

## Employment patterns of Ontario Registered Respiratory Therapists

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Presenting author:  
Brenda J. Gamble, PhD

## Rationale for the study:

- Health human resources (HHR) is crucial to the delivery of health services
- Between 60 and 80 cents of every health care dollar in Canada is spent on HHR (Ontario Ministry of Health and Long-Term Care, 2007)
- As a result health human resources planning and research is important

## Ontario Registered Respiratory Therapists (RRTs):

- “Registered Respiratory Therapists (RRTs) specialize in caring for people with breathing difficulties. They help to monitor, evaluate and treat individuals with respiratory and cardio-respiratory disorders.”

(College of Respiratory Therapists of Ontario web site)

3

## Overall research goals:

- To study resource shifts of RRTs across sub-sectors, with an emphasis on shifts from hospital to community; and
- To analyze the factors which are associated with retention of these health care professionals, both within their profession, and within their sub-sector.

4

## Data source:

- RRTs are required to annually register with the College of Respiratory Therapists of Ontario (CRTO)
- CRTO administrative data for 1996-2006 were merged on a unique registration number.
- Created a retrospective longitudinal database
- 2,903 RRTs

5

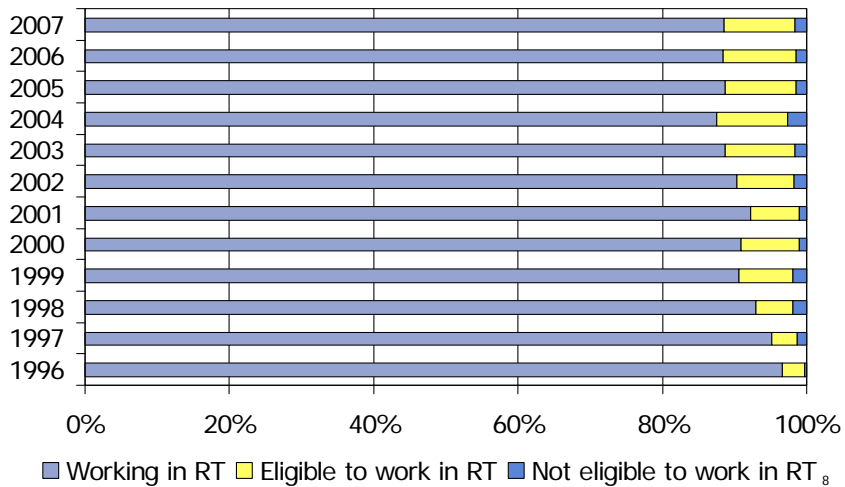
## Data analysis :

- Descriptive trends:
  - Proportion of RRTs actively working in Ontario
  - Age categories
  - Place of employment
  - Department worked in
  - Full time/Part-time/Casual
  - RRTs working for more than one employer and whether the pattern is different for different age groups
- Survival analysis using the Cox-proportional hazard model

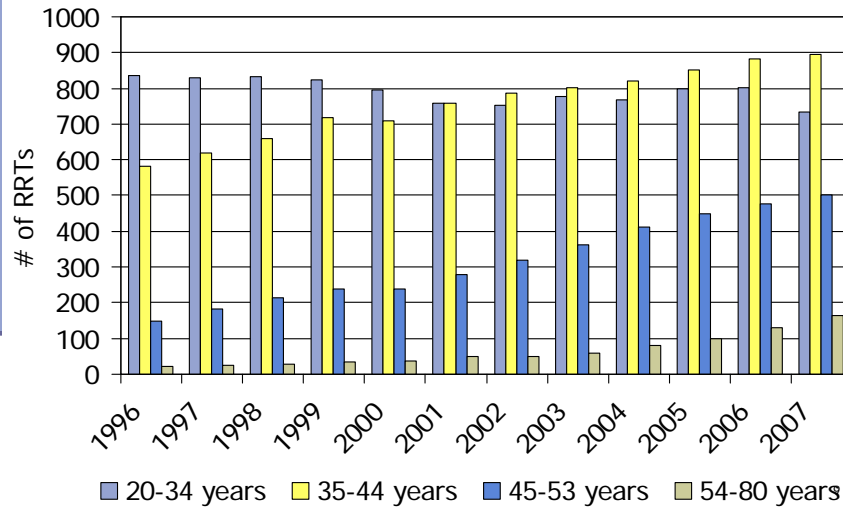
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Employment Eligibility	Sub – Employment Eligibility Classifications
Working in RT in Ontario	Working in RT in Ontario
Eligible to Work in RT in Ontario	Working in RT outside of Ontario but seeking work in Ontario Not working but seeking RT work Not working but on maternity leave Not working but on academic leave Not working but on disability or sick leave Not working but on leave of absence
Not Eligible to Work in RT in Ontario	Working in RT outside of Ontario but not seeking work in Ontario Not working and not seeking RT work

