

The Impact of an Economic Downturn on Employment of Nurses: Does Policy Play a Role?

Mary Crea-Arsenio and Paul Rizk

Andrea Baumann, RN PhD

Mabel Hunsberger, RN PhD

2014 CAHSPR Conference
May 12–15 | Toronto, Ontario



CAHSPR ACRSPS

Canadian Association for Health
Services and Policy Research

L'Association canadienne pour la
recherche sur les services et les
politiques de la santé

Funded by:
 **Ontario**

Outline

- Background to Policy
- Nursing workforce in Ontario
- Nursing Graduate Guarantee (NGG)
- Methods
- Results
- Conclusions

Objective

To evaluate the effectiveness of a government policy in mitigating the impact of an economic downturn on full-time employment of new graduates nurses.

Background to Policy

Healthcare restructuring (1990s):

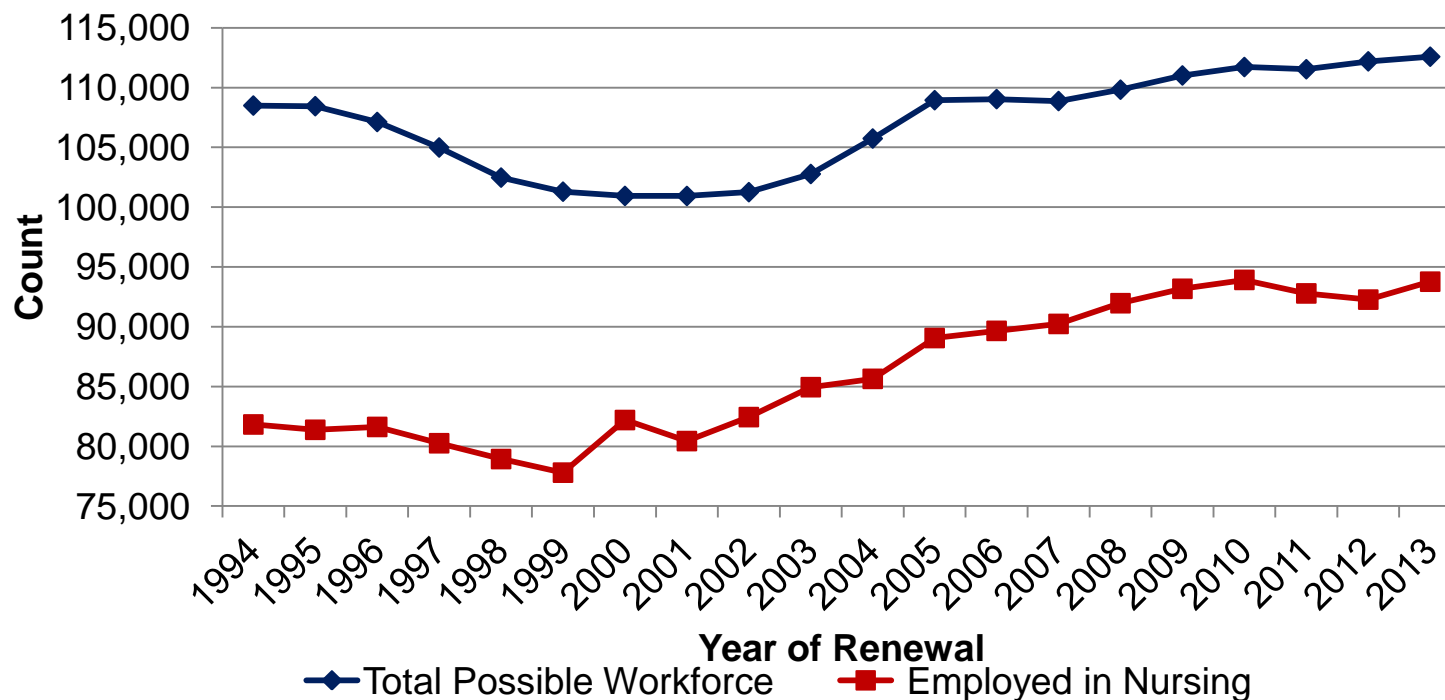
- Increase in the casualization of the nursing workforce
- Decreased supply of registered nurses (RNs) and registered practical nurses* (RPNs)

Early evidence identified an increased trend of part-time and casual employment

SARs outbreak highlighted issues associated with casualized nursing workforce

Total RN Workforce 1994-2013

(Source: CNO, 2013)

