

## A Review of the Literature on Use of Medical Scribes in Primary Care Settings

Margaret Ziemann, MPH, Clese Erikson, and Maddie Krips

### ISSUE

Clerical burdens have strained primary care providers already facing a shifting healthcare landscape and workforce shortages. These pressures may cause burnout and job dissatisfaction, with negative implications for patient care. Medical scribes perform real-time EHR documentation and are posited as a solution to relieve clerical burdens, thus improving provider satisfaction and other outcomes. The purpose of this study is to identify and describe the published research on medical scribe utilization in primary care and safety net settings.

### METHODS

We performed a literature review of U.S.-based outcomes studies on medical scribe utilization in a primary care setting published between 2010 and spring 2020. Searches were conducted in PubMed and supplemented by a grey literature search for publications specific to the safety net setting. Articles for inclusion were reviewed by the study authors and evaluated based on role(s) of medical scribe/clinical documentation assistant, outcomes examined, and results. We addressed and reconciled discrepancies in content interpretation between authors until we achieved consensus.

### FINDINGS

We identified 19 peer-reviewed publications and one grey literature report based on the inclusion criteria. Most studies were on small provider samples at a single clinical site; five were in a safety net setting. Patient and provider experience, efficiency, and productivity outcomes were the most frequently reported outcomes in the literature. Scribe utilization was consistently reported as being associated with improved productivity and efficiency, provider experience, and documentation quality, including in safety-net settings. Findings for patient experience were mixed.

### DISCUSSION

Collectively, published studies indicate scribe utilization in primary care may improve productivity, clinic and provider efficiencies, and provider experience without diminishing the patient experience. As primary care practices continue to experiment with the use of scribes, including how to adapt to the new challenges introduced by COVID-19, it will be important to build in measures to understand better how the use of scribes contributes to providers' ability to provide high-quality care, address social determinants of health, and improve population health and health equity. Further large-scale research is needed to validate the reliability of study findings and assess additional outcomes.

**Key Words:** Medical scribes; primary care; health information technology; physician burnout