



# The healthcare diagnostics value game

## **The challenges of delivering and demonstrating value in under-pressure markets**

*Realizing value series*

Despite some national differences, diagnostics providers around the world face common competitive challenges and margin pressures, while often struggling to demonstrate the value they bring to the wider healthcare system. To avoid a race to the bottom of an increasingly commoditized market, they should play a more integral role in care pathways and find ways to gain greater recognition for their vital contribution to improving patient outcomes and cutting overall treatment costs.

---

**Adam Thorpe**  
KPMG in the UK

**Frédéric Thomas**  
KPMG in France

**Alberto De Negri**  
KPMG in Italy

**Evelyn Smith**  
KPMG International

# Reframing the diagnostics industry

## The vital role of diagnostic services.

Diagnostic services, either through pathology in laboratories, or imaging like scanning, ultrasound and radiology, play a vital role in spotting health problems and informing medical interventions.

In the UK, for example, the average citizen has 14 tests per year performed by a laboratory medicine specialist.<sup>1</sup> In the US, laboratory testing is the single highest-volume medical activity, with an estimated 13 billion tests performed each year.<sup>2</sup>

Early diagnosis can increase the chances of a positive outcome, helping to improve the lives of patients and save costs of further treatment. Additionally, diagnostics also play a vital role in patients' ongoing care programs.

As health systems worldwide move from treatment to prevention, and from volume to value, diagnostics can accelerate this shift. Yet, despite rising demand in most of the world's largest healthcare economies, many diagnostics companies face a continuing struggle against commoditization. It seems that the increasing strain on health budgets is causing public and private payers to seek regular price cuts, with diagnostics too often viewed as a relatively easy source of additional savings.

KPMG professionals' discussions with several leading players and market commentators indicate a set of common challenges across the main mature markets in North America and Europe.

### Four main challenges facing diagnostics providers:



Growing price and volume pressure



Rising cost base



Battle for talent



Building better relationships with buyers

Having exhausted many of the most accessible routes to cost-cutting, diagnostics companies of all sizes need to escape the commodity trap by delivering greater value and, crucially, convincing clinicians, payers and the public of their value. Changing the perception of the industry calls for greater involvement with doctors and patients, more customer-friendly service levels, diversification, and a greater willingness to embrace technology and innovation.

Above all, it means grasping the huge opportunities offered by digitalization: to build a strong body of evidence of diagnostics' contribution to improved outcomes and lower total healthcare costs; to better utilize data to detect patterns of diseases; to reduce operating costs and raise productivity (including remote diagnosis); and to accelerate the shift to community care.

## Why diagnostics CEOs and healthcare investors should read this paper.

The diagnostics sector has a great opportunity to place itself at the center of healthcare delivery and avoid a slide into commoditization. By discussing how to overcome the key challenges, and sharing best practice between countries (something that has not happened sufficiently in the past), diagnostics companies can deliver significant improvements that should enhance their value to both owners and potential investors. This means looking beyond mere survival to come up with a winning strategy.

### Five ways to win the diagnostics value game:



Partner with the wider health system – including the public sector



Make more of data to demonstrate diagnostics' value and enhance care



Evolve healthcare models – including community care



Engage differently with regulators



Innovate and provide new solutions

This paper closes with a **diagnostics value maturity matrix**: to enable diagnostics CEOs – and investors in the industry – to assess how much work is needed to come up with a winning strategy.

### About this paper

To support our perspective with practical evidence, KPMG professionals surveyed 18 senior diagnostics professionals from many of the leading private sector providers, along with expert commentators, covering both medical laboratories and imaging, with coverage across 13 different countries. We discussed some of the key concerns facing the industry, the actions being taken to address these challenges, and ways in which diagnostic companies can best position themselves as trusted healthcare partners. These findings were augmented by the views and experience of 15 KPMG diagnostics experts from around the world.



# A snapshot of the diagnostics industry

Volume growth is outstripping value growth.

## Volume and value trends and financial performance

Despite unique local political, regulatory and structural differences, mature diagnostics markets also exhibit a number of similarities – which should enable different players to learn from each other’s experiences.

Ageing populations and changing lifestyles are causing an increase in conditions like cancer, diabetes and heart disease, which are leading to growth in demand for diagnostic services – exacerbated by major government public screening initiatives.

All of this should spell good news for the diagnostics sector – if it weren’t for the inability of funding to keep pace with the surging demand for testing.

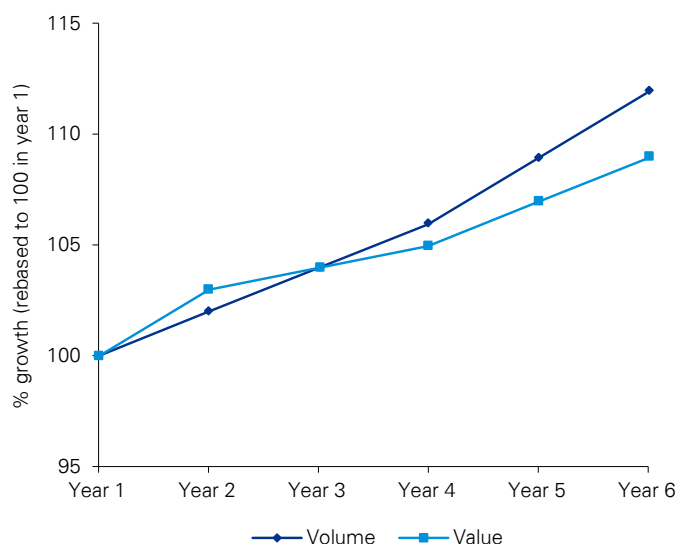
## Value is lagging behind volume

Of course, no two markets are exactly the same. But, despite national differences in the ratio of public to private provision, and in service and payment models, many of the diagnostics executives we spoke to voiced remarkably similar views on the state of the market in their countries. Indeed, many of these commonalities apply to both imaging and medical laboratories.

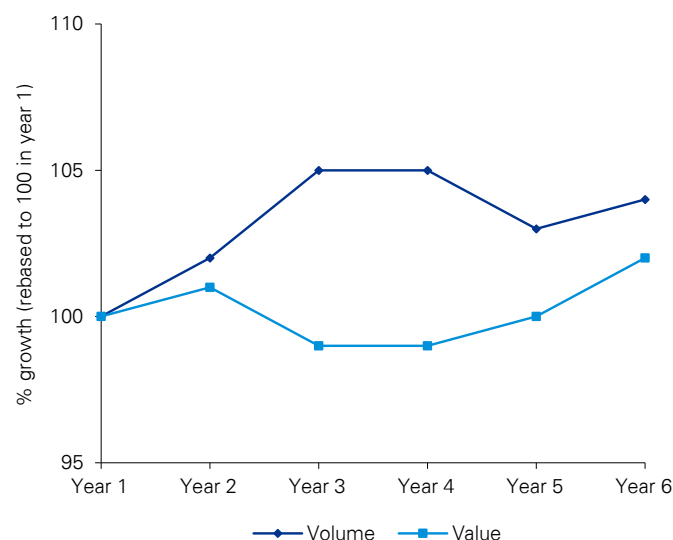
The following illustrative sample of several European countries and segments (i.e. imaging and labs) shows a clear trend of value lagging behind volumes. It’s a similar story when looking separately at the European laboratory and imaging sectors. In the former, the healthy rise in volume is not matched by corresponding value growth (where value is defined as volume x price); again a sign that reimbursement is failing to keep pace.

The gap is even more pronounced for imaging, where value has only grown by a few percent in recent years in our sample of selected countries.