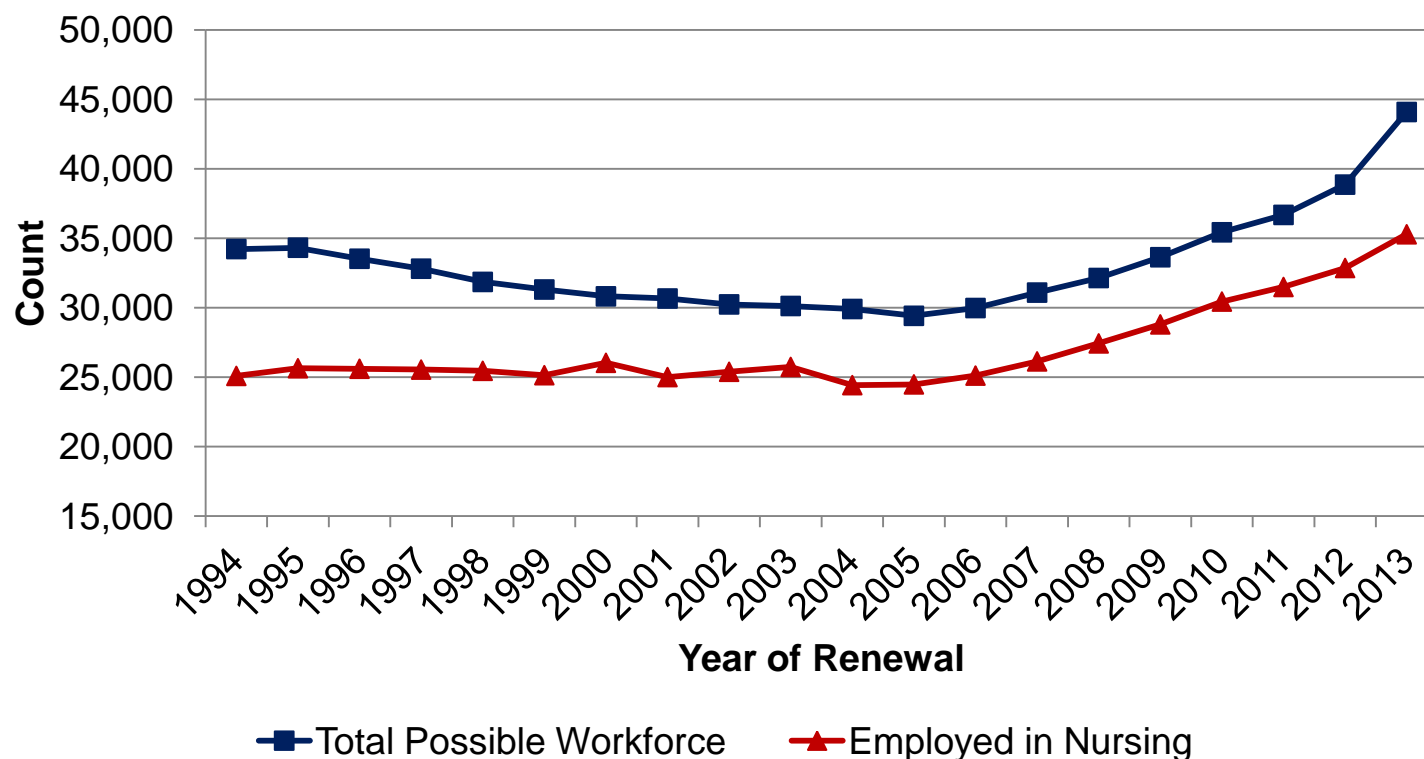


Date of renewal counts reflects members who renewed at the end of the previous calendar year (e.g. 2012 data represents members who renewed at the end of 2011 for the 2012 practice year).

Source: College of Nurses of Ontario (CNO), 2013.

Total RPN Workforce 1994-2013

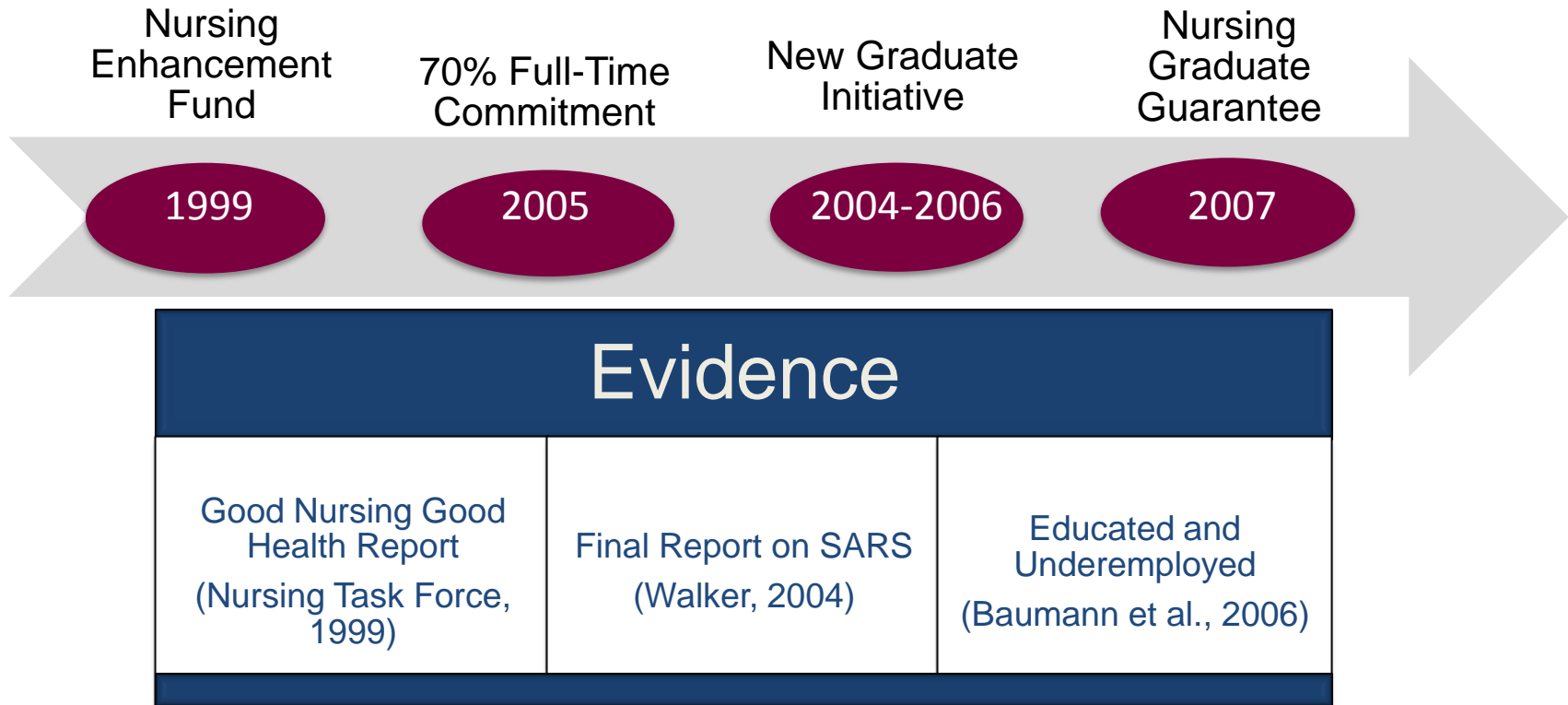
(Source: CNO, 2013)