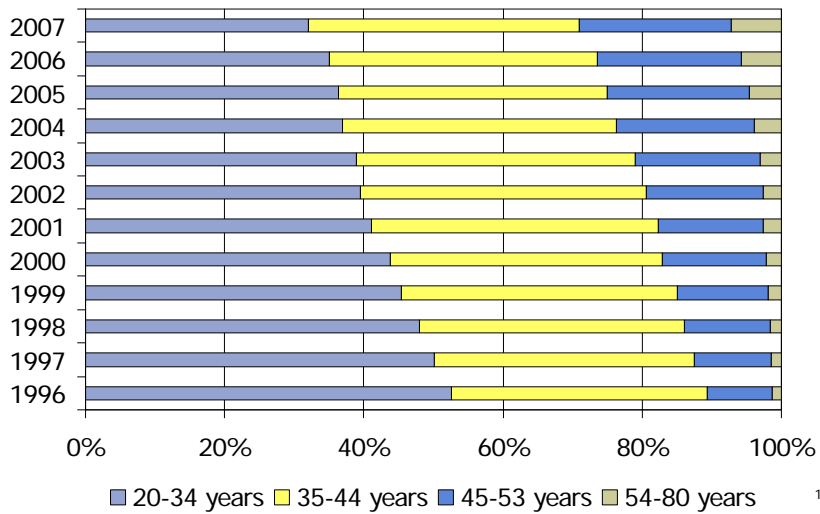
## The proportion of CRTO registrants who are working in respiratory therapy:



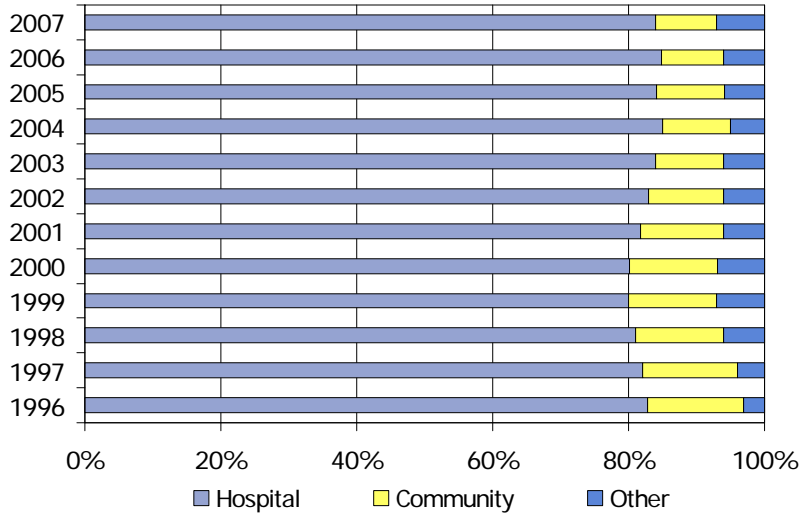
## What is the number of RRTs by age category?



