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Dying of Cancer in Canada's Acute Care Facilities

For many people, a diagnosis of cancer provokes fear and anxiety. In fact, in a recently released study of women diagnosed with early breast cancer, 50% had clinically important signs of depression, anxiety or both in the year after diagnosis (Burgess et al. 2005). Statistics Canada data shows that five-year relative survival rates are over 80% for this and other types of cancer (Canadian Institute for Health Information 2002). A cancer diagnosis often triggers people to plan next steps. For some people, this involves planning for recovery; for others, it means making decisions about their end-of-life care.

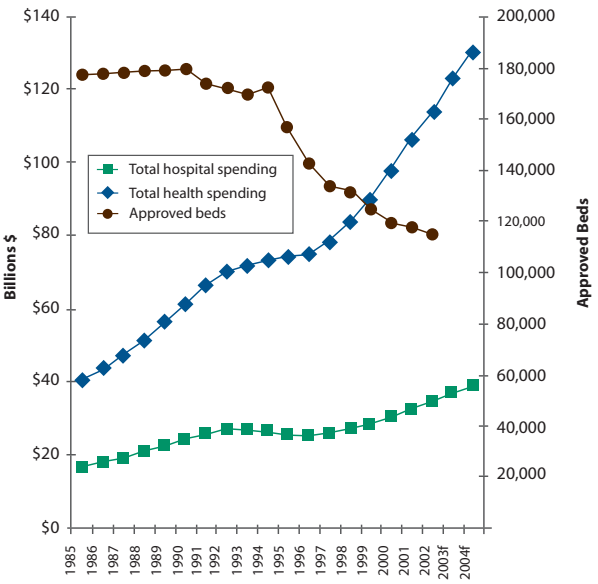
Despite good evidence to suggest that the majority of people diagnosed with cancer would rather have end-of-life care in the home (Flory et al. 2004), most Canadians diagnosed with cancer die in acute care facilities. According to a recent report, despite declining in-hospital death rates for cancer, approximately three out of four people in Canada diagnosed with cancer die in hospital (Health Canada 2004). Here we highlight how trends in in-hospital deaths differ for breast, prostate, colorectal and lung cancer. Deaths related to these four cancers account for approximately 50% of all cancer deaths in Canada. Knowing where people die matters because it helps to inform decisions about how healthcare should be organized to support those in need of end-of-life care (Flory et al. 2004).

The Changing Face of Healthcare

Over the past 10 years, the Canadian healthcare system has undergone substantial change in how care is organized and delivered. Some of these changes may have an impact on community and home-based care. Examples include:

- *More spending on home care.* Spending on care provided in the home by healthcare workers or through health programs supported by governments at the provincial or community level has increased substantially. Between 1988/1989 and 2000/2001 total provincial home-care spending increased by over 469%. At the beginning of this period, home care accounted for 1.6% of total provincial health spending. By 2000/2001, it had risen to 5.0% of the total (Canadian Institute for Health Information 2003).
- *Increased ambulatory care.* There has been a shift away from in-hospital care toward increased day surgery and outpatient care. At the same time, there has been a decrease in the number of approved inpatient beds in the system – from approximately 170,000 in 1994/1995 to 115,000 in Canada in 2001/2002.
- *Increases in total health spending.* Since the mid-1990s, overall spending on healthcare has increased. As of 2004, health spending is estimated to be over $130 billion dollars.

Figure 1. Trends in Health Spending and Approved Beds in Canada



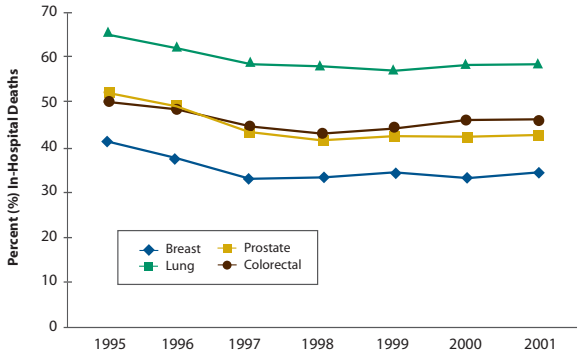
Source: National Health Expenditure Database; Canadian MIS Database, Canadian Institute for Health Information.

