### **Designing and Evaluating Instruments for Qualitative Research and Analysis** Presenter: Imran Nahin<sup>1</sup> SCHOOL OF MEDICINE CASE WESTERN RESERVE UNIVERSITY **Preceptor: Sherry Ball, PhD<sup>2</sup>**



**DEPARTMENT OF POPULATION AND** QUANTITATIVE HEALTH SCIENCES



Master of Public Health Program

### Terminology

Medical Scribes: Employees hired specifically to document patient encounters in Electronic Medical Records whose work is supervised and signed by licensed medical providers

Scribe Champions: Stakeholders at each site of the pilot program who bear responsibilities for administrative oversight

### Background

America's largest integrated health system, the Veterans Health Administration (VHA) provides care to over 9 million enrolled veterans annually at over 1,450 healthcare facilities nationally. In 2018, Congress passed the VA MISSION Act to improve veterans' access, experience, and quality of care.

Section 507 of the MISSION Act mandated development of a scribe pilot program to evaluate the potential utility of scribes for improving medical provider experience and efficiency as well as alleviating documentation burden. By reducing physician time spend on the computer, scribes could increase face-to-face interactions between providers and patients, ultimately improving patient care and satisfaction.

The scribe research team was charged to evaluate the pilot program to produce a report for Congress. Present literature on medical scribes in the VHA is scarce and does not offer tools for qualitative observational research. Since critical project goals were to observe and evaluate patient-provider and provider-scribe interactions, this Practicum experience focused on the development of new tools for qualitative data collection and analysis.

### Population

The VA Scribe Pilot took place at multiple VHA sites nationally that ranged from urban to rural. The Pilot Program focused on three clinical settings: orthopedic and cardiology clinics, and emergency departments. Thus, tools developed through this practicum needed to be versatile and applicable with multiple patient populations in distinct clinical settings.

### Learning Objectives

- Perform a literature review of scribe utility and efficacy in clinical care, specifically research done in cardiology, orthopedics and emergency room settings
- Evaluate existing tools for observational data collection
- Apply principles for policy evaluation in the design of new tools for observational data collection and analysis
- Develop recommendations for decision making using data collected on health policy implementation
- Perform effectively on interprofessional teams

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## Activities

Thus, daily activities included:

- Literature review of medical scribes and observational data collection tools
- Developing a guide for observing and evaluating scribe utility in the emergency department
- Modeling as an interviewee in the development of a guided interview template for scribe champions (major site-specific stakeholders in the scribe pilot)
- Developing a qualitative matrix for categorizing and analyzing interviews with scribe champions

# Methods

- Initially, I conducted a literature review on medical scribes and available observational tools for qualitative studies
- ✤ I then developed an observational guide for evaluating scribes' potential utility to the emergency department using both relevant background literature and personal clinical experiences in varied healthcare settings
- The guide was refined through a focus group session where participants observed patientprovider and scribe-provider interactions using videos of medical encounters with scribes ✤ I tested the scribe champion interview guide via telephone interview, offering feedback Sherry Ball and I co-created a matrix for categorizing and analyzing transcripts of Scribe Champion interviews, which we refined through application and utilization



Qualitative research generates a different type of data and focuses on unique goals compared to quantitative studies:

- Qualitative data are often implicitly difficult or impossible to quantify because observational results are too nuanced for simple categorization
- However that same nuance allows for more subtly derived conclusions to be made and to more effectively direct future research efforts
- Furthermore, the unique perspective of qualitative approaches can support, explain, and/or question the meaning of some quantitative data

- Implementing and evaluating large scale policy requires compartmentalized, sequential efforts: Achieving the broader goal of improving scribe usage in the VHA system required first understanding how scribes can be and are currently used
- Complex organizations like the VHA require multi-level analyses for research: departmental experience, administrative program oversight, site-specific differences, and national coordination Before embarking on said analyses, we needed appropriate tools for data collection and interpretation that would yield necessary data or aligned directly with program objectives

Research tools must be developed in accordance with project objectives and a clear analytical plan: Generating an observational guide as a final product required literature analysis, identification of goals, and refinement through focus groups

Interprofessional collaboration is essential to capturing qualitative research breadth and scope: ✤ By incorporating experience from diverse healthcare professionals, our research tools more comprehensively addressed the perspectives of all relevant stakeholders This generates data analyses that are more broadly understandable by varied audiences and generally applicable to policy decision-making

This practicum experience served as the foundation for a Capstone which made policy recommendations regarding the aforementioned section 507 of the VA MISSION Act.

- Departments

### What Happened Next?

### **Public Health Implications**

- outcomes for veterans

### Acknowledgements

- research experience
- guidance and support work with and learn from you all





**U.S. Department of Veterans Affairs** 

Veterans Health Administration VA Northeast Ohio Healthcare System

### Deliverables

Observation Guide for Evaluating Scribe Utility in Emergency

Interview Guide for Scribe Champions Analytical Matrix for Scribe Champion Interviews

### **COVID Effects**

Originally, the observation guide was intended for in-person data collection at each pilot site. Unfortunately, COVID made such travel impossible and we were unable to utilize the final version of the guide Scribe Champion interviews were conducted via phone to

accommodate travel restrictions as well

Transcribing, categorizing and analyzing interviews according to the matrix were all completed remotely

Though the observation guide could not be used, the insight gained from designing it was applied both when modeling the interview guide and developing the interview analytical matrix.

The tools developed through this Practicum were then used for data collection and analysis during the Capstone Project. Incorporating our qualitative data with a separate quantitative team's results, our team produced a final report that was responsive to the needs of the program office and could provide the data mandated by Federal law

The tools developed through this practicum generated data that will directly influence federal policy for the VHA and may also be used to further other qualitative research enterprises

Scribe utilization could improve provider efficiency, reduce physician burnout, and increase patient satisfaction. Given that the VHA is the largest integrated health system in the United States, scribes represent a substantial potential investment in achieving these

The VHA could serve as a direct example to major non-federal healthcare institutions on both the potential of scribes and methods for scribe implementation, with potential impacts even beyond the VA

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