

POCUS QUERI

Partnered Evaluation Initiative

VA



U.S. Department of Veterans Affairs
Veterans Health Administration
Quality Enhancement Research Initiative

Implementing a National Point-of-care Ultrasound Training Program

The Point-of-care Ultrasound (POCUS) QUERI Partnered Evaluation Initiative has collaborated with the VA Employee Education System since 2016 to train frontline VA clinicians to use clinical applications of POCUS in the VA's commitment to zero harm to patients. POCUS QUERI has trained more than **360 VA clinicians** from over **40 VA medical centers** nationwide to benefit an estimated **160,000 veterans** annually.

Empowering VA Clinicians with Better Tools

POCUS use is associated with **many benefits**, primarily reducing procedural complications, ancillary diagnostic testing, and healthcare costs.

Certain POCUS applications are now **standard of care** but are not universally used.

Major barrier to implementation of POCUS use is the **limited number of trained providers**.

POCUS QUERI is evaluating the **impact of training frontline clinicians** on POCUS use for procedural and diagnostic applications with respect to:

- Provider skill acquisition and retention
- Frequency of POCUS use by providers & facilities
- Barriers & facilitators to POCUS use
- Procedural complication rates

Clinicians from selected VA facilities participated in an **immersive POCUS Training Course** that combined didactics and hands-on scanning practice in small groups.

Clinicians' **knowledge, skills, and frequency of use** were assessed at baseline, immediately post-course, and 6-9 months post-course.

Benefits of POCUS



Bedside Procedures

- Improved access and expedited performance of bedside procedures
- Fewer procedural complications and associated costs
- Improved patient experience



Diagnostic Exams

- Fewer delays in diagnosing acute and urgent conditions
- Reduced ordering of ancillary diagnostic testing and associated costs
- Decreased exposure of patients to ionizing radiation



QUERI VA Quality Enhancement Research Initiative
EVIDENCE INTO PRACTICE

Implementation Strategy

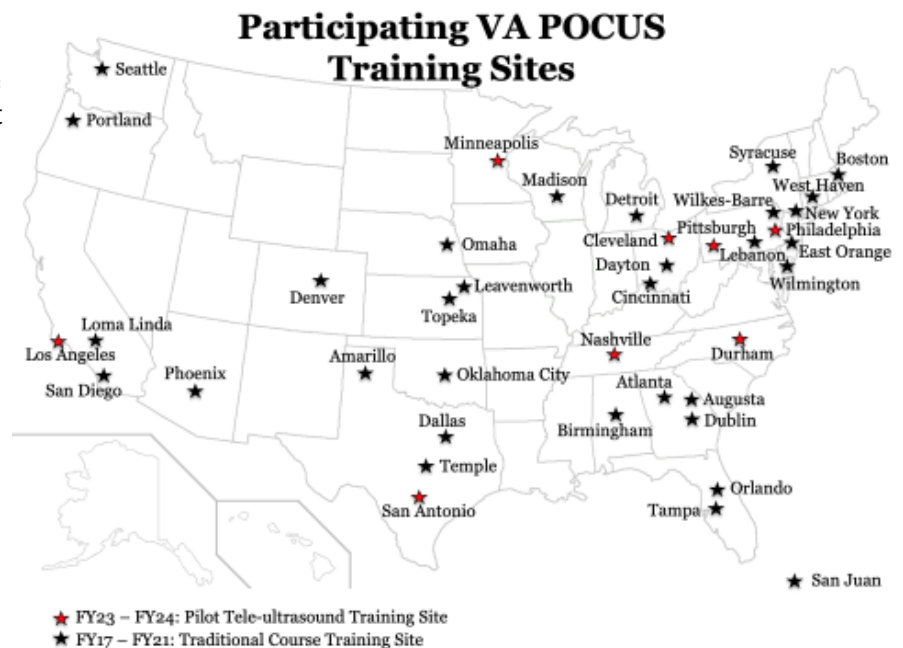
POCUS QUERI Partnered Evaluation Initiative follows **Replicating Effective Programs**, an established implementation strategy included in the QUERI Implementation Roadmap, that includes the following components:

- National assessment of current POCUS use, training needs, and barriers
- Facility assessment of readiness for POCUS implementation
- Immersive hands-on training courses for clinicians modeled after effective non-VA courses
- Supplementary resources including toolkits, documentation templates, SharePoint site access, and educational materials

Improving Care Across the VA System

Since 2016, the POCUS QUERI Partnered Evaluation Initiative has conducted **30 immersive, hands-on training courses** and trained more than **360 VA clinicians** from over **40 VA facilities**.

- VA clinicians demonstrated sustained **improvements in knowledge and skills** and **more frequent POCUS use in patient care** after participating in the POCUS training course.
- Participating VA facilities had a **15% increase in POCUS usage** compared to 4% decrease among non-participating facilities.
- Trained VA clinicians reported **73 fewer procedural complications** annually with an estimated cost savings of **\$1.8 million** per year.
- More than **160,000 veterans** are benefiting from this program annually.
- **Eight VA facilities** are **piloting hybrid POCUS courses using tele-ultrasound** in collaboration with the National Center for Patient Safety.
- **VHA National Specialty Care Program Office** and other national offices **support POCUS implementation** by investing in resources to standardize POCUS use systemwide.



For more information, check out:
<https://www.queri.research.va.gov>

If you would like to learn more or partner with us, please contact:
Elizabeth Haro (Research Associate): haro@uthscsa.edu
Kathryn Krellenstein (Program Coordinator): krellenstein@uthscsa.edu

Principal Investigator:
Nilam J. Soni, MD, MS

San Antonio, Texas
Nilam.Soni@va.gov
Sonin@uthscsa.edu