

# 7

## HEALTH SERVICES: PROVISION AND UTILIZATION

Following is a profile of the health care delivery system on Bell Island. Data sources include: findings from the Bell Island Needs Assessment 2004 Telephone Survey; de-identified data from the St. John's Health Care Corporation and Health and Community Services; and, data from interviews and focus groups. In the process of collecting and analyzing the 2004 Telephone Survey data, the Memorial University Health Research Unit identified a number of challenges and recommendations for Health Services referenced in this chapter.

This chapter focuses on those persons working within the healthcare system, namely providers, management and staff. Health Services is one of the Twelve Determinants of Health so this chapter follows a slightly different format from the preceding chapters. The chapter is divided into three sections.

The first section sets out the services and programs offered by the Health Centre and Health and Community Services as well as the known costs associated with those health services. The second section looks at how Bell Islanders use those programs and services and the challenges around data acquisition and analysis. The third and

final section presents the challenges faced by the staff and health professionals when delivering services and programs. As in preceding chapters, this chapter concludes with a summary of the challenges and suggestions for consideration on how to address those challenges. It also suggests health service indicators and opportunities for further research.

The majority of health care services on Bell Island are provided by: two fee-for-service physicians; a local

pharmacy; the Health Care Corporation of St. John's (HCCSJ); and, Health and Community Services St. John's Region. Please note that prior to the completion of this report, the Health Care Corporation and Health and Community Services amalgamated and were renamed Eastern Health. Programs and services under the auspices



WABANA LANDSCAPE. PHOTO COURTESY OF DESMOND MCCARTHY.

of HCCSJ operate out of the Dr. Walter Templeman Health Centre located in downtown Wabana. Health and Community Services has staff offices in the Health Centre and in another government building on Bennett Street, approximately five city blocks away from the Health Centre.

## Services provided by the Dr. Walter Templeman Health Centre

The Health Centre provides inpatient long-term, acute, palliative and respite care for Bell Island's residents. It also offers outpatient and emergency services. The Senior Medical Officer, assisted by an outpatient nurse, runs a fee-per-service outpatient clinic out of the Health Centre. The Health Centre is also affiliated with the Memorial University Medical School. As part of that relationship, the Senior Medical Officer preceptors third and fourth year medical students.

### Emergency services

The Health Centre provides 24/7 emergency services. Clients are assessed by a triage nurse. The facility contains an examination room which is soon to be replaced by a functional trauma room. This \$125,000 upgrade has recently been approved and a section of the Health Centre will be renovated for this purpose. The Centre provides pre-hospital care for emergency calls and transfers to another facility, typically the Health Sciences or St. Clare's Hospital in St. John's. A general practitioner is on site or can be called in within a very short period of time. Coverage on weekends and holidays is provided by locums and / or a nurse practitioner. Emergency pharmacy services, EKG and laboratory services are also provided. Three of the Health Centre's nurses are certified in Advanced Cardiac Life Support.

### Long-term, acute, palliative and respite care for inpatients

The Health Centre has a total of 20 beds. There are 12 long-term care beds (level III), six acute care beds and one palliative suite. There is also one respite / convalescent bed.

### Ambulatory / Outpatient service

Ambulatory care or outpatients refers to services that do not require an overnight hospital stay. Available outpatient services on Bell Island include: physician visits; procedures and follow up on procedures with the physician or clinic nurse; rehabilitation; and chemotherapy administered by one of the three nurses who have chemo therapy training. The Health Centre also houses a private dental practice which operates one day a week.

### Diagnostic Services Laboratory and X-ray

The Dr. Walter Templeman Health Centre has the capacity to perform hematology, chemistry and urinalysis. It does not carry out coagulation or genetic tests. Blood is taken for immunology and histology and sent to the Health Sciences Centre to be processed. Most

test results are available the same day however thyroid and cholesterol results may take a week. Emergency blood tests are done on Saturdays and Sundays. General x-rays are done with an outdated x-ray machine which has a number of limitations. For example, x-rays of the neck can only be done standing up. If the x-ray has to be read by a specialist in St. John's, the results can take up to three weeks to come back to the Health Centre. Presently the Health Centre is not connected to the Health Science's new online Picture Archiving and Communication System (PACS).

### Information Systems

By and large, data capture, management and storage at the Health Centre is paper based. Outpatient / Ambulatory information is recorded manually when a person registers for a service. Client data, for example, the patient's name, treatment and MCP number is faxed each day to Health Records in St. John's where it is entered into an electronic data base by Health Records employees. These data can then be accessed by the Health Centre's staff through MEDITECH. Inpatient 'discharge data' are faxed once a month to St. Clare's where they are classified according to ICD-10 codes and entered into the Health Care Corporation of St. John's Health Information System. Laboratory and x-ray data remain paper-based and are stored on site at the Health Centre.

### Utilization of Dr. Walter Templeman Health Centre facility for groups and / or programs

A number of groups have used the Dr. Walter Templeman Health Centre over the years. Groups include: Weight Watchers; Alcoholics Anonymous; and the Seniors Advisory Group. The Health Centre boardroom also provides a meeting place for the Health Advisory Group and is used as a Teleconferencing Educational Site. Teleconferencing is used by interns, nurses, paramedics and the doctor for educational purposes.

### Volunteer Services

As in many small communities across Newfoundland and Labrador, the Health Centre has a number of volunteers dedicated to improving the stay of patients in the Health Centre. These volunteers contribute by feeding the patients in long-term care, organizing the Christmas Party and maintaining the gift shop.

### Dr. Walter Templeman Health Centre Staffing Profile 2003 – 2004

As indicated in Table 3 (see following page), there are 42 employees (41.5 FTE) at the Dr. Walter Templeman Health Centre.

**Table 3: Dr. Walter Templeman Health Centre Employees, 2003 – 2004**

Dr. Walter Templeman Health Centre Employees, 2003 – 2004	
TYPE OF ROLE	# OF POSITIONS
Management / Support	3 permanent full-time
Nursing	15 permanent full-time 4 temporary staff
Laboratory / x-ray	2 permanent full-time
Facilities	2 permanent full-time
Housekeeping	4 permanent full-time
Dietary	3 permanent full-time
Dietary / Housekeeping	2 permanent full-time 3 temporary staff
Stores	1 permanent part-time
Ward Clerk	1 permanent part-time
Medical Records Technician	1 permanent full-time
Admitting Clerk	1 permanent full-time

## Services provided by Health and Community Services

Health and Community Services professionals and staff have offices in the Health Centre and at their Bennett Street premises. To reiterate, the two Community Health Nurses and the half time Mental Health / Addictions Counselor work out of the Health Centre. The remaining Health and Community Services staff work from the second floor of the Bennett Street site. There are two child social workers and a third social worker who is responsible for community supports. These professionals are supported by a clerk typist and point three of a clerical support position. Like the Health Centre, Health and Community Services has a relationship with Memorial University in St. John's and as a result accepts student placements from the School of Social Work. Health and Community Services works with individuals, families, the schools and the community generally. Clients self-refer or are referred by other healthcare providers. The most frequent users are parents through the public health programs or families already on the Children and Youth Family Services case load.

## Human Resources Labour and Employment

Health and Community Services works closely with Human Resources, Labour and Employment (HRLE) located on the ground floor of the Bennett Street building. HRLE's three client services officers are responsible for providing income support and the promotion of programs supporting the employment of youth and adults.

## Child Care Services

The Community Health Nurses work with Head Start, the local early childhood education and care centre, to ensure that a licensed child care service is accessible and meets government standards for a safe, nurturing and stimulating child care environment. Head Start is located in the Wabana Complex, which the community also refers to as the old Trade School.

## Community Living and Supportive Services

This Health and Community Services program provides support, financial services and case management for individuals of all ages with physical and / or developmental disabilities. The program also covers those affected by deinstitutionalization under the 'Right Future Project'. Finally, the program serves those individuals requiring protection under the 'Neglected Adults Act'. The program's focus is on supporting individuals, families, caregivers and promoting independence, community inclusion, safety and well-being.

