

Background:

Nurses are the largest group of regulated health professionals in Canada, accounting for about half the health-care workforce. This includes more than 115,000 Ontario registered nurses (RN) who care for the most complex patients in our province.

As Ontario moves towards the *Patients First* vision laid out by Health Minister Eric Hoskins, it is essential to have an appropriate number of RNs working to their full scope of practice in all sectors of the health system. Unfortunately, recent trends in health human resources show this is not currently the case. RNAO's 2016 report, *Mind the safety gap in health system transformation: Reclaiming the role of the RN*, shows that RNs are being replaced with other care providers. This has caused the RN share of the nursing workforce to drop steadily, and left Ontario with the lowest RN-to-population ratio of any Canadian jurisdiction. In 2015, there were 694 RNs per 100,000 people in Ontario, compared to 833 RNs per 100,000 people in the rest of Canada. Changes to the skill mix in the province's health-care organizations threaten the health and safety of Ontarians.

A rich body of evidence indicates that RN care is directly linked to positive outcomes on numerous patient, organizational and financial markers. To highlight evidence of the tremendous value RNs bring to our health system, RNAO conducted a scoping review of 70 years of research into RN effectiveness. The results are now part of a groundbreaking publicly accessible database which is available at RNAO.ca/bpg/initiatives/RNEffectiveness. It is intended to serve the public, clinicians, planning authorities, policy-makers, health administrators, and researchers. It will also inform journalists as they tackle current and future health and health-care issues.

Of the 626 research studies in the database, more than 95 per cent indicate that RNs have a positive effect on outcomes for patients, health organizations, and the financial bottom line. These outcomes include increasing quality of care and patient satisfaction, reducing mortality, decreasing infections, falls and pressure injuries, increasing organizational safety, and saving money.

As described below, *70 years of RN effectiveness* makes it clear that RNs are central to a high-performing health system.

Goal:

Create a publicly accessible electronic database on the effectiveness of RNs in three key areas:

- Clinical/Patient Outcomes
- Organizational/Nurse Outcomes
- Financial Outcomes

Research Questions:

To create the database of literature on RN effectiveness, a scoping review of peer-reviewed literature was conducted. The scoping review was guided by three research questions:

1. What is the effectiveness of RNs in improving clinical and patient outcomes when compared to other health workers, including other types of nurses, unregulated care providers, or the absence of nursing care?
2. What is the effectiveness of RNs in improving organizational and nurse outcomes when compared to other health workers, including other types of nurses, unregulated care providers, or the absence of nursing care?
3. What is the effectiveness of RNs in improving financial outcomes when compared to other health workers, including other types of nurses, unregulated care providers, or the absence of nursing care?

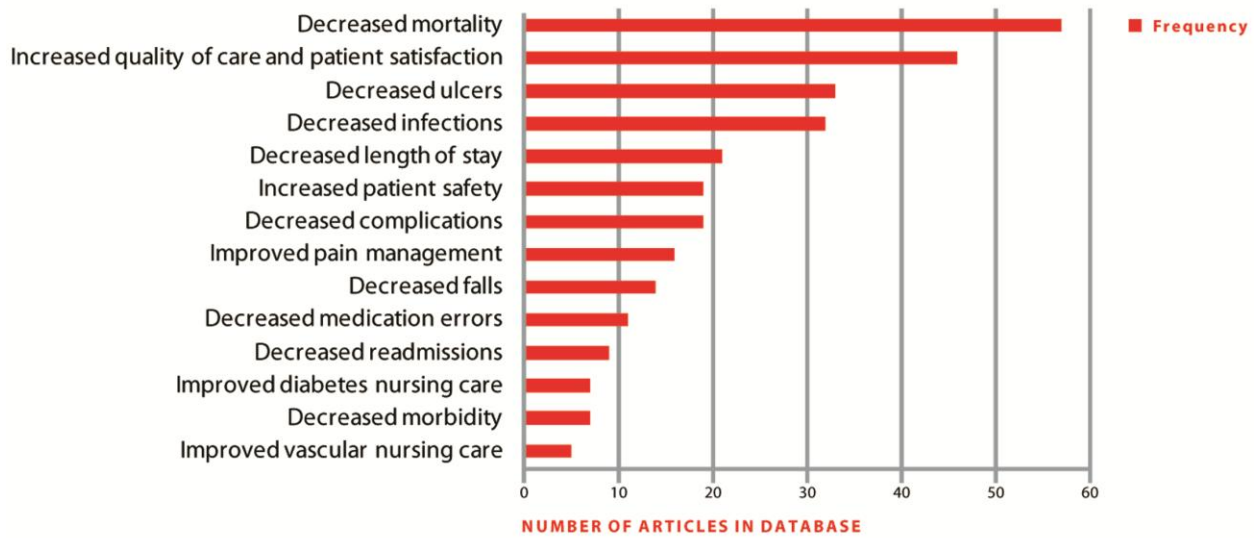
How were studies included in the database?

