

Sigma Theta Tau International's 29th International Nursing Research Congress

Promoting Primary Care Delivery in the US Through Effective Utilization of Nurse Practitioner Workforce

Lusine Poghosyan, PhD, MPH, RN, FAAN

School of Nursing, Columbia University, New York, NY, USA

Affan Ghaffari, PhD

School of Nursing, Columbia University School of Nursing, New York, NY, USA

Purpose:

The demand for primary care services in the United States (U.S.) is increasing due to aging population, growing chronic disease burden, and the health insurance expansion stemming from the passage of the Affordable Care Act in 2010, which provided millions of previously uninsured Americans with health insurance coverage. The growing workforce of nurse practitioners (NPs) in the U.S. can help meet the demand for primary care services (Institute of Medicine, 2010). The NP workforce is expected to grow by 93% between 2013 and 2025 (U.S. Department of Health and Human Services Health Resources and Services, 2016). However, a number of policy and organizational barriers constrain NPs' ability to deliver high quality care and meet the demand for primary care services. Despite the uniformity in NPs' educational preparation across the country guided by a common accreditation agency, variation persists in state level scope of practice (SOP) regulations. These SOP regulations determine the type and breadth of the services NPs can provide across the U.S. Currently, 22 states and the District of Columbia allow NPs to practice independently from physicians. However, 28 states impose a restriction on NPs by requiring them to have supervisory or collaborative relationships with physicians to deliver care. The variations in the SOP regulations impact the access and quality of care in the country (Graves et al., 2016; Xue, Ye, Brewer, & Spetz, 2016). Similarly, organizations employing NPs also create barriers for NP practice including not providing NPs with adequate support and resources, not fostering NP autonomy and not providing NPs with their own patient panel to deliver ongoing continuous care (Poghosyan & Aiken, 2015). The purpose of this study was to investigate NP practice, work environment, and NP outcomes in two states with different scope of practice regulations. Specifically, we investigated how different health care organizations utilized NPs in care delivery as well as how state and organizations impact NP work environment, ownership of patient panels, job satisfaction, and turnover in these states.

Methods:

A cross-sectional survey design was used to collect data in 2012 from 314 NPs in Massachusetts (MA) and 278 NPs New York (NY) state. The SOP regulations for NPs were stricter in NY where they needed an agreement with physicians for both prescribing medications and delivering care whereas in MA an agreement with physicians was only needed for delivering care. NPs completed measures of patient panel status (i.e., whether NPs have their own patient panel or share patient panel with physicians), work environment, job satisfaction, intentions of turnover, and demographics. NP work environments were measured with the 4 subscales of the Nurse Practitioner Primary Care Organizational Climate Questionnaire: NP-Physician Relations (NP-PR), NP-Administration Relations (NP-AR), Independent NP Practice and Support (IPS), and Professional Visibility (PV). Multivariate Analysis of Variance investigated the effect of state and organization type on work environments. The chi-square tests examined the effect of organization type on job satisfaction, turnover, and NP patient panel status.

Results:

State and organization type predicted NP work environment ($p < 0.05$) with no significant interaction between state and organization type in affecting NP work environment ($p > 0.05$). NP work environment was better in community-based clinics. The mean scores on all four subscales measuring work environment were higher in MA than in NY (NP-PR-3.36 in MA and 3.18 in NY; NP-AR-2.87 in MA and

2.74 in NY, IPS-3.48 in MA and 3.29 in NY, PV-3.15 in MA and 2.85 in NY). Overall, 26% of NPs were dissatisfied with their job (22% in MA and 30% in NY) while 15% of NPs planned to leave their job (19% in MA and 11% of NPs in NY). In addition, 45% of NPs in MA and 40% of NPs in NY had their own patient panel. NPs in these states were employed in three types of organizations: physician offices, hospital-based clinics, and community health centers. Organization type had no significant effect on job satisfaction ($\chi^2=1.21$, $p>0.05$) or turnover ($\chi^2=2.30$, $p>0.05$). A statistically significant relationship existed between organization type and whether NPs had their own patient panel ($\chi^2=29.38$, $p<0.05$) with community health centers exhibiting a significantly higher proportion than any other clinic type.

Conclusion:

NPs in both states faced significant organizational challenges with NPs in NY reporting more challenges in their work environments. Better work environments in MA might be explained by the state's less restrictive scope of practice regulations. Poor work environments in hospital-based clinics may be attributable to the setting's hierarchical organizational structure. As the NP workforce is growing not only in the U.S. but also internationally and the health care organizations globally will see an increase in the number of NPs in their staffing mix, it is important to address work environment issues and create effective environments in order to fully exploit the capacity of the NP workforce. State and organizational reforms should be considered to maximize the NPs' contribution to patient care and outcomes.

Title:

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Keywords:

nurse practitioner, policy and organizational barriers and primary care

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Abstract Summary:

The U.S. health care system is facing significant challenges to deliver high-quality primary care to millions of Americans. The nurse practitioner (NP) workforce can help meet the demand. This presentation will highlight the mechanisms by which the primary care capacity can be improved through removal NP policy and organizational barriers.

Content Outline:

Lusine Poghosyan

General Purpose:	To understand how organizations utilize Nurse Practitioners (NP) in states with different scope of practice regulations.
Specific Purpose:	To investigate NP practice, work environment, and NP outcomes across various organizations employing NPs in two states with different scope of practice laws.

INTRODUCTION

Background

A. The U.S. health care system is facing significant challenges to deliver high-quality primary care to millions of Americans.

