

Clinical Services Plan Consultation Document

November and December 2015



Plan for the presentation

- Context
- Population and Vitalité Health Network profile
- Trends
- Transformation and modernization
- Hospital system reorganization
- Savings and investments
- Conditions for success



CONTEXT



Context

- The Government of New Brunswick's approach to program review
- Two scenarios proposed to Vitalité Health Network by the Department of Health for analysis and feedback
- Seeking solutions: an imperative



Context

- Findings: current model obsolete
 - Many resources
 - Physician to human resources ratios among the highest in the country
 - Bed ratios among the highest in the country
 - Health conditions of the New Brunswick population among the least favourable, especially on the territory served by Vitalité Health Network
- Population health profiles closely related to behavioural and socioeconomic factors but not much to health care services
- Proposed solution: transforming and modernizing Vitalité Health Network



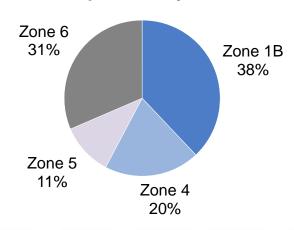
POPULATION AND VITALITÉ HEALTH NETWORK PROFILE

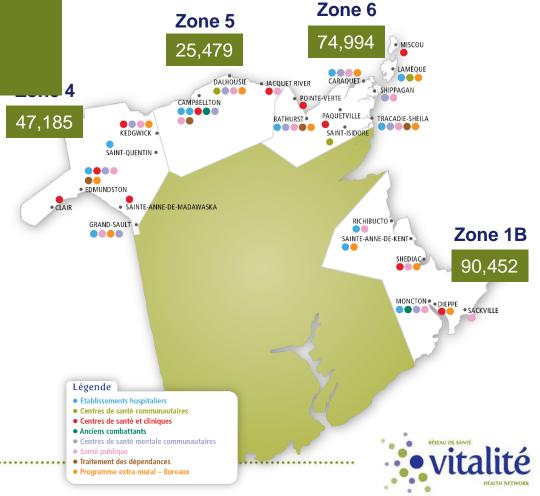


Population profile

The Network's population in 2015:
238,380
(32% of New Brunswick's population)

Distribution of the Network's Population by Zone





Population profile

Population Changes – 2006 to 2017



Source: Vitalité Health Network

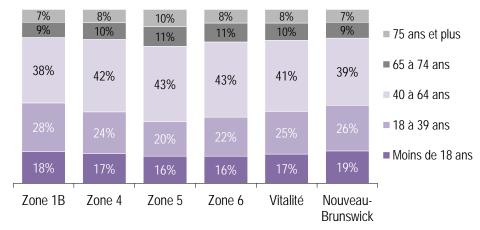
- Growth of the population in Zone 1
- Decline in the population of the three northern zones



Population profile

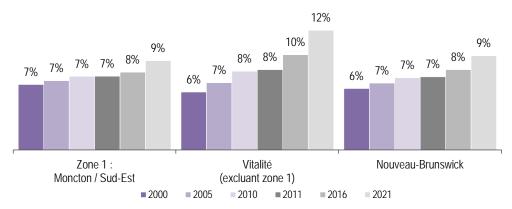
- Vitalité Health Network's population relatively old in the northern zones, especially in Zone 5
- Progress of aging over the next few years

