

Radiology Services in Europe: Harnessing growth is health system dependent

- Across European markets, national health improvement priorities are driving increased volume and funding levels for radiology services but the ability to serve demand hinges on systems having sufficient equipment and radiologists in the right geographic areas
- Investors who understand the policy, regulation, funding, and reimbursement landscapes will be best placed to unlock growth opportunities across European geographies
- In this piece, Marwood explores how health system evolution in England, France, Portugal, Spain and Switzerland is key to understanding future demand volumes and growth strategies in radiology markets

The need for diagnostic imaging continues to grow across Europe. And while technology promises to improve the diagnosis of certain conditions and lessen the need for clinicians, demand for imaging services is growing faster than the clinical radiology workforce. This presents opportunities for expansion. But how should investors think about the different European markets?

As populations age, health systems are prioritizing the detection of distinct diseases. Pressures on overall public pay budgets and insufficient clinical staff also lead health systems to deploy strategies - either to gatekeep or divert demand. While some systems attempt to contain costs by limiting volumes, others have increased spend on teleradiology and diverted demand to these services. In this piece, Marwood discusses some of the policy, regulatory and funding issues across five European countries (England, France, Portugal, Spain and Switzerland) to help investors understand how to harness growth in different geographies.

Market	Diagnostic imaging equipment per 100,000	Radiologists per 100,000	Overall diagnostic services spend
England	Slightly above EU average	Insufficient	Increasing
France	Slightly above EU average	In excess	Slightly decreasing
Portugal	Below EU average	Insufficient	Decreasing
Spain	Below EU average	Insufficient	Increasing
Switzerland	Above EU average	Insufficient	Decreasing

Source: Marwood Analysis

Health systems with limited diagnostic capacity gatekeep volumes using national policy or clinical guidelines

Many health systems establish national, regional or local imaging referral guidelines to help gatekeep limited diagnostic capacity and support cost containment. Spain and Portugal have some of the lowest levels of diagnostic imaging equipment in Europe. In Spain, this leads to their use being closely guarded.

In Spain and Portugal, diagnostic imaging services can be offered in stand-alone outpatient centers contracted with insurance companies and public payers. Diagnostic imaging can also be contracted by public hospital services via public tenders. Depending on the way a health system is organised, radiology services may deliver via public-pay systems or directly to private-pay patients.

Regardless of this, clinical guidelines can limit volumes. The Spanish Ministry of Health has funded studies on the appropriate use of diagnostic imaging technologies in distinct clinical areas such as acute abdominal pain. These have informed national referral guidelines.

Spain has a two-tiered gate-keeping function

National legislation sets out a catalogue of diagnostic services available to patients via the public pay system. Autonomous Communities also establish clinical guidelines to limit referrals from primary care

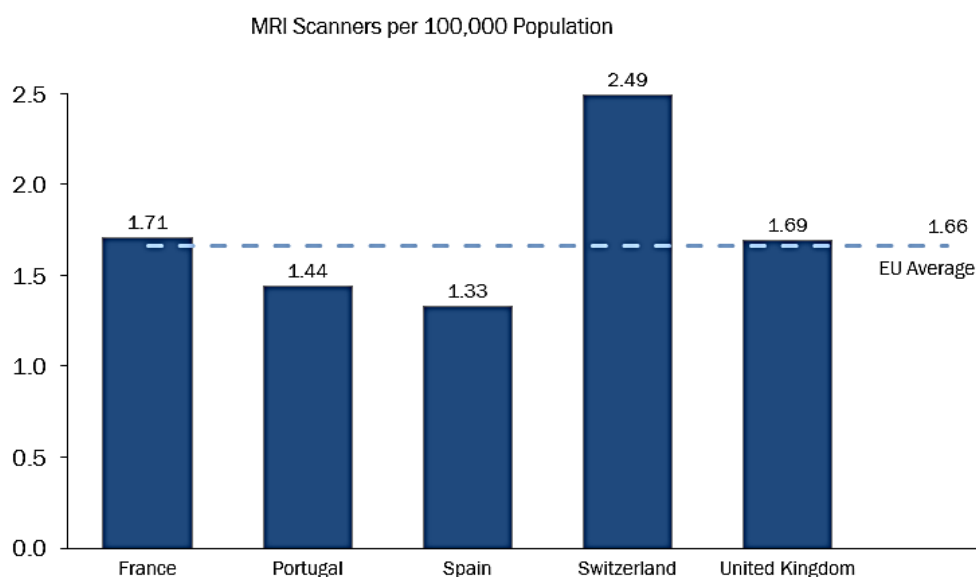
The 17 Autonomous Communities in Spain – which run regional health services – use national guidelines to inform clinical guidelines for referrals from primary care as well as regional health plans for quality improvement. This can create variable referral volumes for diagnostic imaging across the regions.