1. NPs can help the country to meet the growing demand for primary care services due to aging population, growing chronic disease burden, and the health insurance expansion stemming from the passage of the Affordable Care Act in 2010 which provided millions of previously uninsured Americans with health insurance coverage.

B. The growing workforce of NPs is facing major policy and practice challenges that affect the optimal utilization of these clinicians.

1. Twenty-nine states impose restrictions on NPs by requiring them to have supervisory or collaborative relationships with physicians to deliver care.
2. Similarly, organizations employing NPs also create barriers for NP practice such as not providing NPs with adequate support and resources or promoting NP role and autonomy or providing NPs with their own patient panel to deliver ongoing continuous care (Poghosyan & Aiken, 2015).

Purpose

A. The purpose of this study involved examining NP practice, work environment, and NP outcomes in two states with different scope of practice regulations and various organizations employing NPs.

B. Specifically, we investigated how organizations utilized NPs and NP work environments and demonstrated how state and organization type impact work environment, panel, job satisfaction, and turnover in states with variable scope of practice regulations.

BODY

Methods

A. Cross-sectional survey design was used to collect data from primary care NPs in Massachusetts (MA) and New York (NY) state in 2012.

1. In MA, 314 NPs and in NY 278 NPs participated in the study. NPs completed measures of patient panel status (i.e., whether NPs have their own patient panel or share patient panel with physicians), work environment, job satisfaction, intentions of turnover, and demographics.

2. NP work environments were measured by the Nurse Practitioner Primary Care Organizational Climate Questionnaire, which captures aspect of NP work environment such as NP-Physician Relations, (NP-PR), NP-Administration Relations, (NP-AR), Independent NP Practice & Support (IPS), and Professional Visibility (PV).

B. Statistical methods were employed to analyze the NP survey data.

1. Multivariate Analysis of Variance investigated the effect of state and organization type on work environments.

2. The chi-square tests examined the effect of organization type on job satisfaction, turnover, and NP patient panel status.

Results

A. Massachusetts NPs reported better work environments than New York NPs

1. The mean responses of NPs on the four work environment scales were higher in MA than NY (3.36 in MA and 3.18 in NY for NP-PR, 2.87 in MA and 2.74 in NY for NP-AR, 3.48 in MA and 3.29 in NY for IPS and 3.15 in MA and 2.85 in NY for PV)

B. State and organization type predicted NP work environment.

C. There was no significant interaction between state and organization type in determining NP work environment.

D. Organization type had no significant effect on job satisfaction or turnover.

1. Organization type had no significant effect on job satisfaction ($\chi^2=1.91$, $p>0.05$).
2. Organization type had no significant effect on turnover ($\chi^2=2.30$, $p>0.05$)

E. Organization type predicted NP ownership of a patient panel rather than sharing it with a physician.

A statistically significant relationship existed between organization type and whether NPs had their own patient panel ($\chi^2=29.38$, $p<0.05$) with community-based clinics exhibiting a significantly higher proportion than any other clinic type.

CONCLUSION

Summary

A. NPs in both states faced significant organizational challenges with NPs in NY reporting more challenges in their work environments.

1. Better work environments in MA might be explained by the state's less restrictive scope of practice regulations in 2012.
2. Poor work environments in hospital-based clinics may be attributable to the setting's larger size and hierarchical structure.

Implications

A. Addressing work environment issues and creating effective environments is needed to fully exploit the capacity of the NP workforce in the U.S as health care organizations will see increase in the number of NPs in their staffing mix.

B. State and organizational reforms should be considered to maximize the NPs' contribution to patient care.

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First Primary Presenting Author

Primary Presenting Author

Lusine Poghosyan, PhD, MPH, RN, FAAN
Columbia University
School of Nursing
Assistant Professor

New York NY
USA

Professional Experience: Dr. Lusine Poghosyan, PhD, MPH, RN, FAAN, is a nationally recognized health services researcher with expertise in studying primary care organizations, workforce, teamwork, and quality of patient care, especially for chronic diseases. Dr. Poghosyan's research produces evidence regarding how to optimally utilize nurse practitioners as primary care providers to assure patients, particularly racial and ethnic minorities and those living in underserved areas have access to timely high quality safe primary care.

Author Summary: Dr. Lusine Poghosyan, PhD, MPH, RN, FAAN, is an Assistant Professor at Columbia University School of Nursing. Her research focuses on primary care organizations, nurse practitioner workforce, and quality of care, especially for chronic diseases. Dr. Poghosyan is a Principal Investigator on multiple federal and foundation funded research projects including those funded by the Agency for Healthcare Research and Quality, National Institute on Minority Health and Health Disparities, and Robert Wood Johnson Foundation.

Second Author

Affan Ghaffari, PhD
Columbia University School of Nursing
School of Nursing
Research Coordinator
New York NY
USA

Professional Experience: 2013-2017- Graduate Research Assistant at Texas A&M School of Public Health- performed quantitative data analysis, confirmatory factor analysis and qualitative data analysis related to 1115A Medicaid Waiver.

Author Summary: I had an abstract accepted for presentation at 2015 Organizational Theory in Healthcare Association Conference. The title of Abstract: Applying Relational Coordination to Inter-Agency Teamwork and Patient Experiences with Providers I had an abstract accepted for poster presentation at 2015 Academy Health Conference. The title of poster: Applying Relational Coordination Metrics to Care Navigators and Key Partners in Care Navigation.