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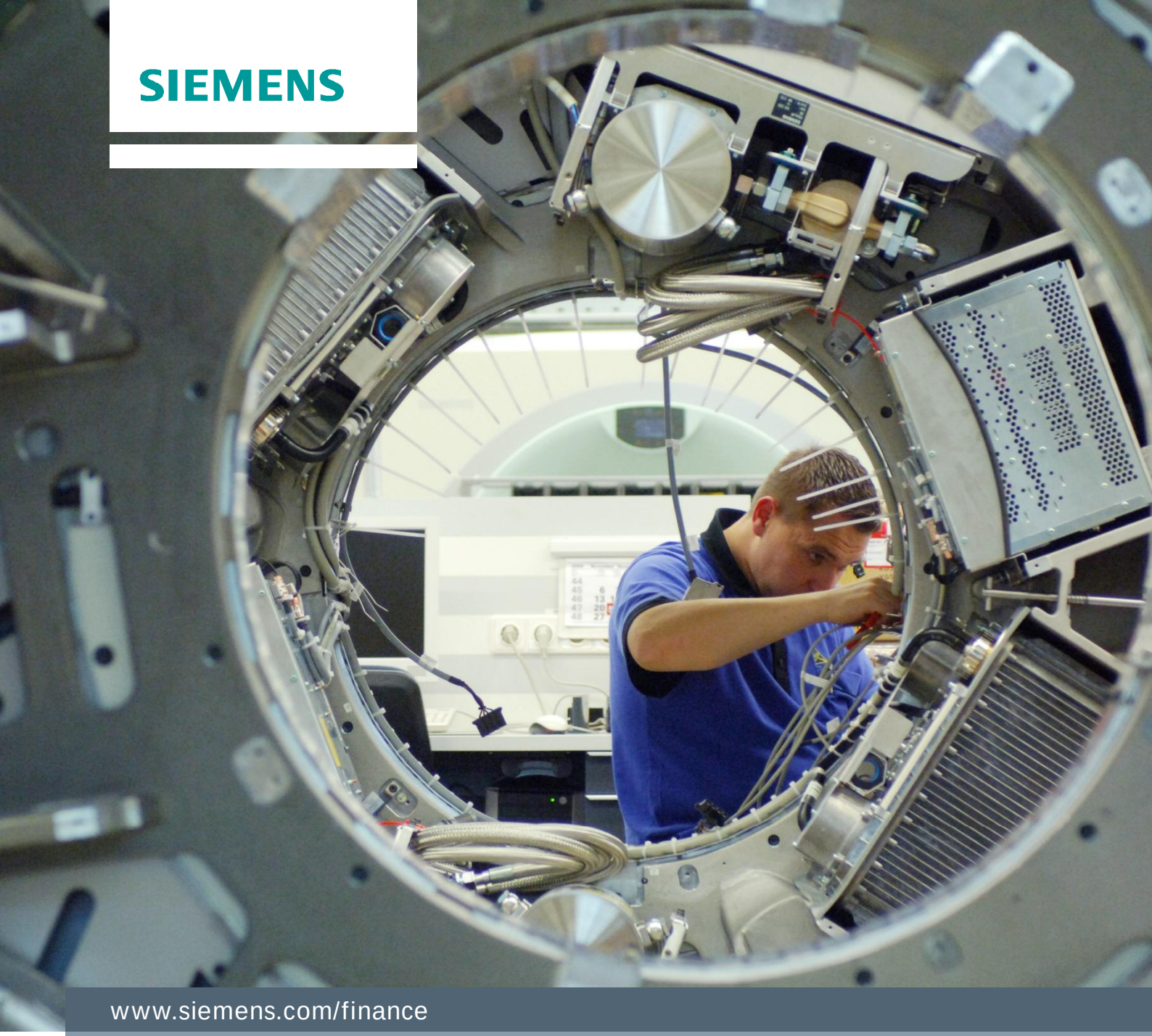

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Rising to the challenge

A research study into the role asset finance is playing to help healthcare institutions around the world meet the challenge of medical technology investment

Financial Services

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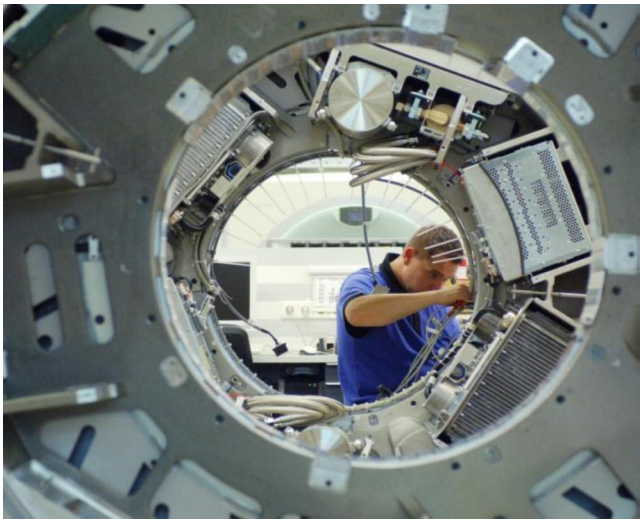