**Figure 1: Indicative laboratory service growth, selected countries<sup>3,a</sup>**



**Figure 2: Indicative imaging service growth, selected countries<sup>4,b</sup>**



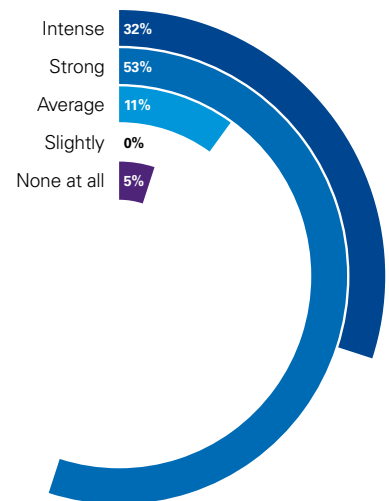
**We're in danger of seeing examinations become commoditized... this is creating a race to the bottom and makes sticking with imaging a difficult place to be.**

– Executive, European imaging firm

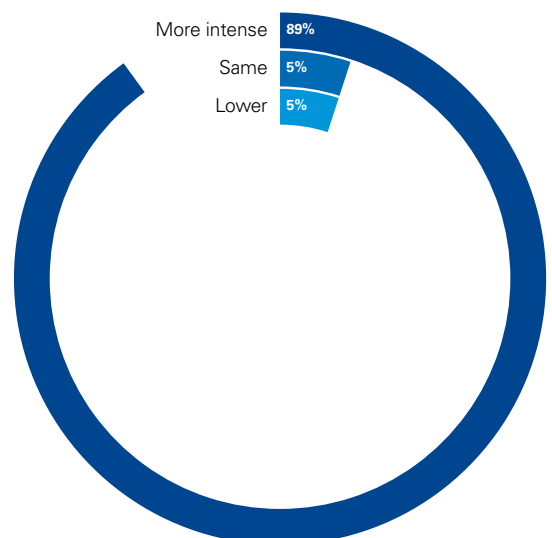
**Financial performance under the spotlight**

Diagnostics companies are feeling the heat from the combination of pricing pressure and increased competition. The majority of respondents believe their organization's financial performance is under greater scrutiny than ever before. Some private equity (PE)-owned diagnostic companies also express concerns over whether they could meet their investors' targets.

**Figure 3: How strong would you describe the pressure you are feeling on financial performance?<sup>5</sup>**



**Figure 4: How would you compare any pressure on performance with pressures over the past 5 years?<sup>6</sup>**

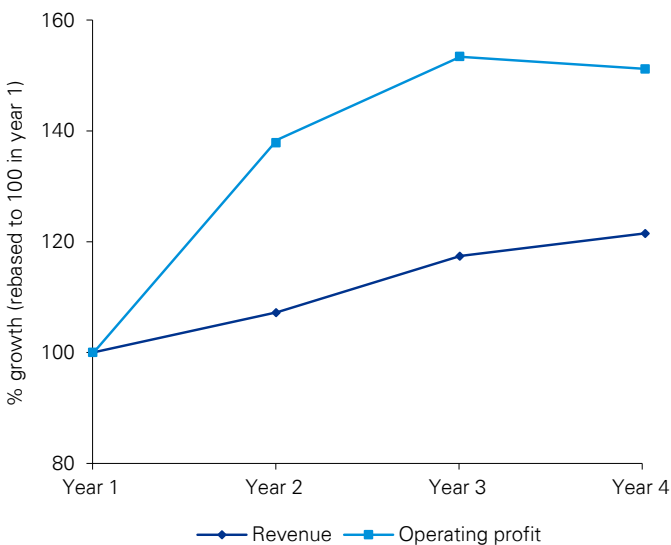


© 2018 KPMG International Cooperative ("KPMG International"). KPMG International provides no client services and is a Swiss entity with which the independent member firms of the KPMG network are affiliated. All rights reserved.

As you can see in the graphic below, a sample of company performance data across markets indicates that the more structured players have tended to enjoy above-average revenue growth. Much of this is probably down to inorganic expansion, with acquisitions a core strategy for leaders, particularly in medical labs, where they can bring significant synergies.

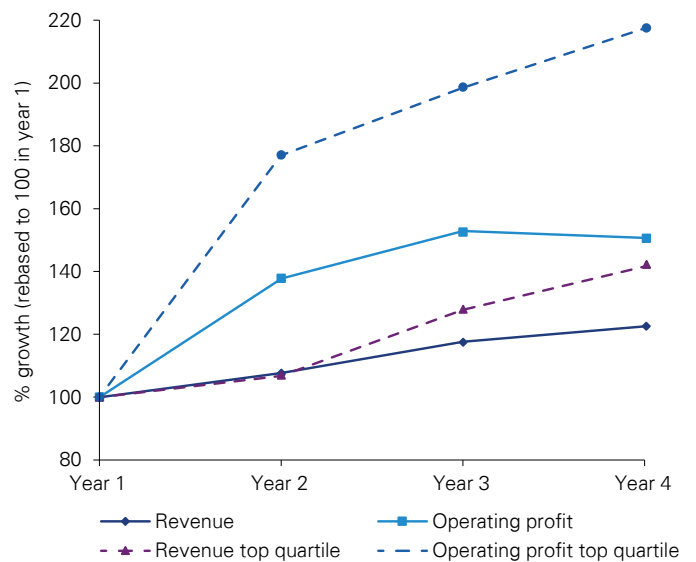
Acquisitions aside, margin growth is generally harder to achieve. As the figure below indicates, diagnostic companies have failed to sustain profit growth in recent years. Following an initial surge, average growth has plateaued across Europe’s major players. Revenues, on the other hand, have steadily increased, suggesting margin pressure is taking its toll.

**Figure 5: Average industry operating revenue versus operating profit growth<sup>7,c</sup>**



For the top 25 percent of diagnostics players, profit growth has outstripped revenue growth, although the rate of increase has slowed in recent years – again suggesting new sources of value creation are needed.

**Figure 6: Average industry operating profit growth<sup>8,d</sup>**



Given the pressures on the sector, it is little surprise that diagnostics companies are actively seeking improvements. Senior management teams in most, if not all, of the major providers are fighting hard to control costs, drive efficiency programs and realize scale economies through synergies on acquisitions – but this is proving increasingly challenging. There is a sense, in many markets, that the ‘low-hanging fruit’ have been largely picked, and that further, incremental improvements may be harder to achieve.

Interview feedback shows a high level of concern from the leaders of the major diagnostics players.

