Physician Productivity in Specialty Care

June 2025

U.S. Department of Veterans Affairs
Veterans Health Administration
Health Systems Research

Recommended citation: Mackey KM, Anderson J, Gerrity M. Physician Productivity in Specialty Care: A Scoping Review. Washington, DC: Evidence Synthesis Program, Health Systems Research, Office of Research and Development, Department of Veterans Affairs. VA ESP Project #09-199; 2025.

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PREFACE

The VA Evidence Synthesis Program (ESP) was established in 2007 to conduct timely, rigorous, and independent systematic reviews to support VA clinicians, program leadership, and policymakers improve the health of Veterans. ESP reviews have been used to develop evidence-informed clinical policies, practice guidelines, and performance measures; to guide implementation of programs and services that improve Veterans' health and wellbeing; and to set the direction of research to close important evidence gaps. Four ESP Centers are located across the US. Centers are led by recognized experts in evidence synthesis, often with roles as practicing VA clinicians. The Coordinating Center, located in Portland, Oregon, manages program operations, ensures methodological consistency and quality of products, engages with stakeholders, and addresses urgent evidence synthesis needs.

Nominations of review topics are solicited several times each year and submitted via the ESP website. Topics are selected based on the availability of relevant evidence and the likelihood that a review on the topic would be feasible and have broad utility across the VA system. If selected, topics are refined with input from Operational Partners (below), ESP staff, and additional subject matter experts. Draft ESP reviews undergo external peer review to ensure they are methodologically sound, unbiased, and include all important evidence on the topic. Peer reviewers must disclose any relevant financial or non-financial conflicts of interest. In seeking broad expertise and perspectives during review development, conflicting viewpoints are common and often result in productive scientific discourse that improves the relevance and rigor of the review. The ESP works to balance divergent views and to manage or mitigate potential conflicts of interest.

ACKNOWLEDGMENTS

The authors are grateful to Becky Baltich Nelson, MLIS for literature searching, screening, and data abstraction efforts, Payten Sonnen for screening and data abstraction efforts and editorial and citation management support, external peer reviewers, and the following individuals for their contributions to this project:

Operational Partners

Operational partners are system-level stakeholders who help ensure relevance of the review topic to the VA, contribute to the development of and approve final project scope and timeframe for completion, provide feedback on the draft report, and provide consultation on strategies for dissemination of the report to the field and relevant groups.

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DISCLOSURES

This report was prepared by the ESP Center located at the **VA Portland Health Care System,** directed by Katherine Mackey, MD, MPP, and funded by the Department of Veterans Affairs, Veterans Health Administration, Health Systems Research.

The findings and conclusions in this document are those of the author(s) who are responsible for its contents and do not necessarily represent the views of the Department of Veterans Affairs or the United States government. Therefore, no statement in this article should be construed as an official position of the Department of Veterans Affairs. The final research questions, methodology, and/or conclusions may not necessarily represent the views of contributing operational and content experts. No investigators have affiliations or financial involvement (eg, employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented in the report.

Executive Summary

KEY FINDINGS

- Few studies have evaluated alternatives to volume-based physician productivity measures for outpatient medicine specialties.
- Two observational studies of cardiology practices proposed modifications to work input measures but still used volume-based measures for work output. A third observational study developed a promising a new productivity model using VHA primary care data that integrates clinic-level inputs with important patient outcomes including quality, access, and patient experience as outputs.
- As a learning health care system that is not dependent on wRVUs for payment, VHA is ideally positioned to develop and test innovative models to measure physician productivity. Two of the 3 studies identified were conducted within VHA, suggesting that VHA already has the data and expertise to advance this field.

Productivity is a term used across many industries, including health care, to describe the ratio of work outputs to work inputs. While physician productivity lacks a standard measurement, most US health care systems including the Veterans Health Administration (VHA) currently use work relative value units (wRVUs) as a surrogate measure to approximate physician work output given the lack of another standard measure. Originally developed for Medicare payments, wRVUs have been widely adopted as a billing tool by state Medicaid programs and commercial payers. Many health care systems use data based on wRVUs, such as total annual wRVUs, to set physician productivity standards (or benchmarks), design physician payment and incentive plans, and assess staffing needs.

However, despite widespread use, physicians across multiple specialties have expressed concerns about the mismatch between wRVU data and actual physician work, which involves many clinical activities that take place outside of a billable patient visit, and the chronic undervaluation of non-procedural clinical services. Productivity metrics based on wRVUs also reward health care volume, rather than value, and do not incorporate patient-important outcomes.

CURRENT REVIEW

The purpose of this report was to review the available evidence on physician productivity measures. This report was requested by the Specialty Care Services and Chiefs of Medicine Field Advisory Board and therefore focused on medical specialty physicians delivering care in the outpatient setting. Given an interest in understanding the size, range, and characteristics of available evidence, we conducted a scoping review, which is a type of systematic review that identifies main themes across a body of literature.

Our search of the selected databases from inception through December 2024 identified 174 potentially relevant articles after deduplication and title and abstract screening. Of these, 3 observational studies met eligibility criteria. Two studies of cardiology clinics evaluated ways to modify measures for work input while continuing to use a volume-based measure (patient visits) for work output. One study adjusted their work input measure to account for shared practice resources, while the other used an alternative measure for clinical time instead of FTE. Both studies found that modifying their measures for work input resulted in a more accurate and fair calculation for individual physician productivity.

The most robust new model of physician productivity reconceptualized what information should be used to calculate both work outputs and work inputs. A strength of this model, which was based on VHA data and informed by an evidence review and stakeholder panel input, is that it ties clinic-level productivity to patient outcomes. In this way, the model offers a distinct departure from wRVU or volume-based productivity measures and would seem to be a better fit with the overall VHA approach to care which prioritizes patient-centeredness, quality, access, and cost containment. While designed for primary care clinics and not yet tested in practice, the model could be modified for specialty medicine clinics and other types of outpatient practice settings.

An overview of included studies is presented in the table below.

ES Table. Overview of Included Studies

Study	N	Study Aim	Work Output Measure	Work Input Measure
Butala 2019	56 cardiologists	Develop a method to measure individual physician outpatient clinical productivity accounting for shared practice resources	Completed patient visits per half-day per week	Individual effort adjusted for shared resources
Saeed 2024	654 cardiology or orthopedics providers in 32 VHA clinics	Propose a new work input measure ("clinical time") to replace FTE in productivity calculations	Patients per effective clinic day[a]	Clinical time[b]
Tran 2024	703 VHA primary care clinics	Develop and test a multi-dimensional measure of primary care clinic productivity	Quality, access, patient experience, number of patients served	Interprofessional clinical time

Notes. [a]Defined as "clinical time" in days; [b]Defined as "the amount of time between the start of the first appointment of the day and the estimated end time of the last appointment of the day for each provider."
Abbreviations. FTE=full time equivalency; VHA=Veterans Health Administration.

CONCLUSIONS

As a learning health care system, VHA is uniquely positioned to develop and test innovative models to measure physician productivity that are aligned with the goal of delivering high-value care. Although few in number, existing studies have demonstrated that productivity measures can be updated to better align with contemporary physician practice. Two of the 3 studies we identified were conducted within VHA, suggesting that VHA already has the data and expertise to advance this field.