NP Patient Panel Study

Exploring Factors that May Influence Ontario Nurse Practitioners' Patient Panel Size in Primary Healthcare Settings: Questionnaire Findings

Nicole Bennewies, MN Student, RN
Daphne Cockwell School of Nursing
Ryerson University
nbennewi@ryerson.ca

Faith Donald, PhD, NP-PHC
Daphne Cockwell School of Nursing
Ryerson University
fdonald@ryerson.ca

Heather Beanlands, PhD, RN
Daphne Cockwell School of Nursing
Ryerson University
hbeanlan@ryerson.ca

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Ryerson University
Daphne Cockwell School of Nursing
Faculty of Community Services



Presenter Disclosure

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Purpose

To explore factors at 3 levels:

- Patient
- NP
- Organization

That may influence NP patient panel size in Ontario PHC settings

Methods

1. Literature review
2. Cross-sectional survey developed from CIHI
3. Questionnaire pilot tested with 4 NPs
4. Questionnaire mailed to 573 NPs working in PHC settings across Ontario
5. Data analyzed using descriptive statistics and inferential statistics (t-tests and ANOVA)

Results

- Of the 573 mailed questionnaires, 284 were returned
- 1 NP did not meet inclusion criteria
- 23 additional NPs excluded:
  - *20 NPs emailed that they no longer worked in PHC*
  - *3 Returned address unknown*
- 283 of the 549 questionnaires included (RR 52%)

Demographics

Characteristic	NPs with a Patient Panel (n=141)	NPs without a Patient Panel (n=142)
Age (years)	47.5 (SD 10.6)	45.8 (SD 9.9)
Gender	Female 94%; Male 6%	Female 93%; Male 7%
NP Education	Graduate 53%; Baccalaureate 44%; Diploma 3%	Graduate 53%; Baccalaureate 43%; Diploma 4%
NP Registration Category*	PHC 99%; Adult 2%	PHC 97%; Adult 4%
RN Background (Top 3)	PHC; ER/Trauma; Public health	
Experience as an NP (years)	9.7 (SD 5.7)	9.6 (SD 6.8)
Practice Location	City 65%; Small town 16%; Rural 18%; Remote 1%	City 56%; Small town 19%; Rural 24%; Remote 1%
Current Practice Setting	FHT 26%; CHC 46%; NPLC 21%; AHAC 4%; Other 3%	FHT 68%; CHC 17%; NPLC 1%; AHAC 5%; Other 9%
Employment Status	FT 72%; PT 28%	FT 54%; PT 39%; Casual 7%

NP Patient Panel Characteristics

Characteristic	Results
NPs Who Have Own Patient Panel	Own 50%; Share 33% ; No 17%
Primary Way Patients Assigned to NP Patient Panel (Top 3)	1) Patients book appointments with the NP 2) The receptionist assigns to NP 3) Patients see NP because physician unavailable
Organization Panel Expectations	Yes 35%; No 48%; N/A 18%
Method Used to Adjust Patient Panel Size	Yes 21%; No 56%; N/A 18%

Patient Factors (n=141)

Variable	Results
Age	All ages 78%; Mainly children/youth 1%; Mainly adults 20%; Mainly seniors 1%
Gender	Female 50%; Male 7%; Even mixture 43%
Health Status Appointment Time (minutes)	Acute: 24 Chronic: 30 Multi-morbidities: 36 Mental Health: 33 Mental Health + chronic: 36 Palliative care: 38
Socioeconomic Status	Low income 53%; Middle income 16%; High income 1%; Even mixture of incomes 30%

NP Factors (n=141)

Variable	Results
NP Education	Graduate 53%; Baccalaureate 44%; Diploma 3%
Experience as an NP (years)	9.7 (SD 5.7)
Experience in Current Position (years)	6.2 (SD 4.8)
RN Background (Top 3)	PHC; ER/Trauma; Public health
Employment Status	FT 72%; PT 28%
Number of Hours Worked Per Week	34.7 (SD 6.3)
Number of Patients Seen Per Day	Face-to-Face: 12 Telephone: 4
NP Role Clarity	Excellent/Good 99%; Fair/Poor 1%

Organizational Factors (n=141)

Variable	Results
PHC Clinic Model	FHT 26%; CHC 46%; NPLC 21%; AHAC 4%; Other 3%
Number of Clinic Sites	Single site 41%; ≥2 sites 59%
Number of Exam Rooms	1.4 (SD 0.8)
Personnel Support	NPs clean and prepare exam room(s) between patient use: 74% NPs greet and escort patients from the waiting room to exam room: 67%
Members of the Healthcare Team (Top 3)	1) Physician(s); 2) Receptionist(s); 3) RN(s)
NP Satisfaction with: • Interdisciplinary Team Functioning • NP-Physician Relationship • Autonomy	Satisfied or Somewhat satisfied ≥80% for all

