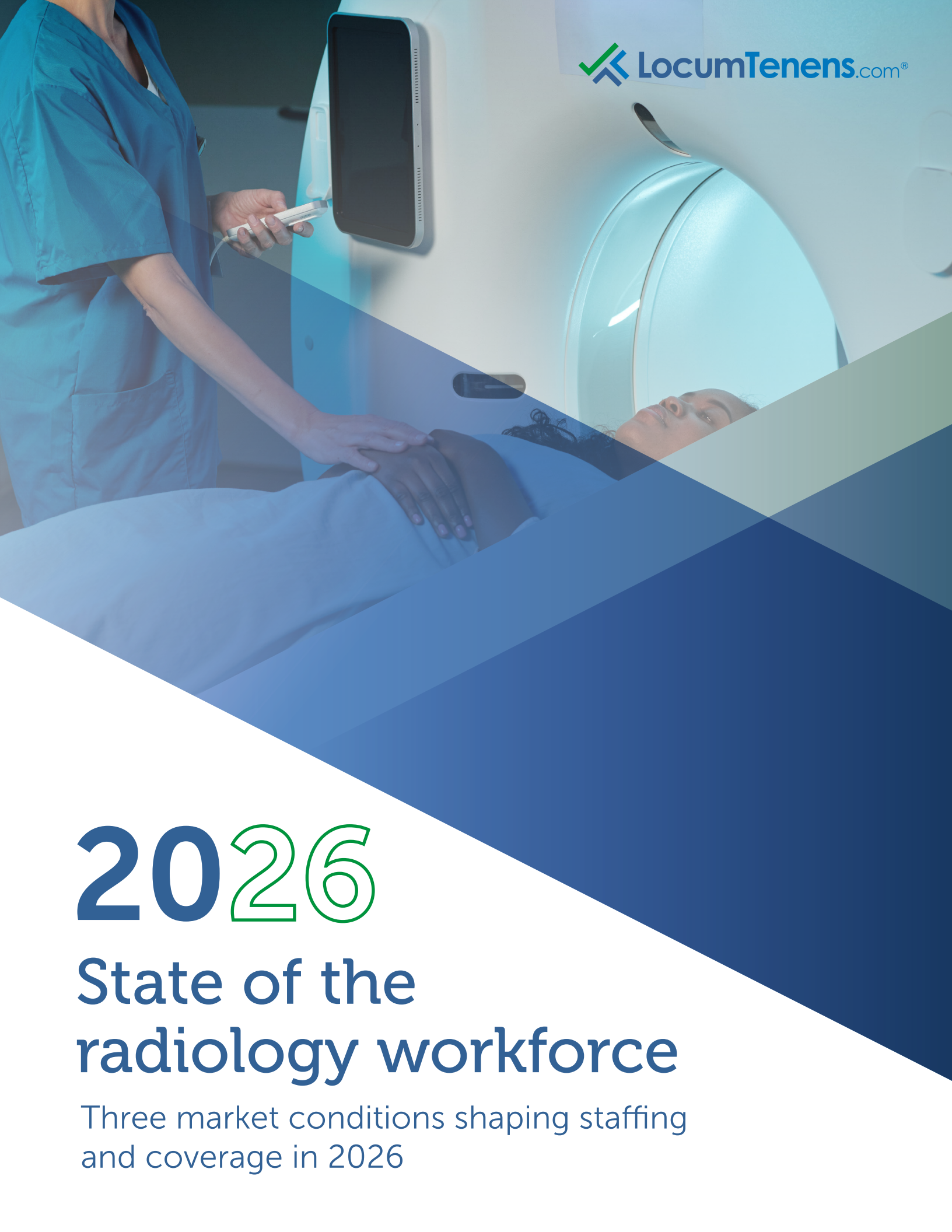


The background of the slide features a photograph of a medical professional in blue scrubs standing next to a patient lying on a table, with a large medical imaging machine (CT or MRI) in the background. The image is overlaid with a large, diagonal blue geometric shape that separates the top header from the main text area.