In Portugal, independent diagnostic providers have increasingly positioned themselves for the health system shift towards value-based care. This has changed the way the value of imaging services is expressed in competitive tenders to contract diagnostic imaging services. It has also impacted the pricing of diagnostic services, moving beyond activity and volume towards clinical outcomes (i.e., earlier diagnosis), patient satisfaction (i.e., shorter

waiting times), and overall system savings (fewer treatment costs and face-to-face appointments).

These dynamics demonstrate public payers are placing greater attention on the value and efficiency of imaging services to make use of limited resources.

The graph below shows how the availability of MRI scanners can vary across select European geographies. Spain and Portugal have some of the lowest levels of MRI scanners per 100,000 population.



Sources: The European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry (COCIR); The Federal Council of the Swiss Government; OECD Data; Marwood Analysis

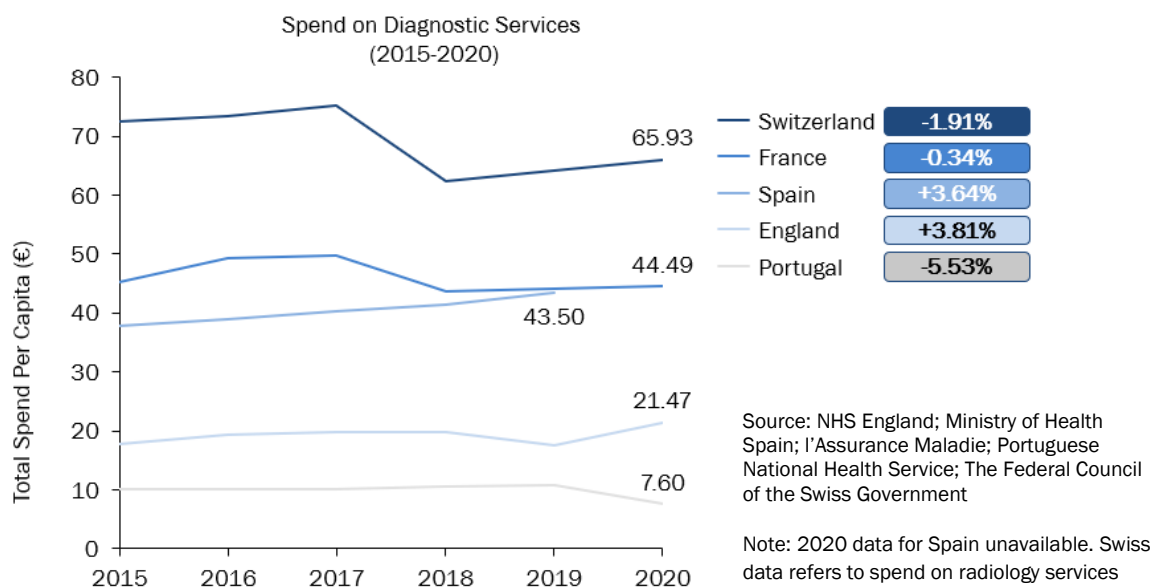
Notes: UK data includes figures for devolved nations, not including Ireland; Data for the number of MRI units is as available in 2020 except for Switzerland which covers 2019 levels

National priorities and health improvement plans drive overall volume and funding levels for diagnostics. This can impact on pricing and reimbursement

National health priorities and health improvement plans are used across European health systems to establish screening policies and other associated targets for the early diagnosis and treatment of conditions such as cancer. In England, the NHS has been working to develop regional diagnostic hubs for some time. More recently, national priorities like reducing the elective care backlog are driving increasing diagnostic imaging volumes and spend on these services, since they are key elements of nearly all clinical pathways.

The Faster Diagnosis Standard in England has placed radiology services under greater pressure to focus on initial diagnosis of cancer since its introduction in October 2021. To meet this standard, public-pay hospitals must prioritise these imaging requests, potentially above imaging for patients whose cancer is already confirmed or who need a diagnosis for other conditions. The target may also direct a greater volume and reimbursement level to independent providers as NHS hospitals may need to outsource urgent and routine reporting on diagnostic imaging scans across a range of modalities to meet the target. Other national-level priorities related to telehealth and electronic health care records also impact the way diagnostic imaging services are demanded. For instance, by providing supporting information for providers during imaging analysis and reporting. As the system evolves with Integrated Care Systems – where NHS hospitals will be calling the shots – diagnostic hubs may take on new strategic importance for independent providers.

