

Improving Access to Acute Care Services



A Policy Paper by BC's Physicians | August 2008



Improving Access to Acute Care Services

A Policy Paper by BC's Physicians

August 2008



The BCMA Council on Health Economics and Policy (CHEP) reviews and formulates policy through the use of project oriented groups of practising physicians and professional staff.

Special Acknowledgement

The BCMA gratefully acknowledges the significant contribution of Dr. William Cunningham (Project Lead), Emergency Medicine, BCMA Board Member, Duncan, BC.

BCMA Council on Health Economics and Policy (CHEP) Membership 2007-2008

Dr. Shelley Ross, Chair – General Practice, Burnaby
Dr. David Attwell – General Practice, Victoria
Dr. Brian Brodie – General Practice, Chilliwack
Dr. Sam Bugis – General Surgery, Vancouver
Dr. Brian Gregory – Dermatology, Vancouver
Dr. Jeff Harries – General Practice, Penticton
Dr. Trina Larsen Soles – General Practice, Golden
Dr. Alexander (Don) Milliken – Psychiatry, Victoria
Dr. Lloyd Opper – General Practice, Vancouver
Dr. David F. Smith – Paediatrics, Vancouver

BCMA Staff Support

Staff support was provided by Jim Aikman, Director of Economics and Policy Analysis; Dr. Jonathan Agnew, Assistant Director of Policy; Cindy Ong, Policy Analyst; and Linda Grime, Administrative Assistant.



Contents of this publication may be reproduced in whole or in part, provided the intended use is for non-commercial purposes and full acknowledgement is given to the British Columbia Medical Association.

Improving Access to Acute Care Services

A Policy Paper by BC's Physicians

August 2008

BCMA Position

The BCMA calls on the provincial government to adopt transparent and publicly available principles for the supply and effective management of functional acute care beds across British Columbia. Functional acute care beds are defined as appropriately staffed and operational hospital beds for medical, surgical, obstetrical, paediatric, psychiatric and critical care patients. This excludes hospital beds allocated for rehabilitation, long-term care and palliative care, and beds that are non-acute or functionally intended for temporary occupancy (e.g., surgical tables, recovery trolleys, delivery beds, emergency stretchers, and beds designated for same-day non-inpatient care). At a minimum, government must:

1. **Uphold patients' right to timely access to acute care services. Meaningful maximum allowable wait times must be implemented for all scheduled surgical and diagnostic procedures from time of referral through provision of service, and for hospital admissions from the emergency department.**
2. **Establish wait time benchmarks on evidence-informed standards. In the absence of such standards, a maximum allowable wait time of six months must be implemented.**
3. **Establish modeling for the supply of functional acute care beds on clinically appropriate standards that reflect the realities of the practice setting. These standards must be developed in collaboration with input from practicing physicians, representative and accountable to their colleagues.**
4. **Ensure that modeling for the supply of functional acute care beds is flexible enough to account for changes in population growth, demographics, patient acuity, technology, geography, and seasonal variations.**
5. **Provide the necessary infrastructure to ensure patients' timely access to all acute care services, including a greater supply of functional acute care beds.**
6. **Support effective management of functional acute care beds in conjunction with increasing their supply.**

7. Sufficiently resource community-based care (e.g., chronic disease management, primary care providers, home and community care) to ensure that functional acute care beds are used appropriately.
8. Provide regular public reports on the number of functional acute care beds by care type (e.g., medical, surgical, obstetrical, paediatric, psychiatric, critical care) and on the progress towards satisfying wait time benchmarks for acute care services.