2026

State of the radiology workforce

Three market conditions shaping staffing
and coverage in 2026

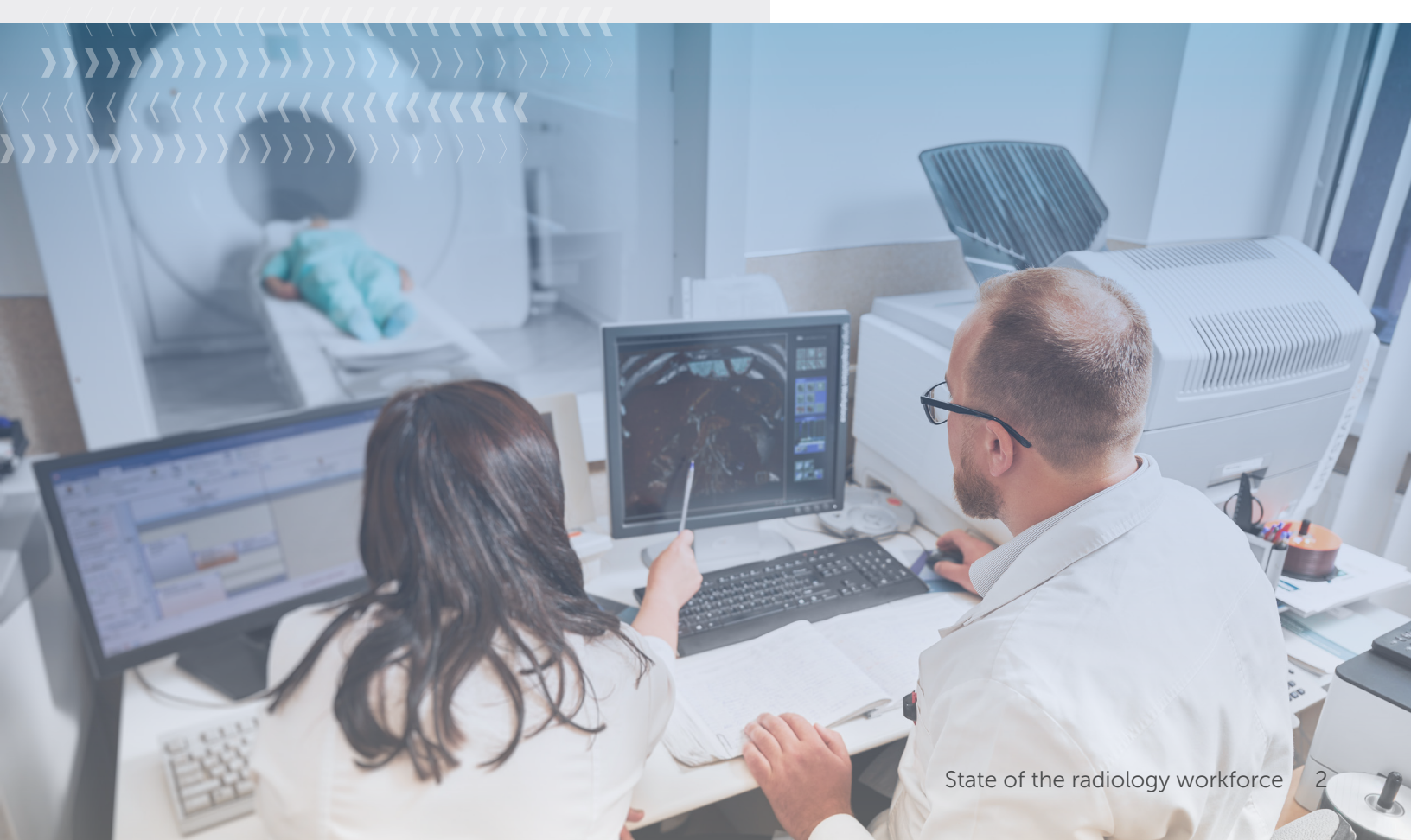
Objective

LocumTenens.com developed this report to assess the market forces shaping the radiology workforce and their implications for healthcare staffing, coverage, and patient access. Drawing on current research from leading government agencies and healthcare industry organizations, the analysis provides a focused view of the factors influencing imaging demand, workforce capacity and evolving coverage models.



About the author

Heather Dauchert is the vice president of the radiology division at LocumTenens.com, where she leads strategy, operations and growth initiatives. She brings more than 17 years of healthcare staffing experience, including extensive expertise in clinician recruitment, team leadership and strategic workforce solutions.



Executive summary

Three market conditions are shaping radiology staffing and coverage:

01

Imaging demand remains elevated, driven by population aging, cancer care (2.1M diagnoses projected in 2026) and preventative screening programs.