Date of renewal counts reflects members who renewed at the end of the previous calendar year (e.g. 2013 data represents members who renewed at the end of 2012 for the 2013 practice year).

Source: CNO, 2013.

Evidence for Policy



Nursing Graduate Guarantee (NGG)

RED
Strategies

HealthForceOntario
(HFO):
Employment Portal

Temporary
Full-time Positions
(supernumerary)

Extended Orientation
and Mentorship
Programs



GREEN
Initiative

MOHLTC
Nursing Graduate Guarantee



BLUE
Goal/Outcome

New Graduate
Full-Time Employment

NGG Sequence

Six months of funding

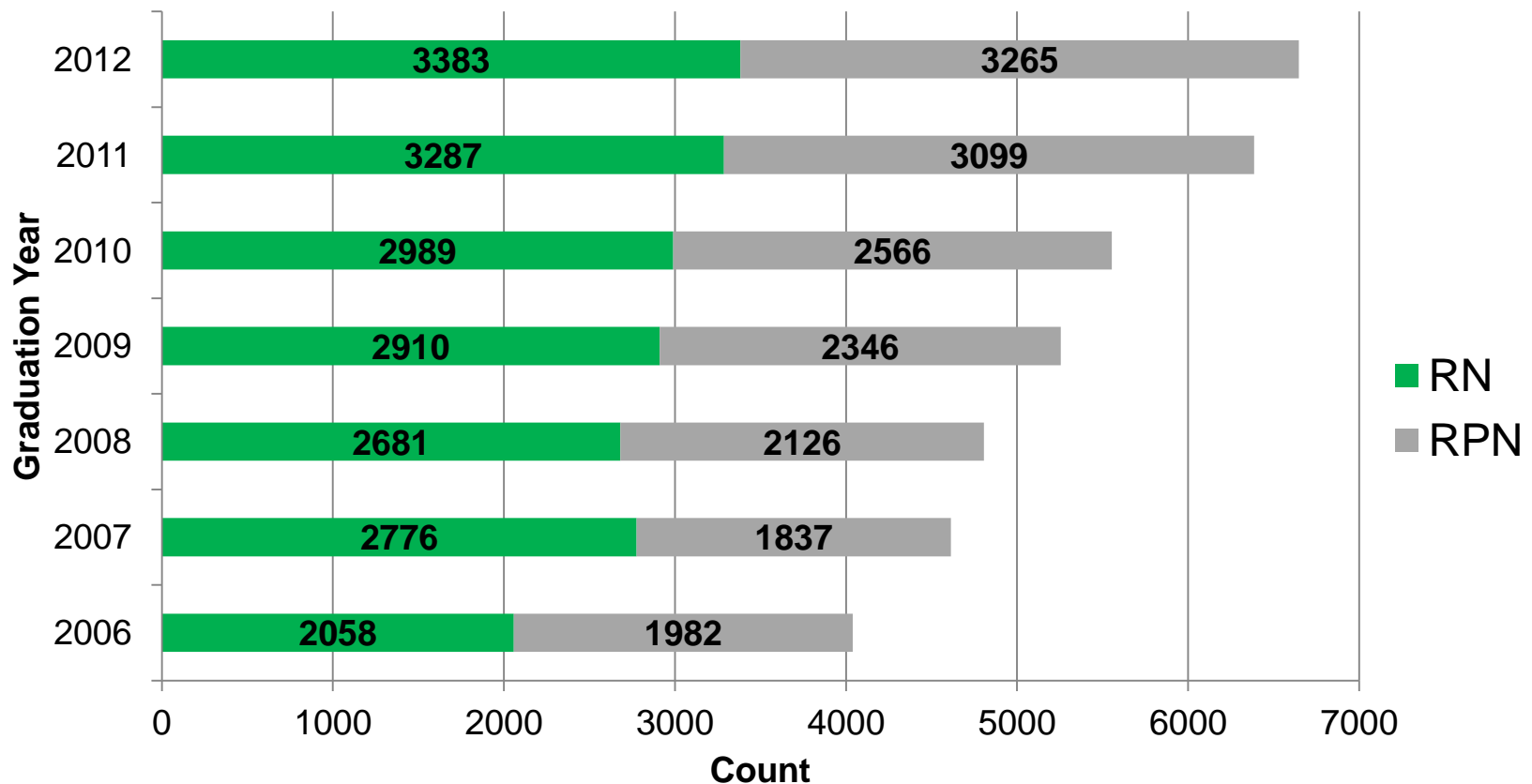
- Online employment portal (HFO^{*} Jobs) facilitates matching between employers and new graduates
- Employer provides a temporary supernumerary FT position with extended orientation/mentorship
- Employer transitions new graduate into FT permanent position

*HFO = HealthForceOntario.