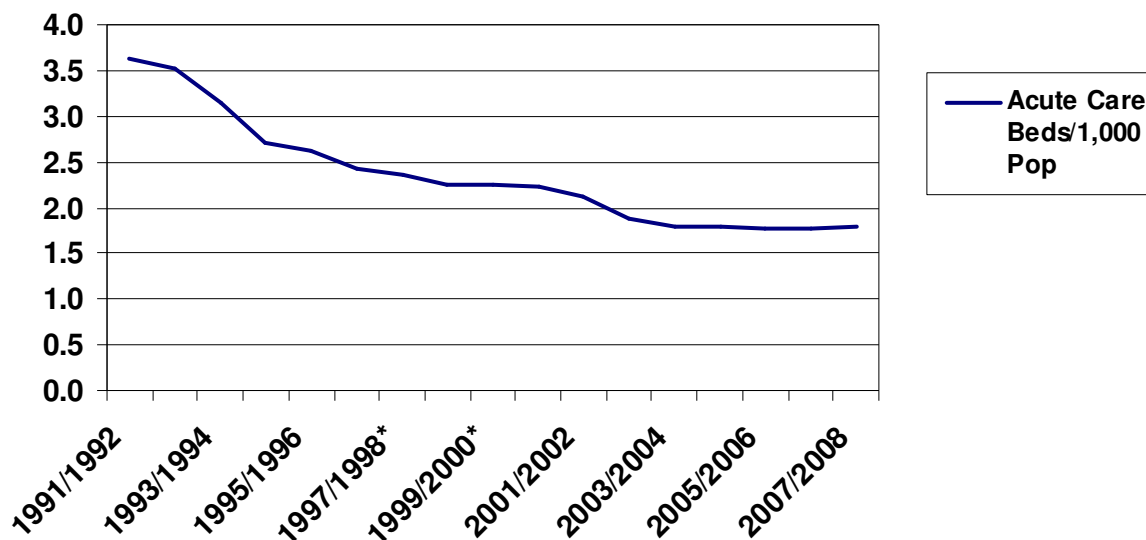
Background

Prolonged waits and delays are common in acute care settings. Impeded patient flow through BC acute care hospitals reduces the quality of care and leads to poor patient health outcomes, including lengthy waits for hospital admissions (e.g., emergency department overcrowding), cancellation of scheduled admissions and procedures, and increasingly strained working conditions for healthcare workers.

Lengthy waits for hospital admissions. The need for health care services, including acute care, will continue to rise as the population ages and the complexity of patient caseloads increases. However, as illustrated in Figure 1, BC experienced a significant decrease (-42%) in acute care bed capacity^a per 1,000 population between 1991/1992 and 2001/2002 from 3.6 to 2.1. Subsequently, a slower decrease (-15%) in acute care bed capacity occurred province-wide between 2001/2002 to 2007/2008 from 2.1 to 1.8 [1]. An insufficient supply of acute care beds contributes to unsustainable occupancy rates in BC hospitals (e.g., over 100% capacity) making regular bed shortages, periodic bed crises, and hospital overcrowding inevitable [2-4]. This, in turn, leads to delays in admitting patients, especially from emergency departments. Evidence shows that patients waiting for hospital admissions in the emergency departments can potentially experience adverse health outcomes during periods of overcrowding [5].

^a The acute care bed counts are a snapshot of the beds available at the end of each fiscal year. Rehabilitative (including those in stand-alone rehabilitation hospitals) and Discharge Planning Unit beds (post 1998/1999) were included in the analysis. Stand-alone mental health facilities were excluded. Beds per 1,000 population are based on all ages population using population estimates as of June of each year from BC STATS, Government of BC, PEOPLE 32.

**Figure 1. Acute Care Capacity in BC,
1991/1992 to 2007/2008**



*The data for acute care bed operating capacity for 1997/1998 to 2000/2001 is currently being reviewed by the BC government. Data for this period should be considered interim, pending completion of this review.

Source: BC Ministry of Health, Health System Planning Division (2008).

Cancellation of scheduled admissions and procedures. A majority (56% in 2006/07) of BC hospital admissions (excluding newborns) occurs via emergency departments [1]. The growing pressure to admit emergency patients has resulted in more frequent cancellations of planned admissions for scheduled procedures, deferments or cancellations of scheduled procedures for hospital patients, and persistent waiting lists.^b The high percentage of acute care beds (e.g., 20% in some hospitals) occupied by patients who require an “alternate level of care” is another key reason for scheduled procedures to be cancelled [1, 6]. In 2007, 61% of BC physicians reported that their patients’ access to hospital care for scheduled procedures was either fair or poor [7].

