ONTARIO NURSES' ASSOCIATION

SUBMISSION

ON

2018 PRE-BUDGET CONSULTATIONS

TO

STANDING COMMITTEE ON FINANCE AND ECONOMIC AFFAIRS

Toronto, Ontario

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Summary of ONA Recommendations for 2018 Ontario Budget

ONA proposes the following recommendations for the 2018 Ontario budget:

1. ONA recommends a 5.3 percent increase in hospital base operating funding to cover the costs of inflation, population growth and aging, plus increased demand for hospital services. This is to ensure our hospitals have the resources to properly maintain RN staffing for safe, quality patient care.

2. We urge the government to implement a moratorium on any further erosion of RN positions. It is time for the Health Minister to move forward with a clear vision for RN care in Ontario hospitals and throughout the healthcare sector. This will require a directive from the Health Minister to all hospitals to ensure hospitals make appropriate evidence-based nurse staffing decisions that do not negatively affect the care patients receive. This is the right thing to do as RN care leads to improved patient outcomes and to cost savings for our health care system.

3. We call for a four-year plan to fund improved RN care in all sectors with a target to reduce the significant gap in the Registered Nurse (RN) to population ratio between Ontario and the rest of Canada. Ontario has the worst RN to population ratio in the country, which must be reversed.

4. We call for the government to increase funding for expanded capacity in home care and to move toward a fully integrated *public* home care system that integrates the delivery of home care services and care coordination in the LHINs. This will require an organized transition of front-line staff working at private, for-profit home care providers into the non-profit LHINs. Eliminating the duplication of resources and costs for the LHINs from the management of and awarding of contracts to for-profit private home care providers will result in cost savings from the elimination of profit from Ontario's home care system. These savings, by eliminating profit, can be redirected to more public home care services for Ontarians coordinated and delivered by the LHINs.

5. We recommend funding and enforcement of a regulated minimum staffing standard in long-term care homes set at an average level of four *worked* hours of nursing and personal care per resident per day. Our call for funding and enforcement of a daily 4-hour nursing and personal care staffing standard is designed to meet the increased care requirements of residents in long-term care homes. The four hours of daily care per resident must be funded on the basis of *worked* hours where care is actually provided to residents and must include the following skill mix to meet resident need: 20 percent RN care, 25 percent registered practical nurse (RPN) care, 55 percent care from personal support workers (PSWs) and 1 nurse practitioner (NP) for every 120 residents.

6. We call on the government to implement all of the 2017 recommendations from the Workplace Violence Prevention in Health Care Leadership Table. The listed priorities represent the best solutions to prevent workplace violence:
    1. Establish a minimum security role/function (includes minimum security staffing) in health care and a minimum training standard for security written into Ontario's health care regulation.
    2. Provide funding for mandatory leading-edge and high quality panic alarms for all healthcare workers that summon security and locates any person being assaulted (ideally personal panic alarms linked to security with GPS, which is two-way voice activated).

3. Safe nurse staffing to be included in Ministry of Labour orders when it is a key contributor to workplace violence and worker safety, including nurses to be trained in de-escalation and self-protection techniques.
4. Requirement for all hospitals to implement an appropriate alert/flagging system that identifies patients and alerts all workers to the risk of workplace violence, including tracking of risks and behaviours, and a system that triggers action and safety measures to be taken to protect workers and minimize risks to patients.
5. Requirement for mandatory minimum supervisor competency training on the Occupational Health and Safety Act and hazards in health care that is similar to the training that is mandatory for supervisors in the mining sector. Requirement that all healthcare Chief Executive Officers and Administrators take the Public Services Health and Safety Association (PSHSA) Occupation Health and Safety leadership training (2.5 modules).
6. Requirement for mandatory Root Cause investigations after incidents of workplace violence written into Ontario's health care regulation.
7. Critical Injury Regulation to be amended to include "an event of workplace violence" so that such critical injuries are reported and addressed.

Further, we call for a realignment of resources at the Ministry of Labour to recognize and to address the specific hazards in the healthcare sector.

