



# **Trends In Diagnostic Point-of-Care Ultrasound Reimbursement for Medicare Beneficiaries among the United States Emergency Medicine Workforce 2012-2016**



## Authors

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# Background

- Point-of-care ultrasound (POCUS) allows for rapid diagnosis in the Emergency Department (ED)
- A previous study found that a low prevalence of emergency medicine (EM) clinicians received POCUS reimbursement in 2012 (0.7%).



## Aims

- We determine nationwide POCUS reimbursement patterns for four subsequent years.



## Methods

- Cross-sectional study using 2012–2016 data from the Centers for Medicare and Medicaid Fee-for-Service Provider Utilization and Payment Data Part B,
- Defining POCUS examinations using Current Procedural Terminology (CPT) codes
- The emergency medicine (EM) workforce was defined by Emergency Medicine, Family Medicine, Internal Medicine, Critical Care, and Advanced Practice Providers who received EM-specific reimbursements.
- We compared patterns of POCUS reimbursement among EM physicians in 2012 versus 2016 via a two-sample test of proportions.

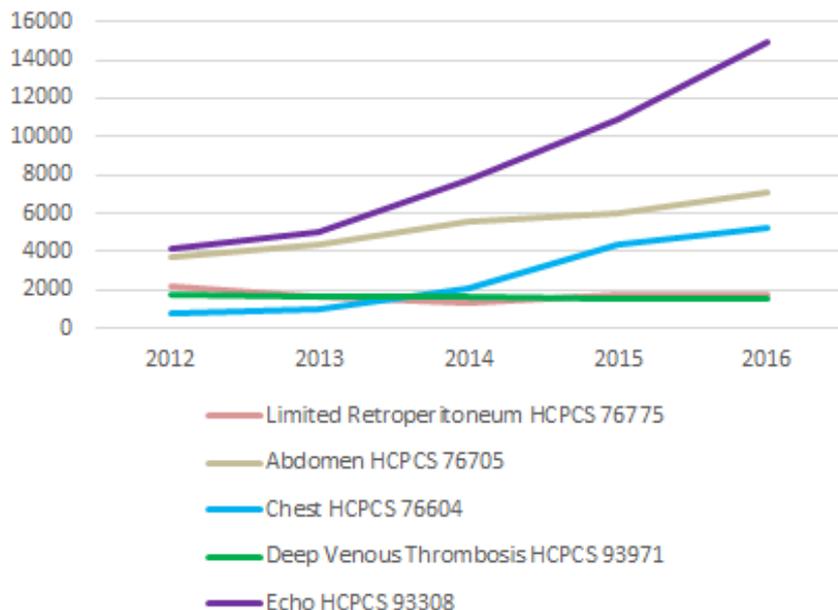


# Results

- In 2012, 342 (0.7% of total) EM workforce clinicians were reimbursed for diagnostic POCUS, versus 801 (1.3%) in 2016.
- EM-physicians represented an increasing proportion of the total workforce, increasing from 86.0% (95% CI 82.3%–89.6%) in 2012 (N=294) to 94.6% (95% CI 93.1%–96.2%) in 2016 (N=758).
- From 2012 to 2016, total POCUS reimbursements increased from 13,697 to 31,717, with significant growth from echocardiograms (4,127 to 13,978), abdominal exams (3,682 to 7,140), and thoracic exams (801 to 5,278).

# Results

**Trends in Medicare Reimbursements for Point-of-Care Ultrasound Examinations**



**EM Workforce Clinicians Reimbursed for Point-of-Care Ultrasound Examinations, by Clinician Type**

	2012	2013	2014	2015	2016
<b>EM Workforce Clinician Type</b>	<b>N (%)</b>				
Emergency physician	294 (86.0)	346 (89.2)	441 (89.3)	581 (92.1)	758 (94.6)
Internal medicine physician	30 (8.8)	22 (5.7)	26 (5.3)	25 (4.0)	22 (2.8)
Family practice physician	14 (4.1)	16 (4.1)	21 (4.3)	13 (2.1)	14 (1.8)
Nurse Practitioner	2 (0.6)	2 (0.5)	1 (0.2)	3 (0.5)	0 (0.0)
Physician assistant	2 (0.6)	1 (0.3)	4 (0.8)	6 (1.0)	4 (0.5)
Critical care physician	0 (0.0)	1 (0.3)	1 (0.2)	3 (0.5)	3 (0.4)
<b>Total</b>	<b>342 (100)</b>	<b>388 (100)</b>	<b>494 (100)</b>	<b>631 (100)</b>	<b>801 (100)</b>



# Limitations

- The MPUF captures procedures for Medicare beneficiaries only
- The MPUF also captures only services that were reimbursed at least 11 times to a clinician in a given year
- Conservative threshold of 11 examinations along with our inclusion criteria of six predefined specialty types
- Examined reimbursement data primarily and not claims or performance data
- Cannot parse out ultrasound reimbursements to providers who also practice in other contexts such as family practice offices or urgent care clinics.



# Conclusions

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