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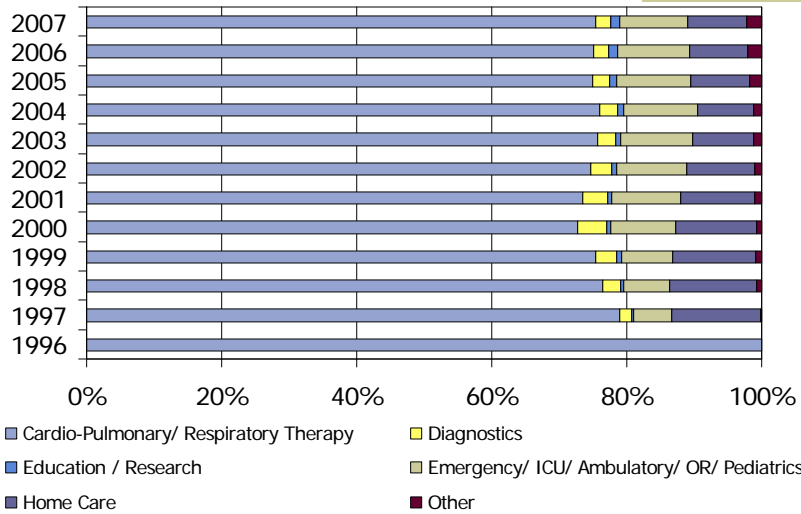


## Where do RRTs work?



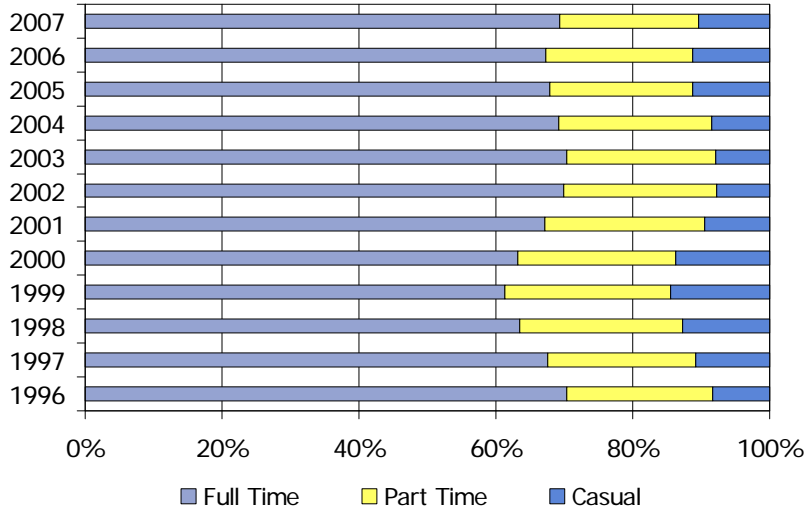
11

## Departments RRTs work in:



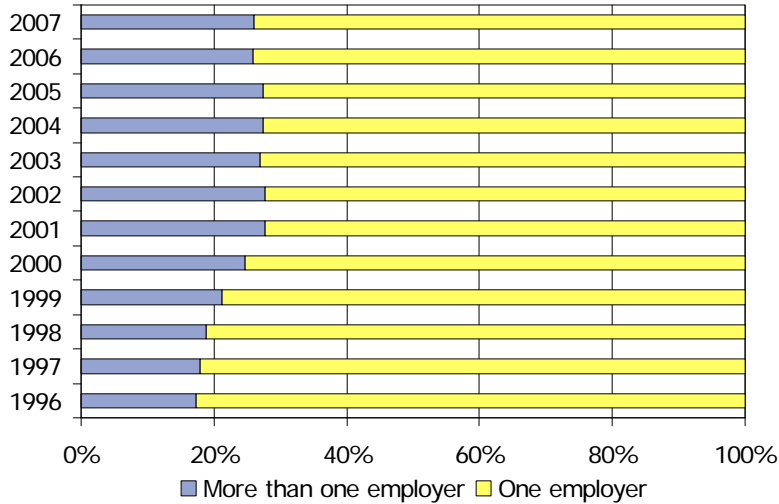
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## The proportion of RRTs who work FT/PT/Casual