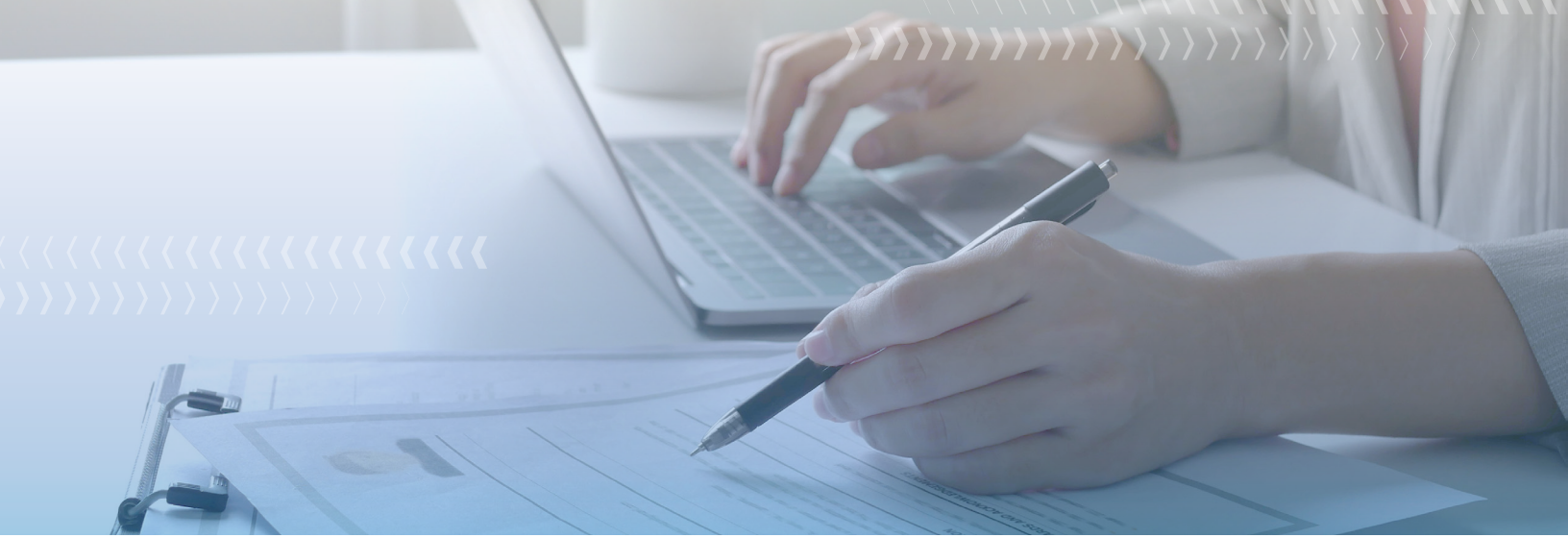
02

Radiologist and technical staffing are critically constrained. National supply is projected to meet only 90% of demand by 2038, with significant subspecialty gaps (neurology 87% filled vs. emergency radiology 25% filled). Technical and physician staffing shortages have distinct operational impacts.

03

Remote interpretation is supplementing onsite coverage as a practical solution when clearly integrated with local clinical workflows and credentialing requirements.

The greatest staffing risks emerge when demand, technical capacity, subspecialty availability and shift coverage overlap. Sustainable solutions require coordinated strategies combining permanent recruitment, temporary coverage, teleradiology and advanced practice providers — tailored to specialty-specific service lines.



Radiology workforce and demand at-a-glance

Market indicator	Latest available data
Radiologist employment	26,770 jobs
Radiologic technologist employment	230,490 jobs
MRI technologist employment	43,390 jobs
Diagnostic medical sonographer employment	90,160 jobs
New cancer cases projected in 2026	2,114,850
Highest selected fellowship fill rate	Neuroradiology: 86.9%
Lowest selected fellowship fill rate	Emergency radiology: 25%
Projected radiology workforce adequacy in 2038	90% of estimated need

Sources: U.S. Bureau of Labor Statistics (2026); American Cancer Society (2026); National Resident Matching Program (2026); Rula (2026). Employment figures reflect May 2025 national estimates.

MARKET CONDITION 1:

IMAGING DEMAND REMAINS ELEVATED

People need imaging scans consistently across all healthcare settings — emergency rooms, hospitals, doctor's offices and specialty clinics. The main reasons are that the population is aging, more people have chronic diseases and cancer patients need imaging for detection and monitoring, according to the U.S. Bureau of Labor Statistics.

Cancer diagnosis and surveillance

The U.S. population is aging rapidly. 61.2 million Americans were age 65 or older in 2024, a 13% increase from 54.2 million in 2020. Since cancer risk increases with age, this demographic shift directly drives higher demand for imaging.