Statistically Significant Relationships: Patient

Variable	n=	NP Patient Panel Size: Pearson's r
Health Status Appointment Time (minutes):		
Acute Condition	135	-0.20*
Single chronic Condition	135	-0.29**
Multi-morbidity	135	-0.30**
Palliative Condition	99	-0.30**
Mental Health	135	-0.19*
Health Status Patients in Panel with (%):		
Acute Conditions	134	-0.18*
Chronic Conditions	134	0.25**

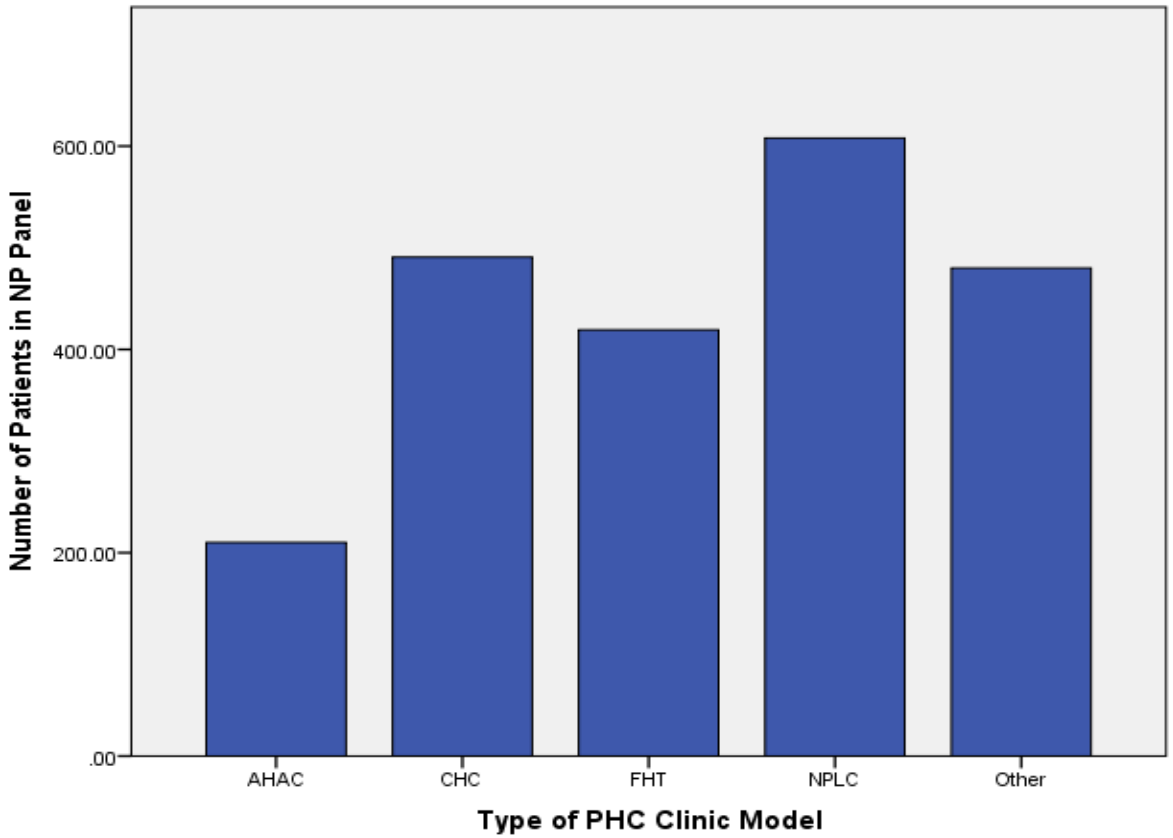
*$p < .05$ two tailed. ** $p < .01$ two tailed.

Statistically Significant Relationships: NP

- NP Employment Status
  - Scheduled hours per week examined using Pearson's 'r'
  - r= 0.38**
    - *** p < .01 two tailed*

Statistically Significant Relationships: Organizational

- **PHC Clinic Model**
  - Statistical significance found between the groups
  - NPLCs panel sizes were significantly larger than both AHACs and FHTs
  - NPs working in NPLCs and CHCs were more likely to have their own patient panel



Implications

- **NP practice and education**
  - Clearer understanding of NP roles and activities in PHC
  - Can use information to implement topics such as complex patient care and time management skills into NP curricula
- **Research**
  - Further consideration of these factors required
  - Questions around shared panels for example require further exploration
  - System factors were excluded but require more exploration
- **Administrators and policy makers**
  - Health workforce planning
  - Highly contextual and complex

NP Patient Panel Size

Questions?

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