Medical Provider Awareness of Patient Gender Identity and Assigned Sex at Birth, and Influence on Clinical Decision Making: A Quality Improvement Study

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BACKGROUND

Health outcomes for gender minorities are influenced by the common and predictable systemic biases and judgement tendencies, resulting in assumptions that patients are cisgender. The US instituted meaningful use criteria for electronic health records that require fields for gender identity (GI) in addition to sex since 2015, and public awareness of gender diversity is increasing. Yet, medical professional's awareness of patient GI and assigned sex at birth (ASAB) is unknown, as is the relationship between awareness, documentation and clinical decision-making.

SPECIFIC AIM

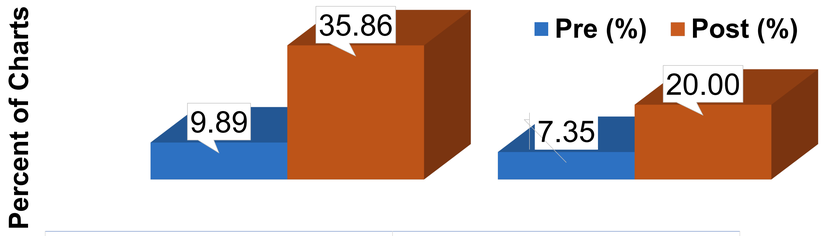
The present study examined practice issues related to GI and ASAB at both the system level and individual participant level. The study investigated whether participant's system-level patient intake process included a 2-question method for identifying GI and ASAB. At the individual participant practice level, the study examined the frequency of awareness of patient GI and ASAB prior to and 30-days following a quality improvement (QI) educational intervention, and whether awareness informed clinical decision making. Finally, the study explored whether system-level patient intake process influenced patient-level outcomes.

METHODS AND MATERIALS

A national sample of clinically practicing physician assistant (PA) participants (N=181), in 37 US states and Washington, DC, were identified via convenience sample. The cohort completed a random chart review pre- and post-intervention (30-days) later; study recruitment was from 2017-2019. Paired-samples analyses were conducted, with significance testing and effect size calculated for each effect. An additional system-level survey explored whether patient intake used a 2-question approach to GI and ASAB. A mixed-measures analysis of variance with measurement time (pre- or post-intervention) as a within-subjects factor and system-level patient intake process as a between-subjects factor was conducted to examine whether these factors interacted. Open-ended responses were collected but lacked specificity, preventing thematic analysis.

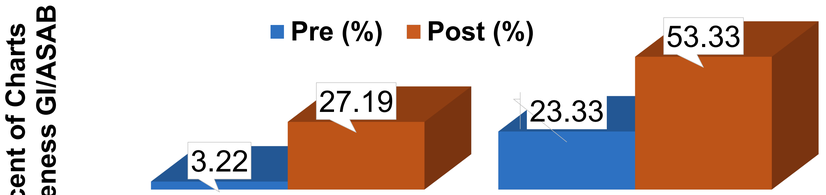
RESULTS

Individuals identified GI and ASAB separately in 9.89% of charts reviewed. Statistically significant improvements from pre- to post-intervention in awareness of 25.97% (9.89%, 35.86%, respectively) were observed, as well as informed clinical decision making 12.65% (7.3%, 20.00%, respectively).



	Awareness of GI&ASAB	Clinican Decision Making
Pre (%)	9.89	7.35
Post (%)	35.86	20.00
Cohen's *d*	0.86	0.6

At the system level, a 2-question method for patient-intake, identifying GI and ASAB separately, was reported among 33.1% of the cohort initially. When scores were analyzed based on intake method, two patterns emerged. Pre- and post-intervention scores differed significantly between participants based on intake method $F(1, 179) = 40.46$, $p < .001$, partial $\eta_p^2 = .18$, and post-intervention ideal responses were significantly higher than pre-intervention as noted above, $F(1, 179) = 107.85$, $p < .001$, $\eta_p^2 = .38$.



	Other Method	2-Question Method
Pre (%)	3.22	23.33
Post (%)	27.19	53.33

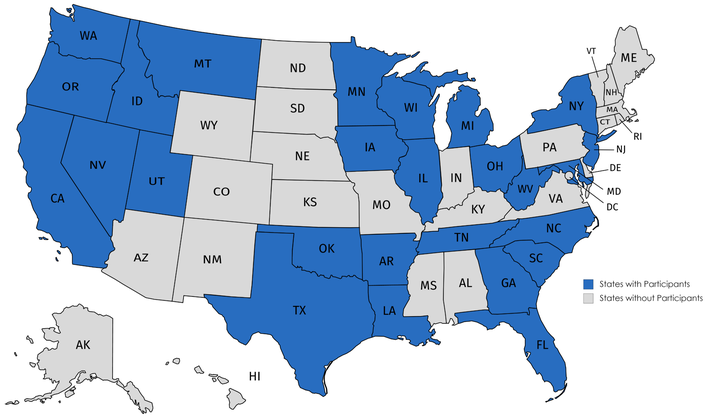
While there was an improvement in participants' practices from pre- to post-intervention, and participants with 2-question patient intake reported more frequent awareness of patient GI and ASAB, these two factors did not significantly interact; the size of improvement from pre- to post-intervention was statistically equivalent regardless of patient intake procedure (23.97% vs. 30.00% improvement), $F(1, 179) = 1.35$, $p = 0.25$).

Qualitative data identified a lack of participant awareness of the available fields for GI and ASAB within EHRs, and difficulty introducing these topics into the patient encounter, with some participants reporting their questions were poorly received by patients

CONCLUSION

Statically significant improvements regarding GI and ASAB awareness, documentation, and associated clinical decision-making may result from the 2-question method at intake as well as from the QI educational interventions.

Even with large-sized effects in each category, participants were aware of GI and ASAB in only 53.33% of the post-intervention charts where the 2-question method was in use during patient intake, and some participants lacked awareness of the availability of GI and ASAB fields in their EHRs. Without explicit training, it is unlikely improvement will occur spontaneously, highlighting a need for further education.



CITATIONS

Zuber K, McCall TC, Bruessow DM, Devine PJ, Straker HO. Improving Health Disparities in PA Practices: A Quality Improvement Study. *Journal of the American Academy of PAs*. 2020;33(1)33-38.

Shaw-Gallagher M, Boyle R, Zuber K. Longitudinal Survey of Behavioral Change in CKD Management. Journal of the American Academy of PAs. 2019;32(4):39-43.

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