Source: Ministry of Health and Long-Term Care (2011). *Guidelines for participation in the Nursing Graduate Guarantee.*

Supply of Ontario New Graduate Nurses

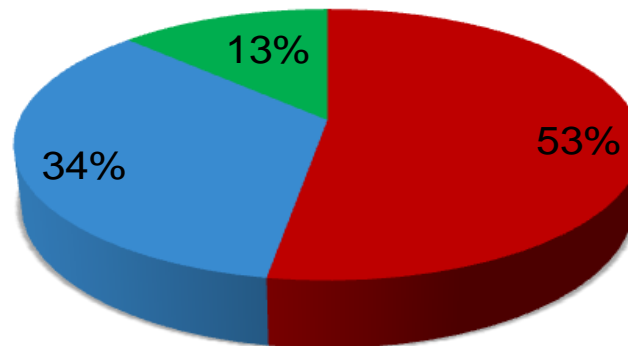
(Source: MTCU, 2013)



Labour Demand: Profile of Ontario Healthcare Employers

Profile of Ontario Healthcare Employers (N =1198*)

- Long-term Care Facilities (630)
- Community & Other Organizations (413)
- Hospitals (155)

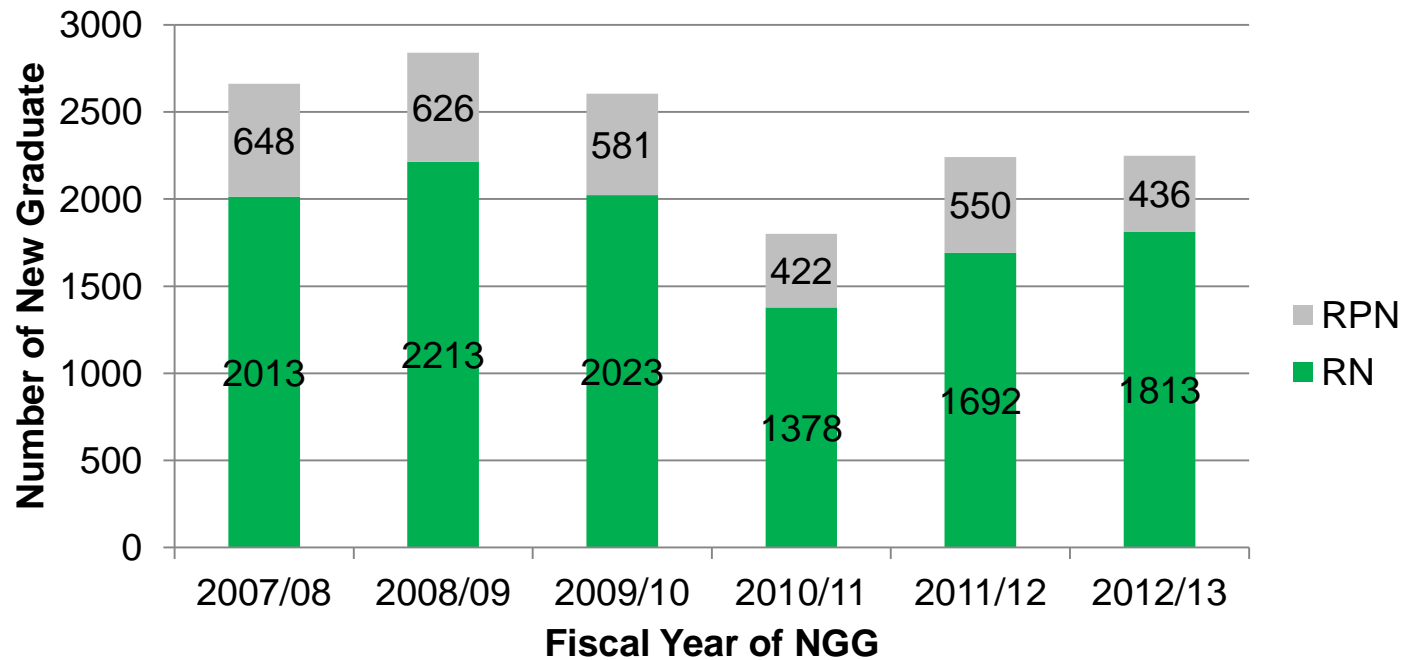


*The total number of employers is an approximate number based on healthcare employers who have registered on the HealthForceOntario Jobs website. This number may include organizations that do not employ nurses.

Source: MOHLTC, 2012.