I. Introduction

The Ontario Nurses' Association (ONA) is the union representing 65,000 registered nurses and health-care professionals, as well as 16,000 nursing student affiliates, providing care in hospitals, long-term care facilities, public health, the community, clinics and industry.

ONA welcomes the opportunity to provide the Standing Committee on Finance and Economic Affairs with recommendations from the perspective of front-line nurses with respect to our healthcare priorities for the 2018 Ontario budget.

In December, the Minister of Health and Long-Term Care spoke to 1,000 ONA members at our biennial convention. He showed strong support for the value of registered nurses (RNs) in Ontario's healthcare system and spoke about the need for more RNs in all sectors. We agree.

The recently released statistics from the College of Nurses show that Ontario has 654 fewer RNs in 2017. This means healthy outcomes for our patients are at risk. The role of RNs in Ontario hospitals, and throughout our health care system, is under attack. Funding models are driving hospital decisions to eliminate, replace and erode RN positions, while patient acuity and complexity is increasing. Hospitals will need funding increases in the 2018 budget just to maintain services for Ontarians. Health care is a top priority for Ontarians as we enter into the last budget before a provincial election next June.

ONA is encouraged that the Health Minister recognizes the value of RNs. Our patients will be looking for these words to translate into action in the 2018 budget.

ONA's submission provides an overview of the state of Ontario's current RN workforce. As nurses, one of the core values that guides us is that we see ourselves as advocates for our patients. At the bedside, nurses are the patients' voice when they cannot advocate for themselves. That's why we must speak out about any plan to cut RNs who are needed to provide care to our most vulnerable patients. We are deeply concerned to witness this policy of cutting RN staffing, not based on any clinical reasons, but for the sake of constraining budgets. As nurses, we are extremely concerned about the impact of these RN cuts for the care of our patients who need our advanced nursing assessment skills.

It is no exaggeration to say that these cuts put a number of our patients at risk with too few skilled RN staff to provide the complex care associated with our patient's unstable conditions. The vital RN services in our hospitals must be protected and improved, not cut and constrained.

II. Status of the RN Workforce in Ontario

The RN ratio per 100,000 population for 2016 is worse than in 2015 and remains at the bottom of the country for the second year in a row.[1] As of 2016 (latest data available), Ontario has 703 RNs per 100,000 compared to 839 RNs for 100,000 people in the rest of Canada. This creates a major gap in RN care for Ontario. At least, **19,126** RNs are urgently required just to catch up to the ratio of skilled care in the rest of the country. It is not good enough to say that Ontario does things differently. Ontarians clearly want RNs caring for them and their loved ones. We are urging the government to develop a funded plan to close the gap in RN care over the next four years.

In addition to current needs, Ontario will also need to plan for the prospect of a growing segment of RNs in retirement age. In 2016, there were 24,298 RNs aged 55-plus, or 25.5 per cent of Ontario's employed RN workforce that is eligible to retire in the coming years.[2]

Combined with more than a quarter of the RN workforce that is eligible to retire, the latest drop in Ontario's employed RN workforce has reached a level of serious concern that requires immediate action to reverse the significant implications for patient care.

In addition, the RN share of nursing employment in Ontario has been *falling* significantly over time – from 76.4 per cent in 2003 to 69.8 per cent in 2017. This trend raises serious concerns given the extensive research that we review next that relates higher RN staffing to improved patient outcomes. Replacing RNs with lesser trained staff is clearly not cost effective when the impact on patients is taken into consideration.

III. RN Care Improves Patient Outcomes and Provides Cost Savings

The Ontario Auditor General's 2016 Annual Report provided strong evidence for the need to improve RN staffing in our hospitals.[3] The Auditor General indicates that RN workload is heavier in Ontario than what international best practices recommend.

The international best practice ratio of 1:4 (one RN for every four patients) in hospital medicine and surgery units is not being met in Ontario hospitals. The Auditor General also found that at the community hospitals they visited, nurse-to-patient ratios are as high as 1:6 during the day and 1:7 during the night shifts on medicine and surgery units. In fact, the auditor's survey of large community hospitals found that nurse-to-patient ratios for medicine units are as high as 1:9 for overnight shifts. Lack of funding was the reason hospitals gave for these extremely high patient ratios.

