



The Cost-Effectiveness of Psychological Treatment

- Psychological interventions can effectively treat a wide range of child and adult health problems, including depression, generalized anxiety disorder, panic disorder, post-traumatic stress disorder, eating disorders, substance abuse, and chronic pain. Furthermore, there is mounting evidence that there are also effective psychological treatments for diseases and disorders that are routinely seen in primary care medical practices but that are typically difficult to medically manage, including type 1 diabetes, chronic tension-type headaches, rheumatoid arthritis, chronic low-back pain, chronic fatigue syndrome, and a range of medically unexplained physical symptoms.
- As emphasized by recent submissions to federal and provincial government departments and commissions by Psychology organizations across Canada, psychological services should be an integral component of the Canadian health care system. Not only can psychological interventions be effective in their own right but also they have the demonstrated potential to actually reduce health care costs.
- A 1993 estimate indicated that the total annual cost to Canadian society of illnesses was almost \$130 billion. The health burden of mental disorders and nervous system diseases—conditions for which psychologists routinely provide services—accounted for 13.4% of these costs. The economically most costly conditions were cardiovascular diseases

and musculoskeletal diseases, and there are psychological services, both preventative and therapeutic, that are known to be effective in treating such diseases.

- More recent estimates suggest that (i) in 1998 the health burden costs in Canada associated with depression and general psychological distress, alone, ran to over \$14 billion and (ii) the annual per capita health and disability costs of depression are greater than those associated with hypertension and comparable to those associated with heart disease, diabetes, and back problems.

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- Recent evidence has demonstrated that psychological interventions can be more cost effective than optimal drug treatment for conditions such as panic disorder and depression. For example, although empirical evidence on panic disorder indicates that cognitive-behavioural treatment and pharmacological treatments have comparable effectiveness, the psychological intervention has been estimated to cost 10%-50% less

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than drug treatments. In the treatment of depression, meta-analyses have demonstrated that psychological intervention (especially cognitive-behavioural treatment) can produce comparable or superior outcomes to medication and that pharmacotherapy has substantial larger drop-out rates than does psychological intervention. Moreover, a recent study found that, over a two-year period, pharmacological treatment is likely to cost 30% more than cognitive-behavioural treatment.

- Over the past three decades, dozens of research studies have found that, following effective psychological interventions, usual costs to the health care system are reduced or averted—this is known as medical cost offset. Such cost offsets due to psychological intervention have been found for numerous conditions and diseases, including heart disease, hypertension, diabetes, cancer, and chronic pain.

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“Every \$1 spent on psychology services yield \$5 saved on medical costs.” - EAP Digest '93.

How Effective is Psychology? Evidence-based Practice

The Group Health Association found that patients receiving previously unavailable health counseling trimmed their non-psychiatric overall medical usage by **30.7%** and their use of laboratory and x-ray services by **29.8%**. *Kansas City Health Care Consumer, Feb 1993.*

When a branch plant of the Kennecott Copper Corp. provided mental health counseling to its employees, hospital medical and surgical costs decreased by **48.9%**. The company's weekly claims dropped nearly **64.2%**. Overall for every dollar invested a savings of **\$5.78** accrued. *EAP Digest 1993.*

Similarly, within the Kaiser Permanente system the addition of psychotherapy resulted in a **77.9%** decrease in average length of hospital stay, a **48.6%** decrease in the number of prescriptions written, a **48.6%** decrease in physician office visits, a **45.3%** decrease in emergency room visits and a **31.2%** decrease in telephone contacts. *Lechnyr, EAP Digest 1993.*

Medicaid patients with drug and alcohol problems who received targeted psychological services reduced their subsequent medical costs by 15% whereas the untreated controls increased their utilization cost by **90%**. *Lechnyr, Oregon Psychological Association, 1992, 38, 8-12.*

A study at the University of California found that every \$1 invested on drug and alcohol treatment saved society \$11.54 in health care, criminal justice costs and lost productivity for business. *Coalition 1991.*

Linehan & Heard 1999 reported a detailed cost-offset analysis of an "industry-standard" psychological treatment for borderline personality disorder. They showed that treated patients cost the health care system **US\$9,291** over a 12-month period, whereas patients in the randomized control, usual care cost was **US\$18,275/yr.** While acute therapy costs were higher for psychological treatment (**\$3,885 vs. \$2,915**) the active treatment was associated with a dramatic decrease in hospitalization cost (**\$2,611 vs. \$12,079**) that offset treatment cost with a greater than 2:1 ratio.

The popular and effective drug Fluoxetine (Prozac) was more expensive as a treatment for depression (**33% higher cost over 2 years**) than was cognitive-behavioural therapy.

Do Psychological Services Save Money?

- Only **5%** of those suffering from a mental disorder who do seek help see a mental health professional; the other **95%** receive help from a family physician. *Lechnyr, 1993.*
- **11% to 36%** of all GP visits involved patients with diagnosable psychiatric disorders. *Eisenberg, New England Journal Medicine, 1992, 326, 1080-1083.*
- Many patients with mental health problems are treated at unnecessarily high cost in ordinary health care services because access to mental health treatment are frequently lacking. *Borquist et al. Psychol. Med., 1993, 23, 763-770.*
- The majority of anxiety disorder patients (**65%**) are seen by family physicians. *Altrocchi et al, American Fam. Physician, 1994, 10, 161-66.* Although **10%** of adults have an anxiety disorder, only an estimated 1/4 of them get treatment.
- When mental health treatments are offered by mental health professionals rather than family physicians, an average saving of **US\$877** per patient/yr was observed. *Zhang et al., 1999.* An estimated **50-70%** of a physician's normal caseload consists of patients whose medical ailments are significantly related to psychological factors. *VandenBos & DeLeon, Psychotherapy, 1988, 25, 335-43.*
- In a Canadian study, frequency of visits to family physicians was reduced by **49%** once a psychotherapy program was put in place and the therapy costs were more than offset. *Golden, 1997.*
- The predominant treatment of mental health problems in a GP's office is pharmacological in nature and this raises concerns about side effects and development of dependence, and the appropriateness of long-term pharmacological treatments. Most patients with anxiety/ depression problems never seek any help and the potential saving that can arise from their effective treatment are lost to the Canadian economy. *Antonuccio et al., 1997.*

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In 2 Canadian studies, (i) brief psychological intervention provided in a family medical centre was found to yield improvement in psychological functioning and a **50%** reduction in medical appointments and (ii) brief group psychological intervention for women who had completed medical treatment for stage 0, I, or II breast cancer resulted in an improvement in patients' adjustment and quality of life and a reduction of **23%** in health care costs for the two years following intervention.

A recent meta-analysis of 91 research studies published between 1967 and 1997 found that average health care cost savings due to psychological intervention were in the range of **20-30%** across studies. Indeed, **90%** of the studies reported evidence of a medical cost offset. Among the studies that included a description of estimated cost savings, only **7%** reported that the costs of psychological treatment exceeded the cost savings that resulted from the intervention. Not only did most of the psychological interventions lead to reductions in health care costs, but also these reductions were typically large enough to fully cover the costs of the psychological interventions themselves.

Psychological treatments can also be very cost-effective forms of treatment and may be more cost-effective than commonly used pharmacological interventions. Psychological interventions have the potential to reduce health care costs, as successfully treated patients typically reduce their use of other healthcare services. In some cases, the reduced cost to the health care system may actually be greater than the cost of the psychological service, resulting in a total cost offset to the system.