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# An Exploration of Practice Structure and Registered Nurses' Roles and Related Skills and Expertise in Primary Care Practices in Maryland

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# Study Purpose

- Elicit perspectives of Maryland's primary care practices
- Document the existing primary care landscape and nursing engagement
- Understand educational opportunities for RNs as team members in the state's primary care nursing workforce

# Presentation Aims

- Preliminary data analysis of ongoing research of RN roles in Maryland's primary care practices:
  - Describe the composition of primary care practice teams
  - Describe at least four RN roles utilized within current primary care practice types
  - Identify relevant RN skills and associated competencies that enhance the Quadruple Aim
  - Explore implications and opportunities for curricular approaches to prepare the RN primary care workforce



# Background & Justification

- Increased demands on the Primary Care Workforce due to:
  - Shift in focus to value-based care, health system global budgeting, shifting reimbursement methodologies
    - MACRA: MIPS, Advanced Alternative Payment models
  - Emphasis on interprofessional, evidence-based and patient-centered clinical practice (DHHS CMS, 2016)
    - Increased complexity of care
    - Collaboration among interprofessional team members

# Background & Justification (cont'd)

- Primary care practice transformation, driven by the Quadruple Aim (Bodenheimer & Sinsky, 2014)
  - reorganization, restructuring, reallocation of workload to achieve more efficient, effective workflows
  - Patient engagement and self-management
- *Registered Nurses: Partners in Transforming Primary Care* (Josiah Macy, Jr. Foundation, 2016).
  - Educate registered nurse students in primary care
- Maryland's Comprehensive Primary Care Model (2018-2023)

# Methods

- **Literature Review:**
  - Keyword search for practice structures using evidence based RN roles in primary care
  - Generated a list of RN roles to structure the query
- **Identified the study population**
  - Mapped the changing landscape of Maryland's primary care infrastructure:
    - Ongoing consolidation of practices, preponderance of large practice groups
    - Health system consolidation & alignment with primary care practices
- **Built an RN role table affiliating skills & activities**
  - Hierarchical skills associated with practice domains
- **IRB nonhuman subjects research**
  - Market research descriptive study
  - Waived documentation of consent

# Survey Methodology

- Mailed letters with Qualtrics Survey link & unique survey ID to a convenience sample of 220 primary care practices identified from publicly available websites
- Participants entered responses to a 35-item survey in Qualtrics
  - Branching logic
  - Respondent-initiated optional Face to Face/phone interview
- Low response rate (n = 11)
  - Accessed websites to update practice information
  - Mailed undeliverable survey letters to revised addresses
  - Mailed additional reminder letters

# Sample Questions

- Respondent Role
- Practice demographics of the practice
- Network, payment, & insurance plan affiliation(s)
- Enumeration of RNs
- Enumeration of professional providers
- Plans for hiring/timing if no RNs
- Independent RN visit vs co-visit
- Patient & team satisfaction with RN roles
- Pick list of RN Care delivery functions
  - Care management
  - Protocol based order sets
- Pick list of RN management & care delivery functions
  - Pre-visit/During visit/Post-visit
- Rank order where in practice flow RNs provide most value in practice flow (Quadruple Aim)





# Methods: Data Analysis Plan

- Codebook for data management
- Data analysis in SPSS
  - Descriptive and inferential statistics (ordinal data)
- Review free-text data
- Conduct thematic interpretation
- Search for global themes from respondents overall

# Demographic Results

		Based on Mode
Respondent Role	Practice manager	55% *
Practice Type	Federally Qualified Health Center	30%**
	Hospital Health System Affiliates	40%**
Primary are Specialty	Family Practice or Family & Internal Medicine	90%**
Health Plan Participation	Medicare, Medical Assistance, Commercial, Qualified Health Plans, Self-Pay	60%**
Payment System	Fee for Service	100%
	includes- 1 FFS, ACO, Pay for Performance, Capitation, MIPS, Advanced Alternative Payment Models	* n = 11 **n = 10

# Team Composition n =10

Member	% with Role	% & # per practice
Practice Manager	90%	56% = 1
Physician	100%	20% each = 7 & 4
Nurse Practitioner	60% (40% = none)	50% = 2
Physician Assistant	40%	33% = 1, 10% = 3
Registered Nurse	90%	30% = 1, 22% each = 5 & 2 2
Licensed Practical Nurse	30%	33% each = 1, 2, & 4
Medical Assistants	90%	22% each = 10 & 1
Social Worker	40%	50% =1, 25% each = 4 & 6
Other	Medical Office Assistant/ Administrator, Behavioral Health Case Manager	

# RN Clinical Management Roles

Role	% Practices with Role	% & # with Role
Telephone Triage	80%	75% = 1, 12,5% each = 2 & 3
Walk-in Triage	70%	57% = 1, 29% = 2, 14% =1
Manage EHR Patient Portal	50%	71% = 1, < 15% = 2 & 3
Other Duties (free text)	Work with Practice manager on QI Care Transitions medical office duties oversight	2 responses
Other Duties (free text)	Medical Office oversight Responsibilities	1 response