As the Auditor's report identified, comprehensive research shows "that every extra patient beyond four that is added to a nurse's workload results in a 7% increased risk of death."[4] This means that patients in these units are at risk because there is extensive research evidence that shows improved outcomes for patients who receive *more* hours of RN care.[5] More RN hours of care positively impact a variety of adverse outcomes for patients *and* reduce costs for our health care system. RN staffing is associated with a range of *improved* patient outcomes: *reduced* hospital-based mortality, *fewer* cases of hospital-acquired pneumonia, unplanned extubation, failure to rescue, nosocomial bloodstream infections, and *shorter* length of stay.[6]

Research has also developed costing models related to cost savings realized from interventions and treatments related to avoidable adverse events that would no longer occur as a result of improved RN staffing levels. One study, for example, has demonstrated that higher RN staffing decreases the odds of readmission of medical/surgical patients by nearly 50 percent and reduces post-discharge emergency department visits.[7] A study by Needleman et al[8] concluded that raising the proportion of RN hours resulted in *improved* patient outcomes and *reduced the costs* associated with longer hospital stays and adverse outcomes compared to other options for hospital patient care staffing. Another study[9] has shown improved patient care from additional RN staffing that prevents nosocomial complications, mitigates complications through early intervention, and leads to more rapid patient recovery, *creates medical savings* and shows the economic value of professional RN staffing.[10] Further, a study[11] to determine the costs and savings associated with the prevention of adverse events by critical care RNs found annual savings from prevented adverse events (such as near misses) ranged from $2.2 million to $13.2 million, while RN staffing costs for the same time period amounted to $1.36 million. This study concluded that although RN critical care staffing costs are significant, the potential savings associated with preventing adverse events is far greater.

These research findings clearly suggest that reductions in readmissions and the prevention of adverse events for patients would result in measureable cost savings for Ontario hospitals.

Increasing the number of RN hours has also been found to be a strategy to reduce medication errors and therefore reduce costs.[12] As RN staffing hours *increased*, medication errors *decreased.*

As the study authors state, administering medications to hospitalized patients requires advanced knowledge and is more appropriately assigned to RNs. In this study, there were 335 errors (dose omission, protocols, and improper dose) with 14 percent requiring additional monitoring and treatment.[13]

We ask the Health Minister to take action to define the role of RNs in his vision for Ontario's health care system as he expressed at our recent convention. If RN care is central to his vision as he asserted, then it is time to take action to stop hospitals from making the wrong choices with respect to nurse staffing decisions that research shows impacts the care of our patients and the balance sheet of our hospitals.

IV. Funding to Improve RN Care in Ontario Hospitals

The base hospital operating funding increase for 2008-09 was 2.4 percent, 2.1 percent in 2009-10, 1.5 percent in 2010-11 and in 2011-12, and zero percent frozen hospital base operating funding for four straight years: 2012-13, 2013-14, 2014-15, and 2015-16. In 2016-17, hospitals received a much-needed 1 percent increase to base operating funding and a subsequent 1 percent increase that is currently being allocated to hospitals. In 2017-18, all hospitals received a minimum increase of 2 percent, while another 1 percent of funding was directed to specialized provincial programs. Recently, the Minister of Health also announced restoring of 1,200 hospital beds and another 800 other spaces.

While the provincial announcement of new hospital beds is a good first step in addressing over-census hospitals, successfully easing the congestion on a permanent basis requires more registered nurses at the bedside. ONA has been out front, raising the alarm about our overcrowded hospital crisis for some time now and we have been calling for a funding solution for the conditions that have led to patients being cared for in hallways and 'unconventional spaces,'

including the increased risk for patient suffering. Nurses know that we need more capacity in our hospitals and more front-line RNs at the bedside to care for them.