## Mental Health and Addictions

This program is responsible for the coordination and delivery of mental health and addictions counseling, prevention, and education services on Bell Island. Services provided include advocacy, early intervention, prevention and treatment. The counselor's tasks vary according to the population's needs. Counseling is based on any number of mental health issues, such as: parenting, depression, grief counseling and / or relationship issues. Individual, couple or family counseling is also available. The counselor provides prevention and education linkages between services and other community agencies. Bell Island's half time mental health and addictions counselor works closely with the Community Health Nurses on a number of preventative programs and services focused on youth and new families.

## Health Protection

The local Mental Health Counselor is also the primary contact for family violence. There isn't a woman's shelter on the island. After four in the afternoon the nurses at the Health Centre become the front-line. Kirby House in St. John's is the closest resource.

## Continuing Care

The Community Health Nurses provide curative, preventative, rehabilitation, maintenance and palliative services. Services focus on assisting individuals to live independently at home with the intent of preventing, delaying or substituting for long-term care or acute care alternatives. A coordinated approach is used to

help clients and their families access a variety of facility and community based services, including long-term care.

The Community Health Nurses provide the following services all of which are based on ongoing client assessment and individual need:

- B12 shots
- Wound management and foot care
- Blood pressure and weight monitoring
- Diabetes patient counseling
- Monitoring medication compliance
- Special Assistance
- Palliative Care
- Discharge Planning
- Personal Care Home
- Delegation of function, for example dressing changes
- Other nursing related care, for example: port-a-cath flush; blood work; suture or staple removal; and colostomy care

The Community Health Nurses also carry out assessments of persons 65 years and older to determine the need for home support and the best long-term placement care options. Choices include long-term care in the Health Centre, a Nursing Home or a Personal Care Home. The Community Health Nurses are responsible for the Personal Care Home on the island which falls under the jurisdiction of Health and Community Services.

### Health Promotion

This Community Health and Services program is responsible for the development, implementation, and evaluation of a wide range of population health and community development programs, including health promotion and illness prevention initiatives. As noted in previous chapters, the Community Health Nurses are responsible for

- Prenatal education
- Postnatal care for six weeks (home visits and assessments of the infants)
- Child Health Clinics (immunizations for two to 18 months old infants)
- Baby Group (support group for breastfeeding and bottle feeding mothers and infants)
- Healthy Baby Club (pre-natal group for low socio-economic income mothers)
- Nobody's Perfect parenting education program
- Preschool health

- Hearing tests for school age children
- Travel immunization
- TB skin testing for employment or travel purposes
- Distribution of health promotion literature (sexually transmitted diseases, healthy eating, healthy heart and so on)

The Community Health Nurses also provide outreach to the schools and community groups, for example, the Boys' and Girls' Club.

### Speech Language Specialist and Behavioral Management Specialists

The Department of Education provides the schools with a Speech Language Therapist and a Behaviour Management Specialist on an as-needed basis. Health and Community Services also has a Behavioral Management Specialist who comes to Bell Island once a week to work with families in their homes or at the Bennett Street office. The Health and Community Services Behavioral / Child Management Specialist's caseload is limited to six clients. The specialist works with parents whose children have behavioural issues or with parents whose children are developmentally delayed.

### Child Youth and Family Services

The Child Social Workers, who also refer to themselves as child protection workers, are focused on meeting the needs of children, youth and families. Child and Family Services promote the safety, well-being and protection of children as well as supporting the capacity of families and communities to provide for the well-being of children. The child social workers are responsible for child protection, foster care, adoption and youth services covering individuals 16 – 18 years old. The com-

**Table 4: Health and Community Services Employees, 2003 – 2004**

Health and Community Services Employees, 2003 – 2004	
TYPE OF ROLE	# OF POSITIONS
Community Health Nurses	2 permanent full-time
Child Social Workers	2 permanent full-time
Community Support and Youth Corrections Social Worker	1 permanent full-time
Mental Health Addictions Counselor	1 permanent part-time
Clerk Typist III	1 permanent full-time
Clerical Support	1 permanent part-time
Behaviour Management Specialist	once a week

munity supports social worker is responsible for youth corrections which includes extrajudicial sanctions. These Youth and Family Services Programs are in place to ensure that young people have the support they require to make a healthy transition into adulthood.

### Health and Community Services Staffing Profile 2003 – 2004

As noted in Table 4, there are 8 employees (6.8 FTE) in Health and Community Services.

### Cost of health services on Bell Island 2003 – 2004

The 2004 budget for the Dr. Walter Templeman Health Centre was \$2,131,825.00. The 2004 budget for Health and Community Services was \$426,389. The combined budget is \$2,558,214. In addition, in 2004, there were 32 emergency transfers from the Health Centre requiring the ferry to run after hours. At a cost of \$790 per trip this amounts to \$25,280. This expense was covered by Works, Services and Transportation. In 2004 there was one night time air transfer. The cost of a night transfer using a Cougar helicopter is approximately \$2,700 including ambulance transfer from landing site to hospital. There were no daytime air transfers in 2004 which normally cost approximately \$800. Again, this amount includes the cost of transferring the patient by ambulance from the landing site to the hospital. In 2004, emergency air transportation was covered by Government Air services.

The total expenditures for Bell Island beneficiaries under the provincial Senior Citizen's Drug Subsidy Program in the 2003 – 2004 fiscal year was \$441,321.36 or (\$861.96 / capita). This amount was slightly less than the provincial per capita cost during the same period: \$882.44. The total expenditures for Bell Island beneficiaries under the Provincial Income Support Drug Program in the 2003 – 2004 fiscal year was \$828,234.63 or (\$768.31 / capita). Again, this amount is less than the provincial per capita cost of \$848.08 during the 2003 calendar year (comparable figures for the 2003 – 2004 fiscal year were not available).

According to the Department of Health and Community Services Medical Care Plan (MCP), a total of 4,473 MCP beneficiaries whose address included one of Bell Island's three postal codes, made 17,634 visits to fee-for-service General Practitioners in 2004 at a cost of \$497,299. Because of poor data quality, MCP officials were unable to determine what percentage of these visits took place on Bell Island. These same 4,473 MCP beneficiaries also made 1,996 visits to fee-for service physicians who were not General Practitioners at the cost of \$116,499. MCP was not able to calculate the

number or the cost of those same beneficiaries' visits to salaried physicians.

Please note that although Bell Island had a population of 3,078 in 2001, MCP noted that there were still 4,473 persons giving their address as Bell Island in 2004. This cohort of 1,395 *virtual* Bell Islanders increases the difficulty of accurately attributing and forecasting healthcare costs. It also makes it difficult to design the best complement of services and programs. According to the Newfoundland Centre for Health Information (NLCHI), they have assigned every person in the province with a unique patient identifier (UPI). However, the UPI is not always linked with a postal address. It appears that presently, we have systems in place to help determine where practitioners are providing services but we do not have systems in place that can track which citizens are receiving services and where they are receiving services.

Finally, no estimate was possible for health related out-of-pocket expenses incurred by Bell Island's 3,078 citizens.

### How Bell Islanders use Health Services

We will now look at how Bell Islanders avail themselves of these health services and programs. Data for this section were derived from three sources: 1. inpatient and outpatient data provided by the Health Care Corporation of St. John's; 2. data provided by the Dr. Walter Templeman Health Centre on Bell Island; and, 3. data derived from the Bell Island Needs Assessment 2004 Telephone Survey. There were challenges collecting and analyzing the data.

### Need for valid and timely health data

Independent of a health institution's size or location, data collection and data husbandry are the life blood of any Health Care System. The overriding challenge to building a verifiable picture of how Bell Islanders use the health care system was the lack of clean data. To elaborate, because of the complex and highly variable way data are captured across health institutions, to include the Dr. Walter Templeman Health Centre on Bell Island, the Health Sciences Centre St. John's, the Janeway Children's Hospital and St. Clare's Hospital St. John's, it was impossible to build a comprehensive and wholly accurate picture.

