

# Understanding Sociodemographic Data Collection Workflows in Emergency Department Settings: A Qualitative Study



Sarah El-Azab<sup>1</sup>, MS; Timberlee Whiteus<sup>1</sup>, MPH; Megan Hogikyan<sup>1</sup>, MPH; Michelle Macy<sup>2</sup>, MD, MS; Michele Nypaver<sup>1</sup>, MD; and Keith Kocher<sup>1</sup>, MD, MPH  
University of Michigan, Ann Arbor, Michigan<sup>1</sup>, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, Illinois<sup>2</sup>



## Introduction

- Addressing inequities in emergency department (ED) settings is critical due to their role as a safety net and significant source of healthcare for historically marginalized communities.
- Quality improvement initiatives are an avenue through which health systems can measure and monitor quality of emergency care and enact subsequent process changes to improve outcomes(1).
- Adapting quality measures to specifically target disparities in quality of emergency care is a nascent field of study and these efforts rely on complete and accurate sociodemographic data(2).
- Given the lack of ED-specific guidance for data collection best practices, the purpose of this study is to understand the typical workflow and related challenges when collecting sociodemographic data in ED settings

## Methods

- Semi-structured interviews were conducted with registrars (n=7) working in the EDs of three hospitals participating in the Michigan Emergency Department Improvement Collaborative (MEDIC), a physician-led network of EDs with a shared goal of improving emergency care quality and lowering costs.
- Interview questions were focused on the workflow surrounding collection of sociodemographic data, such as race, ethnicity, language, insurance status, and sexual orientation and gender identity (SOGI).
- Registrars were asked to describe their role and responsibilities, training, their interactions with patients, standard data collection practices, the process of updating or changing data, and how practices differ for specific situations and patient groups (e.g., adult vs. pediatric patients).
- Interviews were conducted over Zoom, recorded, and transcribed.
- Thematic analysis was conducted to identify preliminary themes.

## Conclusion

- EDs are a particularly challenging environment for the collection of accurate and standardized sociodemographic data.
- Standard practices related to collection and updating demographic data varied across sites
- While training and data collection forms in the EHR can help provide some level of standardization, data collection workflows varied in practice as registrars tried to adapt to a high pressure and ever-changing ED context.

## References

1. Kocher KE, Arora R, Bassin BS, Benjamin LS, Bolton M, Dennis BJ, et al. Baseline Performance of Real-World Clinical Practice Within a Statewide Emergency Medicine Quality Network: The Michigan Emergency Department Improvement Collaborative (MEDIC). *Annals of Emergency Medicine*. 2020 Feb;75(2):192-205.
2. Khidir H, Salhi R, Sabbatini AK, Franks NM, Green A, Richardson LD, et al. A Quality Framework to Address Racial and Ethnic Disparities in Emergency Department Care. *Annals of Emergency Medicine*. 2023 Jan 1;81(1):47-56..

## Acknowledgements

Support for MEDIC is provided by Blue Cross and Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships program. Although Blue Cross Blue Shield of Michigan and MEDIC work collaboratively, the opinions, beliefs and viewpoints expressed by the author do not necessarily reflect the opinions, beliefs and viewpoints of BCBSM or any of its employees.