Nurses also know what the realities of front-line care mean, and how heavy workloads are an impediment to patients receiving the best quality care possible. While the government's acknowledgement that Ontario is in an overcapacity crisis is the first step, temporary new beds will not *solve* the problem. Ontario needs new, permanent investments in hospital care, long-term care and community care, including dedicated funding for permanent, not temporary, front-line RNs in all these sectors.

While the recent increases to hospital funding are welcome, hospitals have struggled for at least ten years with insufficient base operating funding to cover the full costs of inflation, population growth and aging. The Ontario population alone has grown by 10.2 percent in this time period. In addition, the proportion of the population of Ontario aged 65 and over, which requires significant health care resources, is projected to reach between 23.8 percent and 26.2 percent by 2038 from 15.6 percent in 2014.[14]

Hospital funding has not even accounted for inflation in most years. The Ontario Consumer Price Index (CPI) increased by 2.3 percent in 2008, 0.4 percent in 2009, 2.5 percent in 2010, 3.1 percent in 2011, 1.4 percent in 2012, 1.0 percent in 2013, 2.4 percent in 2014 and 1.2 percent in 2015. The Ontario Ministry of Finance projects CPI inflation to be 2.0 percent in 2016 through to 2018.[15]

The Ontario Hospital Association estimated in 2014 that a minimum of 3.6 percent is required to cover non-labour cost growth of 1.5 per cent for equipment, supplies and other expenses; population growth pressures of 1.1 per cent per year, and costs due to aging estimated at 1 per cent annually.[16]

A 2017 report from The Financial Accountability Office of Ontario[17] estimates that demographic changes – population growth (1.2%) and aging (1.1%) – increased health care demand from income growth (.9%), and inflation costs (2.1%) will lead to pressures of approximately 5.3 percent increases needed annually over the next five years. This means that hospital funding needs to increase by 5.3 percent in 2018 to meet the real cost pressures that hospitals face.

ONA continues our call for an immediate moratorium on further cuts to indispensable RN care. Hospitals will require funding to offset increased cost pressures of 5.3 percent in 2018.

The Minister must also issue a directive to all hospitals to ensure hospitals make appropriate evidence-based nurse staffing decisions that do not negatively affect the care patients receive.

Enhancing Home Care and Long-Term Care

The Auditor General in her 2015 Annual Report documented issues of duplication and omission of the contracts with about 160 private sector service providers who provide home care services, and commented on the resultant commercial confidentiality in that model so that the true costs are left unsubstantiated. As well, the Auditor General noted, "home care used to serve primarily clients with low to moderate care needs, but now serves clients with increasingly more complex medical and social-support needs."

In ONA's vision for home care, we support the delivery of quality home care services in a public non-profit entity. That is why we were generally supportive of the initial transition of home care coordination to the public non-profit LHINs, although we know that the LHINs face issues of capacity as they move to take on home care coordination. The next step to complete our vision is to transition the delivery of home care front-line services and staff from for-profit agencies to LHINs as the public non-profit entity.

Other organizations with interests in building capacity in the primary care sector, have advocated for moving care coordination into some 445 primary care organizations across Ontario, rather than the LHINs. ONA firmly disagrees. Such a move would continue to fragment care and duplicate services. With Care Coordination services and the delivery of home care services combined together in the LHINs, Ontarians would receive consistent, coordinated services throughout the province.

Our vision in which the LHINs directly employ all of the front-line staff responsible for home care delivery would be a much better use of limited resources and would eliminate the needless and wasteful expenditure of resources on the contracting process. It would also result in much better continuity of care and set consistent standards across the system given the consolidation rather than fragmentation of service delivery.

Further, dispensing with the current fragmentation of service delivery by the contracted private sector service providers would allow for public accountability and transparency for clients and families, rather than restrictions and barriers imposed by commercial confidentiality. Ontario's managed competition model simply does not work for clients because they siphon profit from funding designated for care.

Budget 2017 allocates a five percent funding increase for home and community care, which amounts to $250 million. This funding increase is the same amount of funding for home and community care as last year's budget, which was insufficient to meet the increasing patient demand for services in the community.