For example, there were issues around recording the number of admissions on Bell Island. In 2004, the Health Centre on Bell Island initially recorded 1,394 admissions on Bell Island (3.82 admissions per day) whereas data from the Health Care Corporation St. John's, which enters the data faxed to them by the

**Table 5: Usage of programs and services at the Dr. Walter Templeman Health Centre in 2003 – 2004**

Usage of programs and services at the Dr. Walter Templeman Health Centre in 2003 – 2004		
SERVICE		USAGE
Physician Services	Physician Clinic, Monday – Friday	8,200 patient visits
	Physician / Nurse Practitioner after hours Off site private Physicians Clinic	2,100 patient visits 10,000 patient visits
24-Hour Emergency Services		127 ambulance transfers to city hospitals (30 requiring ferry during its off hours) 88 emergency ambulance calls on Bell Island 1 air ambulance
Technical services	Laboratory Service	5,572 visits
	X-Ray Service EKG	958 visits 512 visits
Ambulatory care		2,089 treatments
Acute Care		124 admissions
Palliative Care		21
Respite Care		7
Long-term Care		12 beds (60% occupancy)
Visiting Dentist		1,250 (approximate visits / year)
Community Health Nurses		200 Child Health Clinic visits / year 6 Healthy / Baby Group visits / week 25 Preschool Health Checks / year
Continuing Care		1 – 15 visits / week
Mental Health Addictions Counseling		n/a : transitioning to new software
Social Workers: Child, Youth and Family Services Community Youth Corrections		n/a: transitioning to new software

Health Centre on Bell Island, only reported 207 admissions for 2004, (one admission, approximately every two days). Subsequent requests to the Health Centre brought the number of Health Centre Admissions in at 124 which would be more in keeping with the numbers seen on Grand Manan but it still doesn't explain the disparity between the Health Centre (124) and HCCSJ (207) accounts.

There were also problems around recording reasons for outpatient visits on and off Bell Island. First, a patient's visit was not always recorded. From 2001 – 2004 there were a total of 40,671 outpatient visits spread among the various HCCSJ sites. Unfortunately, the reason for those visits was recorded for only 7,177 visits, or less than 20% of all cases. Therefore, we caution that the data presented in this section is meant to give an idea of the kinds of reasons that were recorded for outpatients, but should not be taken as a representation of all outpatient visits for the people of Bell Island.

Second, even when the reason for a visit was recorded, it was done as free text meaning; whoever entered the

information did so in a manner that made sense to him or her. The lack of standardized data entry resulted in a single reason for a visit being entered in multiple ways. For example, 'x-ray' was recorded 30 different ways, to include 'ray', 'rays', 'xray', 'x-ray' and so on.

Recording a patient's age was also a free text entry. The lack of standardized recording practices for recording age meant that it was recorded several different ways. Unfortunately, data analysis software can only complete calculations on an age variable when it is entered consistently. Re-entering such data would have been more time consuming than resources allowed. Consequently, these data were not analyzed and as a result, we have no indication of potential trends in outpatient visits among the different age groups. More will be said about the challenges surrounding data acquisition, management and analysis as we proceed through this chapter.

Following are three profiles of how Bell Islanders use health services.

## First Profile: How Bell Islanders used the health services and programs available on Bell Island in 2003 – 2004

These data demonstrate how Bell Islanders use the health services and programs offered on Bell Island. Data for this profile were provided by management at the Dr. Walter Templeman Health Centre. Table 5 sets out the services and programs provided by the Health Care Corporation of St. John's and Health and Community Services St. John's at the Bennett Street and Dr. Walter Templeman Health Centre sites.

Based on data provided by the Health Centre, each Bell Islander made approximately seven visits to his / her family doctor from 2003 – 2004. According to The Office of Primary Health Care, the provincial per capita rate of visits to his / her family doctor from 2003 – 2004 was three to four visits annually. Roughly 10% of these office visits on Bell Island were made after hours.

A number of groups have used the Dr. Walter Templeman Health Centre over the years. As in any small rural community, membership in these groups waxes and wanes. The groups and their aggregate memberships were reported as follows (Table 6).

**Table 6: Groups that have used the Dr. Walter Templeman Health Centre**

Groups that have used the Dr. Walter Templeman Health Centre	
GROUP IDENTIFICATION	# OF USERS / USAGE TIMELINE
Weight Watchers	10 / 5 yrs
Alcoholics Anonymous	15 / 5 yrs
Seniors Advisory / Resource Group	10 to 15 / N/A yrs
Kick the Nic Program	N/A
Health Advisory Group	10 / 7 yrs
Teleconference Educational Site	100 / 5 yrs
Volunteer Services	20 / 5 yrs

## Second Profile: How Bell Islanders use Inpatient and Outpatient Services on and off the island 2001 – 2004

These data illustrate how Bell Islanders use their local Health Centre, the Health Sciences Centre, St. Clare's Hospital and the Janeway Children' Hospital. In other words, we look at how Bell Islanders are using inpatient and outpatient services on Bell Island and in St. John's. These data were provided by the Health Care Corporation of St. John's.

Be forewarned that there were a number of challenges around the data. For example, the numbers for outpatient services are not wholly representative. Information on the use of outpatient services was obtained from the HCCSJ which records the number of outpatient visits electronically. However, in 2001 outpatient visits at the Dr. Walter Templeman Health Centre were not faxed to the HCCSJ to be recorded electronically and therefore virtually no visits were listed in the HCCSJ outpatient database covering Bell Island that year. In 2002, the Health Centre was included in the database of outpatient visits within the HCCSJ but it was not possible to get the data for years 2002 – 2004 only. The rationale for the HCCSJ aggregating the data from 2001 – 2004 was to protect the identity of the patients. Recognizing this shortcoming, it is still important to look at a comparative analysis because these tentative findings point to surprising trends.

Note that while emergency services fall under the broad category of outpatient services they will be examined on their own as the continued provision of emergency services at the Dr. Walter Templeman Health Centre on Bell Island is of particular interest. For the purposes of this comparison, all visits to treatment sites in the capital city were combined. Data presented in the following table affords a very preliminary look at how Bell Islanders use services available to them on the island and in St. John's.

From 2001 – 2004 the HCCSJ recorded 702 inpatient admissions at the Walter J. Templeman Health Centre. During the same time period 866 additional inpatient stays were recorded for Bell Islanders at various treatment sites within St. John's where specialty services and the tertiary care facility are located.

There were large differences in the number of outpatient treatments received by Bell Islanders on and off Bell Island. From 2001 – 2004 15,356 outpatients

**Table 7: Utilization of inpatient and out-patient services on and off Bell Island 2001 – 2004**

Utilization of services		
TYPE OF SERVICE	TREATMENT SITE	
	BELL ISLAND (2001 - 2004)	ST. JOHN'S (2001 - 2004)
Inpatient Services	702	866
Outpatient Services	15,356*	25,314
Emergency Services	1,273*	1,539

\* Only outpatient visits from the years 2002 – 2004 were available for the Health Centre on Bell Island.

visits occurred on Bell Island whereas 25,314 took place in the city. Outpatient visits in St. John's would have included, for example, specialist visits, dermatologist visits, diabetic teaching programs, dialysis, dental services, physiotherapy services, radiology services, cardiology clinic, stress testing, audiology, and so on. To reiterate, the 15,356 outpatient visits occurring on Bell Island do not take into account the missing data for 2001 but even so the total number of out-patient visits in St. John's was unexpected.

Requiring further investigation is the number of emergency treatments received by Bell Islanders at the Walter J. Templeman Health Centre and in the city. It appears that from 2001 – 2004 there were 1,273 emergency visits recorded on Bell Island and 1,539 emergency visits recorded in St. John's. This is a very preliminary look at available outpatient data. As mentioned earlier in the chapter, the outpatient data were compromised in several respects. For this reason, an in-depth study would be required to fully understand the story around where Bell Islanders are receiving their emergency services.

### **Espoused barriers to Health Services**

Data from the 2004 Telephone Survey indicated several barriers to obtaining health services. Twenty five percent of the residents surveyed felt that long wait times at the hospital clinic presented them with a problem in obtaining necessary health services. In addition, 20% of those surveyed felt that the lack of specialty services, specialists and staff on the island also presented a barrier to effective use of health services. Moreover, 23% of residents also felt that the difficulty and cost of transportation (by ferry) to St. John's for health services was problematic. Wait times for specialty consultants and services in St. John's only serve to intensify the barriers to Health Services. The wait times for outpatient consults in St. John's were reported by Health Centre staff as follows: 10 months for mental health; six months for specialists; eight months for an MRI and four to five months for an ultrasound.