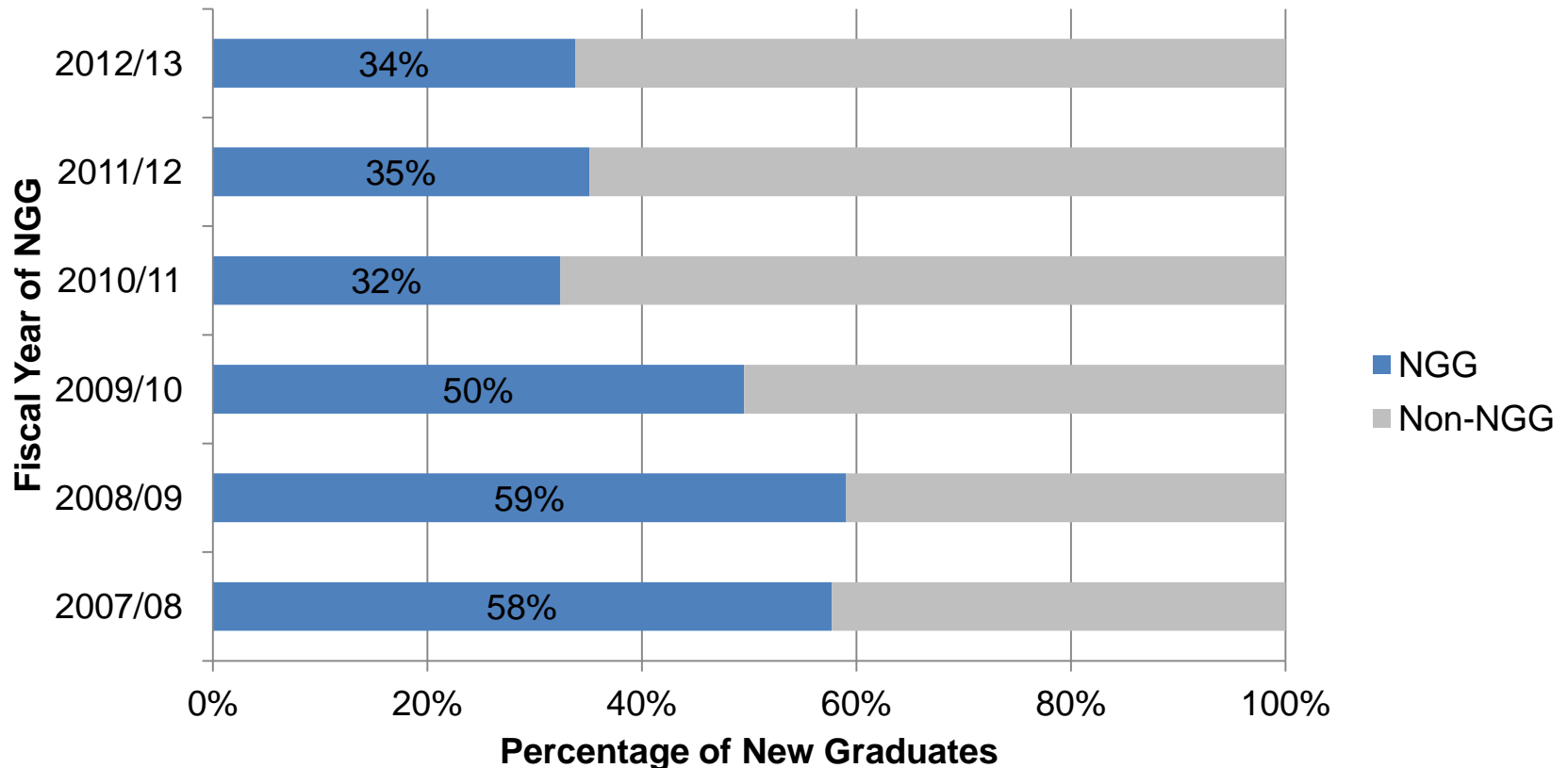
New Graduate NGG Participation

(RN and RPN)



Over six years, a total of 14,395 new graduate nurses obtained an NGG position (11,132 RNs and 3263 RPNs).

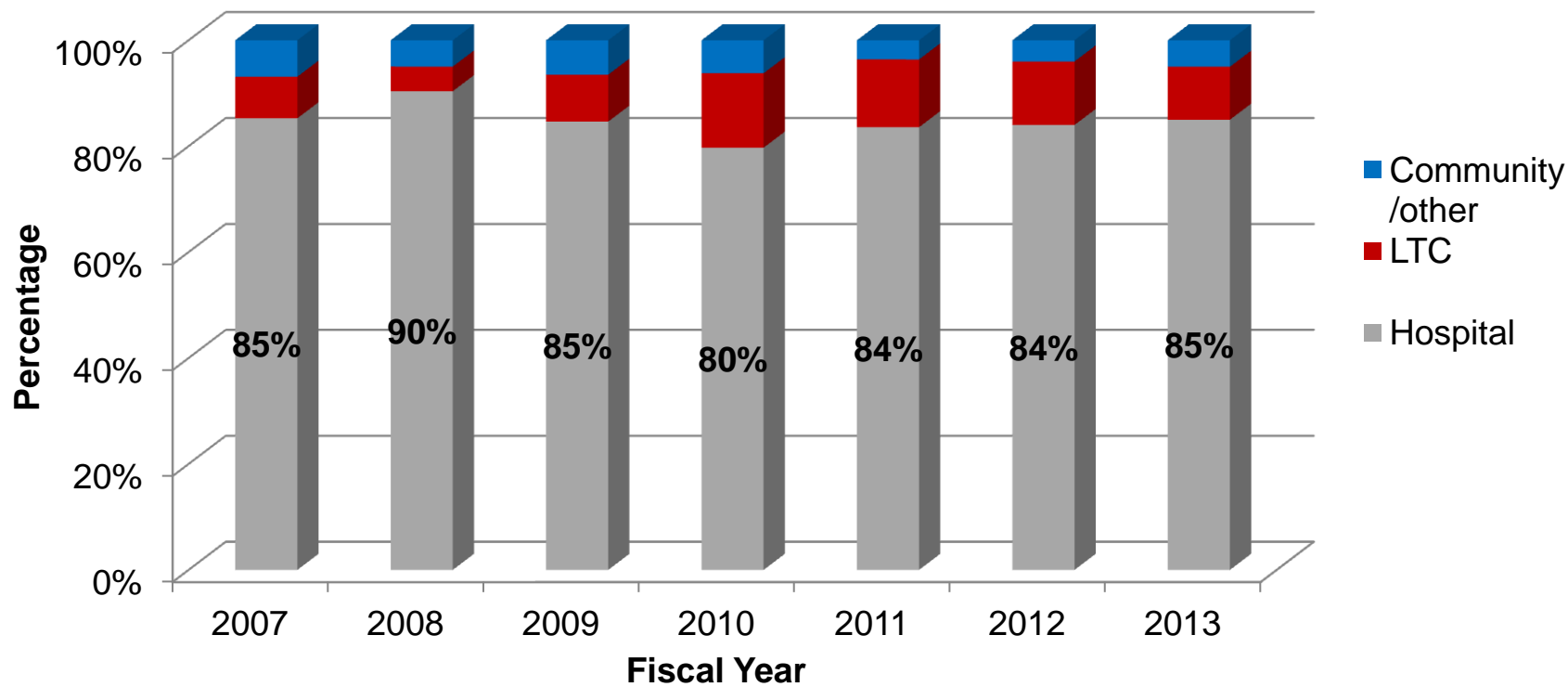
NGG Participants as a Percentage of all New Graduate Nurses