# RN Practice Management Roles

<b>Train/Supervise MA</b>		
Train/Supervise MA	60%	50% each = 1 & 2
Lead Process Improvement	50%	100% =1

# RN Direct Care Roles

Role	% of practices with role	
Patient Education/Wellness	40%	50% =1, 25% each =2 & 4
Med/Vaccine Administration	50%	40% each =1 & 2, 20% = 4
Independent RN Visits	70%	57% = 1, 29% = 2, 14% = 1
Remote Pt Monitoring Chronic	30%	66% = 3, 33% = 2
Co-visits with MD	20%	100% = 2
Chronic Disease Protocols	50%	60% =1, 20% each = 2 & 4
Acute Illness Protocols	30%	100% = 1
Titrate Medications	50%	80% = 1, 20% = 3

## RN Direct Care Roles (cont'd)

Role	% of Practices with Role	% & # Performing Role
Order Labs	20%	100% = 1
Home Visits	10%	100% = 1
Care Transitions	10%	100% = 1
Lead Interprofessional Practice	20%	100% = 1
Pt. EHR Portal follow-up	70%	57% = 1, 28% = 2, 15% = 3
Protocol-based Referrals	40%	75% = 1, 25% = 2
Start IVs	10%	100% = 1

# Most Valued RN Roles

RN Role	Hierarchical Rank
Telephone Portal Triage	1
RN led Visits	2
Post-Visit Encounter	3
Remote Patient Monitoring	4
Pre-Visit Encounter	5
Co-visit with Providers	6





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# Qualitative Analysis

# Barriers to Hiring (more) RNs

- Role not well-defined
  - “(Instead of) supervising: basically (performing) like an MA”
- Finding/hiring/retaining qualified RNs (Recruitment/Retention)
  - Difficult to recruit RNs who want to work in primary care/ambulatory settings
  - Difficult to find the right fit (“for teamwork, adjusting to different flow and skills”)



# More Barriers

- Cost
  - “Initial cost for hiring an RN is high”
    - Pros outweigh the Cons because of Return on Investment
- Lack of Standard Protocols/Orders
- Insufficient uniform communication of policies/standing orders



# Desired RN Skills/Competencies

- Diabetes education (Certified Diabetic Nurse Educator)
- Lactation consultant certification



# Desired RN Education/Training

- Oversight and management of other personnel (specifically Certified Medical Assistants)
- Data Analytics
- Knowledge in Public Health/Social Determinants of Health/Health Disparities (impacting healthcare \$s)
- Chronic Disease Medication Management (HTN, Anticoagulant Rx protocols)



# Conclusions

- Data points suggests a gap between current underutilization of RNs in primary care and the perceived value of the RN role.
- The primary care market is asking for a product of Nursing's educational system that we are just beginning to recognize.
- Our academic institutions are have been slow to develop create curricular pathways for currently utilized RN roles and competencies.

# Next Steps & Anticipated Results

- Continue data collection and proceed with data analysis plan
- Map findings to 2018 C/PHN Competencies (Quad Council), PHN Scope and Standards, and Ambulatory Care Standards and Competencies
- The outcome of this assessment work will document the need for and feasibility of future faculty and professional development programming on the role of registered nurses in primary care.
- Group and incorporate topics into curricular elements to create a professional education framework, to address the Josiah H. Macy Jr. Foundation (2016) and
- (IOM, 2010) reports and associated recommendations.
- Collaborate with practice sites to develop primary care curriculum and clinical experiences for students

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Thank you!  
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## ***Registered Nurses: Partners in Transforming Primary Care***

Josiah Macy Jr. Foundation (2016)

- **Proposed** a new model of nurses functioning as leaders of the team capable of operationalizing the therapeutic plan and assuming increased responsibility for managing patient care.
- **Identified** opportunities for well-prepared registered nurses in partnership with physicians and nurse practitioners
  - Teach/ coach patients for behavior change
  - Manage complex care teams to achieve clinical and financial outcomes, and
  - Coordinate care for complex patients



## **Josiah Macy Jr. Foundation Recommendations**

- Change the Healthcare Culture
- Transform the Practice Environment
- Educate Nursing Students in Primary Care
- Support Primary Care Development of RNs
- Develop Primary Care Expertise in Nursing Faculty
- Increase Opportunities for Interprofessional Education/ teamwork

# Maryland's State CMS Innovation Awards

- All-Payer Model (CMS Medicare Waiver) Hospital In-patient care (Global Budget) 2014, based on hospital avoidance
- Maryland Comprehensive Primary Care Model 2018-2023
  - MIPS= +/-9% revenue adjustment based on reaching targets
  - APM= 5% lump sum up front bonus (“bump”) for participating in the program, gets practice out of MIPS
    - Funds nurses, outreach and other wrap-arounds to meet population health goals
    - Roles for nurses – practice management, etc.
  - Person-centered Home Care Transformation Organization
  - Management functions to help practices with transformation functions.
  - Eventual expansion to all payers.
- Accountable Health Communities
  - Address gap between clinical care and community-health related social needs (“Ecosystem”)

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