### **Third Profile: Inpatient diagnosis trends among Bell Islanders ages zero through 79 from 2001 – 2004**

In the third profile, we examine the most common diagnoses of Bell Islanders admitted to hospital from 2001 – 2004. This overview of inpatient diagnosis, by the different age groups, across hospital sites, provide us with an indication of the most common health problems faced by Bell Islanders leading to hospitalization. These data were provided by the Health Care Corporation of St. John's.

The following analysis points out trends in the most common diagnosis categories among Bell Island inpatients from ages zero through 79 for the years 2001 – 2004. We looked at 16 age groups comprised of five year increments. Only the most notable trends in diagnosis are discussed. For a complete overview of the three most common reasons for inpatient admission please see the table appended to this report.

Perhaps the most striking trend in diagnosis is the overwhelming presence of 'diseases of the digestive system'. This particular diagnosis category, which includes conditions such as cirrhosis of the liver, inflammatory bowel diseases, hepatitis, gastrointestinal cancer, ulcers, gallstones and so on, ranked in the top three most common diagnosis categories for all but one of the 16 age groups examined (70 – 74). Given this striking trend, further research is warranted to help uncover why Bell Islanders are experiencing these types of problems. For example, are diseases of the digestive system a marker for poor nutrition, alcohol consumption, obesity, and / or questionable water quality?

'Diseases of the genitourinary system', involving conditions such as renal disease, calculus of the kidney, and urinary tract infections was also among the top three most common diagnosis categories of half of the age groups studied. Specifically, it appeared in the top three diagnoses for those in groups between the ages 30 – 54 and again for those in groups between the ages 65 – 79.

'Diseases of the circulatory system', involving conditions such as heart disease, angina, and stroke, was also a relatively common diagnosis category for those receiving inpatient care. This was particularly true for those in age groups between the years 60 – 79. 'Diseases of the circulatory system' was the most common diagnosis category for all age groups within this age range. 'Diseases of the circulatory system' also ranked as the second most common diagnosis for persons aged 50 – 54.

The final, and to be expected diagnostic trend involved the pregnancy, childbirth, and puerperium diagnosis category. This was the most common reason for hospitalization recorded for the four age categories between the ages 15 – 34 years.

### **Stories from the inside: management, staff and providers identify the challenges**

To reiterate, this chapter focuses on the healthcare delivery challenges from the perspective of persons working inside the system, namely the practitioners, management and front-line staff.

### Isolation makes the case for maintaining existing health services on Bell Island

Even though Bell Island is only a 20 minute ferry ride or 2.8 miles from Portugal Cove, when the wind comes up or the ice moves in, Bell Island's roughly 3,000 residents can be as isolated as any rural and remote community in Newfoundland. Because of the isolation, healthcare professionals working on the island are unwavering in their support and commitment to the ongoing existence of the Health Community Center. *"The hospital is very, very valuable to this island simply because of the fact that we are an island and therefore we are isolated at times particularly in the wintertime. You run into strong winds, tides, the ferry can't run and you can't get a patient off of Bell Island and therefore we need the hospital to treat them to the best of our ability. Also you can get ice in the tickle [water mass between Bell Island and Portugal Cove] in the wintertime and the boat can't load and if it's dark you would have a job to get a helicopter because you need to get a large helicopter and they usually have to come in from Gander so there it is a long wait. Also an ice breaker takes a long time to get here. That is a big problem so there the hospital is very, very important in this situation."* According to the Bell Island Ferry Users Committee, in 2004 approximately five percent (or 365 trips) of the total number of crossings were cancelled due to weather and / or ferry maintenance.

### In rough weather even emergency services are challenged

In the event of an emergency sometimes even the backup helicopter service is challenged. *"The small helicopters come from St. John's if they haven't got fog. They run in the daytime and they would be here between half an hour and an hour by the time they make the arrangements and get over. If we have an emergency here and the ferry is running it is quicker sending them by ferry than by helicopter. But if it is foggy or at night time the small helicopter cannot run because they run by vision only. The larger ones can fly at night time. The larger ones take four to six hours by the time you get it all arranged. The big ones fly in pretty near all conditions. The little ones don't. If it is windy here in the daytime, enough to stop the ferries, usually the little ones can't fly."*

### Health Services staff face commuter challenges

The lack of a 24/7 ferry service, frequent ferry breakdowns and resulting reduced schedule of crossings make it particularly challenging for staff and profes-

sionals who commute to the island for work. In 2004 the strike by the province's public service employees (which included ferry workers), resulted in additional challenges for staff who commute to work on Bell Island. *"There are no accommodations for us when we are stuck!" ... "We had to sleep on the office floor for a month during the strike so those things are hard."*

### Being rural and remote results in ongoing recruitment and retention issues

Across the board there are short- and long-term staffing issues. These shortages result in *"a gap in services because there are no monies in the system to replace professionals on leave or between hires."* Moreover, there is *"the perception that the high turnover rate results in lack of continuity of care for mental health and addiction and extended periods of time when no services are available."* It was suggested that *"The case load is not picked up because Bell Island is an island, not in town – involvement [getting to and from Bell Island] requires an additional layer of effort."* There have been months at a time when Bell Island has been without a mental health counselor. As a result, *"Mental health shows up in outpatients and results in additional load for the physician."* The bottom line is, *"If staff are off, there is no one to absorb the caseload."*

### Staff shortages impact the workload and possibly health outcomes

Both the Health Centre and Health and Community services have experienced staff shortages. Some of these shortages impact populations that the community has identified as having unmet needs, *"There is supposed to be a social worker for those over 65 years old but there is not – we do all that."* Health professionals recognize that there is a real need for expertise with seniors, *"It's just that there is no one to cover issues like abuse and elder abuse. We come across cases but we do not know exactly what the procedures are."* Sometimes professionals have to backfill for duties that are outside their scope of practice, *"We also do long-term care assessments for placements for over 65 year olds here in the hospital. That is not in our job description but we are told to do it."*

### Management in St. John's is a world away

Being in the same health region doesn't mean that employees experience the same working conditions and case load. The working conditions in an isolated community require a different relationship between workers and their management. Management has

to have a better understanding of employees' work environment. *"So to keep a Public Health Nurse over here they really have to change how things are done. We need more management support, incentives, a bed to sleep in if we are stuck over here. Mind you, the hospital has been great. They make us feel really welcome."* As feedback from Health and Community Services staff indicated, *"Many decisions are made by the Health Care Corporation of St. John's Region with St. John's proper in mind only. Rural communities are different in many ways. How can a manager understand how a community works if they never go to that community? In four and a half years a manager has never been here."* Workers also pointed out that it is very easy to get caught up in the issues and priorities of the Health Sciences and Janeway Hospital but that their day-to-day working reality delivering programs and services on Bell Island is very different.

### Challenges around recruiting practitioners in the short- and long-term

In 2004 the two physicians on Bell Island had an on call schedule of one night in four. Sometimes the Health Centre is challenged to provide relief for its physicians, *"Sometimes we're challenged to get locums to come over, especially during the holidays."* Presently, remuneration is compensation for the inconvenience and isolation. *"Fee-for-service docs are more interested in coming over than salaried physicians."* The point has been made that looking ahead, Bell Island may not be able to support two fee-for-service physicians. *"There is not going to be enough population to warrant two doctors on fee-for-service. They are going to have to pay them a salary which I doubt the government will. Or they are going to start hiring nurse practitioners which is a good thing."*

### Nurse Practitioners are part of the plan moving forward

There is a Nurse Practitioner that comes over to Bell Island on the weekends. Ironically, it costs more for the Nurse Practitioner than it does for a physician locum. There are two reasons for this, the first being that *"The Nurse Practitioner has to be paid overtime for her work on Bell Island because she is doing overtime when she comes over and covers on the weekends."* Second, that *"Nurse Practitioners are covered under the Newfoundland & Labrador Nurses Union therefore payment for Nurse Practitioners comes out of the Community Health Centre's budget whereas the Department of Health covers the cost of a locum."* The Health Care Corporation of St. John's did advertise for a full time Nurse Practitioner but *"There were no*

*takers."* To address the cost issue, management has recommended that the Nurse Practitioner position become part of the Walter Templeman's salaried nurses' budget. Note that subsequent to the field work for this study, a Nurse Practitioner was hired by the Health Centre on Bell Island to focus on health promotion.