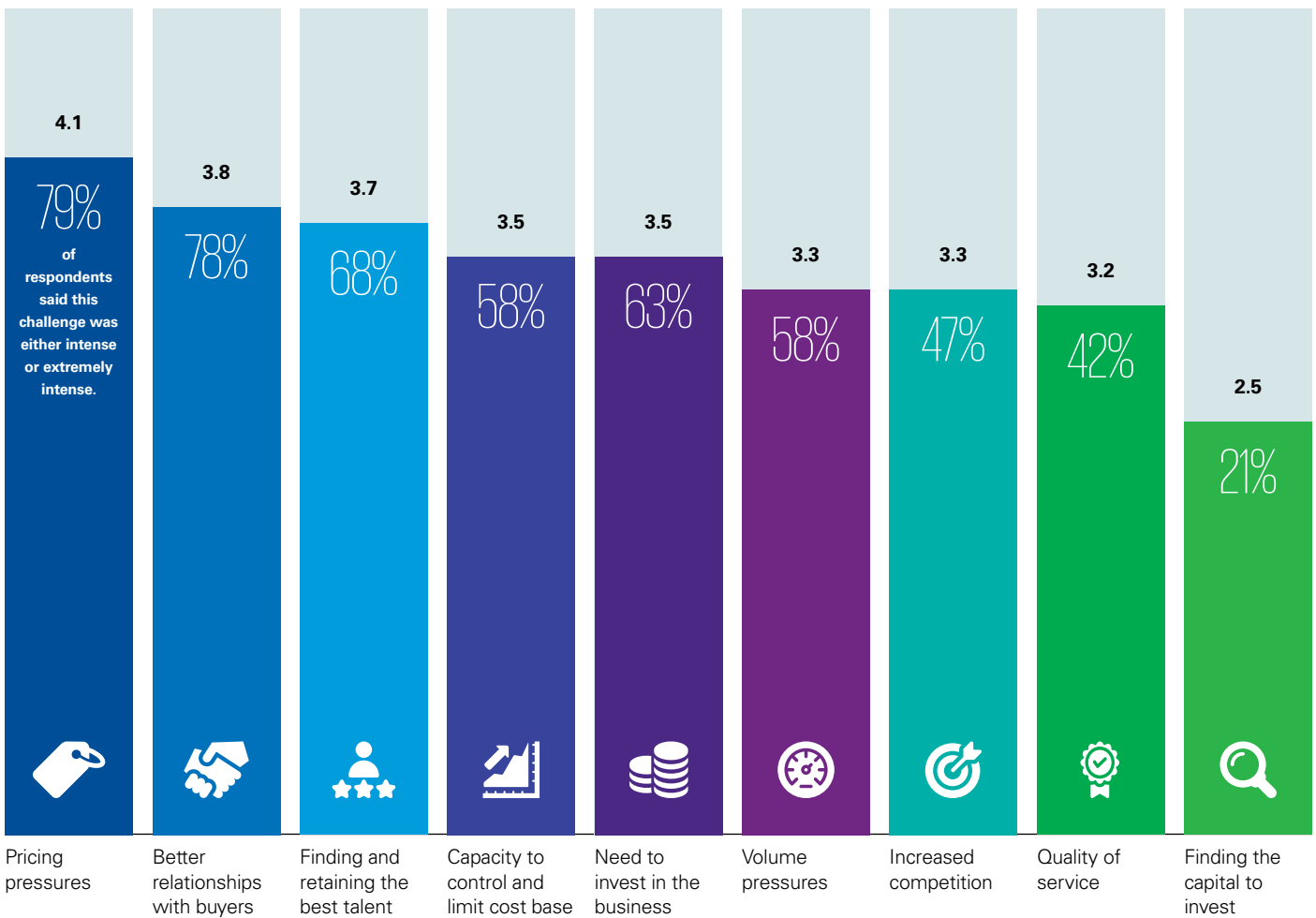
# Key challenges facing the diagnostics sector

Pricing, cost control, talent and buyer relationships are executives' biggest concerns.

According to the cross-section of experts surveyed across the more mature markets, the four most important challenges are pricing and volume pressure, the capacity to constrain costs, staffing, and building better relationships with buyers.

Getting access to investment capital is seen as less important for the major players, but remains a very real worry for smaller businesses – as we discuss below in greater detail.

**Figure 7: Main challenges facing diagnostic executives<sup>9</sup>**



1 = not at all challenging; 5 = extremely challenging

© 2018 KPMG International Cooperative ("KPMG International"). KPMG International provides no client services and is a Swiss entity with which the independent member firms of the KPMG network are affiliated. All rights reserved.



## Growing pricing and volume pressures

In the face of rising demand for services, budget restrictions from both public and private payers are putting downward pressure on prices, with many governments applying regular tariff cuts. As the graphic on the previous page clearly shows, there was virtually unanimous agreement over this challenge.

4.1

**Margin squeeze is a big issue for companies in economies where the industry is more mature – and a general theme across most of the major European markets. The pressure on health budgets, along with a clear and natural increase in demand, is creating tension in the system, with funding envelopes constrained and unit prices generally falling. In turn, this is putting a real strain on the capacity of the industry to invest, upgrade quality and protect margins.**

– Adam Thorpe, Partner,  
Global Strategy Group, KPMG in the UK

In fact, one European imaging executive we spoke to feels that the impact on margins is impairing his company's ability to innovate. Whilst this is tough on the larger players, it is often much more damaging on smaller groups and family businesses, who increasingly struggle to survive. With less flexibility to shave costs or gain scale economies through acquisitions, many have been forced to exit the market or sell to larger groups.

To add to such pricing pressures, some markets also face constraints on volume as a 'double hit'.

Governments in countries like Belgium, France and Canada are trying to curb volume by addressing perceived inappropriate prescribing by doctors. No one wants excessive testing, but putting too much pressure on physicians to reduce diagnostics could be counter-productive, and cause patients to miss out on early diagnosis that can help save money and lives. In many countries, younger doctors are being openly trained to limit the use of testing – most notably on blood tests.



## Encouraging responsible testing

There is a wider recognition across the healthcare ecosystem of the need for appropriate, rather than excessive, testing. The Choosing Wisely campaign, initiated in the US, aims to advance a national dialogue on avoiding unnecessary medical tests and treatments.

Many US and Canadian health providers have bought into this concept, with its influence spreading worldwide to Australia, the UK, Germany, Italy, Japan, the Netherlands and New Zealand, amongst others.

Such initiatives should not be seen as a threat for the diagnostics industry; rather they are a great opportunity for providers to create conversations with clinicians and patients on the role of responsible testing in driving better outcomes.





### Controlling the cost base

Keeping costs under control is a major concern for diagnostics providers, with one European respondent commenting “The easy wins are behind us and the culture of the business and its people constrain what we can achieve.”

3.5

Cost is also impacted by regulatory requirements, which can strongly affect growth strategies, market structures and operational efficiency. Regulations differ notably between countries and even, in some cases, between regions within a country. In Germany, where operations enjoy limited regulatory constraint, diagnostics companies have tended to evolve into low-cost, leaner operators, leaving less potential to cut costs further. France, on the other hand, has quite strict regulatory requirements that can potentially constrain efficiency.

**Costs are rising at a problematic rate. Funding will not keep pace with cost increases and therefore productivity becomes key – which has to be balanced against the need for significant productivity.**

– Executive, imaging company, Asia Pacific



### The talent dilemma

Finding – and keeping – the best people is a recurring theme for diagnostics companies, and is echoed in our discussions with industry leaders. A 2017 report by the Royal College

3.7

of Radiologists (RCR) highlights the ongoing shortage of radiologists in the UK. In 2016, nearly 97 percent of the UK’s radiology departments were unable to meet diagnostic reporting requirements, and close to one in 10 radiologist posts were vacant.<sup>10</sup>

**Even with training, this [talent shortage] is not going to be fixed any time soon, with supply drying up in some areas of specialism.**

– Executive, imaging company, Europe

Speaking about the French market, KPMG in the UK’s Adam Thorpe feels that fewer people will want to become biologists, which, combined with a number of diagnosticians retiring, is intensifying the talent challenge – especially in regions less attractive to younger professionals. Respondents from Israel, Italy, Portugal and the UK all comment on the difficulties of hiring staff such as radiologists/radiographers and biomedical scientists.



### Building better relationships with buyers

As with other areas of healthcare, tough restrictions limit communication to customers, but, arguably, diagnostics has some way to go to match pharmaceuticals. Customer service levels

3.8

can vary widely from country to country. In Germany and Switzerland, there is a tradition of viewing doctors as customers, with diagnostics companies eager to give fast and accurate service, to be as responsive as possible and present data in a simple, meaningful fashion. Other markets place less importance on personal service and relationships.

**Diagnostic providers have much to do to educate doctors, payers and patients about the enormous value they bring, and thus enhance their standing. I’ve seen some excellent efforts in Switzerland (especially from lab groups); whereas peers in countries like France and Belgium seem to be lagging behind.**

– Frédéric Thomas, Partner,  
Head of Life Sciences & Healthcare,  
Global Strategy Group, KPMG in France

## There are a number of secondary challenges facing diagnostics executives.

Service quality, competition, investment funding and anti-private sector attitudes all remain a concern.