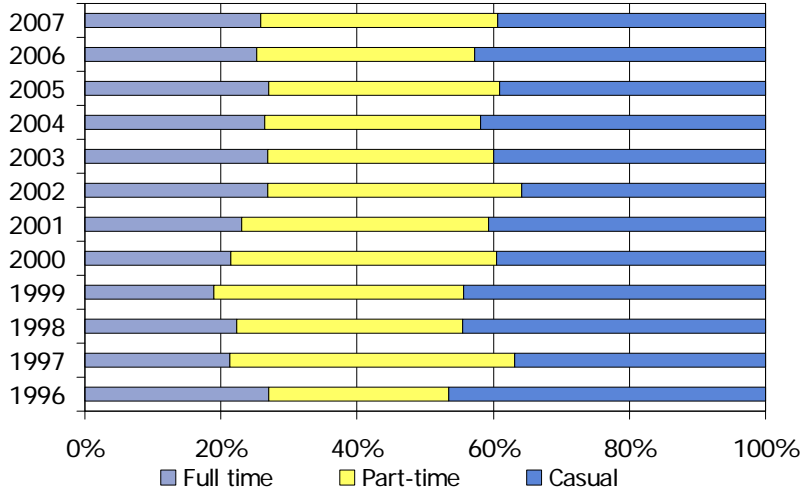
13

## Proportion of RRTs working for more than one employer:



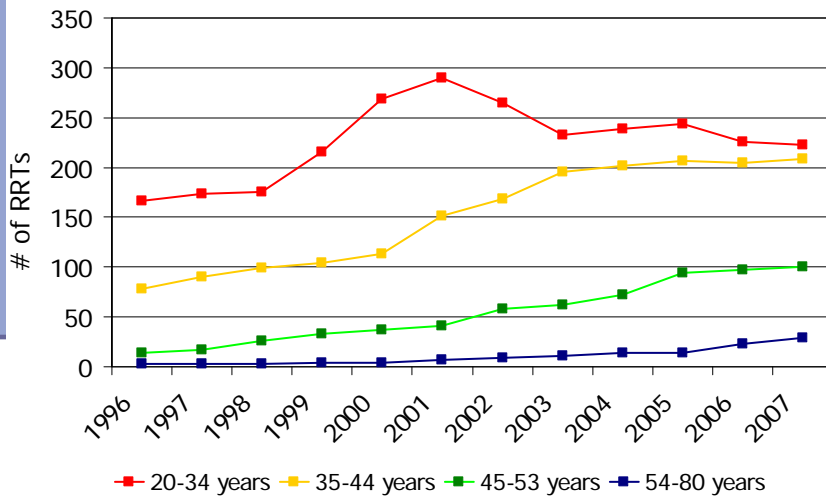
14

## The proportion of FT/PT/Casual RRTs working for more than one employer:



15

## Number of RRTs working for more than one employer by age group:



16

## Compared to a baseline of RRTs age 35-44 years:

- The hazard of RRTs age 20-34 years leaving Ontario's respiratory profession is: 2.108\*
- The hazard of RRTs age 45-53 years leaving Ontario's respiratory profession is: 0.367\*

\*While controlling for other variables in the model.

17

## Compared to a baseline of RRTs working for one employer:

- The hazard of a RRT who works for more than one employer is: 0.374 while controlling for other variables in the model.

18

## Conclusion:

- The majority of RRTs are still based in hospitals
- Complex employment relationships exists:
  - Descriptive statistics tell us that there is a decrease in the proportion of younger RRTs
  - At the same time the number of RRTs overall has increased
  - As well, the youngest age group and casual employees are more likely to leave

19

## Further analysis:

- Inflow analysis will be conducted to determine the proportion of new employees
- Analysis will also be conducted to determine the retention of RRTs or 'stickiness' in the profession.

(Alameddine, 2005)

20

## Link to other studies in the CIHR team:

- Labour market survey conducted by Kathryn Parker at the Michener Institute for Applied Health Sciences
- Results provided will be used to better understand the working conditions, educational needs and skill mix of RRTs
- As well as the number of FT/PT/Casual positions including those filled and vacant
- Results will help to better understand why 1/5 of those eligible to work have more than one employer.

21

## Research team members:

### **Funding Agency:**

- Canadian Institutes of Health Research (CIHR) through the CIHR Team in Community Care and Health Human Resources

### **Research Partner:**

- College of Respiratory Therapists of Ontario (CRTO).
- Ania Walsh, Coordinator of Registration CRTO

### **Researchers:**

- Brenda J. Gamble: Assistant Professor, University of Toronto
- Audrey Laporte: Assistant Professor, University of Toronto
- Carey Levinton: Consultant/Analyst CHIR Team in Community Care and Health Human Resources, University of Toronto
- Frieda Waisberg: PhD Graduate student, University of Toronto
- Raisa B. Deber, Professor University of Toronto

22