The search strategy was conducted by a Health Sciences Librarian in four databases: Medline, CINAHL, Cochrane Systematic Review, and Cochrane Control Trials. Studies were captured within the database if they were published peer-reviewed studies that focused on RN care or staffing and published in English. There were no restrictions on health worker/unregulated care provider, setting, sector, patient/client population, geographic location, or research design.

In order to determine whether studies were truly measuring the effectiveness of RNs, they were required to have a comparator to RN care or staffing such as other types of nurses, other health workers, or the absence of nursing. Articles were excluded from the database if they were not research studies (e.g. commentaries, discussion papers), focused minimally on RN care or staffing, or were not retrievable electronically. Literature searches for each question spanned 70 years, but the earliest study available and included in the database was published in 1973.

Database High Level Findings:

Positive Clinical/Patient Outcomes



Clinical/Patient Outcomes:

- Includes 239 studies
- Only 5 per cent (12) demonstrated neutral or conflicting results
- The largest impacts of the findings include: decreased mortality, increased quality of care, decreased pressure injuries, and decreased infections (please note this is not a comprehensive list)

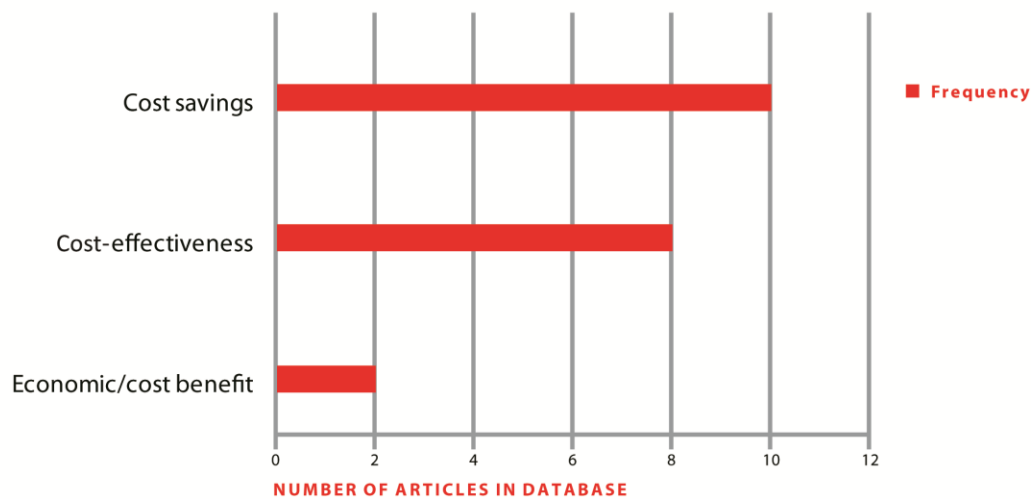
Positive Organizational and Nurse Outcomes



Organizational/Nurse Outcomes:

- Includes 282 studies
- Less than 6 per cent (16) demonstrated neutral or conflicting results
- The largest impacts of the findings include: increased organizational safety, decreased turnover, increased job satisfaction and increased retention (please note this is not a comprehensive list)

Positive Financial Outcomes



Financial Outcomes:

- Includes 122 studies
- Less than 2 per cent (2) demonstrated neutral or conflicting results
- The noted findings include: cost saving, cost-effectiveness, economic/cost benefit (please note this is not a comprehensive list)

What does this mean for Ontario?

Given the overwhelming evidence that RNs have a positive impact on patients, health organizations and the health system, it is imperative that Ontario reverse the troubling trends which have caused the RN share of the nursing workforce and the RN-to-population ratio to drop. Ontario has the lowest RN-to-population ratio in Canada, and Ontarians can't afford the consequences.

RNAO has already proposed solutions in its 2016 *Mind the safety gap* report. Government must now implement the report's evidence-based recommendations in order to truly put patients first:

- The MOHLTC develop a provincial evidence-based interprofessional HHR plan to align population health needs and the full and expanded scopes of practice of all regulated health professions with system priorities
- The MOHLTC and Local Health Integration Networks (LHIN) issue a moratorium on nursing skill mix changes until a comprehensive interprofessional HHR plan is completed
- LHINs mandate the use of organizational models of nursing care delivery that advance care continuity and avoid fragmented care
- The MOHLTC legislate an all-RN nursing workforce in acute care effective within two years for tertiary, quaternary and cancer centres (Group A and D) and within five years for large community hospitals (Group B)
- LHINs require that all first home health-care visits be completed by an RN
- The MOHLTC, LHINs and employers eliminate all barriers, and enable NPs to practise to full scope, including: prescribing controlled substances; acting as most responsible provider (MRP) in all sectors; implementing their legislated authority to admit, treat, transfer and discharge hospital in-patients; and utilizing fully the NP anaesthesia role inclusive of intra-operative care
- The MOHLTC legislate minimum staffing standards in LTC homes: one attending NP per 120 residents, 20 per cent RNs, 25 per cent RPNs and 55 per cent personal support workers
- LHINs locate the 3,500 CCAC care co-ordinators within primary care to provide health system care co-ordination and navigation, which are core functions of interprofessional primary care