The following issues may not be top of the list of executives' concerns, but receive sufficient mention to warrant investigation:



### Service quality

If diagnostics is to demonstrate its importance to the wider healthcare economy, then pace, appropriateness and accuracy of the diagnostics need to be proven and recognized. Such a goal

calls for some investment.

Attitudes to service and quality appear to differ considerably amongst the diagnostics companies we surveyed, but several respondents recognize the need to address this issue, with measurement of patient experience and referrer satisfaction levels a good starting point. One European executive says "It [service] is the most important lever with which we can compete." Another respondent, from a European laboratory, comments: "Reporting and working with doctors is the bit that makes the difference."

**We must position ourselves as consultants who find the best solution for a hospital, taking into account economics, needs of customers and quality....this will make the difference.**

– Executive, laboratory and imaging group, Europe



### Competition

The degree of competition varies from market to market. Italy's diagnostic players operate in a very fragmented environment, where tariffs remain relatively high, enabling even smaller companies to survive on relatively low volumes. Nevertheless, this market is seeing increased competition from international players and private hospital chains (some of whom are investing in their own diagnostic capabilities), which is driving consolidation. The pursuit of economies of scale is also apparent in consolidation in Germany.

**The reality is that, to boost our business, we have to keep acquiring.**

– Executive, laboratory and imaging group, Europe



### Investing in the business

The majority of executives surveyed recognize the importance of investing in the future. However, finding funds to do so is less of an issue for larger (often publicly-listed or private equity backed) operators, while remaining a very real challenge for smaller players. Unlike their larger peers, smaller businesses do not have the deep pockets to invest in innovation, attract top talent and increase quality – all of which makes them potential acquisition targets and drives industry consolidation. Interestingly, diagnostics executives from companies in the UK and Portugal say they are struggling to meet investment.

**There is high pressure on imaging. It's a capital intensive sector; you have to invest and offer the best services but it's difficult to get payback.**

– Executive, imaging company, Europe



### **Attitudes to private provision/outsourcing can create or limit opportunities for diagnostics providers**

Attitudes towards private sector involvement in healthcare vary. In the UK, for instance, historical pride in the NHS can sometimes create a concern, from the media, the public, certain politicians, and NHS workers, that private companies place profits over care quality and push up healthcare prices. It is similar in France and Belgium; countries that also have a strong public health service.

Yet, many recognize that the state does not have the capacity to meet demand – nor the funds to invest in staff and inventory. In UK imaging, for example, a shortage of key staff and ageing equipment produce long lead times to receive reports – which can impact quality.

Mixed feelings about private provision are also reflected in attitudes towards outsourcing. Having made investments in technology, real estate and people, hospitals can be reluctant to outsource, feeling the need to maximize in-house volumes to justify the expense.

In a market like the US, where virtually all laboratory diagnostics are outsourced (although mostly on hospital premises), such anti-private sentiments are less relevant. Here, providers see themselves as a more integral part of the care pathway, with a greater incentive to innovate.

Imaging has historically been integrated within hospitals and received considerable investment because it is viewed as a potential revenue stream. However, more and more imaging is being pushed outside hospitals to an ambulatory setting, where it can be performed at a relatively lower cost.

New Zealand is another example of the public sector opening up to private operators, with diagnostics companies now running laboratory services in a number of the nation's hospitals. Countries like Germany and Spain are also moving towards greater private provision of laboratory services. In the UK, however, labs remain a perennial 'market for tomorrow', with public hospitals slow to adopt private provision, and a complex implementation process. A leading UK laboratory provider comments that: "...change has not happened as fast as anticipated, and enthusiasm has subsequently waned."



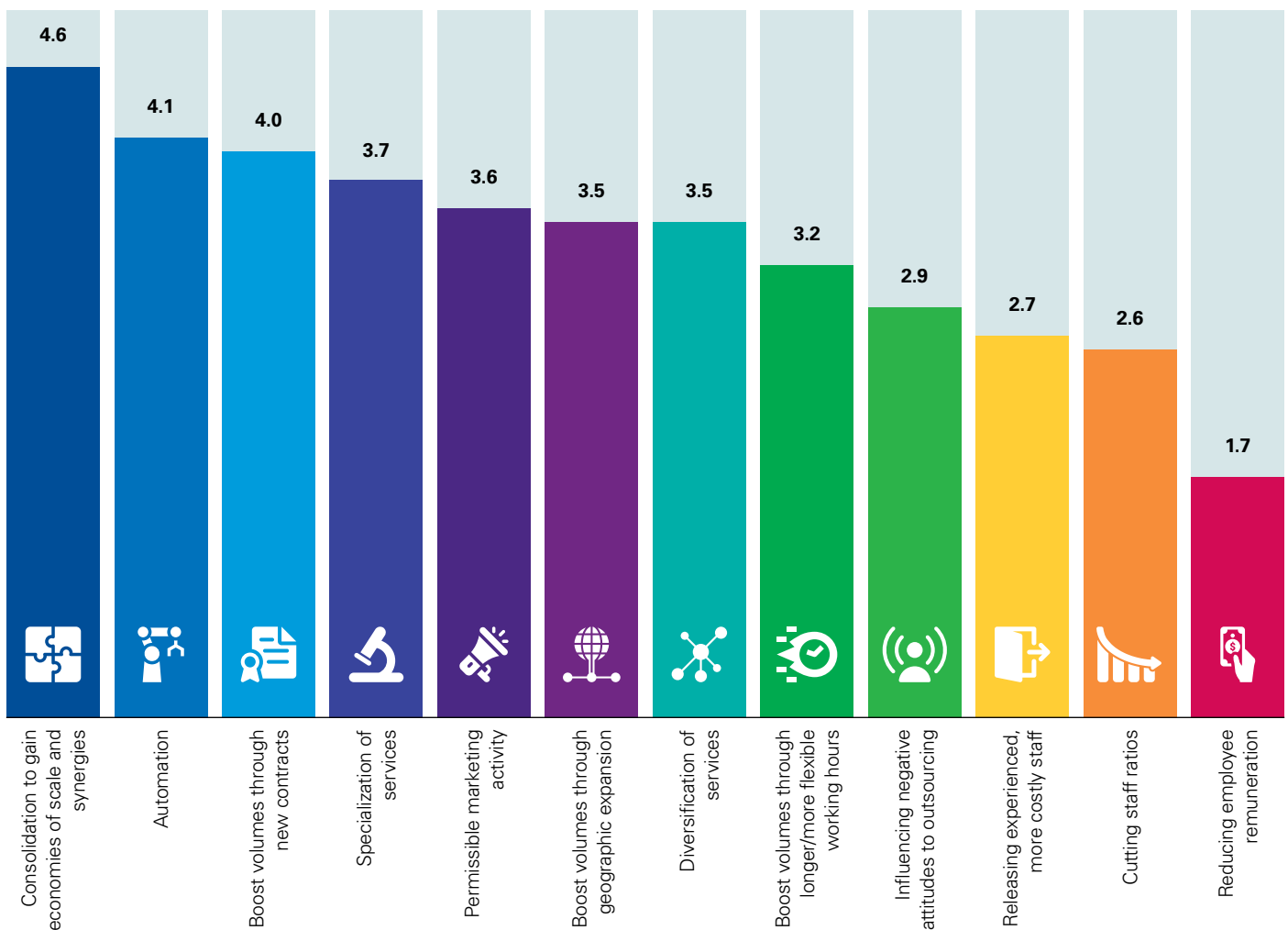
# Five ways to survive in the value game

## How diagnostics companies are driving client value.

KPMG professionals' discussions with industry experts suggest that current and future perceived pressure on margins is higher and more intense than ever.

Once again, despite differences across segments and geographies, many respondents expressed similar views on how best to tackle the key challenges.