Population by Age Group - 2011



Source: Statistics Canada, 2011 Census

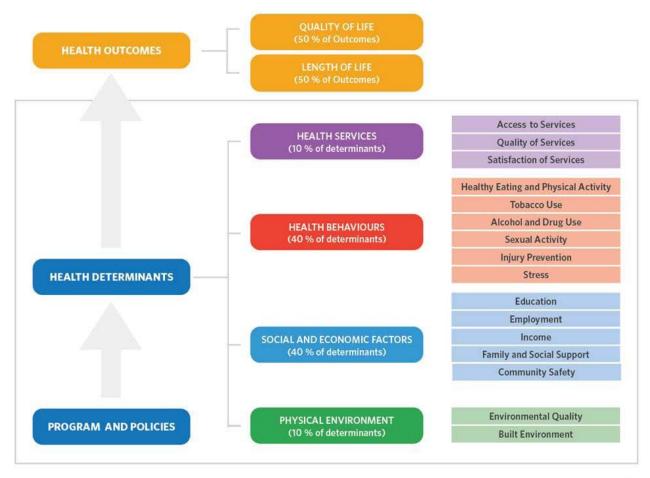
Changes in Demographic Weight in People 75 and Older – 2000 to 2021





Source: Vitalité Health Network

Population health model





Health profile

- New Brunswick compared with Canada
 - Province with the population that has the worst perception of its health, both physical and mental
 - One of the most disadvantaged provinces in terms of education, employment, and income
 - Health-related behaviours to be improved (alcohol, smoking, physical activity)
- Health profile of Vitalité Health Network zones
 - Zone 1: relatively good
 - Zone 4: relatively bad when seen from the point of view of many indicators
 - Zone 5: generally very badly positioned, except for health-related behaviours
 - Zone 6: generally better positioned than zones 4 and 5 for health-related outcome and behaviour indicators, in spite of a very unfavourable socioeconomic profile



Health profile

Examples of Indicators

| | Zone 1 | Zone 4 | Zone 5 | Zone 6 | N.B. | Canada |
|--|--------|--------|--------|--------------------|-------|--------|
| Life expectancy: (2007-2009) | 81.4 | 79.3 | 78.6 | 81.3 | 80.2 | 81.1 |
| Rank | 1/7 | 6/7 | 7/7 | 2/7 | 5/10 | |
| Premature death due to cancer (years of life lost, rate by 1,000, 2008-2012) | 158 | 199 | 200 | 176 | 171 | n/d |
| Rank | 2/7 | 6/7 | 7/7 | 3/7 | | |
| Without a high school diploma (2011) | 15.3% | 23.0% | 25.3% | 28.8% | 16.8% | 12.7% |
| Rank | 3/7 | 5/7 | 6/7 | 7/7 | 8/10 | |
| Smoking, regular or occasional smokers (2013) | 18.4% | 24.9% | 29.5% | 24.0% ^E | 21.8% | 19.3% |
| Rang | 1/7 | 5/7 | 7/7 | 4/7 | 9/10 | |

Rank: For zones, the rank positions the zone among the seven zones in New Brunswick (from best to worst). For New Brunswick, the rank positions the province among the ten Canadian provinces.

E: Use data with caution, sample too small.

Source: New Brunswick Health Council, Population Health Snapshot 2014-2015

Health profile

Use of Primary Health Care Services in the Past 12 Months

| 2014 | Zone 1 | Zone 4 | Zone 5 | Zone 6 | N.B. |
|---|--------|-------------------|--------|--------|-------|
| Visited usual family physician | 83.5% | 74.5% | 77.1% | 83.2% | 80.3% |
| Visited a hospital emergency department | 37.5% | 54.8% | 48.0% | 51.2% | 41.3% |
| Visited a community health centre | 5.5% | 3.0% ^E | 10.1% | 9.8% | 6.9% |

E: Use data with caution, sample too small.

