults accept new technologies. The common perception of older adults as being resistant to automated technology was not substantiated in any of our project activities. Indeed, the majority of older adults expressed interest and enthusiasm in learning more about what technology could offer to them if support and education were available to them. However, many also spoke of the factors and circumstances that may hinder the acceptance and easy use of technology such as cost, natural age-related sensory changes, as well as entrenched ideas about aging.

Older adults are active users of many forms of technology. Older adults must be consulted regarding the design and implementation of all technologies that will affect their lives. In the end, the design of automated systems that take into account the needs of older adults will improve access to and the use of technology for everyone.

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## *Appendices*

- Appendix 1 Project Information Sheet
- Appendix 2 Advisory Board List
- Appendix 3 Focus Group Manual (selected pages)
- Appendix 4 Industry Key Informant Telephone Interview Form
- Appendix 5 Older Adult Key Informant Telephone Interview Form
  
- Appendix 6 Town Hall Moderator's Manual (selected pages),  
advertising poster, and Certificate of Appreciation  
for panelists
- Appendix 7 *Writings in Gerontology*, Seniors and Technology  
(vol 17), cover and table of contents
- Appendix 8 Project Newsletter
- Appendix 9 Web Page
- Appendix 10 Seniors' Education Centre Workshop Guide/Module
- Appendix 11 Project Evaluation Report
- Appendix 12 Listing of the contents of educational module for  
older adults
- Appendix 13 Listing of the contents of educational module for  
industry

**NOTE: Appendices not available in electronic format. However, some may be available upon request.**