Dying of Cancer in Hospital

According to the National Cancer Registry, the number of people with breast, prostate, colorectal and lung cancer and the number of those who die from them has increased over the past few years, from 31,300 deaths in 1995 to an estimated 34,600 deaths in 2002. The percentage of cancer patients who die in hospital varies by the type of cancer involved. For example, based on 2002 estimates, about one-third of people diagnosed with breast cancer die in hospital; for lung cancer, it is over 55%.

The decline in the proportion of cancer deaths that occur in hospital is apparent in all regions of the country. However, regional in-hospital death rates related to specific cancers vary. For example, Quebec's rates of in-hospital breast cancer deaths have been higher than those of other Canadian jurisdictions over the past few years. In 1995, over 60% of people diagnosed with breast cancer in Quebec died in hospital, whereas, in Ontario, the percentage is just over 38%. By 2001, both rates had declined substantially, but Quebec's rate of in-hospital deaths remained higher than any other jurisdiction in Canada. Regional differences may reflect differences in the distribution of palliative care both in and outside of acute care facilities.

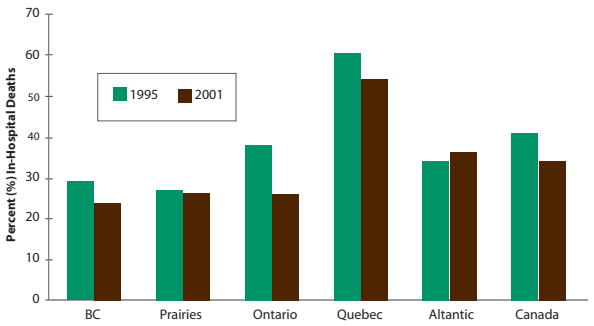
Figure 2. Trends in In-hospital Cancer Deaths



Sources: Hospital Morbidity Database; Discharge Abstract Database, Canadian Institute for Health Information; Canadian Council of Cancer Registries, Surveillance and Risk Assessment Division, Statistics Canada (for total number of deaths in Canada).

Note: Percent of cancer-related deaths occurring in-hospital, Canada, cancer-specific or related ICD codes in first/most responsible position.

Figure 3. Regional Trends in In-Hospital Breast Cancer Deaths



Source: Hospital Morbidity Database; Discharge Abstract Database, Canadian Institute for Health Information; Canadian Council of Cancer Registries, Surveillance and Risk Assessment Division, Statistics Canada (for total number of deaths in Canada).

Note: Percent of breast cancer-related deaths occurring in-hospital, Canada, cancer specific or related ICD codes in first/most responsible position.

The Need for Palliative Care

Most palliative care in Canada is provided to patients who have been diagnosed with cancer (Health Canada 2004). As a result, in-hospital death rates for cancer patients have been used as an indicator of the need for community/palliative care (e.g., Johnston et al. 1998; Townsend et al. 1990). That said, not everyone who is diagnosed with cancer would opt to receive end-of-life care at home. Recent reports (Health Canada 2004; Subcommittee … Science and Technology 2000) have suggested several factors that might influence in-hospital death rates:

- cultural and spiritual beliefs and practices of individuals, families and communities.
- availability of integrated, multidisciplinary palliative care teams.
- ability (both emotional and financial) of family members to provide care – and the supports/assistance they receive to do this.
- financial considerations – While care, supplies (such as pain pumps and oxygen) and drugs are generally provided without cost to the patient in acute hospital settings, this is not always true in other parts of the health system, such as continuing care, hospices or homecare. These financial factors may drive some people to seek admission to hospital.
- educational supports and reimbursements strategies for primary healthcare providers, particularly family doctors, to assist with care.

While we have more information about cancer deaths than in the past, many questions remain. For example, how many people receive appropriate end-of-life care in hospital and at home? How satisfied are patients and their families with end-of-life care? Who provides this care, inside and outside the hospital, and how is this changing? Are home-based deaths meeting patient needs, or are reductions in inpatient bed availability exerting pressure on families to care for dying patients at home? What would be the impact of mandatory palliative care curriculum in medical schools at the undergraduate and postgraduate level? Mandatory curriculum is only offered at 13% of undergraduate programs and 31% of post graduate training (Health Canada 2004).

Answers to these and many other questions may help inform those making decisions about how end-of-life care is supported in Canada. The Canadian Institute for Health Information is embarking on a study of end-of-life healthcare utilization in the four western provinces. Results from this study may help begin the process of answering these questions.

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