**Figure 8: How operators are driving value<sup>11</sup>**



1 = not a priority; 5 = high priority



### **Consolidation and other efficiency drivers**

Consolidation is considered the single most valuable way to boost performance, opening the door to scale economies and synergies. Most markets have seen several laboratories acquired by bigger players, to increase efficiency to cope with revenue pressures. But this is not always easy: in the UK, for instance, political opposition has slowed the rate of consolidation in both private and public sectors. Belgium has already witnessed considerable consolidation, with relatively few opportunities for additional acquisitions.

**There will be a further sustained period of lab consolidation in France, with strong local competitive position a key driver of financial performance. However, there will be fewer and fewer opportunities to purchase smaller players.**

– Executive, diagnostics company, Europe

Improving procurement can help reduce costs, by developing organization-wide purchasing policies, reducing supplier lists and establishing volume discounts. A sharper focus on higher-margin activity should also boost the bottom line.



Automation is high on the agenda, to reduce both laboratory and radiology staffing levels and capital costs. Activities such as online bookings and specialist testing are increasingly being handled by machines; probably only the start of a far more sophisticated and extensive evolution.

**We are investing in better machines to improve volume and increasing automation in pre-analytics. Now we have fewer doctors reading tests as we can automate transport of samples from analyzer to analyzer.**

– Executive, laboratory company, Europe



### **New contracts and public sector outsourcing**

According to the executives we spoke to, one of the most popular ways to improve performance and raise volumes has been to target new contracts (for example, with public hospitals). As an illustration, many smaller hospitals might lack the scale and be operating expensive imaging and laboratory services at low utilization levels. Private diagnostics companies could take over this work and offer a wider range of specialized services to improve cost, timeliness and quality.

However, the chance to outsource is likely to be impacted by the culture of a particular hospital, as a North American respondent observes: “It is dependent upon the desire from medical centers and hospitals, as some wish to avoid sending out lab testing, preferring to do it in-house. The more business-oriented ones, on the other hand, are outsourcing.”



### Diversification, specialization and new income streams

3.5

Diversification is another potential route to new revenue. By consolidating imaging and laboratories into a one-stop service, with easy access, companies could offer cardio, endoscopy and screening, in addition to imaging. Some are trying to boost R&D efforts by forming joint ventures and/or partnerships with smaller, innovative players, to improve speed-to-market. And others again are outsourcing to lower-cost countries (e.g. through tele-radiology) to preserve margins. Any attempts to diversify may, however, be constrained by market practices or regulation.



3.5

As home markets prove increasingly challenging, larger operators are looking to new and faster growth diagnostics markets. Good examples in recent years include entry into the Middle East

by players such as Labcorp, Synlab, Cerba and Unilabs. The Middle East, South America and parts of Africa and South East Asia all hold promise.



3.7

Specialization of services is another popular strategy, in particular to expand into areas like genetics and naturopathic medicine.

**We will continue to offer services to sicker people but also to healthy people as a personalized 'B2C' service.**

– Executive, laboratory company, Europe

Consumer health is a further expanding and often-untapped field for diagnostics, with the potential to offer testing for the 'worried well', including home-based kits linked to lifestyles (such as exercise regimes and diet – possibly linking into wearable devices), blood testing and food intolerance. Marketing directly to consumers is a relatively new direction for many diagnostics companies, calling for new skills.

Other diversification options include animal health and veterinary testing. For example, Cerba is one of a number of business who have gone down this route. Again, in a new area, diagnostics companies would need to build new types of relationships with customers. However, the animal health testing market is unregulated, so sales and marketing would be direct to the consumer/business.



3.6

### Rethinking communications and customer experience

Most diagnostic companies we spoke to say they have tried to step up their communication efforts.

Life sciences companies offer doctors' visits to laboratories, discussions over new tests, and workshops and training – something that the diagnostics sector could emulate on a larger scale than at present.

Respondents believe it is important to have commercial individuals that can work closely with doctors to understand how services could be improved.

**We follow the transparency code, organizing permissible communication campaigns like workshops, and congresses that physicians pay to attend. We also engage doctors digitally to carry out surveys, and build a community of practitioners.**

– Executive, diagnostics company, Europe

The move to consumer diagnostics could also open up opportunities to educate the public on the value of early testing, in conjunction with a healthy lifestyle.

Like any industry, customer experience – whether business-to-business or business-to-customer – is a major factor in determining perceived value. For those companies eager to improve their brand, a starting point is to systematically record customer experience through simple feedback.

One participating executive from a European provider says his company learned lessons from German diagnostics players, to drive a bigger commitment to speedy, attentive service. In addition to offering a wider range of testing points closer to the customer, they also significantly improve results feedback time.

The introduction of tele-radiology, tele-pathology and other services can make a big difference to speed and efficiency. Australia has witnessed an upsurge in tele-radiology, interpreting the results of scans remotely – possibly even abroad – a practice that some other countries have been slower to embrace. This approach not only helps shift processing to lower-cost markets, but also speeds up results by offering 24/7, out-of-hours service.

But there may be regulatory barriers to overcome, with some health authorities insisting radiologists are located in the home country, with local market qualifications, and patient data remaining in-country. These restrictions notwithstanding, as artificial intelligence (AI) becomes more widespread, such practices can only get faster and more efficient.

Given the limitations on marketing in virtually all geographies, personal relationships help build trust and communicate the value story. It is vital to nurture a reputation as a responsive, flexible, hard-working partner that is easy to work with, with a mutual aim to cut waiting lists and improve outcomes.

Flexible, extended opening hours should also be considered, to fit in with more urgent demands for testing and scanning, combined with a fast turnaround of results – all of which aids clinicians' treatment and decision-making (combined with tele-radiology).

One common criticism is that reports fail to fit in with users' needs, so imaging companies in particular could ensure their local radiologists liaise with clients to produce reports in a format that suits the referring clinician. And, as an additional assurance, they can also audit their own (and potentially their client hospitals') equipment, to demonstrate its high quality and reliability.



### The benefits of becoming a trusted advisor

In many diagnostics organizations, highly qualified laboratory doctors spend much of their time testing and analyzing results – tasks that can usually be performed by more junior staff. But some providers take a different stance, with experienced professionals engaging directly with clients and patients, discussing treatments and potential further tests, and generally acting as trusted advisors. Several European laboratory groups already offer a 24/7 hotline staffed by knowledgeable doctors.

Diagnosticians have a real potential to advance personalized medicine, by using DNA to more accurately predict which drugs are most likely to work for a particular patient. This is a real upgrade on most of today's approaches, which often have some element of 'trial-and-error'. This could be hugely beneficial to patients as well as slashing treatment costs, with the results used to build a database showing which therapies were most effective with different types of conditions.

– Adam Thorpe, Partner,  
Global Strategy Group, KPMG in the UK





2.7

### Headcount and staffing

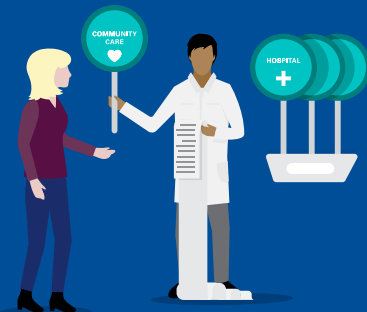
With some exceptions, cutting headcount or wages, or releasing more costly staff, is less common amongst the professionals surveyed. In French laboratories, regulations call for specific staffing ratios, whereas there are fewer such constraints in markets like Germany and Spain, giving greater flexibility.

Arguably, a bigger barrier to personnel cost-cutting is the drive for specialization and quality and the perceived negotiating power of technical and medical teams. Indeed, some companies are fearful of even broaching the idea of reducing people costs. Yet, with staff comprising such a high proportion of the total diagnostics cost base, companies should at the very least consider the opportunities and risks of such a strategy.