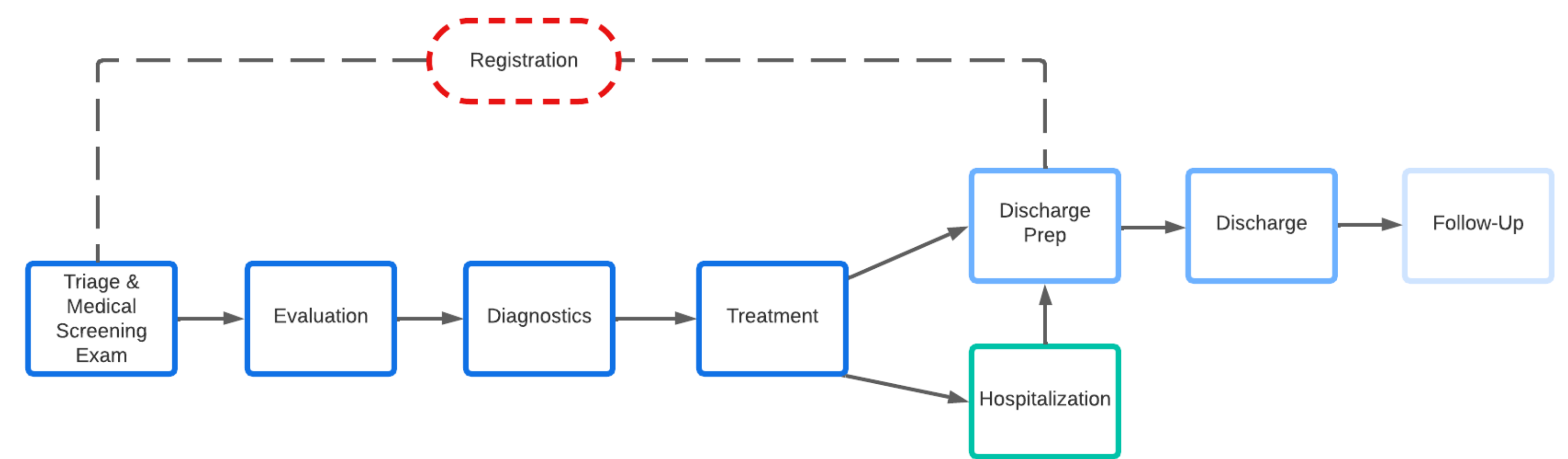


Figure 1: Diagram of a generic emergency department workflow.



**Theme 1:** Registrars find it difficult to balance accurate collection of sociodemographic data with ensuring patients are promptly evaluated and receive necessary care.

*"...our process was just a little different because we want to make sure the acuity is set for our patients, you know, when they come in, rather than gathering all of that for registration information, because we want to make sure we service the patient as fast as we can."*

*"I have to wait, like, so you get an x ray lab, or like, whatever kind of lab or whatever kind of tests. I have to wait till after the fact of that. And then I go in the room. I'll be the discharge prep in a sense."*



**Theme 2:** Training and scripts are helpful but do not cover all circumstances.

*"when I was brought in, we were not trained on anything with preferred pronouns. We were trained with specific language as to how to ask a patient's race and ethnicity. But the pronouns kind of came in afterwards, after I was hired, so we never really had any official training on that. A lot of times, if a patient has preferred pronouns, what I found is like, they tell you before, you can even ask."*

*"I don't think people are aware of the variety of people that we see in the emergency department, and the different situations that come up, especially when you're a trauma one center, like we are, we have a lot of different scenarios that I was not prepared for."*



**Theme 3:** Registrars and patients do not understand why certain information is collected and for what purpose.

*"...And then if we asked for their ethnicity, you know, I mean, and there's only two answers to this, either you're a non Hispanic, or you're Hispanic. And they would say, again, why do you need to know that? And so we would just tell them, Well, you know, just to ensure you know, the quality of care... I guess some of them felt like, why are you asking? I mean, why does it matter? Are you guys being racist? Is that important? I mean, and which is not? I mean, we're not being racist for one for sure. So those are mostly I don't want to say difficulty, but the resistance we're getting from the patients."*

*"But there's also some fields that are really invasive, and that I don't ask about, like sexuality and things like that, but just like, I have no reason. No business asking what sexuality is."*



**Theme 4:** EHRs both facilitate and hinder data collection.

*"I mean, it's really easy. It's right. It's readily available. It's right on the face sheet, basically. So it's just a click away."*

*"Racially and ethnically there, we have dropdowns, that are a little bit odd, frankly...I think that's maybe rooted in and census stuff. Yeah. Because it seems like the what we currently have through epic, the choices are kind of expanded versions of that. But definitely, definitely not complete. It's a sort of a weird mishmash of random ethnicities...Or, or patient chooses not to answer or, you know, there's a couple of defaults that we can use, but there's certainly not a complete drop down."*