
Health Human Resources

CIHR Team Grant Symposium

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Why HHR in the Team Grant? The Canadian population is aging

- This has two implications:
- One quasi-real:
 - If health care needs increase over time, more health care providers will be needed
 - This is real, but not nearly as much as scare mongering would have us believe
 - But types of services/providers needed are likely to change
 - This will be the focus of Theme 3!



The reality

- There are many types of health care workers
- Our understanding is improving
- Care is complex and not always provided by health care workers
- Sites of care are varied and are changing
- All data bases are not yet available and complete



Relationship to Community Care?

- Care has been shifting from hospital to home and community.
- We expect this trend to continue (note presentations about Balance of Care)
An unstated assumption:
- As care shifts, so will HHR.
- Health care providers based in institutions were implicitly expected to shift readily from one care sector to another



Will this happen?

- Are sectors equivalent?
- There are likely to be barriers to movement—loss of benefits and pensions, differences in skill requirements and job characteristics
- Can we clarify the extent to which there are differences across sub-sectors where HHR may work?



The Vision

- To analyze health human resource labour markets with a view to understanding the long run implications ***for each*** of population aging and the shift in site of care delivery



The Vision

- Implications in terms of :
 - Rate of retention of different types of providers
 - Factors that influence retention for different health care provider groups
 - The degree of mobility of providers across care sectors
 - Future supply of different providers



Instant replay: The questions

- Addresses the supply and employment shifts of health professionals, with particular emphasis on: the sub-sectors in which these providers work; the factors affecting the likelihood that they will continue working in their profession; differences by sub-sector in retention ('stickiness') and what workers do; and their training and educational needs



Example of a Research Approach

- One framework for the analysis is derived from labour economics
- Informed by evidence from nursing literature on the factors that have been found to influence retention, job satisfaction, choice of work sector.
- And by the smaller but growing literature on rehabilitation and allied health professionals.



A key concept: Stickiness

- The probability that some-one working in a particular 'setting' in year t is still working there in year $t+1$
- Where "setting" can be defined in a number of ways:
 - The profession (continuing to work)
 - The sub-sector (e.g., hospitals)
 - Work status (FT, PT, casual)
 - Etc.



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- Use registration data bases
 - Link registration records to create longitudinal files
 - labour economics approaches to study 'survival' and how retention is affected by various factors
 - Variety of other approaches to fill in the gaps



Labour markets we've studied using this methodology

To date:

- Nursing, Physiotherapy, Occupational Therapy, Respiratory Therapy
- In the works: Audiologists and Speech Language Pathology, Medical Laboratory Technology, and many more just as beautiful!



Thanks to:

- Our partners
- Our researchers
- Our students
- Key: each sub-project includes expertise in that profession, often from the professional colleges and associations.
- Critical to ensure we interpret findings correctly.



Other methodologies

- Analysis of secondary survey data (CIHI and Statistics Canada Census)
- Not to mention our own primary surveys!
- Focus groups
- Interviews
- Field studies



Professions we have studied with these methods

- Health care managers
- Nurses
- Respiratory Therapists
- Anesthesia Assistants

- Again - more to come



One statistical approach

- With longitudinal data set, compute transition probabilities
- Categorize these: stay, switch, leave
- Are there variations: across sectors
- By work status (FT/ PT/ casual)



Getting fancier: Survival Analysis

- Use multivariate statistical Cox proportional hazard model to see what factors affect exit from the profession
- Advantages over surveys:
 1. Captures actual exit, rather than 'intention to quit' or 'dissatisfaction'
 2. Captures entire population, not just those who replied to survey



What have we been finding?

- Some current findings in today's presentations and posters
- Future findings - we always welcome good collaborators and students!