### Addressing the talent dilemma

A sector that adopts a more customer-centric outlook should also attract the best talent. Freed from the shackles of performing more automated tasks, highly qualified professional diagnosticians would revel in their roles as trusted advisors and problem-solvers, working with clients to make a real difference to patient health. As diagnostics receives greater recognition for its role in improving health outcomes, younger professionals may be more motivated to join an industry where they feel they can make a genuine difference.





# Five ways to win the value game

Mapping future paths to value.



At a pivotal time for the sector, now, more than ever, it is time for the main players to not just provide value; but also demonstrate this value. In the face of budget constraints and increasing demand for services, diagnostics should play a vital role in the move to preventive medicine, helping the shift from hospital to community care, to save lives and money.

Governments and payer systems continue to pay for diagnostics, and do recognize its role in care pathways. But there is a sense that more could be done to highlight this role. When industry executives were asked how the diagnostics sector is viewed, with some exceptions, most feel their efforts to bring value to healthcare are not fully appreciated. Relationships with government and regulators receive similar lukewarm ratings.

Some believe these perceptions are the result of a negative political bias toward the private sector, with politicians and the public viewing diagnostic companies' margins as a drain on the public purse.

As KPMG in Italy's Alberto De Negri notes: "Governments need to make savings and diagnostics companies can

potentially be seen as easy targets, also based on the perception that in some cases providers might actually contribute to inappropriate volumes of care."

**There's a lack of recognition of imaging's role in population health management. By coordinating imaging and pathology testing, clinicians can make better decisions on acute interventions. We lack an economic analysis on how we help get people back to work sooner, and therefore contribute to society.**

– Executive, imaging company, Europe

A further challenge is the 'invisibility' of laboratory diagnostics, where patients do not see the work (unlike imaging, where they interact with the machines).

**Most people accept diagnostics as a dependency, but wouldn't recognize it as material or fundamental to moving the patient pathway.**

– Executive, diagnostics company, Europe

## How operators should start demonstrating value.

In a world where margin pressures are increasing, and 'easy win' economies are being used up, how can international diagnostics players prosper? And what are the opportunities to innovate and enhance services, in order to gain competitive advantage? We have already discussed some of the strategies currently in play – notably inorganic growth through acquisition – but there are a number of further, exciting options.

Equally importantly, how can diagnostics companies, and the industry as a whole, demonstrate the value they deliver, in a credible way, to cement their position as vital players in the healthcare value game?

In this final section, we highlight five common themes that could help diagnostics companies – and, indeed, the industry as a whole – to start winning the value game.



### **Partner with the wider health system – including the public sector**

Well-publicized pressures on public health budgets create openings for diagnostics companies to take some of the strain. By using the private sector to provide additional capacity to reduce waiting lists and backlogs, public hospitals could work within their existing capacity and pass on overflows. This might, for example, involve setting up a diagnostic imaging service in a hospital car park, offering a complementary service to the in-house lab, or making efficient use of private providers' resources.

**In the UK, the private sector provides much needed additional capacity and access to the NHS. We need to work towards a more collaborative relationship between public and private sector provision.**

– Jason Parker, Partner,  
Head of Healthcare, KPMG in the UK

In addition, many national health providers struggle to find the finance to maintain and replace old imaging equipment. Imaging companies could expand to a broader managed service, offering state-of-the-art equipment that both increases utilization levels and integrates diagnostics

and other hospital services. Several players have started to maintain equipment (including other manufacturers' equipment) for public hospitals and clinics, and provide staff.

Under-utilization of scanners is another major inefficiency in many markets. One way to use up more capacity is to service multiple hospitals, making a wider range of tests available for general practitioners and patients. This is most notable in markets where the private sector has made inroads into public imaging services (like the UK and Italy).

The strain on government finances in many countries is likely to accelerate the trend towards private provision – not just in imaging but also, increasingly, in medical laboratories.

**The better diagnostics players are providing solutions to healthcare systems through additional capacity with state-of-the-art technologies, lower unit costs and reducing waiting lists. This is an excellent way to demonstrate value-add and has measurable outcomes which highlight the value-add.**

– Alberto de Negri, Partner,  
Head of Healthcare, KPMG in Italy



### **Friends – not replacements**

When working with public health systems, outsourcing should be presented as a partnership that augments the provider's services – and not as a 'superior' private sector alternative. In this way, diagnostics companies can emphasize the collaborative nature of the relationship, where they jointly problem-solve to address critical healthcare challenges.



### **Evolve healthcare models – including community care**

A number of health systems are attempting to reduce punitively high hospital costs by moving care into the community, which presents some exciting openings for diagnostics. By scanning in local clinics and GP practices, companies can service multiple hospitals and optimize capacity, while patients get a faster, more convenient service, saving time and cost by avoiding hospital visits.

Laboratories have tended to get more involved in community care than imaging operators, but the latter are starting to play a bigger role, especially in countries like the UK.

Australia already has numerous suburban private clinics for laboratory testing and imaging. These are especially convenient for blood tests, enabling patients to drop in without an appointment. A similar model exists across France and in parts of Belgium.

One emerging concept (notably in Italy and US) is the 'medical village' (also known as a 'polyclinic') – a medical community of general practitioners (GPs), specialists, nurses, diagnosticians, and possibly even dentists. Often based in out-of-town shopping malls or other community centers, such facilities offer many services typically associated with hospitals, but at a lower cost and closer to the user. With a range of specialists available in a single location, patients avoid long waiting periods and can sometimes be referred to relevant practitioners on the same day.



### **Innovate and provide new solutions**

By investing in R&D, it may be possible to come up with new and more valuable forms of testing. Non-invasive pre-natal testing (NIPT), where there is less chance of harming the unborn child, has made a significant difference to expectant mothers. New forms of cancer screening are also emerging, which can detect diseases earlier and improve the prospects of recovery.

**We are positioning ourselves in histopathology and genetics. The growth in genetics is 15-25 percent a year, and histopathology is involved in more and more surgical interventions every day – using samples from surgery – and growing at 10 percent. By moving into these areas we can offer a broader scope of opportunities to customers.**

– Executive, laboratory and imaging company, Europe

Genetics is, as a European diagnostics executive notes, "...an unsecure bet. But we must invest as it's different to what the lab business has known before, offering innovative solutions. We need an enormous amount of data, which means investing in hardware and infrastructure."

Diagnostics also has potential to advance personalized healthcare, by helping physicians build a more specific picture of patients' unique medical profiles.

**A lot of innovation is coming from the pharma industry, particularly in the field of personalized medicine. All of a sudden we're doing analytics for lots of new products.**

– Executive, laboratory company, Europe

Ultimately, by only offering diagnostics, companies risk being viewed as commodity players competing on price alone. By playing a bigger role in treatment regimes, they can proactively identify patients at risk, carry out more frequent tests, and build a body of evidence. This means integrating themselves more deeply into medical practices and being part of the care pathway, finding ways to better serve doctors – such as call center services that include out-of-hours interpretation of results.

**We can deliver better services to the customer, by bundling everything into a one-stop-shop.**

– Executive, diagnostics company, Europe

As Frédéric Thomas, Partner, Head of Life Sciences and Healthcare, Global Strategy Group, KPMG in France says: “Diagnosticians must gain greater influence over clinical decisions. But they can’t do this if they’re spending 90 percent of their time sitting behind machines and responding to prescriptions. They should be managers for chronic patients. It’s not unfeasible to imagine today’s players expanding into genomics and genetics, wellness programs, e-health solutions, naturopathy, and even diversifying out of health into logistics and retail health.”



**Make more of data to demonstrate diagnostics’ value and enhance care**

Arguably the most effective way to show value is to produce clear and credible data on the wellbeing and survival rates of patients as a result of frequent, early diagnostics. For example, do nations that screen women more frequently have better breast cancer survival rates? The statistics could also highlight accompanying savings in treatment costs, as well as economic value measures like productivity. With a few exceptions, these figures do not exist as yet, either on a national or international scale.

