

The MISSION Act Scribes Pilot: Implementation and Costs

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Bottom Line Up Front

The MISSION Act of 2018 required VHA to conduct a two-year pilot of medical scribes in emergency departments and specialty clinics. The evaluation suggests that scribes can provide good value in specialty care but did not improve access in emergency departments. Scaling up the use of scribes in specialty care may be a cost-effective way to improve access to care in VHA.

Introduction

Section 507 of the Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act of 2018 mandated a two-year pilot of medical scribes in Veterans Health Administration (VHA) specialty clinics and emergency departments (ED). Scribes are employed in clinical settings to increase provider productivity and satisfaction by minimizing physicians' documentation burden, and to improve patient experience by increasing the time providers spend with patients rather than entering patient information into the electronic health record.¹

Pilot Design

Cardiology and orthopedics were selected as the pilot specialties given their high wait times.² Twelve Veterans Affairs (VA) Medical Centers (VAMC) were randomized into the scribes pilot, of 32 that expressed interest. Each intervention site was to hire four scribes — two as contractors and two as VA employees — with a target of 70% of hired scribes in specialty care and 30% in EDs. The pilot officially began on June 30, 2020, delayed by the COVID-19 pandemic, and concluded July 1, 2022.

Medical Scribes



Scribes administratively expedite patient encounters by documenting patient care in the electronic health record for the clinician.

PEPReC assisted the Office of Integrated Veteran Care (IVC) in designing a cluster randomized trial around the implementation of the scribes pilot to gain quantitative insights into the effectiveness of scribes in VHA.^{3,4} The VA Collaborative Evaluation Center (VACE) conducted a parallel qualitative evaluation to understand provider, scribe, and patient experiences.⁵ The MISSION Act specified evaluation of physician productivity, patient volume, wait times, and patient satisfaction; however, a recent Government Accountability Office report also suggested that VHA “assess the scalability of the medical scribe pilot.”⁶ A key component of that was understanding the cost of scribes and the value of the effects observed.

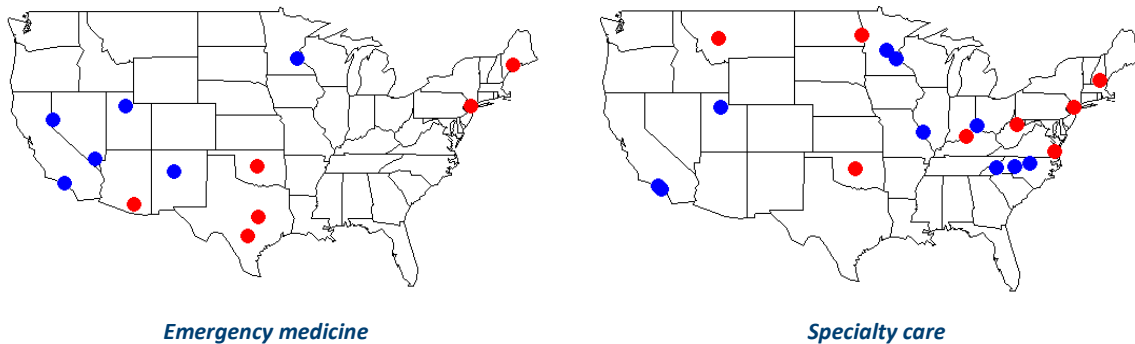


Figure 1: Intervention (red) and comparison sites (blue), by specialty

Implementation

The intervention sites never reached their target complement of scribes (48), with more scribes hired as contractors than as VA employees. VA scribes had a much shorter average time-to-hire (about 88 days versus 160) but a longer average time-to-train (about 26 days versus 7). Most VA scribes were hired earlier in the pilot period so the shorter training time for contract scribes may reflect greater familiarity with the training process by that point. Contract scribes cost somewhat more but may be a more efficient method for finding candidates quickly, assuming contract and VA scribes are similarly productive — a question that the pilot was not sized to adequately study.

Effectiveness

PEPReC found that randomization into the scribes pilot resulted in a 30-minute longer length of stay in emergency departments and a decline of about 7 visits per full-time equivalent (FTE), with no change in relative value units (RVUs) per FTE. Randomization into the scribes pilot was also associated with increases of about 25 RVUs per FTE and 8.5 visits per FTE in cardiology, and increases of about 17 RVUs per FTE and 12.5 visits per FTE in orthopedics. The scribes pilot was also associated with a decrease of 8.5 days in new consult wait times in orthopedics (no change in cardiology).

