1. Why do we need to know about vacancies?

Canada is facing a severe nursing shortage.
- The number of RNs per 10,000 populations fell from 75.1 in 1998 to 73.4 in 2002 (CIHI, 2003).
- Reports from the Canadian Institute for Health Information (CIHI, 2002) and the Canadian Nurses Association (CNA, 2002) indicate a shortfall of 113,000 nurses by 2016.

Key issues facing the nursing workforce include:
- An ageing workforce: the average age of RNs increased by 1.6 years from 42.6 years to 44.2 years between 1998 and 2002 (CIHI, 2003).
- The effect of retirement on the RN supply: 29,746 RNs will be leaving the workforce due to retirement or death at age 65 years by 2006 (O'Brien-Pallas, Alksnis, & Wang, 2003).
- The limited number of full-time work opportunities: 54.1% of all RN positions are full-time, 33.8% are part-time positions and 11.8% are casual (CIHI, 2003). Over 50% of hospitals reported that some part-time staff were working enough hours to be considered full time (OHA, Health Care Provider Market Survey, 2002).
- Changes in information technology have provided young women with more career options, and jobs with higher starting salaries than those of nurses (Buerhaus et al, 2000).

2. What do we know about vacancies?

Labour shortages occur when demand exceeds supply (Meltz and Marzetti, 1988). Statistical data about the supply and demand for nurses is essential to human resource planning. However, data limitations make accurate assessment of supply and demand difficult. Vacancy rates have often been used as an indicator of insufficient supply. Unfortunately the term *vacancy* lacks clear theoretical and operational definitions. Consequently, *vacancies* are not counted in a consistent way.

The most common way of calculating a vacancy rate is based on funded positions. This approach has limited utility because funded positions are based on full-time positions that are often staffed by part-time, casual and agency staff as well as through overtime.

The job status of 10.3% of RNs is unknown.
**Vacancies** indicate an inability to recruit people, or retain them in a position, at the going wage rate (Meltz, 1988). One method of calculating vacancy rate is to divide the number of positions vacant for more than 42 days (for hospital staff positions) by the average number of total positions and multiply the result by 100 to obtain a percentage (Meltz, 1988).

An alternative method is based on full-time equivalent (FTE) vacancies. Using this approach, **vacancy** is defined as a numerical value that is derived from the difference between the total approved budgeted and total actual worked hours converted to FTE vacancies.  

Formula:  
\[
\text{FTE vacancy} = \frac{(\text{TABHs} - \text{TAWHs})}{1950 \text{ hrs}}
\]

TABHs=total approved budgeted hours  
TAWHs=total actual worked hours  

Using the alternative method based on the differences between the hours budgeted for patient care and the hours actually worked, Baumann and Fisher (2001-2002), identified an extremely high number of reported vacancies in acute care and teaching hospitals in comparison to the number of calculated FTE vacancies (Figure 1). Presently the FTE formula appears to be more accurate and able to quantify the vacancy in consistent way than other approaches to counting vacancies. To increase the rigor of the definition, the research team identified that additional information on the categorization and allocation of relief hours should be collected and included in the formula.

**Barriers:**  
- Various data management practices resulting from differences in hospital structure.  
- Lack of standardized data collection tools.

**Recommendations:**  
1. Establish a working group to decide what information about vacancies the Ontario Ministry of Health and Long Term Care requires for strategic planning;  
2. Organize training sessions and perhaps common software for all health care organizations in order to obtain standardized information;  
3. Collect data on vacancies annually using a standardized instrument;  
4. Create a template which can cope with the different structures and combinations of programs in Ontario hospitals and LTC organizations;  
5. Collect FTE data on vacancies for the following job categories:  
   - Directors of Nurses  
   - Registered Nurses with administrative duties (Administrative RNs)  
   - Clinical Nurse Educators  
   - Staff Registered Nurses  
   - Registered Practical Nurses  
   - Health Care Aides by category; and  
6. Investigate a way of creating a more precise definition of FTE vacancy by including allocation of nursing relief hours.

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References Available Upon Request
REFERENCES