However, building a body of evidence on performance is unlikely to be easy, as it requires a clear link between diagnosis and clinical outcomes, and may call for detailed studies of downstream healthcare costs, in conjunction with health providers.

**We’re looking for research showing the benefit of diagnostics, to make the case for going for a scan rather than waiting. By coordinating imaging and pathology tests, we can identify what you need to treat, and advise whether acute intervention is required. There is a lack of recognition of imaging in population health management, and economic analysis should cover issues like getting people back to work sooner.**

– Executive, imaging company, Europe

Reporting how diagnostics impacts outcomes and saves money for the health system could also help counter political opposition to private diagnostics companies.

Data can also contribute to better services. Information on patients – both for individuals and population trends – is an under-utilized resource, and many diagnostics companies are looking at, and investing in, their data and analytics capabilities. They can help physicians identify patterns of usage – which may include unnecessary testing – and their ordering patterns vis-à-vis their peers. For patients, information on their condition can enable greater self-care, all of which improves the customer experience. And by working in partnership with pharmaceutical companies, diagnostics players can use data to enhance the shift to personalized medicine.

**We see massive possibilities from big data for imaging recognition. Companies have so much data and should be using this to look at patterns that can benefit patients and physicians’ decision-making.**

– Executive, diagnostics company, Europe

Looking through a data lens can ultimately transform the overall business model, turning diagnostics companies into health information providers that are at the forefront of developments like genetics and molecular science.



### Highlighting the link between scanning and cancer survival

One of the therapeutic areas where diagnostics can make a significant difference is cancer, with a number of studies of breast cancer suggesting a strong link between volume and frequency of scans and national survival rates. Though not in itself a direct cause and effect, we note that countries like the UK, Spain and Portugal all carry out fewer than average scans per 1000 members of the population – and have correspondingly lower survival figures. In Belgium, Germany and the US, the reverse is the case.<sup>12,13,14,15,16,17</sup>



### Engage differently with regulators

Finally, relationships with regulators are a critical element in the value game, to avoid being forced into a constant defensive and reactive stance. Some of the diagnostics professionals we spoke with feel the industry's trade bodies could be more consistent and proactive in their lobbying activities and general relationships with regulatory authorities. A strong and unified industry body should help enormously with spreading the message and demonstrating value. And executives should also build personal relationships with appropriate bodies.

Going a step further, diagnostic companies should even pro-actively participate in population health reforms introduced in some regional environments, involving value-based payment, using their growing data and analytics to fuel such developments.

**We hold regular meetings with government and regulation authorities, to scale the challenge and ascertain their needs and motivations. At the same time, we're trying to meet the targets and requirements, to maintain a pleasant and fair dialogue.**

– Executive, diagnostics company, Europe



# Closing thoughts for CEOs and investors

## Where does your organization sit on the value game maturity index?

The diagnostics market is changing fast, and laboratory and imaging companies have some tough decisions to make to avoid being caught in a commodity trap. A tremendous opportunity exists to deliver higher value services, and at the same time shift the industry's perception from 'white label' third party supplier, to a

'premium brand' that is an innovative contributor to better healthcare, by enhancing prevention and early treatment and leading the change to personalized medicine. To survive and stay ahead of the value game, CEOs should address the following key strategies and consider their organization's maturity levels in each of these areas:

### Surviving in the value game



Low maturity
 High maturity

## Winning in the value game

### Partner with the wider health system – inc. the public sector

- — Limited interaction with entities outside your core business
- ▼
- 
- ▲ — Managed service to multiple hospitals/other care providers
- — Record of delivering value in cost, speed, investment and quality
- Considered by many as long-term partners

### Evolve healthcare models – including community care

- — Traditional diagnostic supplier
- ▼
- 
- ▲ — Actively involved in community care
- — Embracing evolving models for growth and footprint

### Innovate and provide new solutions

- — Little change in tests and services panel over past 5 years
- ▼
- Do not expect fundamental change in next few years
- 
- ▲ — Adopting new forms of testing and a wider role in healthcare value chain
- — Investing in capabilities to 'future proof' business

### Make more of data to deliver and demonstrate diagnostics' value

- — Data used to run your business and interactions with clients/patients
- ▼
- 
- ▲ — Investing in data capabilities for clinical decision-making and population health strategies
- — Use data to demonstrate value
- Engage differently with industry stakeholders using data
- Growing IT investment

### Engage differently with regulators

- — Infrequent contact with regulators
- ▼ — Wait anxiously for latest regulatory changes and revised tariffs
- 
- ▲ — Clear regulatory strategy
- — Abreast of latest thinking
- Integral part of debate over diagnostics' role in public health

◦ Low maturity

▲ High maturity

# Reader comments

**Actions:**

**Share with:**



# Sourcing & notes

1. The (True) Value of Laboratory Medicine, The Pathologist, 20 November 2017. (<https://thepathologist.com/issues/1015/the-true-value-of-laboratory-medicine/>)
2. Federal Register Volume 79, Number 25, 26 February 2014. (<https://www.gpo.gov/fdsys/pkg/FR-2014-02-26/pdf/2014-04229.pdf>)
3. National Health Service Databases, KPMG Analysis.
4. Ibid.
5. KPMG proprietary survey of 18 senior diagnostics professionals conducted specifically for this piece and not publicly available.
6. Ibid.
7. Amadeus, annual reports, KPMG analysis.
8. Ibid.
9. KPMG proprietary survey of 18 senior diagnostics professionals conducted specifically for this piece and not publicly available.
10. Clinical radiology, UK workforce census 2016, Royal College of Radiologists, October 2017. ([https://www.rcr.ac.uk/system/files/publication/field\\_publication\\_files/cr\\_workforce\\_census\\_2016\\_report\\_0.pdf](https://www.rcr.ac.uk/system/files/publication/field_publication_files/cr_workforce_census_2016_report_0.pdf))
11. KPMG proprietary survey of 18 senior diagnostics professionals conducted specifically for this piece and not publicly available.
12. Benefits and harms of breast cancer screening: a systematic review, Journal of the American Medical Association, October 2015. (<https://www.ncbi.nlm.nih.gov/pubmed/26501537>)
13. The benefits and harms of breast cancer screening: an independent review, British Journal of Cancer, June 2013. (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3693450/>)
14. Pan-Canadian study of mammography screening and mortality from breast cancer, Journal of National Cancer Institute, October 2014. (<https://www.ncbi.nlm.nih.gov/pubmed/25274578>)
15. Breast cancer mortality in participants of the Norwegian Breast Cancer Screening Program, Cancer, 1 September 2013. (<https://www.ncbi.nlm.nih.gov/pubmed/23720226>)
16. Ten common types of cancer: Oesophagus, Stomach, Colon, Rectum, Liver, Pancreas, Lung, Melanoma of the skin, Breast, Cervix, Ovary, Prostate.
17. OECD, CONCORD-3, March 2018. (<http://chronicconditions.lshtm.ac.uk/2018/01/31/global-surveillance-cancer-survival-concord-programme/>). CT and MRI scan data sometimes excludes scans performed in ambulatory care settings.
  - a. Average across four European countries. In order to compare slightly different data sources more easily we have worked back from Year 6 – which is the most recent information available for each sample market.
  - b. Ibid.
  - c. Financial data for latest available 4-year period. Total sample of 55 diagnostic services European companies
  - d. Ibid.