Source: New Brunswick Health Council, Primary Health Survey 2014



Hospital beds

| | | Acute Care | Chronic and Long- Term Care | Rehabilit | Veterans | Restigou che Hospital Centre | Total |
|------------|--|---------------|-----------------------------------|-----------|----------|---------------------------------------|-------|
| Zone 1B | Dr. Georges-LDumont UHC | 256 | 21 | 25 | 40 | | 342 |
| ne | Stella-Maris-de-Kent Hospital | 20 | | | | | 20 |
| Z | Edmundston Regional Hospital | 139 | 30 | | | | 169 |
| Zone | Grand Falls General Hospital | 20 | | | | | 20 |
| 4 | Hôtel-Dieu Saint-Joseph de Saint-Quentin | 6 | | | | | 6 |
| Zone | Campbellton Regional Hospital | 121 | 25 | | 20 | | 166 |
| ē 5 | Restigouche Hospital Centre | | | | | 152 | 152 |
| | Chaleur Regional Hospital | 171 | 44 | | | | 215 |
| Zone | Tracadie-Sheila Hospital | 59 | | | | | 59 |
| le 6 | Enfant-Jésus RHSJ† Hospital | 12 | | | | | 12 |
| | Lamèque Hospital | 12 | | | | | 12 |
| | Total | 816 | 120 | 25 | 60 | 152 | 1,173 |

Note: Profile before acute care beds were reclassified as chronic care beds on April 1, 2015: 27 beds reclassified at the Dr. Georges-L.-Dumont UHC and 26 at the Edmundston Regional Hospital.



Community health services

| | Zone 1B | Zone 4 | Zone 5 | Zone 6 |
|---------------------------------|--|---|---|---|
| Community health centres | | | • St. Joseph | LamèqueSaint-Isidore |
| Health centres | Shediac Regional Medical Centre | Sainte-Anne | • Jacquet River | ChaleurMiscouPaquetville |
| Clinics | Phlebotomy Clinic | Haut-Madawaska Medical ClinicKedgwick Medical Clinic | • E. L. Murray Clinic | |
| Community mental health centres | MonctonRichibucto | EdmundstonGrand FallsKedgwick | CampbelltonPoint of service in Dalhousie | BathurstCaraquetShippaganTracadie-Sheila |
| Public Health | MonctonRichibuctoSackvilleShediac | EdmundstonGrand FallsKedgwick | CampbelltonPoint of service in DalhousiePoint of service in Jacquet River | BathurstCaraquetShippaganTracadie-Sheila |
| Addiction Services | | • Edmundston | Campbellton | BathurstTracadie-Sheila |
| Extra-Mural Program | DieppeSainte-Anne-de-KentShediac | EdmundstonGrand FallsKedgwick | • Dalhousie | BathurstCaraquetLamèqueTracadie-Sheila |



Community health services

Activity Volumes by 1,000 Population (2014-2015)

| | Zone 1B | Zone 4 | Zone 5 | Zone 6 | Average Vitalité | |
|--|--------------------------------|-----------------|--------|------------|---------------------|--|
| Community health centres and health cen | tres | | | | | |
| Consultations | 562 | 129 | 2,159 | 1,118 | 826 | |
| Extra-Mural Program | | | | | | |
| Admissions | 33 | 34 | 33 | 30 | 32 | |
| Visits | 784 | 1,010 | 838 | 666 | 797 | |
| Public Health | | | | | | |
| Immunization: vaccines in schools | 50 | 17 | 23 | 21 | 32 | |
| Healthy Toddler Assessment: children seen | 7 | 5 | 3 | 5 | 6 | |
| Community Mental Health | | | | | | |
| New requests for service | 18 | 21 | 26 | 29 | 23 | |
| Individuals who received a service | 27 | 43 | 59 | 56 | 43 | |
| Therapeutic follow-up - adults | 22 | 33 | 49 | 45 | 34 | |
| Therapeutic follow-up – children/adolescents | 5 | 10 | 10 | 10 | 8 | |
| Addiction Services | | | | | | |
| Admissions | Services | 7 | 7 | 5 | 6 | |
| Clients seen on an outpatient basis | delivered by Horizon Health | 13 | 10 | 8 | 10 | |
| Outpatient visits Source: Vitalite Health Network, Annual Report 2014-2 | | 111 | 69 | 76 | 86 | |
| Source. Vitalite Health Network, Annual Report 2014-2 | o is and Populatio | in by Zone in 2 | .014 | " O KÉSEAL | I DE SANTÉ | |

