

Ontario Respiratory Therapists: An analysis of the inflow and stickiness across settings

CIHI HHR Conference Connecting Issues and People
Ottawa, December 6, 2007

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Funding Agency:

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

Research Partner:

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Rationale for the study:

- HHR is crucial to the delivery of health services
- Delivery increasingly complex and dependent on technology and specialized primary and allied health practitioners
- Previous studies have generally focused on doctors and nurses



Ontario Respiratory Therapists (RTs):

“Respiratory Therapists (RTs) 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)

Research objective:

To analyze the factors which are associated with retention of RTs, both within their profession, and within their sub-sector.

Data source and database:

- RTs are required to annually register with the College of Respiratory Therapists of Ontario (CRTO)
- CRTO administrative data for 1996-2007 were merged on a unique registration number.
- Created a retrospective longitudinal database of 2,903 RTs

Definitions:

Stickiness (retention)

- The transition probability of a RT working in a given setting in year "t" remaining in the same setting in year "t+1"

Inflow (recruitment)

- As the percentage of RTs that are working in a particular setting in year "t", who were not working in that setting in year "t-1"

Note the concepts and definitions are based on the work of Alameddine, Laporte, Baumann, Mildon and Deber in Social Science and Medicine, 2006

Stickiness and inflow were calculated for the following settings:

- Profession as a whole
 - Working in RT/not working in RT;
- Sub-sector
 - Hospital
 - Community
 - Other (e.g., education, private lab, retailer, government, etc.); or
- Department within hospitals
 - Cardio-pulmonary/respiratory therapy
 - Diagnostics/Education/Research
 - Emergency/ ICU/ ambulatory/or/ pediatrics/other
 - Home care.

Differences in stickiness also computed by:

- Employment status
 - Full-time
 - Part-time
 - Causal
- Number of employers
 - One employer
 - More than one employer

Overview of Ontario RTs from 1996 to 2007:

- Increased # CRYPTO registrants (1628 in 1996 to 2300 in 2007)
- Predominant place of employment for RTs remains hospital sub-sector (80% to 85%)
- Department of Cardio-pulmonary/respiratory therapy (73% to 79%)
- Majority of RTs work full time (61.2% to 70%)
- RTs work for one employer (72% to 82%)
- However, there has been increase in the proportion of RTs that work for more than one employer (17.3% to 26%).

Time Trends: RTs working in respiratory therapy

Year/working in RT	Working in RT	Not working in RT	Total
Start (1996)	1572	56	1628
End (2007)	2035	262	2297
# change 1996-2007	463	206	669
% change 1996-2007	29.4	367.9	41.1
% Mean stickiness	93.5	41.5	

Time Trends: Employment sub-sector

Year/sub-sector	Hospital	Community	Other	Total
Start (1996)	1262	214	57	1533
End (2007)	1810	204	147	2161
# change 1996-2007	548	-10	90	628
% change 1996-2007	43.4	-4.7	157.9	40.9
% Mean stickiness	94.9	85.7	82.4	

Time Trends: Hospital department

Year/ department	Cardio- Pulmonary/ Respiratory Therapy	Diagnostics/ Education/ Research	Emergency/ICU/ Ambulatory/OR/ Pediatric/ Other	Home Care	Total
Start (1997)	1243	31	93	206	1573
End (2007)	1619	75	267	186	2147
# change 1996-2007	376	44	174	-20	574
% change 1996-2007	30.2	141.9	187.1	-9.7	36.5
% Mean stickiness	93.2	77.5	87.7	83.9	14

Time Trends: Employment status

Year/ employment status	Full-time	Part-time	Causal	Total
Start (1996)	1086	329	137	1552
End (2007)	1496	439	223	2158
# change 1996- 2007	410	110	86	606
% change 1996-2007	37.8	33.4	62.8	39.0
% Mean stickiness	92.7	77.5	59.1	

Time Trends: Number of employers

Year/number of employers	One employer	More than one employer	Total
Start (1996)	1284	269	1553
End (2007)	1597	561	2158
# change 1996-2007	313	292	605
% change 1996-2007	24.4	108.6	38.9
% Mean stickiness	88.4	78.8	

What is the significance of the results?

- The policy direction that supports the shift of the site of care from the hospital to the community has had little impact on where RTs work
- The majority of RTs still continue to work in hospitals, even in terms of delivering home care
- Does this reflect both the content of work as well as the conditions of work?

Link to other studies in the CIHR team:

- Labour market survey - results provided will be used to better understand the working conditions and skill mix of RTs.
- As well as the number of FT/PT/Casual positions including those filled and vacant.
- Results will also help to better understand why there has been an increase in the number of RTs working for more than one employer.
- What that means for recruitment and retention.