### Support staff experience front-line challenges

A number of front-line challenges are reported by support staff. Those include: 'keeping track of patients' information when they see specialists in town'; 'booking specialist appointments later in the day to avoid conflicting ferry usage with commuters' and 'managing the community's expectations around access': *"When they call the doctor they want to come the same day. The doctor is really booked. There is only so much the doctor can do."* On occasion, there are the long waiting-room times to see the physician at the Health Centre. Patients may not understand that the practitioner is also covering emergencies which, should they arise, result in long waiting-room times. There was also the suggestion that double booking occurred from time to time to offset patients' canceling their appointments.

### Staffing and running the x-ray machine

There have been many complaints about the x-ray machine by staff and patients. The original x-ray machine from 1965 died in 1995. The Medical Director then asked for a new machine. Instead, Bell Island received a reconditioned machine as part of a larger Health Sciences order. Staff deemed this second hand machine inferior to the original machine. Presently the x-ray machine is ten years old and presents a host of problems not the least of which are frequent breakdowns. Moreover, *"When the single staff person takes holidays, time off or training courses, there is no one to man the machine and patients have to go to town."* Also, there are *"limitations as to the kind of x-rays that can be taken: chests have to be done standing up. Sinuses are very difficult and neck injuries not possible because the patient has to stand up."* Although the intent was to cross-train the laboratory technician on the x-ray machine it was determined that the x-ray machine was too old for new staff to train on. Times when there isn't an x-ray technician available and an individual requires an emergency x-ray, they are sent over to the Health Sciences by ambulance. If the individual is on social assistance the cost is covered. If the patient is not receiving social assistance then the individual is charged \$150. Staff pointed out that if that same person lived in St. John's they wouldn't have to pay for the ambulance. Some staff feel that this constitutes a two-tiered healthcare system.

### Why isn't Bell Island plugged into PACS?

Earlier in 2005, *"The Picture Archiving and Communication System (PACS) was installed throughout the corporation but it was deemed too expensive to be installed on Bell Island. The estimated \$100,000 price tag for this web-based system was not budgeted for"* but the need for an online service integrated with the imaging departments in St. John's continues. Under the current system, namely sending patients into St. Clare's for x-rays, means that *"It is difficult to get a verbal report and the written report can take two – three weeks."* Staff have asked that x-ray results be entered into MEDITECH in an attempt to shorten that three week period.

### Is there a way of benefiting from what's going on in town without patients having to go to St. John's?

Workers observe that the challenges and cost of getting on and off the island has a direct impact on how Bell Islanders utilize healthcare services on and off the island. *"I think the geographical disconnection would be probably one of the biggest challenges. You hear a lot of people say that they would love to go to this and that but are unable to make it because of the transportation piece. In an ideal world it would be wonderful to have the same resources available to the people that there are in St. John's."*

Health professionals identified resources in St. John's from which their clients and patients could benefit. *"The Health Care Corporation offers a wonderful seminar on grief but it is very difficult for people to get over there because of transportation issues and so on."* Moreover, *"Connections with support groups would certainly be a useful."* For example, *"The grief session is offered once a month two different times, two different sessions. It could be possible to bring a speaker here. There is a lack of support groups, no Alcohol Anonymous, no Narcotics Anonymous, no Gambling Anonymous. AA has been in and out, it has and hasn't worked. Those are the essential resources. We try to encourage people to go to them [in St. John's] but most of them are in the evening and you have to get there [St. John's] and back."* Staff also noted that the cost of traveling to St. John's and back was a deterrent for some clients.

### Providers are committed to providing addiction services but are challenged to reach their audience

The half-time addictions / mental health counselor started the job just a short time before this research took place. Prior to the counselor's arrival, the position had been vacant for six months. The consensus

amongst Bell Island's health professionals is that *"The mental health piece is known but the addictions piece may not be as widely known. Health and Community Services provides mental health counseling on anything from parenting, to depression to mental illness, any type of mental health problem, couples relationship issues, and it goes on and on. Referrals come from the physicians but we get a lot of self-referrals – so the word has gotten out there that the Mental Health Counselor is here."* However, health professionals are challenged to have ready contact with those struggling with addictions. For example gambling, *"If we can get some of that 'gamblers awareness information' out there and there was a big enough group of people that eventually it came together it could be a good support. There are spaces on Bell Island where you could run a gambling group. Group sessions for drinkers or gamblers are extremely useful. We can leave pamphlets in the room so people can take them home."* However, at the same time, health professionals on the island point out, *"Group attendance on Bell Island has been notorious for being very difficult and I think that goes back to the rural community, the privacy."* For example, while gambling and alcohol addictions were listed in the top ten community problems, the findings from the telephone survey also indicate that the addictions specialist was used by less than 1% of the households on the island. There is a consensus about the challenge and the potential solution. *"There is a taboo around addiction and mental health. It is important to get that mental health out there. It is about breaking down the barriers in the small communities."*

### There is a recognized need for public and private allied health professionals

Without exception healthcare workers and providers on Bell Island reiterated the need for a physiotherapist, occupational therapist, dietitian, chiropractor / podiatrist, optometrist, chiropractor and message therapist. In addition to serving the chronic care needs of inpatients, particularly those in long-term care, the presence of these professionals would act as a catalyst for addressing at risk behaviours and encouraging health promotion. Providers and staff cited the Health Centre's ability to accommodate allied health professionals visiting Bell Island as they do for the dentist, *"We have the space to set up some kind of physio room, it is not like we have to build a building."* The Health Centre is recognized as a real asset. *"If they close the chronic care facility, I would like to see them keep it open for some other form of usage – somebody on staff for diabetic training, diabetic teaching, someone to do foot care, someone to*

do chemo therapy for cancer" ... "Utilize the space for something else. Don't just close it down." The need for an optometrist was also cited. "He used to come up to a year ago. Maybe we could advertise for another one and offer a free room." One often expressed observation by staff was patients' reluctance to go to St. John's for treatment. "We need more resources on Bell Island, we have very little resources. If somebody needs physiotherapy or occupational therapy or needs anything additional and they have to go to St Johns, they don't have the income to go, so they don't go, they go without." As one of the staff so aptly put it, "It would be nice to have one Primary Health Care setting and have everyone in the one building." Staff also observed that these allied health professionals would also be instrumental in keeping seniors independent in their homes and enjoying optimal quality of life. Finally, nothing breeds success like success. One staff member pointed out that if Bell Island were to host the proposed allied health professionals on an ongoing itinerant basis that would make the prospect of both coming here to work and moving to Bell Island that much more attractive, "If we had the facilities here for our physiotherapist and our dietitian and our optician it would sure be an attraction for people to come here."

### **Continue to build staff capacity through cross-training and extending professional skill-sets**

At the time of the study, Health Centre staff and management were all engaged in upgrading or broadening their skill-sets. For example, the laboratory technician was training to take x-rays, one nurse had just started training as a nurse practitioner, the Health Centre administrator was hard at work on his Masters, and other nurses were training in Advanced Cardiac Life Support. Nurses also expressed strong interest in cross-training with allied health professions. "They could set up a physio program in the community Health Centre. The physio could work with the nurses, do assessments and treatments plans and the nurses could do the treatment under the direction of the physio. There are limits to what the nurses are trained to do but even walkers would make a difference."