Employer NGG Participants by Sector

Sector	Fiscal Year of NGG					
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Hospital	97	91	106	104	96	103
Long-Term Care	87	64	86	99	94	82
Community and Other	38	20	32	27	22	29
Total	222	175	224	230	212	214

NGG Positions by Sector of Employment



Note: All totals as of June 22, 2012.

Source: : MOHLTC, unpublished NGG program data, 2012.

Purpose

- Evaluating the impact of the NGG on full-time employment of new graduate nurses.
- Differential impact on RNs and RPNs
- Evolution of the initiative (i.e. changes in impact over time)

Data Sources

- On-line surveys administered yearly for 6 years
 - Primary data source for conducting analysis
- Secondary database analysis (College of Nurses of Ontario)
 - Mandatory registration database for all practicing Ontario nurses
 - Used for sample validation and complementary information

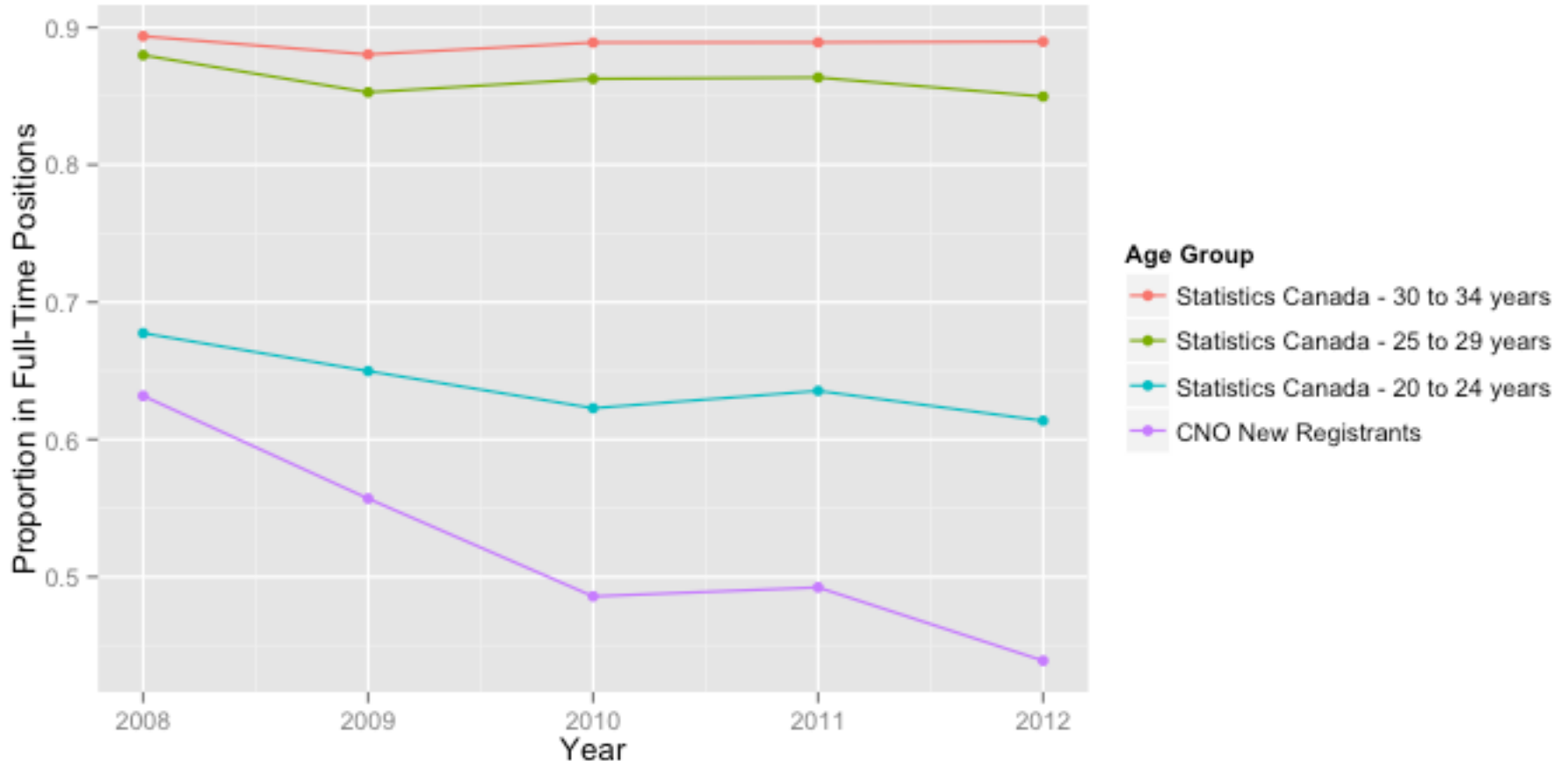
Sample Characteristics

<i>Characteristic</i>		<i>n (%)</i>
Designation	RN	2766 (69.0)
	RPN	1242 (31.0)
NGG Participation	Yes	2178 (54.3)
	No	1830 (45.7)
Age	19 or under	10 (0.2)
	20-24	1832 (45.7)
	25-29	953 (23.8)
	30-34	441 (11.0)
	35-39	340 (8.5)
	40 or over	432 (10.8)
Gender	Female	3668 (91.5)
	Male	340 (8.5)

