MACH7

ENTERPRISE IMAGING BEST-PRACTICES GUIDE

Governing point-of-care ultrasound.

Where do your POCUS images actually live? A practical guide to keeping point-of-care ultrasound findable, retained, and accessible in your enterprise imaging archive and viewer.

FROM PIXEL TO POINT OF CARE.

START HERE

The one-page POCUS governance checklist.

If you read nothing else, work through this. Each item is expanded later in the guide. The first six are yours to own as an organization. The last one, where the images live, is where an enterprise archive and viewer either sustain the program or quietly sink it.

01 **Owner named.** A standing, multidisciplinary POCUS governance committee owns policy across the organization.

02 **Credentialing and privileging.** You can say who is trained and privileged to perform and interpret POCUS, by specialty and exam type, and it is current.

03 **Quality assurance.** A QA process covers image quality, interpretation, and equipment monitoring, with a feedback loop.

04 **Documentation standard.** You have defined what a complete, saved POCUS study looks like, and saving it is the default.

05 **Retention and billing.** Studies are retained for the full period in a way that meets the documentation rules reimbursement depends on.

06 **Enterprise imaging integration.** POCUS devices connect to the record, the archive, and the viewer through open standards, not one-off bridges.

07 **A durable home for the images.** Every study reaches a vendor-neutral archive, indexed to the patient and encounter, and is viewable alongside the rest of the record. If it does not, the six items above cannot hold.

Use the fuller archive-and-viewer requirements checklist later in this guide to pressure-test that last item against your current systems.

WHO OWNS WHAT

An honest map.

POCUS governance is mostly an organizational discipline, not a product you buy. It helps to be clear about the split before anyone brings a vendor into the room.

GOVERNANCE RESPONSIBILITY	OWNER
Governance committee, policy, and scope	The organization
Credentialing, privileging, and training	The organization
QA process and equipment monitoring	The organization
Documentation standards and completeness	The organization (workflow and clinical)
Retention, access, and the durable home for images	Enterprise archive and viewer (where Mach7 works)
Standards-based capture, indexing, and exchange	Enterprise archive and viewer (where Mach7 works)

Mach7 does not acquire POCUS studies, credential the people who perform them, or run your committee. It owns the slice where the images are captured, retained, matched to the right patient, and made viewable across the record. That slice is where most POCUS programs quietly fail, which is why it deserves its own scrutiny, but it is a slice, not the whole.

EXECUTIVE SUMMARY

Point-of-care ultrasound is one of the fastest-growing sources of medical images in the hospital. The problem is not the scanner. It is that the images those scanners produce routinely escape the systems meant to hold them.

Analysts size the global point-of-care ultrasound market at roughly 4.2 to 4.5 billion dollars in 2025 to 2026, growing toward 8.4 billion by 2035, with hospitals the single largest segment and handheld devices the fastest-growing class (GM Insights; Fortune Business Insights). Every one of those devices generates studies at the bedside, and most were never designed around the ordering, indexing, and archival assumptions that radiology workflow depends on.

The result is a governance and data-management challenge. A single clinician orders, acquires, interprets, and reports an exam at the point of care, often with no radiology order, no accession number, and no device credentialing step. When that happens without a governance model behind it, images go undocumented and unsaved. The literature calls them orphaned studies, or phantom scans: exams that exist in neither the medical record nor the archive, and that are difficult or impossible to retrieve later (POCUS Journal; HIMSS-SIIM-AIUM).

This guide reframes POCUS from a device decision into a data-governance decision. It draws on the consensus governance framework published by the HIMSS-SIIM Enterprise Imaging Community in collaboration with AIUM, and it sets out what a durable archive and a universal viewer need to deliver so that every POCUS study is captured, retained, and available across the patient record.

THE DATA PROBLEM

Why POCUS is a data problem, not just a device decision.

Most POCUS programs begin with a clinical champion and a purchasing decision: which handheld or cart-based scanner, for which department. That is the visible half. The half that decides whether the program is sustainable is what happens to the images after the probe comes off the patient.

