

# Myth Busters

July 2008

A SERIES OF ESSAYS GIVING THE RESEARCH EVIDENCE BEHIND CANADIAN HEALTHCARE DEBATES

## MYTH In healthcare, more is always better

*Myth Busted July 2008*

Picture this: two 50-year-old men are experiencing chest pain and abnormal heart rhythms. One of the men is admitted for care at a local community hospital in a small town. The other is admitted at a teaching hospital in one of the nation's largest cities. It's natural to assume that the city-dweller will fare better, since his hospital spends more money and therefore has greater resources and provides more specialized care. In the same way, it's instinctive to think that the small-town patient will suffer worse outcomes, since his hospital has less money with fewer resources and poorer access to specialized care.

According to the research, however, when it comes to invasive procedures, and even diagnostic testing, "less is more . . . and better"<sup>i</sup>. In fact, compared to patients in regions that spend less, patients in high-spending regions are no more satisfied with their care, and actually experience a greater risk of harm and possibly even death.<sup>ii - iv</sup>

### **Where you live begets the care you receive**

In many cases, it's difficult to determine whether patients receive appropriate care. What is known is that there is great

variation in the amount of healthcare people receive that depends largely on where they live.<sup>v - xii</sup> For more than 15 years the Dartmouth Atlas Project, led by John E. Wennberg and Elliott S. Fisher, has tracked "glaring variations" in the distribution and use of healthcare resources in the United States.<sup>ii</sup> Based on U.S. Medicare data, the studies consistently show that more resources – specifically, frequent specialist visits, diagnostics, and specialist and hospital care – don't necessarily lead to better care (see table).

In one study involving nearly one million patients dispersed over 306 regions in the U.S. (based on where people go for hospital care), Fisher and colleagues found that patients in high-spending regions received 60 percent more care than those in the lower-spending areas. However, they did not experience lower mortality rates, better functional status or higher satisfaction.<sup>iv</sup> In fact, patients in the lower-spending regions actually received certain preventive services (influenza vaccination, Pap smear and mammography) more often than patients in the highest-spending areas.<sup>iii</sup>

### **Select Dartmouth Atlas studies comparing regional differences in spending and the content, quality and outcomes of care** (adapted with permission,<sup>xiii</sup>)

	<b>High-spending regions compared to low-spending regions<sup>a</sup></b>
<b>Content and quality of care</b> <sup>iii, v, xiv</sup>	<ul style="list-style-type: none"> <li>• Less adherence to process-based measures of quality</li> <li>• Little difference in rates of major elective surgery</li> <li>• More hospital stays, physician visits, specialist referrals, imaging, and minor tests and procedures</li> </ul>
<b>Health outcomes</b> <sup>iv, xv, xvi</sup>	<ul style="list-style-type: none"> <li>• Higher mortality over a five-year period following heart attack, hip fracture and colorectal cancer diagnosis</li> <li>• Higher survival in regions that practiced medical versus invasive cardiac management of heart attack patients</li> <li>• No difference in functional status</li> </ul>
<b>Physician perceptions of quality</b> <sup>xvii</sup>	<ul style="list-style-type: none"> <li>• More likely to report poor communication among physicians</li> <li>• More likely to report inadequate continuity of care</li> <li>• Greater difficulty obtaining inpatient admissions or high-quality specialist referrals</li> </ul>
<b>Patient-reported quality of care</b> <sup>xviii</sup>	<ul style="list-style-type: none"> <li>• Worse access to care and greater wait times</li> <li>• No difference in satisfaction</li> </ul>

<sup>a</sup>High- and low-spending regions are defined as the U.S. hospital referral regions in the highest and lowest quintiles of per capita Medicare spending.<sup>iii</sup>

It's not just an American phenomenon. In Ontario, the Institute for Clinical Evaluative Sciences has documented large regional variations in the provision of healthcare for a range of services. Specifically, patients with conditions such as cardiac disease,<sup>viii</sup> stroke,<sup>ix</sup> arthritis,<sup>x</sup> asthma,<sup>xi</sup> and diabetes<sup>xii</sup> are getting varying degrees of care, despite the availability of evidence-based clinical guidelines in these areas.

Canadian research also highlights that in some cases, ready access to care can be a bad thing for patients. A Vancouver-based study that assessed the effectiveness of a range of elective surgeries found that cataract surgery was often ordered in the absence of significant visual impairment and that it left 27 percent of patients reporting no change or even deterioration in their visual function.<sup>xix</sup>

### ***A built hospital bed is a filled one***

A variety of factors contribute to whether a patient receives a healthcare service – the severity of the patient's symptoms and the physician's clinical judgment, for example. Other predictors can also drive the use and, more specifically, the overuse of services. These include patient demand, a medical culture in which physicians often do more tests and interventions than are really necessary, and the fee-for-service structures that reward physicians for providing more and more care.<sup>xx</sup> One particularly strong predictor that factors into the equation is the availability of healthcare resources such as hospital beds and specialists.<sup>v</sup> As the 1960s health services researcher Milton Roemer put it, "A built hospital bed is a filled hospital bed."<sup>v</sup> In practice, "Roemer's Law" can indicate inefficient systems that offer ineffective and inappropriate care for patients.

### ***Conclusion***

Although Canadians may feel better when they live in close proximity and have quick access to healthcare resources, the research suggests they may be experiencing a false sense of security. So is there such a thing as too much medicine? Almost certainly there is, according to a 2002 issue of the *British Medical Journal*.<sup>xxi</sup> And as everyday life becomes increasingly medicalized, with a new pill or procedure constantly in development, the problem is growing.<sup>xxi</sup> At the same time, some patients benefit from invasive, high-tech care, but better evaluation of healthcare performance is needed to identify these cases. Doing so would help in matching resources to population need, with a view to clinical and financial efficiency and overall improvements in quality of care.

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