Toward Eliminating Health Disparities in PA Practice: Sustaining Change

Diane M. Bruessow, MPAS, PA-C\(^1,2,3\); Timothy C. McCall, PhD\(^4,5\); Kim Zuber, MS, PA-C\(^6\)
\(^1\)Yale School of Medicine, PA Online Program; \(^2\)Healthy Transitions; \(^3\)Transhealth Northampton; \(^4\)George Washington University; \(^5\)National Association of County and City Health Officials; \(^6\)American Academy of Nephrology PAs

**BACKGROUND**

Health disparities remain persistent in medicine.\(^1\) This study, conducted via a random chart review, evaluated the professional practices of a national cohort of clinically practicing PAs who participated in a previous quality improvement (QI) intervention addressing 5 domains where health disparities are known to exist: race/ethnicity, sexual orientation/gender identity (SOGI), literacy/numeracy, physical/sensory/cognitive disabilities, and access issues (economic/geographic). Published statistical analyses on a paired-samples pre-post intervention revealed significant improvements in participant's practices after 30 days with medium- to large-sized effects in 4 of the 5 domains.\(^2\) The purpose of the present study is to examine the previously studied cohort's professional practices at 1-3 years post-intervention.

**HYPOTHESIS**

We suspected that greater awareness of “ideal” professional practices in domains known to experience health disparities would result in practice modifications by participants.

**METHODS**

A national cohort of 181 clinically practicing PAs from a prior, published study were invited to review ten random charts over a 90-day period, at 1-3 years post-intervention. Reminder emails were sent at 2-week intervals with a personalized email sent at the 3-month date. Eighty-six clinically practicing PAs responded for a total response rate of 47.5%. There was “decay” at the 1-3-year follow-up in every domain: improvements from the pre-intervention data to 30-day post-intervention data were not sustained 1-3 years post-intervention. There was an improvement from pre-intervention to 1-3 years post-intervention in the SOGI and numeracy/numeracy domains. However, the effect size was small. In the remaining domains, improvements between pre-intervention data and 1-3-year data did not rise to statistical significance due to the 95% confidence intervals. It appears that a 1-time QI-CME intervention in health disparities will not sustain changes in PA professional practices at the 3-year mark.

**RESULTS**

At the 1-3-year post-intervention mark, 86 participants from the initial cohort responded for a total response rate of 47.5%. There was “decay” at the 1-3-year follow-up in every domain: improvements from the pre-intervention data to 30-day post-intervention data were not sustained 1-3 years post-intervention. There was an improvement from pre-intervention to 1-3 years post-intervention in the SOGI and numeracy/numeracy domains. However, the effect size was small. In the remaining domains, improvements between pre-intervention data and 1-3-year data did not rise to statistical significance due to the 95% confidence intervals. It appears that a 1-time QI-CME intervention in health disparities will not sustain changes in PA professional practices at the 3-year mark.

**CONCLUSION**

This study sought to explore whether practice improvements from a single cultural competency educational intervention were sustained at 1-3 years post-intervention. The statistically significant decay in improvement (defined as higher than baseline, but lower than 30-day post) suggests a need for further study of driving and restraining factors that influence PA practice behaviors. Previously published studies have observed significant improvements in ideal clinical practices 3-years after QI-CME.\(^3\) However, these prior studies pertained to clinical practices and not professional practices regarding cultural competency. Limitations include cohort size, response rate, and lack of a control group. This study’s findings suggest that cultural competency training may need to be reinforced at less than 3 years intervals.

**CITATIONS**


**DISCLOSURES**

Disclosures: Diane Bruessow is Assistant Professor Adjunct, Yale School of Medicine PA Online Program, and PA at Healthy Transitions, and Transhealth Northampton; Timothy C. McCall is Director of Research, NACCHO and Director, HSCI Undergraduate Courses, and The George Washington University; Kim Zuber is Executive Director, American Academy of Nephrology PAs. The authors wish to recognize the contributions of these co-authors who contributed significantly to the preliminary study: Pat Devine, Community Outreach Coordinator, HEALWA, University of Washington, and Howard Straker, Assistant Professor and Director, PA/MPH Program, George Washington University, Department of Physician Assistant Studies. IRB exemption: Chesapeake IRB under regulation 45 CFR 46.101(b) (1).