### **Extant professionals are too strapped for time to take on Health Promotion**

Providers are quick to point out that the need for health promotion is huge but they lack the time and resources in order to effect change. "Health promotion is desperately needed on the island but it is the last thing done. If you have someone who comes home from the hospital, continuing care takes priority. Health promotion has always been put on the back burner and that is the problem." Reasons why

this situation persists are understandable, "You cannot do any health promotion and education if you have too much paperwork or too many clients to see or if you don't get any relief coverage." Workers cited the need for early intervention, "We need to get up to the school and educate the youth. That is something that needs to be done but it's very difficult to do that when you don't have the time to go. We are at our full capacity over here." Staff were also keen to take health promotion out into the community and suggested doing blood pressure checks in the grocery store, the ferry line up and the post office. Staff and professionals also had a grounded understanding of what was required over the long-term, "We need to say, okay, maybe our focus should now be on this generation. In this decade we need to probably focus on promotion and keeping people healthy longer so that the health system is providing people with the education and the assistance needed to stay healthy longer and more productive. Doing so will decrease the cost to the health care system for chronic conditions."

### **Educating the public is paramount**

Without exception, health care professionals cited the need to educate the citizenry regarding health promotion and, as importantly, chronic care. "People are not educated on why it is dangerous to smoke. A lot of people just don't know. I think if we had the opportunity to educate, on the whole, they would probably be able to make better life decisions regarding smoking and diet. Your everyday activity is a problem, nutrition and alcohol abuse." Caregivers also zeroed in on the "need to educate the public on diabetes, cholesterol and so on, so people are aware of the problem and how they can fix it." Developing effective strategies and the right staff complement for implementing education programs was just as important. "Patients need to be able to go to some place and get the education and assistance to deal with these issues rather than the physician's clinic because the physician does not have the time nor do the two community health nurses and one mental health counselor." Education around self-care is also an issue. "Education is the biggest thing. A lot of them will say. I went to see the doctor today and they gave me this pill, what's it for?" There appears to be a real need for a coordinated program of health promotion and education around chronic conditions. "We need far more teaching: diabetes, blood pressure, B12 deficiency, and types of food to eat. Education is also a big part of continuing care. We have to educate people regarding health problems, what to do, what not to do." Moreover there need to be improved communication channels, "There is no

*focus on pamphlets or information that folks can take home.*" Presently two of the nurses in the Health Centre have special training in diabetic education but they do not have the time to initiate an education program. In addition to education around healthy behaviours and chronic disease management, Health and Community Services staff cited the need for parenting classes and teaching adults how to care for the elderly.

### **How we use the Health Centre could be reworked**

The drop in number of long-term care residents has given rise to speculation that the long-term care wing might be closed. If this is to occur there are questions as to what would happen to that space. *"The hospital here, I don't know if it is fully utilized to its capacity. Realistically we have this big facility and I don't know if it is utilized effectively."* Others envision a real use for that space, *"We have the facility, the services and the resources but need to rearrange the pieces so people have a place to come to get health promotion services."* Other professionals caution that the number of seniors on Bell Island is actually increasing and that in the not-too-distant future the need for long-term care may actually increase. In fact, between the time that the field work ended and the writing of the report began, long-term care at the Health Centre was once again operating at full capacity with a waiting list.

### **How do we know what we're dealing with?**

Without an electronic health record or formal chart review at the Health Centre, it is impossible to ascertain the exact number of cases, for example, of Type II diabetes or bowel cancer. Following are the informed impressions of those in the health care delivery system. *"The major health problems here are cardiovascular disease and obesity. No, smoking is number one. Poor nutrition is number two. Those two contribute to cardiac problems. We also see lots of ulcers related to diabetes and cardiac disease."* Professionals also state that they see a lot of cancer, *"We see a lot of breast cancer for women, and lung cancer for men. Gastric and bowel also stand out."* Some of these claims are substantiated by the trends noted earlier in the most common diagnosis categories among those admitted for inpatient treatment. This is particularly true for comments regarding diseases of the digestive system which was in the top three 'most common diagnosis' categories for all but one of the age groups examined. 'Diseases of the circulatory system' was also a common diagnosis category, particularly for those aged 60 – 79 years. It was particularly difficult to get a consensus on whether or not mental health was an issue on the island. As previously noted,

the challenges around data acquisition and husbandry make it very difficult to ascertain even rough numbers which would inform the choice and design of health services.

Health and Community Services also reports being information challenged, *"Statistics are gathered manually to ensure an equitable distribution of staff resources for Child, Youth, Family Services, Continuing Care and Community Living and Supportive Services through the region including Bell Island, but hopes for reports that could be generated through the (Client Referral and Management System) CRMS have not materialized."* Specific challenges include: absence of postal codes and absence of a specific code for Bell Island as a 'district', lack of historical data, and so on. In addition, the data that is collected by Health and Community Services regarding caseloads is compromised due to lack of standardized recording practices. For example, if services provided to a client were completed and the client program was not closed before the end of a reporting period, the case will still be counted. This means that the number of clients that appear to be receiving treatment in any given month may actually be inflated. On the other hand, the numbers reported each month refer only to cases that are active at the end of the reporting period. New client cases that are opened and closed during the month-long reporting period may not be counted. This means that the number of clients receiving any of the services provided by Health and Community Services may actually be higher than reported.

### **Communication with the outside world continues to be a challenge**

Management at the Dr. Walter Templeman Health Centre has a recent high speed connection with St. John's which enables better communication with remote administrative colleagues in St. John's, but clinical staff and the Health and Community Services offices at the Health Centre have dial up only. Dialup supports the required applications but communication is frustratingly slow. By way of comparison, the Bennett Street Health and Community Services office has been converted to terminal services which are connected to the terminal services server farm at Cordage Place via a broadband link to the Provincial Government's network. This system is fully funded by the Department of Human Resources, Labour and Employment which is located on the ground floor of the Bennett Street site.

To summarize: challenges to a seamless interface between the technology and practice include: slow connections; sharing computers; time-consuming electronic charting; and, double documentation in continuing care due to the many forms to complete by

hand. Health and Community Services staff also cited the need for additional training if the Client Referral and Management System software is to be used for continuing care.

### **Identification, diagnosis and treatment of at-risk behaviours requires a big picture**

Both the community and health professionals recognize that gambling is a problem, *“Gambling, I see it as a significant issue, especially the VLTs and all the social ills that come with that. It is quite problematic on Bell Island.”* Presently, health professionals offer a very grounded, one-on-one approach to gambling and its associated problems. *“Basically the only thing we can do right now is give people an assessment. So you sit down and find out about their abuse. How much are they using, how much are they spending, how often do they go, is the family at home and are they missing out on their activities. So how does gambling impact their life? And that is how we would determine if it is a problem or if it is not a problem for a person.”* However, there isn’t the means for arriving at even a rough estimate of how many persons in the community have a problem with gambling. Health professionals have been able to get a better sense of need throughout the community in relation to alcohol abuse, *“I usually see it in the younger adults and the middle age adults, you just see it throughout even the elderly up to the 70s and 80s – not so much in adolescence – mostly in the middle 20s and up.”* Findings from this study relating to the prevalence of at risk behaviours including gambling and alcohol point to the need for a comprehensive plan to address at risk behaviours to include: obesity, smoking, gambling, drinking, and street and prescription drugs.

