





in 18 hospital stays in Canada involved at least one avoidable harmful event in 2014-2015, with the hospital costs for related additional care (excluding physician fees) totalling \$685 million. And of the patients who experienced harm, about 20% experienced more than one harmful event while in hospital. The death rate for those who experienced at least one harmful event was four times higher than for those who did not experience harmful events.<sup>1</sup> The total estimated economic burden of acute care adverse events in Canada 2009-2010 was \$1.1 billion, in

excluding the direct costs of care after hospital discharge, or societal costs of illness, such as loss of functional status or occupational productivity.<sup>2</sup>

Global evidence links lower nurse staffing and skill mix to adverse patient outcomes such as increased mortality, falls, infections and longer lengths of stay—all of which increase health care costs. How much of these personal, social and economic unnecessary events are the result of not following evidence-based nurse staffing, with respect to both the level of nursing and the dose of nursing?

There is overwhelming evidence on what constitutes the right level of nursing and the right dose of nursing,<sup>3</sup> but the health system focuses instead on non-evidence-based 'beliefs', overlooking the evidence. No one would challenge the fact that a neurosurgeon is needed to perform brain surgery, but we do not apply the same logic when it comes to nursing care.

Why do we spend the largest portion of our health care personnel budgets on nurse staffing? Because nurses are essential health care professionals who are experts in caring for patients. Nurses safeguard the quality of care, ensuring optimal patient outcomes, and fewer adverse events. When we cut nursing care, costs go up elsewhere in the health care system, even as the quality of care declines.

# INVESTING IN NURSING BUDGETS = HEALTH SYSTEM SAVINGS. IT'S JUST COMMON SENSE.



- A US longitudinal study of over 18 million hospital discharges found increases in nurse (Registered Nurses (RN) and Licenced Practical Nurses (LPN)) staffing were associated with reductions in adverse events and length of stay and did not increase patient care costs.<sup>4</sup>
- A study of 292 acute medical/surgical units at 125 Veterans Health Administration medical centres found an increase in total nursing (RN and LPN) hours per patient day was not associated with an increase in cost per hospital admission among surgical patients.<sup>5</sup>
- A study of 799 acute care hospitals in 11 states demonstrated that higher nursing (RN and LPN) hours reduce patient days, adverse outcomes, and patient deaths, at an increase in annual hospital costs of only 1.5% or less, with expenses declining over time.<sup>6</sup>

### **Registered nurses are too expensive.**

## **RNs save health care dollars.**

- A US longitudinal study of over 18 million hospital discharges found that if hospitals increased the proportion of nursing staff that are RNs by 4.2%, there was a 3.1% decrease in costs.<sup>7</sup>
- A study of 799 acute care hospitals in 11 states found that increasing the proportion of RNs without increasing total nursing hours was associated with net cost savings of US \$242 million over the short term, and US \$1.8 billion in savings over the long term, through avoided adverse events and shorter lengths of stay.<sup>8</sup>
- Nationwide hospital discharge data analysis showed that each patient care RN employed generates US \$60,000 annually in reduced medical costs and improved national productivity; this figure omits the additional cost savings realized through reduced nurse turnover and lower readmission rates.<sup>9</sup>
- Every dollar spent on adding one Nurse Practitioner (NP) to an in-patient trauma service team in Ontario results in a cost-benefit ratio of \$1:\$4.22.<sup>10</sup>



Canada cannot afford to increase nursing care for seniors.

# Increasing nursing care for seniors saves money.



- A review of 17 studies, comparing nursing home residents who are patients of NPs to others, revealed lower rates of hospitalization and overall costs for the NPs' patients.<sup>11</sup>
- The potential for NPs to control costs associated with the health care of older adults was recognized by UnitedHealth Group, which found that providing NPs to manage nursing home patients could result in US \$166 billion (2010-2019) in health care savings through reducing avoidable and inappropriate care.<sup>12</sup>
- A study of 1,376 at-risk residents from 82 nursing homes found that 30–40 minutes of RN time/resident/day versus <10 minutes was associated with fewer pressure ulcers, hospitalizations and urinary tract infections, providing an annual net societal benefit of \$3,191/resident/year.<sup>13</sup>



Nurse-led care is more expensive than traditional care.

Nurse-led community-based care is a cost-effective alternative to traditional care with better patient outcomes.

- Researchers in the <u>Netherlands</u> determined that nurse-led outpatient management of children with asthma was as effective as follow-up by a pediatrician at a cost 17.5% lower, even when nurses spent twice the time on follow-up care.<sup>14</sup>
- In <u>England</u>, nurse-led respiratory intermediate care teams providing in-home acute care for COPD patients were estimated to be 62% of the cost of conventional care.<sup>15</sup>
- Wound Care <u>Canada</u> estimates that in Ontario wound care provided by a specialist nurse would result in community savings of \$338 million (a 66% cost reduction) and a further savings of \$24 million in reduced hospitalizations alone due to fewer infections and amputations.<sup>16</sup>
- A systematic review of randomized controlled trials of Nurse Practitioners showed that NPs in alternative provider ambulatory primary care roles have equivalent or better patient outcomes than comparators and are potentially cost-saving.<sup>17</sup>
- A systematic review of 37 studies found consistent evidence that cost-related outcomes such as length of stay, emergency visits, and hospitalizations for NP care are equivalent to those of physicians.<sup>18</sup>
- A systematic review of nursing intervention literature concluded that nurse-led models of care are most effective and equally or less costly than usual physician-led care.<sup>19</sup>





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- The costs of a team-based early intervention service for psychosis, including community psychiatric nurses, was found to be £961 less than usual care after 24 months.<sup>27</sup>
- Every \$1 invested in publicly funded psychological services for adults with depression in Canada, including those by psychiatric nurses, would yield \$2 in benefits to society through reduced hospitalizations and suicide attempts.<sup>28</sup>
- The cost of a rapid-response team used for treating suicidal adolescents, comprised of a psychiatrist, a psychiatric nurse and other health professionals, was \$1,886 lower than usual care.<sup>29</sup>

# MYTH'S REALITY

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