TRENDS



Trends

Chronic diseases

- Current situation
 - Leading cause of death worldwide
 - In Canada, more than two-thirds of all deaths caused by chronic diseases (cancer, diabetes, cardiovascular diseases, and COPD)
- Health services to be adapted
 - Health promotion and disease prevention
 - Use of a frontline interdisciplinary team
 - Continuous, integrated and coordinated care and services
 - Involvement of individuals in self-management of their disease



Trends

Chronic diseases

- Challenges
 - Current service organization more focused on response to acute health care problems
 - Current approach hardly appropriate for coordinated prevention and management
 - Services generally delivered in a hospital setting
 - Few formal mechanisms for sharing information between partners



Trends

Care and service organization

- From a comprehensive point of view
 - Strengthen frontline services
 - Prioritize care (primary, secondary, tertiary; general, specialty, subspecialty, etc.)
 - Organize services and expertise into networks
 - Make specialized or limited resources available throughout the Network rather than in a single facility
 - Focus on interdisciplinarity
 - Standardize practices



TRANSFORMATION AND MODERNIZATION



Guiding principles

Seven dimensions related to service quality

Accessibility

Clinical viability

Equity

Safety

Appropriateness

Efficiency

Effectiveness

Citizen-focused services



Vision and foundations

Shift to primary health care services, with major emphasis on ambulatory and community care, as well as on home care

Foundations

- For people
 - Acknowledging that people are the priority
 - Preventive action on health determinants
 - Focus on services for the most vulnerable
- For the organization of services
 - Delivering appropriate services
 - Overall performance vision, high quality standards, and evidencebased data
 - Range of standardized services throughout the territory
 - Interdisciplinarity
 - Specialized services organized into networks



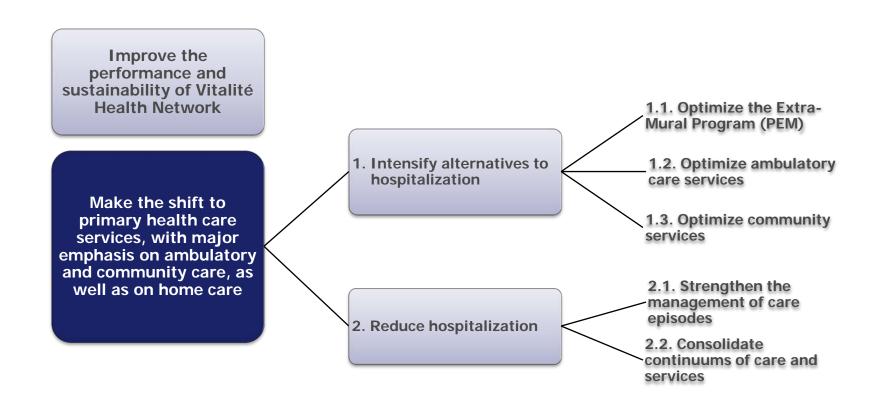
Vision and foundations

Foundations (cont.)

- For clinical practices
 - Multidisciplinary team in physicians' offices and community centres
 - Case management model and individualized care plans (e.g., elderly, chronic diseases, mental health)
 - "Home First"
 - Geriatric approach in the hospital setting
 - "Choose with care" (reducing the number of useless tests, treatments, and procedures)
- For the Network management
 - Developing strong clinical governance
 - Physician involvement
 - Mutual trust between physicians and the organization



Transformation plan



Transformation plan - Alternatives to hospitalization

1. Intensify alternatives to hospitalization

1.1. Optimize the EMP

- 1.1.1. Improve service accessibility and intensity
- 1.1.2. Improve medical care for EMP patients
- 1.1.3. Integrate EMP services into each program/clientele
- 1.1.4. Increase home care for long-term clients (elderly, chronic diseases)
- 1.1.5. Develop home geriatric assessment/intervention
- 1.1.6. Develop home rehabilitation services
- 1.1.7. Develop home telehealth
- 1.1.8. Develop home palliative care
- 1.1.9. Increase resources to keep heavier cases at home
- 1.1.10. Improve access to short-term support services
- 1.1.11. Optimize the use of individual support services on a short-term basis
- 1.1.12. Facilitate access to diagnostic services and medical and professional specialized consultations for clients at home (e.g., "virtual hospital")
- 1.1.13. Optimize coordination with home-based assistance and support services