The Auditor, however, has identified that at least 10,000 people are waiting for community care.[18] The acuity of patients in home and community care is increasing – as a result of shortened length of stay in hospital and renewed efforts to shift alternative level of care patients out of hospital – which requires the skills and knowledge of RNs.[19]

There is evidence from the literature that shows when Care Coordinators are able to coordinate a range of services for the frail elderly based on need, the use of hospital emergency, acute care and long-term care declines.[20]

As in home care, there is an extensive literature[21] on the relationship between higher RN staffing levels in long-term care homes and improved quality of care outcomes for residents. Conversely, decreasing RN staffing has a negative impact on resident health outcomes.[22]

As a result, ONA continues to advocate for funding and enforcement of a staffing standard to meet the rising, well-documented care requirements of residents in long-term care homes. RN staffing levels have not kept pace with the increasing complexity of resident care and are not keeping residents and nurses safe.[23]

ONA calls on the government to fund and to regulate a minimum staffing standard of an average of four *worked* hours of nursing and personal care per resident per day, including 48 minutes of RN care per resident per day. The government has announced a commitment to increase the provincial average to four hours of direct care per resident per day. The governed states this will mean an additional 15 million hours of nursing, personal support and therapeutic care for long-

term care residents across Ontario. The government's announcement is a provincial average, will be phased in over four years, includes paid hours that are not direct care, and includes other classifications other than only those providing nursing and personal care. This is a positive start but we need these investments sooner and residents need the 4.0 daily *worked* hours of nursing and personal care to contain 20 percent of the care hours from RNs.

Our proposal addresses the rising resident acuity and is aligned with the RN staffing recommendations for quality resident care in the research literature.[24] RN skills are essential to meet the growing clinical needs in order to provide the necessary care for the complex conditions of long-term care residents.

While the Health Minister has acknowledged more RNs will be needed to implement the government's commitment to move to four hours of daily resident care, more funding will also be required for the long-term care sector in this year's budget to ensure appropriate levels of RN care for our complex residents. The four hours of daily care per resident must be funded on the basis of *worked* hours where care is actually provided to residents and must include the following skill mix to meet resident need: 20 percent RN care, 25 percent registered practical nurse (RPN) care, 55 percent care from personal support workers (PSWs) and 1 nurse practitioner (NP) for every 120 residents.

V. Keeping Nurses Safe at Work: Action to Prevent Workplace Violence

A comparison of the number of lost-time injuries in Ontario for 2016 by sector disturbingly shows that the healthcare sector continues to have the highest rates of lost-time injuries for workplace violence.[25] Lost-time injuries in health care arising from workplace violence are up by more than 27 percent over the last four years to 816 claims in 2016. More than $4.7 million in benefits were paid out in 2016 as a result of injuries due to incidents of workplace violence in the health care sector.

Acknowledgment that RN staffing not only improves patient outcomes but RN staffing is a critical feature for improving the safety of nurses themselves.[26] Improved RN and security staffing will be key in the next steps for government action arising out of implementation of the 2017 interim recommendations coming out from the Workplace Violence Prevention in Health Care Leadership Table. Key minimum standards to be implemented in Ontario hospitals include:

1. Establish a minimum security role/function (includes minimum security staffing) in health care and a minimum training standard for security written into Ontario's health care regulation.
2. Provide funding for mandatory leading-edge and high quality panic alarms for all healthcare workers that summon security and locates any person being assaulted (ideally personal panic alarms linked to security with GPS, which is two-way voice activated).
3. Safe nurse staffing to be included in Ministry of Labour orders when it is a key contributor to workplace violence and worker safety, including nurses to be trained in de-escalation and self-protection techniques.
4. Requirement for all hospitals to implement an appropriate alert/flagging system that identifies patients and alerts all workers to the risk of workplace violence, including tracking risks and behaviours, and that triggers action and safety measures to be taken to protect workers and minimize risks to patients.
5. Requirement for mandatory minimum supervisor competency training on the Occupational Health and Safety Act and hazards in health care that is similar to the training that is mandatory for supervisors in the mining sector. Requirement that all healthcare Chief Executive Officers and Administrators take the Public Services Health and Safety Association (PSHSA) Occupation Health and Safety leadership training (2.5 modules).
6. Requirement for mandatory Root Cause investigations after incidents of workplace violence written into Ontario's health care regulation.
7. Critical Injury Regulation to be amended to include "an event of workplace violence" so that such critical injuries are reported and addressed.