That means more imaging. The American Cancer Society projects 2,114,850 new cancer diagnoses in 2026, which is approximately 5,800 cases daily. But cancer imaging demand doesn't end at diagnosis. Imaging is needed throughout the care continuum: detection, staging, treatment planning, image-guided procedures, response assessment and long-term surveillance. Many patients require serial imaging during and after treatment, creating sustained demand across multiple imaging modalities and subspecialties.

The American Cancer Society projects
2,114,850
new cancer
diagnoses in 2026



Women's imaging

Screening mammography is recommended every two years for women ages 40 through 74. When screening detects an abnormality, patients need follow-up; this means additional mammography, ultrasound, MRI, biopsy or ongoing monitoring.⁷

Delivering this care requires an entire system working together: technologists to perform mammograms, radiologists to interpret them, appointment access, functional and compliant equipment, biopsy services and patient navigation. If any single piece fails, the whole program slows down.



Operational implication

While we can't predict exactly how many imaging scans the country will need, the data makes clear that healthcare facilities must have enough imaging capacity — from technologists to equipment to radiologists — to actually handle the increasing demand throughout all their services. Without sufficient capacity, patients face delays.

MARKET CONDITION 2:

WORKFORCE CAPACITY IS LIMITED AND UNEVEN

Radiology services depend on two related but operationally distinct workforces:

- Technical personnel who perform examinations.
- Physicians who interpret studies and provide subspecialty expertise.

National workforce capacity

Workforce category	May 2025 employment
Radiologists	26,770
Radiologic technologists	230,490
MRI technologists	43,390
Diagnostic medical sonographers	90,160

Sources: U.S. Bureau of Labor Statistics (2026)

Technical capacity and interpretation capacity are not distinctly different — and not interchangeable. Adding more radiologists won't resolve a shortage of technologists needed to operate scanners and perform examinations. Likewise, additional equipment and technical staff cannot prevent interpretation backlogs when there aren't enough physicians to cover.

Imaging constraints may therefore appear in several forms:

- Unused scanner capacity caused by technical staffing shortages
- Delayed final reports caused by limited physician coverage
- Restricted hours for specialized imaging services
- Dependence on a small number of physicians for call or overnight coverage
- Delays in diagnostic follow-up or procedure scheduling

Federal workforce projections from the American College of Radiology estimate that radiologist supply will leave 10% of U.S. demand unanswered in 2038).⁴ And this estimate may understate local challenges, because access depends on whether clinicians are available in the required subspecialty, location and shift.

Subspecialty pipeline differences

Counting total radiologists masks critical gaps. Some specialties have plenty of physicians, while some face serious shortages. The National Resident Matching Program's 2026 appointment-year results show the problem: neuroradiology filled 87% of available positions, while emergency radiology filled only 25%. Breast imaging and musculoskeletal radiology fell somewhere in between.³

Radiology fellowship	Positions offered	Positions filled	Fill rate
Neuroradiology	327	284	86.9%
Breast imaging	221	181	81.9%
Musculoskeletal radiology	218	158	72.5%
Interventional radiology, independent	146	94	64.4%
Emergency radiology	16	4	25%

Sources: National Resident Matching Program (2026). Fill rates calculated from positions offered and filled.