Transformation plan — Alternatives to

hospitalization

- 1. Intensify alternatives to hospitalization
- 1.2. Optimize ambulatory care services

- 1.2.1 Maintain emergency services while setting up what is needed to reduce these services during the night in community hospitals
- 1.2.2 Establish a day hospital
- 1.2.3 Ensure access to outpatient rehabilitation services
- 1.2.4 Develop specialized clinics (COPD, diabetes, heart failure, elderly clients with multiple needs, mental health clients, etc.)
- 1.2.5 Optimize renal replacement therapy services

Transformation plan — Alternatives to

hospitalization

- 1. Intensify alternatives to hospitalization
- 1.3. Optimize community services

- 1.3.1 Support the development of living environments adapted to seniors
- 1.3.2 Decentralize some specialty clinics towards community health centres/family health teams
- 1.3.3 Develop new community health centres/family health teams or improve service delivery in existing centres
- 1.3.4 Develop community palliative care
- 1.3.5 Improve quick access to a family physician by developing networks of medical clinics
- 1.3.6 Optimize complementarity between frontline multidisciplinary care teams and pharmacists in the community for therapeutic follow-up
- 1.3.7 Implement integrated crisis services for mental health clients
- 1.3.8 Develop support services in the community for individuals with serious mental disorders (FACT model)

HOSPITAL SYSTEM REORGANIZATION



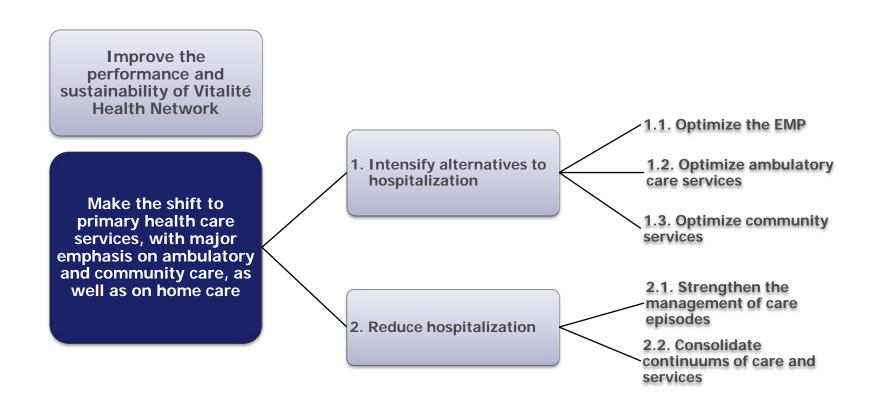
Medical staff organization

| Regional Medical Departments | Divisions |
|---------------------------------|------------------------------|
| General Practice | Family Practice |
| | Emergency |
| Specialized Medicine | Cardiology |
| | Dermatology |
| | Endocrinology |
| | Gastroenterology |
| | Geriatrics |
| | General Internal Medicine |
| | Nephrology |
| | Neurology |
| | Oncology |
| | Physiatry |
| | Pneumology |
| | Rheumatology |
| Mother/Child | Fertility |
| | Obstetrics |
| | Pediatrics |

| Regional Medical Departments | Divisions | |
|---------------------------------|---------------------|--|
| Psychiatry | | |
| Surgery | Anesthesia | |
| | Bariatric | |
| | General | |
| | Gynecology | |
| | Ophthalmology | |
| | ENT | |
| | Orthopedics | |
| | Plastic | |
| | Thoracic | |
| | Urology | |
| | Vascular | |
| Diagnostic Services | Laboratory Medicine | |
| | Radiology | |