Further, we are calling for a realignment of resources at the Ministry of Labour to recognize and to address the specific hazards in the healthcare sector. The healthcare sector experiences unbalanced attention from the Ministry of Labour related to health and safety compared to the other workplace sectors. The Ministry of Labour's occupational health and safety structure was created some four decades ago when the workplace demographic was primarily located within the male-dominated industry, mining and construction sectors. The workplace demographic has changed significantly in the healthcare sector, while health and safety performance has significantly deteriorated. Yet, the Ministry of Labour's structure is the same. The Ministry still has an industrial branch, a construction branch and a mining branch with hundreds of inspectors. There are a handful of healthcare inspectors tucked away in the industrial branch. The healthcare workforce is double that of construction and 20-times larger than mining. Ministry statistics show

thousands more inspections in construction than health care and similar numbers to mining. It is time for change within the Ministry of Labour to realign resources to reflect the significantly changed workforce demographics in Ontario and the need for increased attention to the healthcare sector as was accomplished in other sectors in the past.

It is timely to remember Justice Campbell's warning that if workers aren't safe, neither are patients. Implementation of the recommendations above will go a long way to making healthcare workplaces safe for nurses and healthcare workers. We remain committed to ensure government action and funding equates to zero tolerance for workplace violence in the healthcare sector.

VI. Conclusion

ONA welcomes the opportunity to provide our priorities to the Standing Committee for the 2018 budget from the perspective of Ontario's front-line registered nurses.

ONA recommends a 5.3 percent increase in hospital base operating funding to cover the full costs of inflation, population growth and aging, plus increased demand for hospital services.

We urge the government to implement a moratorium on any further erosion of RN positions, including a directive to all hospitals from the Health Minister to ensure hospitals make appropriate evidence-based nurse staffing decisions that do not negatively affect the care patients receive.

We call for a four-year plan to fund improved RN care in all sectors with a target to reduce the significant gap in the Registered Nurse (RN) to population ratio between Ontario and the rest of Canada. Ontario has the worst RN to population ratio in the country, which must be reversed.

We call for the government to increase funding for expanded capacity in home care and to move toward a fully integrated *public* home care system that integrates the delivery of home care services with care coordination in the LHINs.

We call for funding and enforcement of four daily worked hours of nursing and personal care for each resident. This staffing standard is required to meet the increased care requirements of residents in long-term care homes. The four hours of daily care per resident must be funded on the basis of *worked* hours where care is actually provided to residents and must include the

following skill mix to meet resident need: 20 percent RN care, 25 percent registered practical nurse (RPN) care, 55 percent care from personal support workers (PSWs) and 1 nurse practitioner (NP) for every 120 residents.

We call on the government to implement *all* of the 2017 recommendations from the Workplace Violence Prevention in Health Care Leadership Table.

We list the priorities that represent the best solutions to prevent workplace violence. Further, we call for a realignment of resources at the Ministry of Labour to recognize and to address the specific hazards in the healthcare sector.

We set out a course of action for the government to do the right thing so that increasingly acute patients receive the care they need.