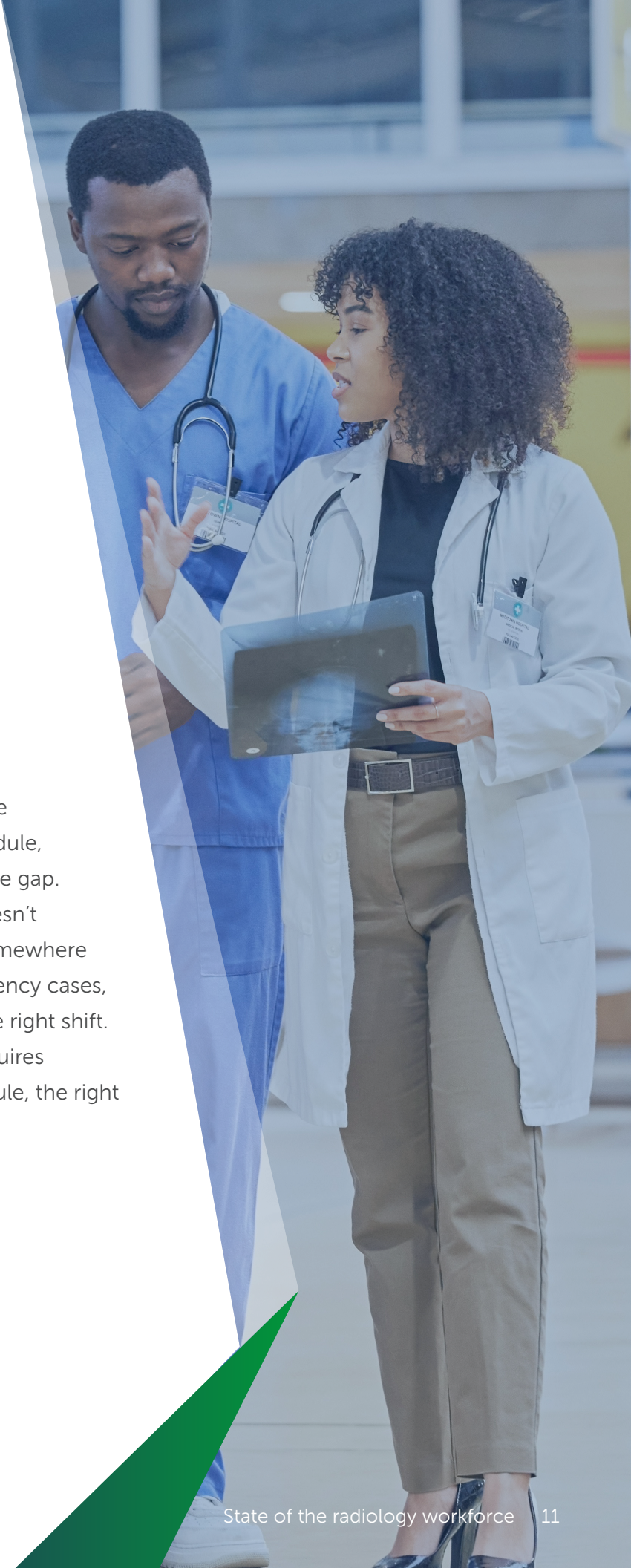


These numbers reflect the training pipeline; they tell us how many physicians are choosing each specialty, but not necessarily employer demand or national shortages.

Career preferences, program structure, geography and application timing shape training decisions differently than they shape employer recruitment needs. Employer recruitment is shaped by different factors including compensation, scheduling, call requirements, credentialing, licensing and local service needs. But the fill-rate gaps tell you where shortages are most likely to appear.

Coverage implication

The question isn't whether there are enough radiologists nationally. The question is are there enough radiologists whose subspecialty, schedule, credentials and location align with the coverage gap. A hospital with an emergency imaging gap doesn't benefit from a surplus of neuroradiologists somewhere else; they need a physician who covers emergency cases, is credentialed at their facility and can work the right shift. That's why staffing a radiology department requires precision — the right specialty, the right schedule, the right credentials, in the right location.



MARKET CONDITION 3:

REMOTE COVERAGE IS SUPPLEMENTING ONSITE STAFFING

Teleradiology solves a distribution problem: even if the nation trains enough radiologists, they won't necessarily be located where imaging demand is highest.

Remote interpretation is already an established component of radiology delivery. Current American College of Radiology (ACR) technical standards explicitly address the electronic transmission of images for interpretation and consultation, including on-call interpretation and subspecialty support.²

Projected workforce and imaging trends support the continued use of remote radiology coverage. According to the ACR, the number of radiologists could increase by 20.9% by 2055. During the same period, imaging demand is expected to grow by 17% for MRI scans and 25% for CT scans.⁴ But that growth won't happen evenly across regions. Some areas will have a radiologist surplus while others face persistent challenges, making remote coverage and flexible staffing models a practical necessity for healthcare organizations.

Where remote coverage provides the most value

Coverage need	Role of the remote interpretation
Overnight and after-hours coverage	Supports emergency, trauma, inpatient and urgent imaging services
Subspecialty access	Connects facilities with expertise that may not be consistently available onsite
Backlog and overflow	Adds temporary interpretation capacity during volume surges or vacancies
Rural and community coverage	Provides physician access without requiring every specialist to be locally based
Multi-site support	Distributes reading volume across facilities and physician teams
Women's imaging	Supplements eligible screening and diagnostic interpretation services

Remote interpretation works when local teams can perform examinations, but don't have radiologists available to read them. It fills the physician gap without replacing anyone else.

But teleradiology cannot:

- Position and monitor patients
- Support procedures
- Operate scanners
- Manage onsite complications
- Administer contrast
- Handle local workflow decisions

Those jobs require someone physically present. Remote coverage only works when you have the technical staff and infrastructure in place — you're just adding physician interpretation from elsewhere.