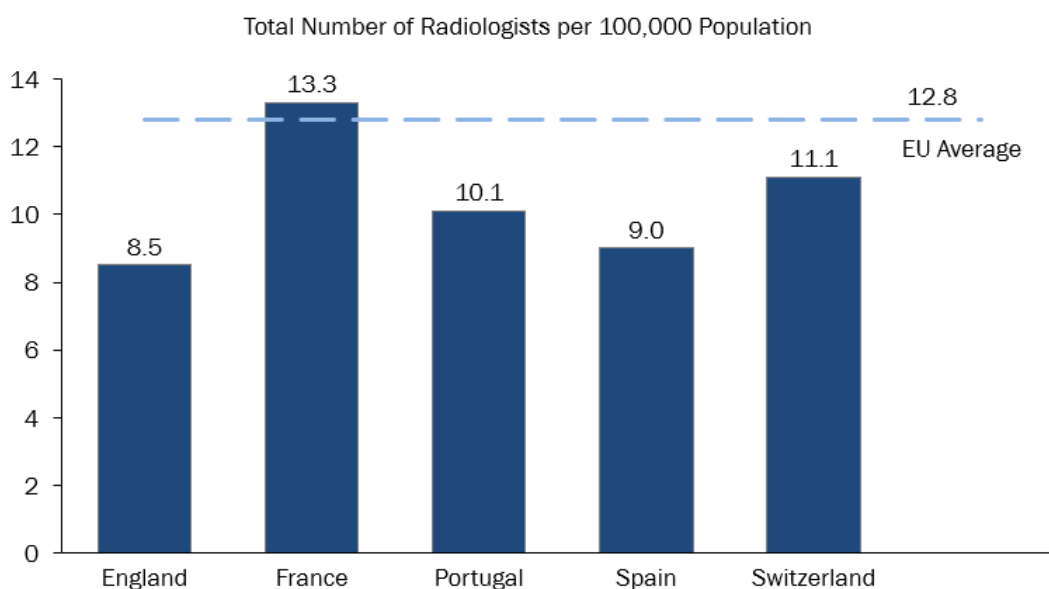
Over the last 5 years, overall public-pay spending levels for diagnostic services have grown differently across the selected markets – driven by their distinct policy approaches and reimbursement trends (see graph).



In Spain, a certain volume of activity is subcontracted to independent providers, usually aligned with system improvement plans to reduce the waiting list for surgical procedures or for screening tests using high-tech equipment. Payment for diagnostic services may be on a fee-for-service (FFS) basis, or a combined payment mechanism (a block element adjusted by a FFS element), and the price is based on public rates that differ between regions and are updated annually. However, because of the limited budgets of regional health systems, there are still long waiting lists for CT, MRI scans and even for ultrasonography and conventional radiographic examination. As a result, stand-alone independent diagnostic imaging centers are increasingly meeting the needs of patients who do not want to wait and can either afford to purchase the service out of pocket or have complementary insurance.

Geographies with insufficient radiologists present opportunities for new models and innovations. Regulatory requirements around teleradiology vary across European markets

Many health systems are experiencing a lack of medically trained staff across radiology. European countries are no exception, with all markets examined in this piece struggling to deliver demanded services in the face of staffing shortages.



Sources: The Royal College of Radiologists; Profil Médecin; Ordem Dos Médicos; Ministry of Health Spain; FMH Swiss Medical Association; COCIR; Notes: Data from 2020, except for France which is from 2019, and Spain which is 2021

England, Portugal, Spain, and Switzerland have shortages of radiologists

The number of radiologists per 100,000 population is highest in France among the selected markets. But levels are only slightly above the EU average and services face challenges due to the workforce's distribution across the country. Spain and Portugal have the lowest levels after England. Switzerland falls slightly below the EU average.

Across the EU, there is a growing shortage of radiologists, with only an average of 12.8 radiologists for every 100,000 population. Even France, which has levels of radiologists in excess of this, is experiencing difficulties due to the disproportionate physical distribution of staff. As a result, health systems are increasingly looking for more efficient ways to deliver services.

Resource shortages in radiology have enhanced the trends for outsourcing of image reading activity as health systems lack the capacity to meet the demand with existing clinical staff.

Teleradiology is widely used in France under strict regulatory and technical conditions. For example, the radiologist's workstation must meet the standards of the French National Agency for the Safety of Medicines and Health Products

(ANSM). In addition, the tools available to the radiologist must allow for identical quality compared to that of work undertaken on site. There are also recommendations from both the Professional Council of Radiology and the Medical Council that must be adhered to, and the service must be approved by the Regional Health Agency responsible for the geographic area.

In Switzerland, teleradiology has grown too, and is regulated by national-level legislation, alongside the directives of the Federal Office of Public Health, and the guidelines of the Swiss Medical Association. Despite this – and due to the health system's organisation – there is a lack of uniform regulatory enforcement across the cantons. And the trend is for remote services such as teleradiology to require a licence to practice in the canton where the service provider is based.

Conclusion

Health systems across European markets present distinct policy, regulation and funding environments. This drives pricing and reimbursement in the current landscape, but also informs demand evolution. Investors looking at the pan-EU radiology space should consider how companies can position their growth strategies to align with these dynamics, both within a geography and across them.

The global demand for diagnostic imaging is growing, led by clinical priorities around cancer and other health system concerns like clearing elective care waiting list backlogs. However, many markets are seeing shortages of clinical radiology staff, and create national policies and clinical guidelines to help ration limited diagnostic capacity. This may at times come up against national priorities and health improvement plans which seek to increase overall volume and funding levels for diagnostics. Providers of radiology and teleradiology need to understand health system evolution and varying regulatory requirements across markets to unlock opportunities for new models and innovations.

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