Endnotes

[1] Canadian Institute for Health Information (CIHI). *Regulated Nurses, 2016.* ONA calculations based on CIHI data as CIHI no longer reports nurse to population ratios.
[2] College of Nurses of Ontario. *Membership Statistics*, 2015.
[3] See 2016 Annual Report of the Office of the Auditor General of Ontario.
[4] Auditor, p. 470.
[5] See, for example, the literature cited in Tourangeau, Anne E. et al., "Impact of hospital nursing on 30-day mortality for acute medical patients." *Journal of Advanced Nursing 57(1):33, 2007.*
[6] See, for example, Needleman, et al. "Nurse-staffing levels and the quality of care in hospital." *New England Journal of Medicine 346*(22): 1715-1722, 2002
[7] Weiss, M. E., et al. "Quality and cost analysis of nurse staffing, discharge preparation, and post discharge utilization." *Health Services Research* 46(5):1473-1494, 2011.
[8] Needleman, J., et al. "Nurse staffing in hospitals: Is there a business case for quality?" *Health Affairs 25*(1): 204-211, 2006.
[9] Dall, Timothy M. et al. "The Economic Value of Professional Nursing," *Medical Care* 47(1):97-104, 2009.
[10] The term "economic value of professional nursing" in this study refers to a monetary assessment of the value of incremental changes in nurse staffing that result in improved quality of patient care. This definition emphasizes the changes in nurse staffing that affect medical costs due to the impact on patient outcomes. Improved patient care that prevents or mitigates complications creates medical savings. Reduced lengths of recovery and mortality rates have national productivity implications.
[11] Rothschild, J. M., et al. "The costs and savings associated with prevention of adverse events by critical care nurses." *Journal of Critical Care* 24(3): 2009.
[12] Frith, K., et al. "Nurse Staffing Is an Important Strategy to Prevent Medication Errors in Community Hospitals." *Nursing Economic$* 30(5): 288-294, 2012.
[13] The study estimates the cost of the 47 errors that occurred on the nursing unit at $450,260.
[14] Statistics Canada. *The Daily*, "Population Projections: Canada, the provinces and territories, 2013 to 2063." September 17, 2014. Statistics Canada. *Annual Demographic Estimates: Canada, Provinces and Territories,* Catalogue no. 91-215-X, p. 62.
[15] Ontario Budgets. 2015, 2014, 2011.
[16] See Ontario Hospital Association, Submission to Standing Committee on Finance and Economic Affairs, January 23, 2014, p. 2.

[17] See Fiscal Accountability Office of Ontario, *Ontario Health Sector: Expense Trends and Medium-Term Outlook Analysis*, Winter 2017.
[18] Annual Report of the Office of the Auditor General of Ontario, 2010, p. 115.
[19] Health Quality Ontario, *Quality Monitor*, 2012, pp. 12-15.
[20] Williams, A.P. et al. "Reducing Institutional and Community-Based Care," *Healthcare Quarterly* 12(2): 2009.
[21] See, for example, Bostick, Jane E. et al. "Systematic Review of Studies of Staffing and Quality in Nursing Homes." *J Am Med Dir Assoc* July 2006: 366-376. For Canadian evidence, see McGregor, Margaret J, and Lisa A. Ronald, "Residential Long-Term Care for Canadian Seniors: Nonprofit, For-Profit or Does it Matter?" *IRRP Study*, No. 14, January 2011.
[22] For example, see McDonald, S.M. et al. "Staffing Related Deficiency Citations in Nursing Homes." *Journal of Aging & Social Policy 25(1):83-97, 2013 and* Trivedi, T.K. et al. "Hospitalizations and Mortality Associated with Norovirus Outbreaks in Nursing Homes, 2009-2012." *Journal of American Medical Association 308(16): 1668-1675, 2012.*
[23] Higher levels of RN staffing mix are associated with lower assault rates. See Staggs, V.S. "Nurse Staffing, RN Mix and Assault Rates on Psychiatric Units." *Research in Nursing & Health* 26(1): 26-37, 2013.
[24] Note that experts suggest 4.55 total hours per resident per day as a minimum (See Harrington et al. "Nursing Home Staffing and Its Relationship to Deficiencies," *Journal of Gerontology: SOCIAL SCIENCES* 55B (5): 2000.
[25] Workplace Safety and Insurance Board EIW Claim Cost Analysis Schema, September 2017 data snapshot.
[26] Leigh, Paul. "Higher Nurse-to-Patient Ratio Law Improves Nurse Injury rates by One-third." NIOSH Science Blog, May 6, 2015.