### **Communication between agencies and between the agencies and the community need strengthening**

At the time of this study, the Health Care Corporation of St. John’s provided clinical services while its partner, Health and Community Services, provided public health and social services. Workers within the sister systems consistently cited the need for better communication between these two systems and between the system and the community. *“Agencies can help by working together. One group doesn’t know what the other group is doing.”* Because workers of these two agencies are not all working out of the same location, staff thought that it must be hard too for the community to understand how the two systems and resulting programs fit together. *“In terms of the Healthcare Corporation, they have to let people know using memos or the newsletter that we*

*(Community Health Nurses and Addiction Services) are part of the same system. We are in the same building. It is just a matter of making those connections more available.”* Others suggested that everyone would benefit if they were all under the same roof. *“It would be nice to have one primary care setting and have everything in one building. There are two Health and Community Services sites here on Bell Island. If we were all under one roof we could work as a team – be on the same wavelength.”*

Providers and staff also stressed that communication between the Health Centre, Health and Community Services and the public had to be improved. *“I know many people that I work with who look around and say, we don’t have that here or we don’t have that service here, I can’t get that. But you can, you can access things. Just making people aware that there are services, that there are supports is really needed. I think that the coordination of services and tapping into the resources that are here is important.”*

### **Primary Health Care Reform**

Staff and providers are aware and supportive of Primary Health Care Reform (PHCR), *“I think Bell Island is on the cutting edge. It could develop a true primary health care centre with all the resources in a place.”* Professionals working on the island recognize the need for the network and core teams that PHCR proposes. Networks and core teams would include a customized combination of the pharmacy, physician, nurse practitioner, social worker, community health nurse, physiotherapist, occupational therapist, mental health / addictions counselor, registered nurse, licensed practical nurse, speech language pathologist, dentist, social worker, and, an audiologist. Bell Island’s professionals also cite the need to add a dietitian, optometrist, podiatrist and massage therapist to the ‘basket of services’. Regardless of the final composition of the network or core team, the challenges inherent in getting back and forth to Bell Island remain a significant stumbling block to implementing the model on Bell Island. In principal, the health services and programs on Bell are aligned with the four pillars of Primary Health Care, namely, information, teams, access and healthy living. The challenge will be to successfully modify and deploy the PHCR model in this rural and remote island community.

### **We need a plan and public campaign to eradicate family violence, abuse and neglect**

As noted in previous chapters, expertise on how to deal with elder abuse is limited. Professionals cited the need for education as to what constitutes abuse. It was also pointed out that more resource materials and an effective means of distribution were needed for

victims, abusers and professionals. In the event that someone does present with abuse, *“usually referrals would be made out of Mental Health Addiction Counselor who deals with abuse and alcohol abuse and physical abuse, all sorts of abuse.”* However, after 4:00 pm, abuse becomes an out-patient issue. In the words of one staff member, *“You are on Bell Island. Where are you going to go in the middle of the night? Once he beats you up where are you going to go? You are going to come to the hospital but then you are going back home. Hospital staff are powerless because we don’t have the resources to offer the person. Once resources are offered, for example a shelter, how do they get there? How do they contact the social worker at five in the morning? It’s a huge decision. There is no place readily available. You have to wait until the next morning to decide. We can’t keep you in the hospital.”* There have been times on Bell Island when there have been up to six months between mental health / addictions workers so *“Those people that required services [as a result of family violence], or who were probably in a crisis situation went without for those six months. There would be the St. John’s crisis number that they could call.”*

### **Sometimes the island has limited ambulance coverage**

There are two privately owned ambulances on the island that are subsidized by the government. One has specialized up-to-date equipment, the other does not. *“At night, the boat ties up on the Portugal cove side and returns to Bell Island if needed for an emergency. It takes approximately an hour for a patient to be stabilized at the Walter Templeman Health Centre before they are ready to go on the ferry so having the boat tied up on the other side works*



FERRY CROSSING THE TICKLE. PHOTO COURTESY OF REGINALD DURDLE.

*out. However, if the ambulance comes over at two in the morning with an emergency the ferry will not take the ambulance back to Bell Island unless the doctor is traveling with the ambulance.”* The ambulance owner argues that the ferry should wait the hour that it takes for him to return to the ferry terminal after dropping someone off at the Health Sciences or St. Clare’s. *“The ferry workers argue that there is a six hour consecutive rest period under transport Canada and taking the ambulance back could compromise their ability to run the service and as a result, in the morning you would have 400 people now trying to get to work.”* The ambulance owner is concerned that there would be no response if there was a big accident or two accidents occurred at one time on Bell Island.

### **Summary of challenges**

- services and programs that encompass the entire health care delivery continuum, to include acute interventions, chronic disease management, primary care, prevention, health and wellness
- effective strategies for reaching out and meeting the health and well-being need of Bell Island’s citizenry living below the low income cut off (LICO)
- systematic identification, diagnosis and treatment of persons at risk due to gambling, alcoholism, smoking, obesity, street and or prescription drugs
- support and overnight accommodation for staff detained on Bell Island due to unfavorable weather and ferry conditions
- allied health professionals to complement and leverage the health and well-being efforts of the existing primary health care team
- management in St. John’s to better understand the context and inherent challenges of working on Bell Island
- securing backfill staffing for physicians, laboratory and x-ray technicians, community health nurses, child social workers, mental health / addictions counselor, and so on
- need for specialized staff, for example: nurse practitioners; adult and senior social workers; mental health addictions personnel; health education and prevention specialists, and so on
- ubiquitous access to broadband on Bell Island supporting PACS, telehealth and community-based television
- revisit the vision, philosophy, use and layout of the Health Centre and Bennett Street sites
- an overarching and integrated plan to address domestic abuse and family violence

- improved communication between the Health Care Corporation and Health and Community Services and between these institutions and the community
- standardized data acquisition and access resulting in valid and relevant analysis of health data
- meaningful indicators for new and extant health services and programs
- allocation of staff time and resources to address education needs around prevention, health and wellness and chronic disease management
- detailed protocols to address challenges faced by support staff and patients when arranging for and following up on medical treatment and appointments in St. John's and surrounding environs
- leverage potential relationships with: Memorial University; College of the North Atlantic; MUN Office of e-Health; the provincial Office of Primary Health Care Reform; MUN Medical School Primary Care Research Institute; and, the province's Centre for Applied Health Research

## Suggestions for consideration

These suggestions may be of interest to individuals, the community and the health care system working together or independently. Although many of these suggestions were raised at the community level they are revisited here because the focus in this chapter is on the health system.

**Big picture:** Findings from this study point to the need for a comprehensive plan that takes into account the Twelve Determinants of Health and spans the entire health-care delivery continuum to include acute interventions, chronic disease management, prevention, health and wellness. If Primary Health Care Reform is the chosen vehicle, Bell Island will want to be well represented on the Primary Health Care Advisory Committee that covers Bell Island. High unemployment, in combination with the data on at risk behaviours, notably smoking, gambling, obesity, inactivity and alcohol consumption, street and prescription drugs, underscores that band-aid solutions are no longer tenable. Health and well-being on Bell Island requires an overarching plan that engages the health system, Bell Island's citizens and their community. Phase Two of the Needs Assessment is the next step in determining that big picture. Follow up to Phase One and Two would be to ensure that the Primary Health Care Advisory Committee is fully aware of the scope and findings from the Needs Assessment and that Bell Island is represented on the Primary Health Care Advisory Committee.

**Reaching out:** This study failed in its efforts to satisfactorily canvass and engage the health and

well-being needs of the working poor and persons on social assistance. Moving forward with Phase II of the Needs Assessment, it is imperative that these parties become proactively engaged in the process. One strategy would be for all participants to team up with and involve someone living below the LICO throughout Phase II. Also ensure that representatives from those on social assistance and the working poor become active members of the Bell Island Health and Wellness Committee.

**Emergency accommodation and support for stranded staff:** Which perception is more likely to increase professional staff and allied health workers interest in providing services and programs on Bell Island: *"They'll take really good care of you"* or *"You'll probably get stranded."* To reiterate the proposal set out in the chapter on community, employers and the community should have a backup plan covering food and accommodation for employees detained on the island due to bad weather or ferry breakdown. Knowing that there is a community volunteer plan that comes into play in the event of an emergency sends a clear message to health professionals that it is an organized and caring community that values the services that commuting health professionals bring to the island. Knowing that this option is in place might also address some of the issues that impede backfilling staff vacancies. The plan could be as simple as a rota of citizens willing to volunteer meals and / or overnight accommodation.

**Basket of services:** Staff and health professionals espouse the need for allied health professionals and social workers with the expertise needed to work with adults and seniors. Once the community has worked their way through Phase II, the best complement of health professionals and how to support and integrate same will become clearer. Regardless, this is an ongoing process because the community's needs are changing. For example, each year the number of seniors is increasing. Progress towards the best possible complement of staff will be both incremental and ongoing.