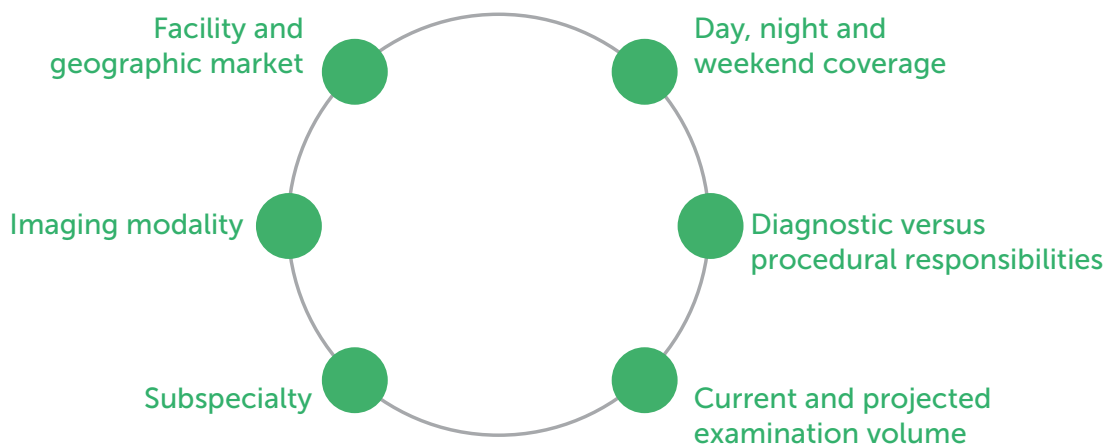
A sustainable remote model also requires appropriate licensing, credentialing, clinical privileges, image and worklist integration, data security, quality assurance, communication standards, turnaround expectations and escalation procedures.¹

Teleradiology is therefore both a workforce strategy and an operating model decision.

Strengthening radiology coverage

Evaluate capacity by service line and shift

Counting total radiologists may not reveal coverage vulnerability. Capacity assessments are more useful when organized by:



This approach helps distinguish isolated scheduling problems from broader structural workforce gaps.

Separate examination capacity from interpretation capacity

Don't assume more equipment or more radiologists will fix access problems. Technical and physician staffing should be evaluated independently, as each staffing gap requires its own solution. For example, if your scanners sit idle because you don't have enough technologists, adding more radiologists won't help. Additional scanner availability won't improve access if interpretation coverage is limited.

Advanced practice providers (APPs) don't interpret images, but they fill a different role in supporting procedures, pre- and post-procedure rounding and managing procedural workflows. Adding APPs to the care team frees up physician time, strengthens procedure completion and improves continuity of care — making existing radiologists more effective and efficient.

Access depends on the entire imaging workflow — not radiologist headcount alone.

Conclusion

Radiology capacity is not a headcount problem — it's a systems problem. Imaging demand, technical staffing, subspecialty availability, shift coverage and local workflow requirements all determine whether patients get timely access.

The greatest risks emerge at the intersection of high-demand service lines, limited technical capacity, difficult-to-recruit subspecialties or a shift that depends on a small number of physicians. These gaps compound.

Solving this requires a coordinated approach, combining permanent recruitment, technical staffing, temporary locum coverage and remote interpretation. Teleradiology works best when it addresses a clearly defined physician-coverage need and is fully integrated with onsite clinical operations. No single solution fits every gap. The facilities maintaining access are the ones diagnosing their specific bottlenecks and challenges, and assembling the right mix of staffing strategies to address them.



How LocumTenens.com can help

LocumTenens.com helps healthcare organizations address physician and advanced practice staffing needs across a range of specialties, including radiology. Supported by dedicated radiology recruiters, we connect hospitals, health systems and medical groups with qualified clinicians whose experience aligns with their clinical, scheduling and coverage requirements.

In addition to physician coverage, LocumTenens.com provides advanced practice provider staffing solutions that help healthcare organizations strengthen care teams, maintain service continuity and respond to changing coverage needs. This added flexibility can support radiology and other service lines where staffing gaps may affect patient access, throughput or daily operations.

LocumTenens.com also offers telehealth solutions that can expand access to remote radiology, women's imaging, and other subspecialty coverage and expertise. Together, these staffing and telehealth models can help organizations maintain patient access, support service continuity, reduce coverage gaps and respond to changing workforce needs.

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