Traditional imaging assumes a modality is ordered, an accession number ties the study to the patient and the order, a technologist acquires it, and a radiologist reads it from a worklist. POCUS satisfies almost none of those assumptions. Understanding that gap is the first step toward governing it.

FOUR WAYS POCUS BREAKS THE TRADITIONAL PACS ASSUMPTION

1 **No order, no accession.** A bedside exam is frequently performed without a formal imaging order, so there is no accession number to bind the study to the patient and the encounter. Without that key, images have nowhere reliable to file themselves.

2 **One clinician does everything.** The same clinician orders, acquires, interprets, and documents the exam. There is no technologist quality step and no separate reading worklist, so the checks that normally catch a mislabeled or unsaved study simply are not there (POCUS Journal consensus terminology).

3 **Many devices, many specialties.** POCUS is spreading well beyond emergency and critical care into a long list of specialties, each with its own devices and habits. Encounter-based images are now generated across the enterprise, far from radiology and far from any single archive.

4 **Documentation and QA gaps create orphaned studies.** When an exam is performed without captured images or documentation, it becomes nearly impossible to identify or retrieve. It shows up in neither the record nor the archive. These phantom scans are more than an IT annoyance: undocumented, unsaved scans can lead to repeat unnecessary imaging and can fall short of the documentation and image retention that billing depends on in some jurisdictions (HIMSS-SIIM-AIUM).

WHAT A PHANTOM SCAN ACTUALLY COSTS

The cost of an orphaned study is real even when it is hard to put a single number on, and it varies by program, so treat the categories below as the exposure to size for your own organization rather than a fixed figure.

Repeat imaging

A study that cannot be found is a study that gets redone. That is avoidable cost and, in some cases, avoidable patient risk from unnecessary repeat imaging (HIMSS-SIIM-AIUM).

Reimbursement and compliance exposure

Billing and reimbursement rules expect retained, accessible images and documentation. Scans that were never saved or cannot be retrieved can fail those rules (HIMSS-SIIM-AIUM).

Quality assurance you cannot run

QA, credentialing review, and improvement loops all depend on the images being retained and reviewable. No archive, no QA.

Clinical continuity

A prior POCUS finding that no clinician can pull up later is a gap in the record at the moment it matters.

The point is not the precise dollar amount. It is that every one of these costs traces back to the same root cause: the image never reached a durable, accessible home.

WHAT GOOD GOVERNANCE LOOKS LIKE

Six essentials.

The HIMSS-SIIM Enterprise Imaging Community, working with AIUM, published a consensus set of governance considerations for POCUS. It is the most useful backbone available for a program that has to scale, because it treats POCUS as part of enterprise imaging rather than a departmental side project. The essentials below follow that framework and expand the checklist at the top of this guide.

1 **Stand up a governance committee.** A standing, multidisciplinary committee owns POCUS policy across the organization: which specialties scan, on which devices, under what standards, and where the images go. Without an owner, every downstream decision is made ad hoc, device by device.

2 **Credentialing and privileging.** Define who is trained and privileged to perform and interpret POCUS, by specialty and exam type, and keep that current. Credentialing is both a quality control and a prerequisite for defensible documentation and billing.

3 **Quality assurance.** Put a QA process in place for image quality, interpretation, and equipment monitoring, with a feedback loop for improvement. QA is only possible if the images are actually retained and reviewable, which points straight back to the archive.

4 **Documentation standards.** Standardize what a complete POCUS study looks like: the images, the interpretation, and the link to the encounter. The goal is to close the gap that produces orphaned studies, so that a scan performed is a scan saved and documented.

5 **Retention, access, and billing.** POCUS images need a permanent, accessible home. Retaining studies in an enterprise archive is what makes them available for later care, for QA, and for meeting the documentation rules that reimbursement requires. Storage that is departmental, temporary, or device-bound does not meet that bar.

6 **Enterprise imaging integration.** Enterprise imaging is the strategy for capturing, indexing, managing, storing, distributing, viewing, exchanging, and analyzing images, POCUS included. That means the devices connect to the record, the archive, and the viewer through open standards, not one-off bridges (HIMSS-SIIM-AIUM; AuntMinnie).