Emergency Departments	Cardiology	Orthopedics
<ul style="list-style-type: none"> • Decreased visits per FTE • Increased length of stay 	<ul style="list-style-type: none"> • Increased visits and RVUs per FTE per pay period • No change in wait times 	<ul style="list-style-type: none"> • Increased visits and RVUs per FTE per pay period • Decrease in wait times

Cost and Value

The contract positions were funded through a firm fixed-price contract to two companies, with a floor of about \$19.50-26.00 per hour, depending on location. The VA positions were generally hired as GS-4 (about \$29,000-37,600 per year in 2023), which was a barrier to hiring and retention. Moreover, a desk audit during the pilot was unsuccessful in increasing the VA pay grade. A full-time VA scribe costs around \$47,000 per year, in pay and benefits before overhead; this is in line with the Congressional Budget Office’s estimated costs of “roughly \$48,000 [per scribe]” in 2018.⁹

	Unadjusted cost	Unadjusted cost per scribe-year	Assumed overhead rate	Adjusted cost	Adjusted cost per scribe-year
Contract	\$2,132,300	\$74,600	none	\$2,132,300	\$74,600
VA	\$1,054,000	\$47,300	33%	\$1,401,800	\$62,950
Management	\$492,700	–	33%	\$546,900	–
Total	\$3,679,000	–		\$4,081,100	–

Figure 2: Cost of MISSION Act scribes pilot; numbers rounded.

The total cost of the pilot includes the firm fixed-price contract, the actual pay and benefits costs incurred for VA-hired scribes during the pilot period and pay and benefits for three project management staff. The cost of contract scribes was all inclusive, no overhead costs were borne by VHA but were required for VA hires.^{7,8} The true overhead cost made a considerable difference in whether and by how much VA hiring held a cost advantage over contracting.

PEPReC's estimate of the **total cost of the pilot is approximately \$4 million**, excluding evaluation costs; this was in line with the pre-pilot Congressional Budget Office's estimate, including evaluation costs, of approximately \$5 million.⁹

Scaling

An important consideration for value and scalability is to determine what it would cost to replicate the productivity gains of hiring additional physicians instead. Scribes led to an approximate 30% increase in productivity in cardiology and 20% in orthopedics. If assumed productivity scales linearly, observed cost of scribes can be compared to the estimated cost of expanding physician capacity (FTEs) in the intervention clinics by those same percentages.¹⁰ In doing so, PEPReC found that **hiring more physicians to achieve similar productivity effects would cost about \$900,000 more over a two-year period, or approximately 45% more than scribes.**

Paying a fixed price can lead to higher costs per FTE if hiring targets are not met. The possibility of more favorable contracting should be considered when assessing scalability. Scaling would likely also require increased administrative capacity to manage the program, report on performance, and support the field (e.g., establishment of a scribe program office within IVC).

Conclusion

PEPReC found that randomization into the scribes pilot resulted in increased visits and RVUs for cardiology and orthopedics per FTE, and decreased visits and longer stays for emergency care. Contract scribes also cost more than full-time VA scribes and both types of scribes cost less than specialists, who also would require additional space.

Improving productivity enhances access and scribes may give VHA a new way to improve productivity in specialty care at a lower cost than hiring additional providers, recognizing that scribes should only work with providers who really want them. PEPReC does not know what share of VA providers would be interested in working with scribes, as provider participation in the pilot was voluntary, and how this might vary across specialties.

Primary care could be a growth area for scribes in VHA as the notation is less technical and cases are not as complex as specialty care or the ED, but the team-based care model in primary care might pose a challenge to integration of scribes into workflow.¹¹

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ABOUT PEPRcC POLICY BRIEFS

This evidence-based policy brief is written by Partnered Evidence-based Policy Resource Center (PEPRcC) staff to inform policymakers and Veterans Health Administration (VHA) managers about the evidence regarding important developments in the broader health system and economy. PEPRcC is a Quality Enhancement Research Initiative-funded resource center that collaborates with operational partners to design and execute randomized evaluations of VHA initiatives, develops and refines performance metrics, and writes evidence-based policy briefs.