Increasingly strained working conditions for healthcare workers. Ensuring a practice environment where providers can deliver high quality care is critical for recruiting and retaining healthcare workers. Canadian nurses have reported the shortage of health workers to be the main reason for deteriorating patient care,

^b According to the Ministry of Health, median wait times for cataracts, cardiac surgery, hip replacements, and knee replacements have decreased over the past several years [6]. Although data from the BC Ministry of Health indicate decreasing median wait times for several surgical services – a laudable achievement – the calculation of these data likely underestimates the total wait time experienced by patients. Wait time figures are based on the difference between the time the actual surgery is performed and when the hospital booking is made, rather than when the specialist referral is made or the wait to see a GP begins, thereby underestimating the actual patient wait.

especially in hospitals, where job dissatisfaction among nurses is especially high [8]. The perceived inadequacy of resources has been found to be a factor in the development and progression of provider burnout [9]. According to a recent survey, 46% of Canadian physicians were classified as being in the advanced stages of burnout [10]. Furthermore, empirical evidence has shown better patient outcomes when hospital nurses' work conditions (e.g., nurse-to-patient ratios, overtime, organizational support) are adequate [11, 12]. Significant hospital bed closures, along with greater workloads on an aging workforce and higher patient acuity, can also contribute to increased risk of injury among nurses [13].

Recommendations

Prolonged delays in accessing acute care are symptomatic of a mismatch between capacity and demand. To address capacity shortfalls, the BCMA calls on the provincial government to adopt transparent and publicly available principles for the supply and effective management of functional acute care beds across British Columbia. Functional acute care beds are defined as appropriately staffed and operational hospital beds for medical, surgical, obstetrical, paediatric, psychiatric and critical care patients. This excludes hospital beds allocated for rehabilitation, long-term care and palliative care, and beds that are non-acute or functionally intended for temporary occupancy (e.g., surgical tables, recovery trolleys, delivery beds, emergency stretchers, and beds designated for same-day non-inpatient care).

At a minimum, government must:

- 1. Uphold patients' right to timely access to acute care services. Meaningful maximum allowable wait times must be implemented for all scheduled surgical and diagnostic procedures from time of referral through provision of service, and for hospital admissions from the emergency department.**

Patients have a right to timely access to acute care, and governments have a responsibility to provide it. In fact, the Canada Health Act stipulates that Canadians must have "reasonable access" to insured hospital and physician services. However, the Act makes no reference to how long "reasonable" is. To remain meaningful in today's healthcare environment, reasonable access should be realized through a commitment to maximum allowable waits for treatment.

BC has made some progress by setting multi-year access targets in two clinical areas (hip/knee replacements and cancer treatment). Although these are important areas, it is critical that waits for other procedures or in other areas of the health care system not be ignored, or we will end up with the "balloon effect" where the exclusive focus on waits in specific areas actually increases waits in non-targeted areas [14].

2. Establish wait time benchmarks on evidence-informed standards. In the absence of such standards, a maximum allowable wait time of six months must be implemented.

Meaningful wait time benchmarks must be based on medical outcome evidence and professional opinion. Fortunately, much work has already been done in this area, and the BC government should base its provincial wait time benchmarks on these previous efforts, including:

- Western Canada Waitlist (WCWL) Project (2000-2005)
- Federal Wait Time Benchmarks
- Canadian Wait Time Alliance
- BCMA Position on Emergency Room Overcrowding
- Canadian Association of Emergency Physicians Position on Emergency Department Overcrowding

3. Establish modeling for the supply of functional acute care beds on clinically appropriate standards that reflect the realities of the practice setting. These standards must be developed in collaboration with input from practicing physicians, representative and accountable to their colleagues.

