

# Quality of Primary Care for Medicaid Enrollees in New York: A Comparison Between Physicians, Nurse Practitioners, and Physician Assistants

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# Introduction – Medicaid Workforce Issues

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- NY suffers from workforce maldistribution -- shortage of primary care physicians in NY's underserved areas serving Medicaid population calls for additional workforce.
- Recognition of the important roles that NPs and PAs play in primary care has been growing (e.g. 2016 NP 3,600 hours law in NY).
- Quality of primary care provided by PCMDs, NPs, and PAs in all ambulatory care settings\* has not been thoroughly studied in NY.
  - ❖ Ambulatory care settings (excluding home health care), including: Medical and diagnostic laboratories; Offices and clinics of doctors of medicine; Offices and clinics of other health practitioners; Outpatient care centers; and other ambulatory health services.
  - ❖ Abbreviation: Primary Care Physician (PCMD), Nurse Practitioner (NP), Physician Assistant (PA)

# Objectives

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- The objectives of this study were to compare the quality of care and practice patterns of PCMDs, NPs, and PAs providing primary care services to Medicaid patients in ambulatory care settings in New York.

- Hypothesis

**The quality of care and practice patterns of NPs and PAs were comparable to PCMDs.**

# Method / Data

- **Multivariate regressions were utilized to estimate the impact of receiving primary care from NPs/PAs vs PCMDs for Medicaid patients.**
  - **Literature review** -- Seven quality of care indicators
    - ❖ **Smoking, depression, hyperlipidemia treatments, physical exam, ultrasound service, medications, referral**
  - **Data analyses** -- summary statistics on providers/patients
  - **Inference methods** (design & model based) -- estimate statistical impacts of indicators
- **3-year NY Medicaid claims data from Jan 2016 to Dec 2018**
  - **23 million claims** -- NYS Medicaid Data Warehouse, linked to NYS licensure data
  - **Inclusions/Exclusions** -- PC Providers with 5+ visits (non-Peds); Non-pregnant enrollees aged 18+; Enrollees seen by more than one provider type were excluded.
  - **Variables** -- date of service, demographic information, location, procedures, diagnosis, enrollment status, licensures, provider type, referrals, costs etc.
- **Findings are preliminary. Reviewing methods.**

# Results – Summary Statistics

- **Primary Care Provider Medicaid participation rates in NY**
  - **About 90% for primary care physicians and PAs**
  - **Over 70% for NPs**
- **PCMDs had a higher average number of visits per provider than NPs and PAs.**
- **NPs on average saw more unique Medicaid enrollees than PCMDs and PAs, indicating their different patient portals and practice patterns.**
  - **PCMDs had smaller patient pool, but with more visits (follow-up/regular basis)**
- **Provider demographic characteristics (race, age) were largely similar among provider types across specialties and settings, while the majority of NPs were females.**

# Results – Model

- **Medicaid primary care services provided by PCMDs, NPs, and PAs are largely comparable in NY --**
  - **4 of 7 indicators** (depression, hyperlipidemia, general exam, and medications) had no statistically significant differences in NP/PA-provided care compared with PCMDs
- **Compared to PCMDs, statically significant (AOR, design-based model) --**
  - **Smoking cessation treatments** -- Patients seen by NPs were nearly 60% more likely to receive interventions
  - **Ultrasonography** -- Patients seen by PAs were about one-third more like to receive ultrasound services
  - **Referrals** -- Patients seen by PAs almost 40% more likely to have referrals than physicians or NPs.

# Discussion - Limitations

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- The selection of health indicators may be biased -- based on the data availability, generalizability, and prevalence of indicator in the claims.
  - Pediatric providers were excluded
  - Patients seen by a mix of provider types were excluded
- Cross-sectional analysis does not help determine cause and effect.
- The quarterly timing of the snapshot may not be guaranteed to be representative.
- A full claims data study may be more promising, however requires a much bigger dataset.

# Conclusions

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- Primary care services provided by NP/PAs were largely equivalent to those provided by PCMDs.
- A greater use of NPs and PAs is likely to produce equivalent quality primary care services (as estimated by 7 outcomes).
- Policy makers should be confident in the contributions of NPs and PAs to high-quality primary care.
- The comparable outcomes could produce cost-saving opportunities, especially in underserved areas in NY.



# Questions?

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