PRESSURE-TEST YOUR SYSTEMS

The archive and viewer requirements checklist.

Governance decisions only hold if the underlying archive and viewer can deliver on them. Use this checklist to pressure-test whether your current systems can sustain a growing POCUS program.

REQUIREMENT	WHAT TO CONFIRM
Vendor-neutral storage	Studies from any POCUS device are stored in open, standard formats, not locked to one vendor or one department.
Encounter-based capture	Images that arrive without a traditional order can still be captured, indexed to the patient and encounter, and retrieved.
Durable retention	A permanent, accessible archive holds POCUS studies for the full retention period, supporting QA and billing documentation.
Universal access	Clinicians can view POCUS alongside the rest of the patient's imaging record from one viewer, wherever they work.
Standards-based exchange	The archive speaks DICOM and DICOMweb, with an HL7 engine and patient-identity matching (PIX and PDQ) so studies bind to the right patient.
No lock-in	You can migrate and share data on your terms, so the POCUS program is not trapped by an early tooling choice.
Consolidated view of QA	Retained, reviewable studies make credentialing and quality assurance practical rather than aspirational.

WHERE MACH7 FITS

The slice where the images live.

Mach7 does not acquire POCUS studies or credential the people who perform them. Mach7 is the enterprise imaging layer that catches what POCUS produces and makes it governable: a durable, vendor-neutral home for the images and a universal way to see them. That is the slice mapped at the top of this guide, and it is deliberately not the whole of governance.

Mach7 Technologies provides an enterprise imaging offering built for exactly the problem POCUS creates. The Vendor Neutral Archive (VNA) gives encounter-based studies a durable, standards-based home regardless of the device that produced them, which is the direct answer to orphaned and phantom scans and to the retention and documentation requirements that billing depends on. The Communication Workflow Engine moves and matches studies using an HL7 engine and patient-identity matching (PIX and PDQ) so images bind to the right patient and encounter. The Enterprise Viewer (eUnity) gives clinicians universal access to POCUS alongside the rest of the imaging record, with no lock-in, so the program stays flexible as it grows. AI enablement rounds out the family, and Flamingo is the next Mach7 offering.

The through-line is data independence: open standards, portability, and customer choice, so a decision made for one POCUS device or department never becomes a constraint on the enterprise. That is practical modernization, matched to the operational reality of a fast-growing image source.

GETTING STARTED

1. **Name an owner.** Charter a POCUS governance committee with representation from the scanning specialties, radiology or imaging informatics, IT, and compliance.
2. **Map where images go today.** For each POCUS device and specialty, trace whether studies reach a permanent archive and how they are found later. The gaps are your orphaned-study risk.
3. **Set the documentation standard.** Define what a complete, saved POCUS study looks like, and make saving it the default, not an extra step.
4. **Pressure-test the archive and viewer.** Run your systems against the checklist above. If storage is departmental or device-bound, treat that as the priority fix.
5. **Plan for growth.** POCUS volume is climbing across specialties. Choose an archive and viewer that scale on open standards so today's fix does not become tomorrow's lock-in.

LET'S TALK

Govern POCUS at scale.

See how Mach7's enterprise imaging offering gives point-of-care ultrasound a durable, vendor-neutral home and a universal view across the patient record. Talk to our team about governing POCUS at scale.

Contact Mach7

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REGULATORY NOTICE

In the United States, eUnity is an FDA-cleared Class II medical device (510(k) K172490) that enables healthcare professionals to view, manipulate, and analyze medical images to aid in diagnosis. Professional and prescription use only. This guide addresses image management, retention, access, and governance, not the clinical interpretation of POCUS studies.

Regional availability and content notice. eUnity is a medical device for professional and prescription use by qualified healthcare professionals. Regulatory status, available modules and approved indications vary by market. For the approved indications in your market, contact your Mach7 representative or Mach7 Regulatory Affairs.

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