The traditional method of basing models for acute care bed supply on target occupancy levels (i.e., the average percentage of occupied beds) has limitations: a standardized measurement of an acute care bed is lacking, the census is normally measured at midnight, and utilization variation is not reflected over time. Studies have shown that target occupancy levels can underestimate the required number of beds to meet reasonable service performance standards [15]. A different model based on standards that reflect the ability to place patients in appropriate beds in a timely fashion rather than on a target occupancy levels is needed [15, 16]. Rather than focusing on a target occupancy level, such a model instead would base decisions on clinically appropriate standards that reflect the realities of the practice setting and need to be developed in collaboration with relevant health care providers including practicing physicians.

4. Ensure that modeling for the supply of functional acute care beds is flexible enough to account for changes in population growth, demographics, patient acuity, technology, geography, and seasonal variations.

Hospitals cannot adequately respond to the variability in patients' demand for acute care services if they are operating at very high occupancy rates. The process for forecasting acute care bed utilization must be flexible enough to account for changes in population growth, demographics, patient acuity, technology, geography, and seasonal variations. For example, a growing proportion of admitted patients is older and has increasingly complex health conditions – modeling must take such changes into account [17]. Also, the setting of scheduled surgeries has shifted from inpatient to outpatient

care. In BC, the number of day surgery visits has increased 30.3% from 1995/96 to 2005/06 [18]. These factors, along with human resource requirements, should be incorporated into any long-term planning for acute care bed supply.

5. Provide the necessary infrastructure to ensure timely access to all acute care services, including a greater supply of functional acute care beds.

As a critical infrastructure component, the supply of functional acute care beds must be increased to a level where patients admitted to the hospital have access to one in a timely manner. To date, standards for acute care bed supply have not been set in BC despite some health authorities' calls for an immediate investment to address serious capacity shortfalls [19]. Recently, 46% of BC physicians reported that their patients' access to critical care beds was either fair or poor [7]. The shortage of staffed critical care beds has a significant impact on the ability to care for emergency and scheduled admissions. Provincial acute care bed capacity must be set at a level that ensures quality care and minimizes bed blockage, ED overcrowding, and excessive wait times for scheduled surgeries. At the same time, efforts must be made to recruit and retain qualified healthcare workers to adequately staff beds (e.g. critical care nurses). Public-private partnerships and contracting out of publicly funded health services to private facilities can be used as strategies to increase inpatient capacity, provided they are cost-effective, the quality of care is not compromised, and that there is no cost to the patient.

6. Support effective management of functional acute care beds in conjunction with increasing their supply.

Effective acute care bed management strategies can play a role in improving bed occupancy rates, shortening hospital length of stays, and alleviating hospital overcrowding provided that the acute care bed supply is increased to sufficient levels. Examples of such strategies include:

- Scheduling the number of scheduled cases and case hours more evenly during the week;
- Designating separate operating rooms for scheduled and unscheduled surgeries;
- Planning for discharges at least one day in advance;
- Coordinating the scheduled admission load with predicted emergency room demand;
- Establishing bed management coordinators to help determine, acquire, and maintain a supply of empty beds across the hospital; and
- Improving the coordination of inpatient care to maximize efficiencies in patient management.

- 7. Sufficiently resource community-based care (e.g., chronic disease management, primary care providers, home and community care) to ensure that functional acute care beds are used appropriately.**

Proper investment must continue for primary care, chronic disease management, community/residential care, and palliative care in order to avoid unnecessary emergency department visits and hospital admissions, keep discharged patients from returning to the hospital, and decrease the number of alternate level of care patients in hospitals. Meaningful, system-wide changes in primary care and chronic disease management are occurring from the collaborative efforts between the BC government and the BCMA. This success can be leveraged to improve patients' access in other areas of community-based care such as home and community care.

- 8. Provide regular public reports on the number of functional acute care beds by care type (e.g., medical, surgical, obstetrical, paediatric, psychiatric, critical care) and on the progress towards satisfying wait time benchmarks for acute care services.**

It is important that the BC government be committed to improving system infrastructure and be accountable for providing the space, professional care, and budget for patients admitted to a hospital service or program. BC will receive approximately \$775 million^c of federal funding to implement wait time guarantees, but it remains unclear how the BC government plans to spend these substantial funds. Patients and providers deserve greater accountability from government to ensure timely access to acute care services. In addition to implementing wait time benchmarks, Health Authorities must publicly report the number of functional acute care beds by care type and their progress towards satisfying wait time benchmarks. As a laudable first step, the recent implementation of the BC Surgical Patient Registry will collect more comprehensive information on patient wait times for surgical services.