Reminder of the transformation plan



Transformation plan — Reduce hospitalization

- 2. Reduce hospitalization
- 2.1. Strengthen the management of care episodes

- 2.1.1 Assign daily bed utilization management to "episode managers" (EMs)
- 2.1.2 Develop and implement systematic follow-up protocols for clients
- 2.1.3 Identify the major users of hospital services who could benefit from individual care plans
- 2.1.4 Manage the appropriateness of admissions and stays on a dayto-day basis
- 2.1.5 Develop memoranda of understanding and service corridors with nursing homes
- 2.1.6 Implement protocols for returning patients to their referring facility
- 2.1.7 Realize full potential of day surgery
- 2.1.8 Develop telehealth (remote consultations)

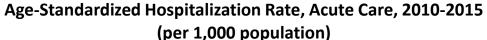
Transformation plan — Reduce hospitalization

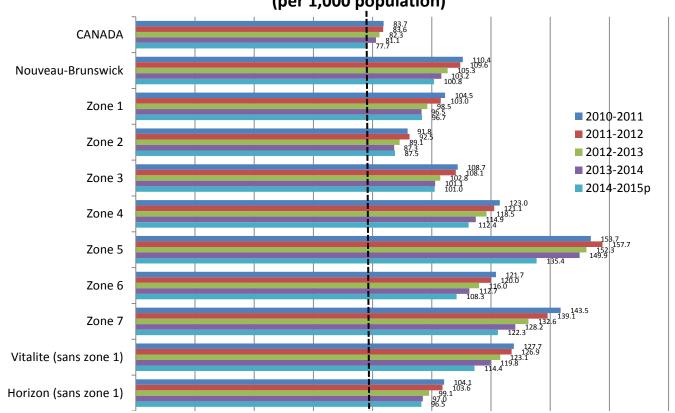
- 2. Reduce hospitalization
- 2.2. Consolidate the continuums of care and services

- 2.2.1 Improve integration with extra-mural care and services (prehospital, ambulatory, community, home-based)
- 2.2.2 Optimize patterns of service by program/clientele
- 2.2.3 Implement a single point of access for each program/clientele
- 2.2.4 Implement clinical access

- A number of studies and comparative analyses show that hospital beds are overused in New Brunswick and within Vitalité Health Network in particular.
 - High hospitalization rate per 1,000 population compared to the Canadian average
 - High number of beds per 1,000 population compared to other Canadian provinces and other OECD countries

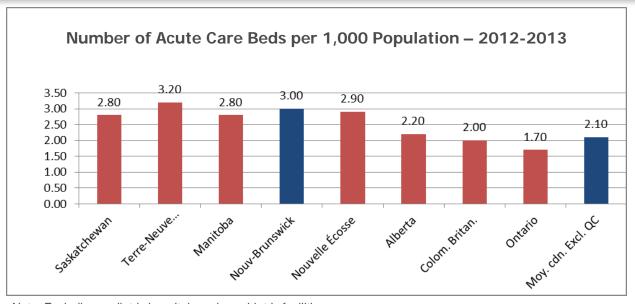






Note: Age-standardized hospitalization rate, excluding newborns. Based on the patient's place of residence (province or region). Canada excludes data related to Quebec and the territories. 2014-2015 data projected over 6 months.

Sources: CIHI Portal DAD. CGM 2014. Estimates of population by census division, sex and age group for July 1, based on the Standard Geographical Classification (SGC) 2011, annual (persons)



Note: Excluding pediatric hospitals and psychiatric facilities Source: CIHI Hospital Beds Staffed and in Operation, 2012-2013

Acute Care Beds per 1,000 Population - April 2015

| | Number of Acute Care Beds | Number of Acute Care Beds per 1,000 Population |
|---------------|------------------------------|--|
| Vitalité | 816 | 3.41 |
| Horizon | 1,400 | 2.70 |
| New Brunswick | 2,216 | 2.92 |