# Related KPMG Thought Leadership

## **Medical devices 2030, KPMG International.**

January 2018

<https://home.kpmg.com/xx/en/home/insights/2018/01/medical-devices-2030.html>

## **What works: The triple win, KPMG International.**

January 2018

<https://home.kpmg.com/jm/en/home/insights/2018/01/what-works--the-triple-win.html>

## **Customer experience in the ageing sector, KPMG in Australia.**

May 2017

<https://home.kpmg.com/au/en/home/insights/2017/06/customer-experience-aged-care.html>

## **The dental chain opportunity, KPMG International.**

May 2017

<https://home.kpmg.com/xx/en/home/insights/2017/05/the-dental-chain-opportunity.html>

## **Golden Opportunities from the Graying Population, KPMG International.**

May 2016

<https://assets.kpmg.com/content/dam/kpmg/pdf/2016/07/kr-gtl-golden-opportunities-from-the-graying-population.pdf>

## **What works: Partnerships, networks & alliances, KPMG International.**

January 2016

<https://home.kpmg.com/xx/en/home/insights/2016/01/what-works-partnerships-networks-alliances.html>

# Healthcare practice contacts

## Chairman

### Global Health Practice

#### Mark Britnell

T: +44 20 7694 2014

E: mark.britnell@kpmg.co.uk

## Argentina

### Mariano Sanchez

T: +5411 4316 5774

E: marianosanchez@kpmg.com.ar

## Australia

### Liz Forsyth

T: +61 2 9335 8233

E: lforsyth@kpmg.com.au

## Austria

### Johann Essl

T: +43 732 6938 2238

E: jessl@kpmg.at

## Belgium

### Emmanuel De Moyer

T: +32 2 708 4486

E: edemoyer@kpmg.com

## Brazil

### Leonardo A Giusti

T: +5511 3940 3213

E: lgiusti@kpmg.com.br

## Canada

### Gordon Burrill

T: +1 416 777 3061

E: Gburrill@kpmg.ca

## Central/Eastern Europe

### Mirosław Proppe

T: +48 604 496 390

E: mproppe@kpmg.pl

## Chile

### Santiago Barba

T: +562 2 798 1507

E: santiagobarba@kpmg.com

## Colombia

### Oscar Galindo

T: +57 (1) 6188000

E: ogalindo@kpmg.com

## Czech Republic

### Zdeněk Tuřma

T: +420 222 123 390

E: ztuma@kpmg.cz

## Denmark

### Marten Koch

T: +4550879608

E: mokoch@kpmg.com

## Finland

### Pasi Tyyvi

T: +358 20 760 3089

E: Pasi.tyyvi@kpmg.fi

## France

### Benoit Pericard

T: +33 1 55 68 86 66

E: benoitpericard@kpmg.fr

## Germany

### Volker Penter

T: +49 30 2068 4740

E: vpenter@kpmg.com

## Hong Kong/China

### Jenny Yao

T: +86 108 508 7074

E: jenny.yao@kpmg.com

## Iceland

### Svanbjörn Thoroddsen

T: +3545456220

E: sthoroddsen@kpmg.is

## India

### Nilaya Varma

T: +91 98 100 85997

E: nilaya@kpmg.com

## Indonesia

### Wah Lee Ho

T: +62 21 574 0877

E: WahLee.Ho@kpmg.co.id

## Ireland

### Paul Toner

T: +353 1410 1277

E: Paul.toner@kpmg.ie

## Israel

### Haggit Philo

T: +972 3 684 8000

E: hphilo@kpmg.com

## Italy

### Alberto De Negri

T: +39 02 6764 3606

E: adenegri@kpmg.it

## Japan

### Keiichi Ohwari

T: +81 3 5218 6451

E: keiichi.ohwari@jp.kpmg.com

## Malaysia

### Yeekeng Lee

T: +60 3 7721 3388

E: leeyk@kpmg.com.my

## Mexico

### Ignacio Garcia Tellez

T: +525552468300

E: igarciatellez@kpmg.com.mx

## Netherlands

### Anna van Poucke

T: +31 20 656 8595

E: vanpoucke.anna@kpmg.nl

## New Zealand

### Souella Cumming

T: +6448164519

E: smcumming@kpmg.co.nz

## Norway

### Clas G. Waagø-Hansen

T: +4797027638

E: wencke.vandermeijden@kpmg.no

## Philippines

### Emmanuel P. Bonoan

T: +63 2 885 7000

E: ebonoan@kpmg.com

## Portugal

### Fernando Mascarenhas

T: +244227280102

E: femascarenhas@kpmg.com

## Romania

### Maria Elisei

T: +40 37 237 7800

E: melisei@kpmg.com

## Saudi Arabia

### Sammy Ahmed

T: +966564606445

E: sammyahmed@kpmg.com

## Singapore

### Satyanarayan Ramamurthy

T: +6582016155

E: sramamurthy@kpmg.com.sg

## South Africa

### Anuschka Coovadia

T: +27837878470

E: anuschka.coovadia@kpmg.co.za

## South Korea

### Kyung Soo Park

T: +82 2 2112 6710

E: kyungsoopark@kr.kpmg.com

## Spain

### Candido Perez Serrano

T: +34 914 513091

E: candidoperez@kpmg.es

## Sweden

### Stefan Lundstrom

T: +46 8 7239652

E: stefan.lundstrom@kpmg.se

## Switzerland

### Michael Herzog

T: +41 44 249 31 53

E: michaelherzog@kpmg.com

## Taiwan

### Jarret Su

T: +88 628 101 6666 x 15942

E: Jarretsu@kpmg.com.tw

## Thailand

### Nawarat, Nitikeatipong

T: +6626772319

E: nawarat@kpmg.co.th

## Turkey

### Hakan Orhan

T: +90 212 316 6000

E: horhan@kpmg.com

## UK

Private Sector

### Roger Widdowson

T: +44 121 609 6161

E: roger.widdowson@kpmg.co.uk

Public Sector

### Jason Parker

T: +44 20 7311 1549

E: jason.parker@kpmg.co.uk

## US

Govt. Health

### Paul Hencoski

T: +1 212 872 3131

E: phencoski@kpmg.com

HLS Strategy

### John Matthews

T: +1 312 665 2814

E: johnmatthews@kpmg.com

Public and Private Health

### Ed Giniat

T: +1 312 665 2073

E: eginiat@kpmg.com

## Vietnam and Cambodia

### Michal Jacob

T: +84 283 821 9266

E: michaljacob@kpmg.com.vn

# Authors

## Adam Thorpe

Partner

Global Strategy Group

KPMG in the UK

E: adam.thorpe@kpmg.co.uk

T: +44 20 7694 8077

## Frédéric Thomas

Partner

Head of Life Sciences and  
Healthcare

Global Strategy Group

KPMG in France

E: fredericthomas@kpmg.fr

T: +33 15 568 3430

## Alberto De Negri

Partner

Head of Healthcare

KPMG in Italy

E: adenegri@kpmg.it

T: +39 0267 6431

## Evelyn Smith

Global Healthcare Sector

Executive

Global Healthcare team

KPMG International

E: evelyn.smith@kpmg.co.uk

T: +44 20 7311 2813

[kpmg.com/strategy](https://kpmg.com/strategy)

[kpmg.com/healthcare](https://kpmg.com/healthcare)



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2018 KPMG International Cooperative (“KPMG International”), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International.

Designed by **CREATE.** | CRT099565A | July 2018



## About KPMG’s Global Strategy Group

KPMG’s Global Strategy Group works with private, public and not-for-profit organizations to develop and implement strategy from ‘Innovation to Results’ helping clients achieve their goals and objectives. KPMG Global Strategy professionals develop insights and ideas to address organizational challenges such as growth, operating strategy, cost, deals, digital strategy and transformation.



## About KPMG’s Diagnostic team

KPMG’s professionals work with many of the world’s leading diagnostics players, as well as numerous smaller, specialized providers. With an in-depth knowledge of local, regional and broader industry conditions and trends, we advise member firm clients on a wide range of challenges including strategy, operational efficiency, sales and marketing, M&A, integration, alliances and partnerships. We appreciate the key role played by diagnostics companies – both laboratories and imaging – in improving health outcomes and raising efficiency.