^c BC is scheduled to receive an estimated \$715 million as part the ten year Wait Rime Reduction Fund announced in 2004. In addition, the March 2007 federal budget announced "up to \$612 million to support jurisdictions that have made commitments to implement wait time guarantees." BC's share of this funding, if allocated on a per capita basis, would be approximately \$60 million.

Conclusion

Given that acute care beds are fundamental to service provision in the hospital and the resource to which all other resources are mapped, changes in acute care bed capacity can have important consequences for service delivery and quality of care. BC is experiencing difficulties in providing hospital care in a timely manner due, in part, to significant cuts in the number of acute care beds over the past decade. Efforts to improve access to acute care must focus on establishing wait time benchmarks for acute care, increasing the supply of functional acute care beds, managing such beds effectively, investing in community-based care, and improving government accountability.

References

1. BC Ministry of Health, Health Systems Planning Division, Editor. 2008.
2. Bagust, A., M. Place, and J.W. Posnett, *Dynamics of bed use in accommodating emergency admissions: stochastic simulation model*. Bmj, 1999. 319(7203): p. 155-8.
3. Forster, A.J., et al., *The effect of hospital occupancy on emergency department length of stay and patient disposition*. Acad Emerg Med, 2003. 10(2): p. 127-33.
4. BCMA, *Emergency Department Overcrowding: Policy Statement*. 2006.
5. Bernstein, S.L. and B.R. Asplin, *Emergency department crowding: old problem, new solutions*. Emerg Med Clin North Am, 2006. 24(4): p. 821-37.
6. Canadian Association of Emergency Physicians, *Backgrounder: Emergency Department Overcrowding in Canada*. 2004.
7. College of Family Physicians of Canada, C.M.A., Royal College of Physicians and Surgeons of Canada,, *National Physician Survey*. 2007.
8. CIHI, *Findings from the 2005 National Survey of the Work and Health of Nurses*. 2006.
9. Chopra, S.S., W.M. Sotile, and M.O. Sotile, *STUDENTJAMA. Physician burnout*. Jama, 2004. 291(5): p. 633.
10. Boudreau, R., et al., *The Pandemic from Within: Two Surveys of Physician Burnout in Canada*. Journal of Community Mental Health, 2006. 25(2): p. 71-88.
11. Aiken, L.H., et al., *Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction*. Jama, 2002. 288(16): p. 1987-93.
12. Stone, P., Mooney-Kane, C., Larson, E., Horan, R., Glance, L., Zwanziger, J., Dick, A., *Nurse Working Conditions and Patient Safety Outcomes*. Med Care, 2007. 45(6): p. 571-578.
13. Occupational Health and Safety Agency for Healthcare in BC, *Trends in Workplace Injuries, Illnesses, and Policies in Healthcare across Canada*. 2004.
14. BCMA, *Waiting Too Long: Reducing and Better Managing Wait Times in BC*, in *A Policy Paper by BC's Physicians*. 2006, BCMA: Vancouver. p. 79.
15. Green, L.V., *How many hospital beds? Inquiry*, 2002. 39(4): p. 400-12.
16. Green, L.V. and V. Nguyen, *Strategies for cutting hospital beds: the impact on patient service*. Health Serv Res, 2001. 36(2): p. 421-42.
17. CIHI, *Understanding Emergency Department Wait Times: Access to Inpatient Beds and Patient Flow*. 2007: Ottawa.
18. CIHI, *Trends in Acute Inpatient Hospitalizations and Day Surgery Visits in Canada, 1995-1996 to 2005-2006*. 2007.
19. Fraser Health Authority, *Fraser Health Directional Plan for Acute Services to 2020: Transforming Healthcare in Fraser Health*. 2006.