Source: Vitalité Health Network, Regional Health and Business Plan 2015-2018



- Significant number of acute care beds occupied by alternate level of care (ALC) patients
 - Mostly older people awaiting transfer to a more appropriate care environment, nursing home, or home with services that meet their needs
 - In 2014-2015, an equivalent of 177 family practice beds occupied by ALC patients within the Network
- Significant number of beds occupied by patients with chronic diseases and by patients who are ready for discharge



Closure of 99 beds

| | Service population | Acute care beds | Acute care beds per 1,000 people served | per 1,00 | care beds 00 people d - target | Surplus beds by zone |
|---|-----------------------|--------------------|---|----------|--------------------------------------|----------------------------|
| Dr. Georges-LDumont UHC | 91,694 | 256 | | | | |
| Stella-Maris-de-Kent Hospital | 1,615 | 20 | | (| | |
| Zone 1B | 93,309 | 276 | 2.96 | | 2.82 | 13 |
| Edmundston Regional Hospital | 44,744 | 139 | | | | |
| Hôtel-Dieu Saint-Joseph de Saint-Quentin | 1,366 | 6 | | | | |
| Grand Falls General Hospital | 1,716 | 20 | | | | |
| Zone 4 | 47,826 | 165 | 3.45 | | 2.88 | 27 |
| Campbellton Regional Hospital | 27,964 | 112 | | | | |
| Zone 5 | 27, 964 | 112 | 4.01 | | 3.13 | 25 |
| Chaleur Regional Hospital | 66,076 | 171 | | | | |
| Tracadie-Sheila Hospital | 6,745 | 59 | | | | |
| Lamèque Hospital | 335 | 12 | | | | |
| Enfant-Jésus RHSJ† Hospital | 1,549 | 12 | | | | |
| Zone 6 | 74,705 | 254 | 3.40 | | 2.94 | 34 |
| Vitalité | 243,804 | 807 | 3.31 | | 2.91 | 99 |

Service population based on data from the Department of Health

Acute care beds before some beds were reclassified on April 1, 2015. Acute care beds, excluding cribs, veterans' units, rehabilitation,

the Restigouche Hospital Centre, and 9 psychiatry beds at the Campbellton Regional Hospital.



Closure of 99 beds

- Reduction of the bed ratio per 1,000 population from 3.31 to 2.91 (based on the service population)
- Realistic target, close to New Brunswick's current average, taking into account the territorial and socioeconomic particularities of Vitalité Health Network
- Weighted bed ratio by zone to take into account the population age structure of each zone
- The number of surplus beds would be much higher if the bed target per 1,000 population were lower.

| | Bed Ratio per 1,000 Population | Surplus Beds |
|---|-----------------------------------|--------------|
| Based on the target ratio | 2.91 | 99 |
| Based on Horizon Health Network's ratio | 2.7 | 150 |
| Based on the Canadian average ratio | 2.1 | 296 |



SAVINGS AND INVESTMENTS



Annualized savings and investments

| Savings | \$9,791,667 |
|---|-------------|
| Beds | |
| Closable beds | 99 |
| FTE reduction | 127.4 |
| Potential savings | \$9,441,667 |
| Medical Imaging | |
| FTE reduction | 7.0 |
| Anticipated savings | \$350,000 |
| Investment of 50% of savings from the bed reduction | \$4,720,835 |
| Improve alternatives to hospitalization - Episode manager positions - Optimize EMP and create a virtual hospital - Optimize ambulatory care services - Optimize community services - Optimize home-based services | |
| Net savings | \$5,070,832 |

IN CONCLUSION



In conclusion

- Proactive approach to the organization of services and implementation of futureoriented changes
- Improved management by services and care in the community
- Reduction in the number of ALC days, increasing significantly patient days available for acute care and OR activities, medical care, and faster admissions from emergency departments
- Better use of short-term care beds
- Follow-ups that better meet the public's changing needs