*

Decrease in full-time employment amongst young workers

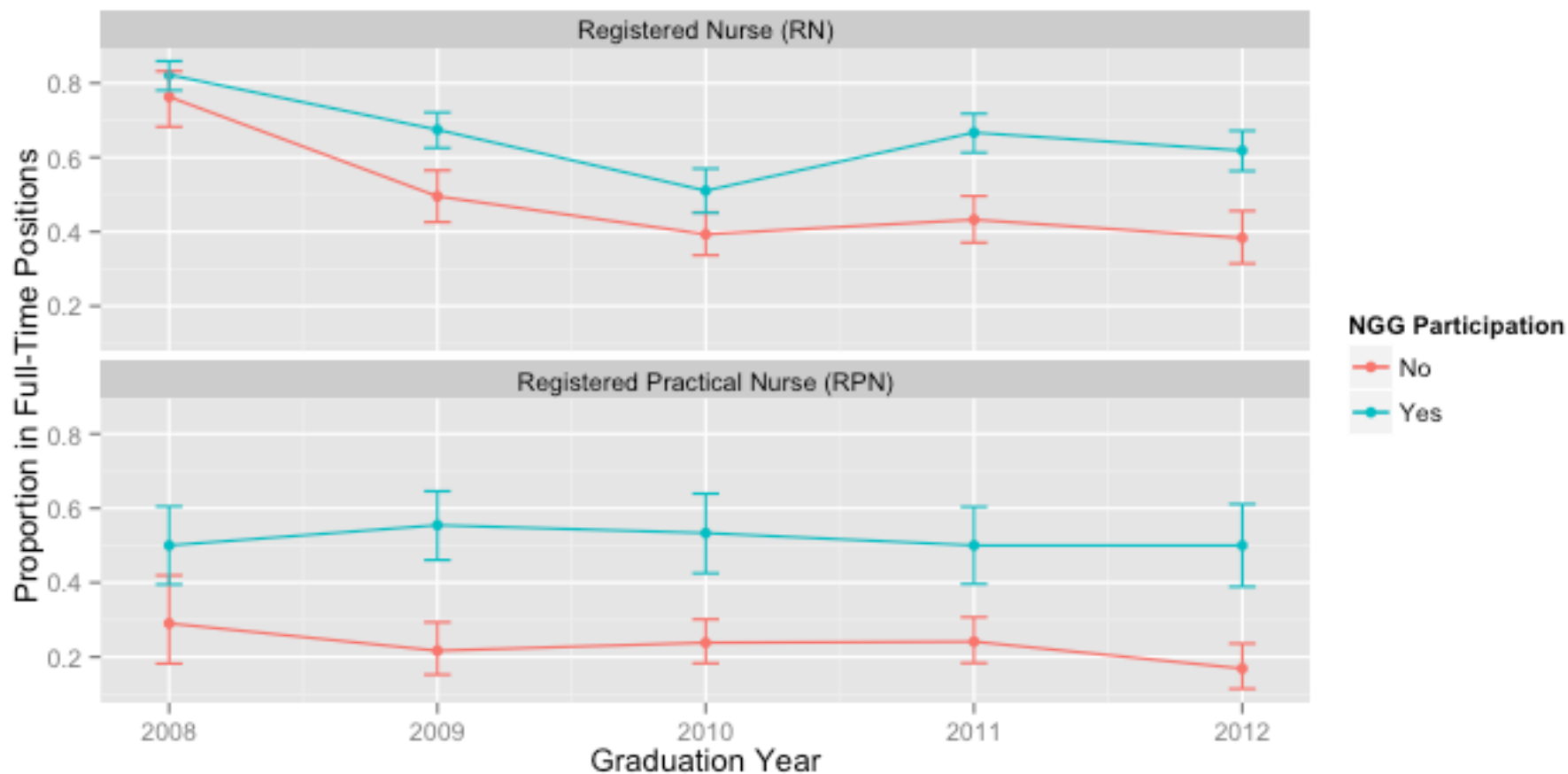
(Source: CNO and Statistics Canada)





Comparison of full-time employment between NGG and non-NGG nurses

(Source: Online Survey)