**Information and communication technologies (ICT):** The higher the bandwidth and the more ubiquitous the technology, the more options Bell Island will have to support telemedicine, telehealth and tele-education. Moreover, broadband supports cable television and, as noted in previous chapters, a community owned and operated Bell Island Health and Well-Being television channel may be the most effective population health promotion tool. The concept is a community television channel featuring content generated by Bell Islanders for Bell Islanders. The Bell Island Health and Well-being channel would play in private homes,

in the waiting-rooms, in the post office, and on the ferry. There could be interviews with a nutritionist in the grocery store highlighting healthy foods and food preparation. There could be a laboratory technician making a 'reality' home visit with a senior who is housebound. There could be a course on parenting or how to care for the elderly. Children could generate adds advocating dental hygiene and youth could focus on staying tobacco free or upcoming employment opportunities. Eastern Health is well positioned to collaborate with the community on lobbying government to get the very best information and communication infrastructure possible.

**Reworking where health services and programs are provided:** Bell Island's health professionals repeatedly cited the advantages of housing all clinical and Health Centre and Health and Community Services staff under one roof. The rationale for doing so is increased opportunities for collaboration and improved communication and coordination of programs and services. Institute monthly 'Grand Rounds' and have persons from the Health Centre and Health and Community Services take turns presenting cases. In addition to having all of Eastern Health's staff under one roof is it also possible to provide space for itinerant allied health professionals, such as a physiotherapist, occupational therapist, optometrist, dietitian, massage therapist and so on? As in the case of the dentist, the health centre would be accommodating a combination of private and public health services. The decision of where to consolidate services might not be clear cut as the building on Barrett Street appears to have ample room and be in good condition.

**Domestic abuse and family violence:** What programs and services does the government provide to meet the needs of victims of domestic abuse and family violence in rural and remote communities across the province? Moreover, how can Bell Island avail itself of these programs and services? If nothing exists, can Bell Island become a living laboratory for the research, development and deployment of such programs and services? Domestic abuse and family violence as well as senior abuse and neglect must be acknowledged by individuals, the health system and the community, but the health system has to take the lead when it comes to public education and provision of services and programs for adults and families. The community is presently working with the children in the schools, The Boys' and Girls' Club and through programs offered by the RCMP. What additional programs and services can the health system provide to better address domestic abuse, neglect and family violence?

**Valid and timely data:** The Health Centre and Health and Community Services are challenged when it comes

to standardized data collection, storage and analysis. Yet reliable data are fundamental to determining need and the requisite programs, services and resource allocation required to meet those needs. Eastern Health is an organization in transition. Moreover, it will be many years before the province has a functional and fully integrated electronic health record. In the interim, and as part of Phase II, Health Services could identify key data streams to track manually, for example, the number and type of diabetics being treated on Bell Island, cause of death, number of diagnosed asthmatics and so on. As time goes on it will also become increasingly important for Bell Island to standardize outpatient emergency data. Collecting valid and timely data will require the assistance of a statistician / data analyst with a solid understanding of database design.

**Commuting patients:** Strike a working group involving support staff, representatives from the ferry users committee and a cross-section of patients and caregivers experienced in commuting for medical treatment. Working together, identify the full spectrum of challenges from booking a workable appointment time to getting priority passage over and back on the ferry. Identify solutions. Produce pamphlets and posters that set out the principles and guidelines for commuting patients. Distribute the information directly to patients who have to commute for medical reasons.

**Isolation:** Bell Island has everything required to become a living / learning laboratory for rural and remote primary health care. It has a dynamic and forward looking administration and staff, an engaged community and a discrete population which allows changes in health status to be measured. Bell Island could become a showcase for primary health care reform as well as a pilot site for the research, development and deployment of information and communication technologies supporting the full health care delivery spectrum. Chronic disease management and health and well-being on Bell Island have the potential to become an industry.

## Suggested indicators

Indicators allow individuals, the community and the health care system to establish a baseline and monitor change over time. The following list is a starting point for discussion. The wording of these indicators would be formalized in Phase Two if the Needs Assessment. The end goal is to identify indicators that are truly meaningful for Bell Island's health care system.

1. Number of programs or interventions across the health care delivery spectrum to include: acute interventions; chronic disease management; primary care; prevention; and, health and wellness

2. Percentage of population living below the LICO participating in health and well-being initiatives on the island
3. Percentage of Eastern Health under one roof
4. Type and number of visits by allied health professionals
5. Number of client visits per clinic to an allied health professional
6. Percentage of the population that avails itself of resources supporting victims and families of domestic violence and / or abuse and / or neglect
7. Number of patients and staff using the internet for telehealth, telemedicine and / or tele-education
8. Total number of programming hours on the community TV channel devoted to health and well-being related topics
9. Number of meals and overnight accommodations used by Eastern Health staff or allied health professionals detained on the island due to extenuating circumstances
10. Number of staff days not backfilled
11. Number of per capita physician visits
12. Number of per capita dentist visits
13. Membership numbers for Alcohol Anonymous, Gambling Anonymous, Weight Watchers, and so on
14. Total and per capita cost of the Senior and Provincial Income Support Drug Programs
15. Number of Grand Rounds

## Topics for further research

These research topics relate directly to the material in this chapter. The intent of putting these topics forward is to encourage undergraduate and graduate students to integrate this research on Bell Island into their studies. Doing so will help establish Bell Island as a living / learning laboratory under the auspices of the Bell Island Health and Well-Being Committee.

1. What information and communication technologies (ICT) could be researched, developed and deployed to support the health and well-being of individuals living in rural and remote communities?
2. What information and communication technologies could support the virtual delivery of programs and services offered by allied health professionals such as physiotherapists, occupational therapists, dietitians, message therapists and so on, to a rural and remote island community like Bell Island?
3. What is the best combination of public and private programs and services to be provided by allied health professionals in rural and remote communities?
4. Determine the barriers and motivators for allied health professionals to provide a combination of public and private services on Bell Island.
5. What baseline data should rural and remote health centers collect? How should data collection be standardized?
6. Why is Diseases of the Digestive Tract one of the top three ICD-10 reasons for hospital admissions across all admission sites and all age groups?
7. What programs and services does the province provide to meet the needs of victims of domestic abuse and family violence? Are these resources accessible by rural and remote communities across the province? What ICT infrastructure would help victims and their families avail themselves of these resources?
8. How does the model for Primary Health Care Reform map onto health care delivery on an island that is in essence rural and remote and as such doesn't meet the criteria for a stand-alone network?
9. Are current dental services meeting the needs of Bell Islanders? If not, what are the barriers and motivators to optimal dental hygiene and dental care for Bell Islanders and how can these barriers be addressed and the motivators leveraged?
10. Conduct an in-depth comparative analysis of Bell Islander's use of emergency services on and off Bell Island.
11. Determine the per capita cost of health and well-being services on Bell Island compared with per capita costs in St. John's.
12. Determine why the per capita cost of the Provincial Income Support Drug Program is so high.
13. Determine why recipients of the Provincial Income Support Drug Program appear to require, on average, 26 prescriptions annually. Does this pose a health risk to the recipients and broader community?

## References and resources

References listed here include those mentioned in the chapter, as well as suggestions for further reading.

Bell Island Ferry Users Committee. [online]. (April 2006). [http://www.bellisland.net/ferry\\_users/index.htm](http://www.bellisland.net/ferry_users/index.htm)

Bell Island health and well-being needs assessment community profile. (2004).

Dr. Walter Templeman Health Centre. (2003 – 2004). Overview of services.

Government of Newfoundland and Labrador Office of Primary Care.

Government of Newfoundland and Labrador Provincial Drug Program. [online]. (April 2006). <http://www.health.gov.nl.ca/health/guide/other.html>

Government of Newfoundland and Labrador. Provincial government reports. [online]. (April 2006). <http://www.gov.nf.ca/publicat/pub.htm>

Health Canada. Violence and abuse. [online]. (April 2006). [http://www.hc-sc.gc.ca/hl-vs/violence/index\\_e.html](http://www.hc-sc.gc.ca/hl-vs/violence/index_e.html)

Health Care Corporation of St. John's. (2001 – 2004). Inpatient and outpatient admission data.

Public Health Agency of Canada. National clearing house on family violence. [online]. (April 2006). <http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/>