Logistic regression to assess impact of NGG

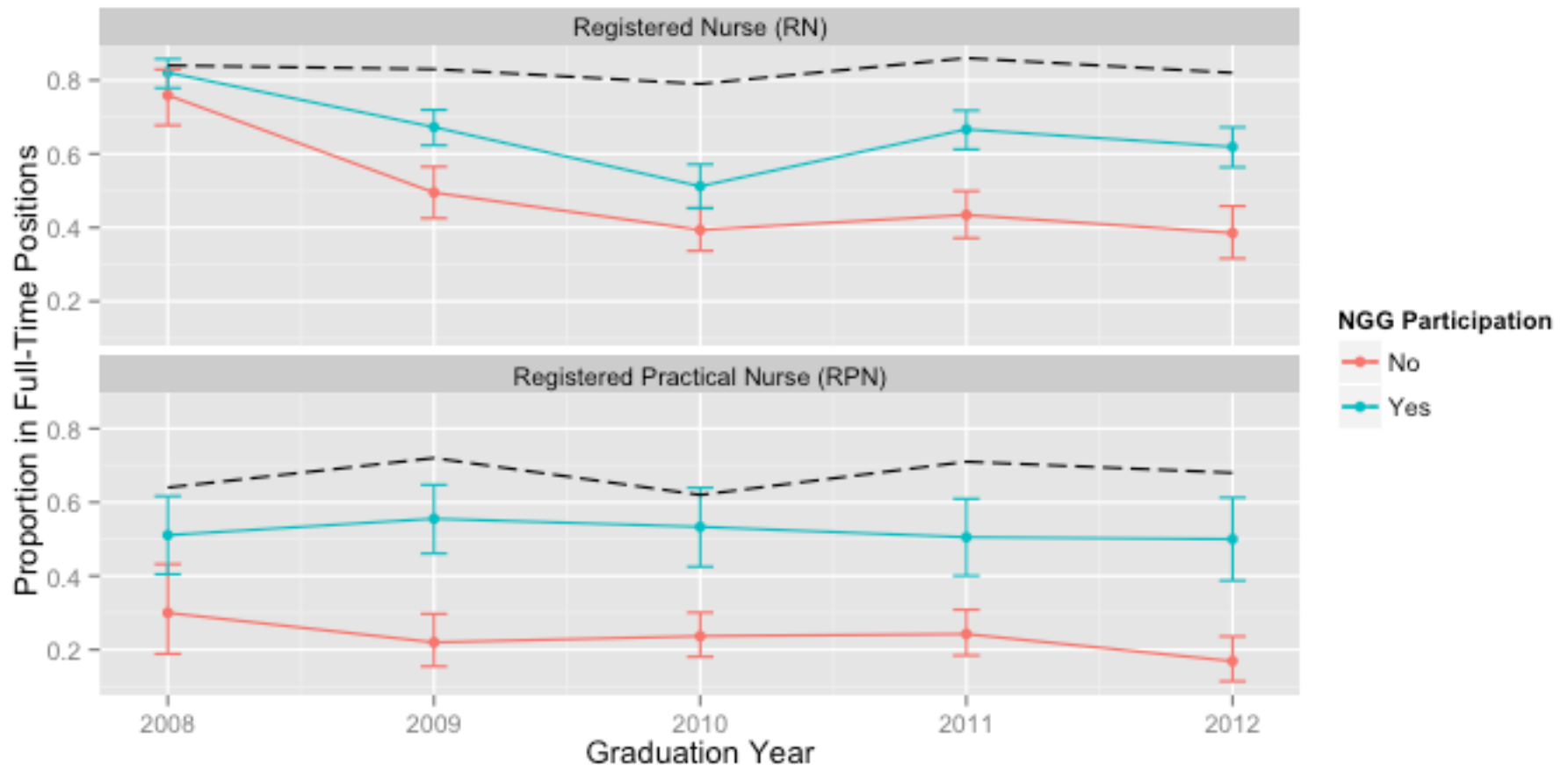
- Dependent variable: Employed in a full-time position at the time of survey (Yes/No)
- Primary covariate: NGG Participation
- Adjusted for age and gender
- Two interaction terms to examine differential impact:
 1. NGG Participation * Designation
 2. NGG Participation * Grad. Year

Results of logistic regression

Year	Odds Ratio (95% CI) for NGG Participation	
	RN	RPN
2008	1.51 (0.93 - 2.43)	2.43 (1.21 - 4.86)
2009	2.10 (1.50 - 2.94)	3.36 (1.26 - 8.68)
2010	1.64 (1.18 - 2.27)	2.62 (1.05 - 6.74)
2011	2.63 (1.88 - 3.69)	4.21 (1.63 - 10.8)
2012	2.66 (1.82 - 3.79)	4.26 (1.71 - 10.7)

Nurse preferences: Possible demand effect?

(Source: HFO Online Survey)



Conclusions

- The NGG can mitigate negative impact on employment in worsening economic conditions.
- The extent to which the NGG impacts full-time employment *may* be dependent upon the relationship between position availability (supply) and preference for full-time employment (demand)

Limitations

- Sampling frame: Online survey participants accessed through HFO portal registration. Possibility of non-representativeness. Although good agreement with population data (i.e. CNO)
- Self-Report: Particularly important with variable definitions of “full-time” employment

References

- Baumann, A., Hunsberger, M., & Crea-Arsenio, M. (2013, December). *Health Human Resource Series Number 38. Employment integration of nursing graduates: Evaluation of a provincial policy strategy*. Hamilton, Ontario: Nursing Health Services Research Unit, McMaster University.
- Hunsberger, M., Baumann, A. & Crea-Arsenio, M. (2013). The road to providing quality care: Orientation and Mentorship for New Graduate Nurses. *Canadian Journal of Nursing Research*, 45(4), 72-87.
- Baumann, A. Hunsberger, M & Crea-Arsenio, M (2012). Impact of Public Policy on Nursing Employment: Providing the Evidence. *Canadian Public Policy*, 38(2), 167-79.
- Baumann, A. Hunsberger, M & Crea-Arsenio, M (2012). Full-Time Work for Nurses: Employers' Perspectives *Journal of Nursing Management*.
- Baumann, A., Hunsberger, M., & Crea-Arsenio, M. (2011). Workforce Integration of New Graduate Nurses: Evaluation of a Health Human Resource Employment Policy. *Healthcare Policy*, 7(2), 47-59.

Contact

Andrea Baumann, RN PhD

Scientific Director

Nursing Health Services Research Unit

McMaster University

Michael DeGroote Centre for Learning

MDCL 3500

(905) 525-9140 ext. 22581

baumanna@mcmaster.ca