Key Findings

- 68% of the global top 40 medical equipment manufacturers observe that they have seen an increasing demand for healthcare equipment finance from their customers over the last two years
- The overall penetration rate of asset finance in global medical equipment sales over this period has grown annually by an average of nearly 7%
- No respondent reported any decline in the demand for healthcare equipment finance over the last two years. Respondents either reported growth or no change
- Looking to the future, over 60% of respondents believe that the proportion of their sales financed through asset finance will continue to rise steadily over the next two years, by an estimated average of more than 3% per annum
- This increasing penetration rate for medical equipment finance should be viewed in combination with projected annual growth rates for the medical device market of around 7% per annum[1] - meaning the overall growth in the adoption of asset finance is approaching levels of 10%
- Although the last two years saw a broadly consistent rise in medical equipment finance demand from public and private sector healthcare organizations, the growth in the next two years is expected to be stronger in private healthcare institutions
- 64% of respondents report that healthcare organizations globally are feeling a squeeze on their capital budgets
- 57% report an increase in demand from healthcare organizations for tailored financing to acquire new equipment, reflecting how these organization are turning to asset finance to overcome these capital budget pressures
- And in a related finding, 64% of respondents observe that their customers are increasingly using the concept of Total Cost of Ownership in their business case justifications for equipment acquisition, showing a recognition that other costs (service, maintenance, failure disruption, energy consumption) should also be considered in determining whether to retain or replace older equipment

[1] Sources: Espicom, World Medical Market to 2017; World Medical Market to 2018

Introduction

Healthcare systems across the world continue to labor under financial pressures. In mature healthcare systems, healthcare delivery is coming under strain as demand rises, whether as a result of aging populations or emerging conditions relating to trends such as increasing levels of obesity (leading to the growing diabetes crisis). In developing healthcare systems, rapid infrastructural growth has led to massive capital demands, as countries strive to make basic healthcare services (and therefore improved health outcomes) more available to the population. These countries are also experiencing growing demands on the healthcare system from increasingly affluent citizens who have become more demanding and are developing previously less common conditions as a result of the changes in lifestyle and diet that come along with their increasing affluence.

One single theme links healthcare delivery in every country in the world and that is the requirement for sustainable financing. Mature economies are struggling to bring the escalating cost of healthcare under control, and are under pressure to introduce significantly greater efficiency into the provision of healthcare. Having observed the escalation in healthcare costs experienced in the West, developing economies are determined to ensure that their growth will not falter and overheat. They are therefore keeping a very keen eye on the levels of debt taken on by healthcare organizations in their countries.[2]

However, a dichotomy exists over medical technology. It is widely acknowledged that up-to-date medical technology enables better health outcomes, reduces the need for expensive invasive surgery, and improves overall diagnostic and clinical efficiency and throughput. Nevertheless, there is a cost to replacing outdated equipment, and devoting capital to such investments can be difficult to justify at a time when frontline services are under pressure to deliver efficiency. Many healthcare institutions have decided the answer is to harness private sector capital, in order to 'pay to use' their equipment, rather than tie up their own scarce funds in depreciating assets. In some technology categories, it also makes little sense to write down an equipment investment over ten years when a significant technology upgrade is likely to come along in the next three to five years.

This paper first describes new research amongst the top 40 global healthcare equipment manufacturers, specifically concerning their views on the role of asset finance in the last two years, and their predictions for the next two years. It then briefly reviews the different performance, development and financial pressures on the healthcare systems in ten countries around the world: China, France, Germany, India, Poland, Russia, Spain, Turkey, the UK and the US. Finally, in the light of these findings, the paper summarizes the size of the financial challenge, the role/benefits of asset finance and the important support that it is giving to affordable high quality healthcare around the globe.

[2] For instance: China Daily Mail, China bans some hospitals from raising more debt, 18 Dec 2012; The Economist, Bridging the fiscal chasm, 22 Feb 2014

The Role Asset Finance is Playing in Medical Equipment Acquisition

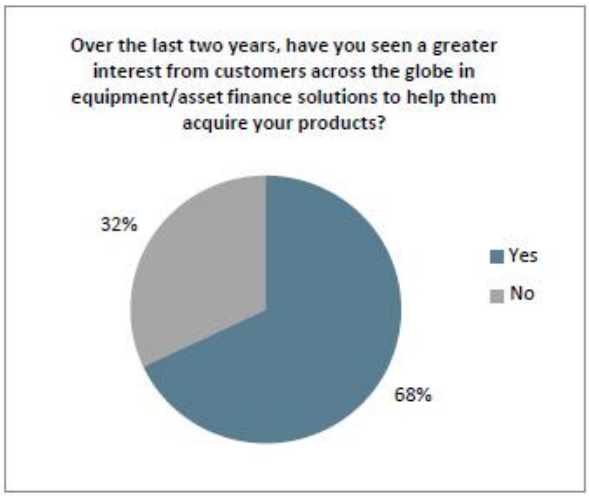
In order to understand global trends in medical equipment financing, Siemens Financial Services (SFS) commissioned research amongst the world's top 40 medical equipment manufacturers – a cohort that represents around 75% of the global medical device market.[3] In each respondent company, multiple interviewees held responsibility either for a region of the world (e.g. the Americas; Europe; etc) or had a global remit.

Asset Finance – Growth, Stability or Decline?

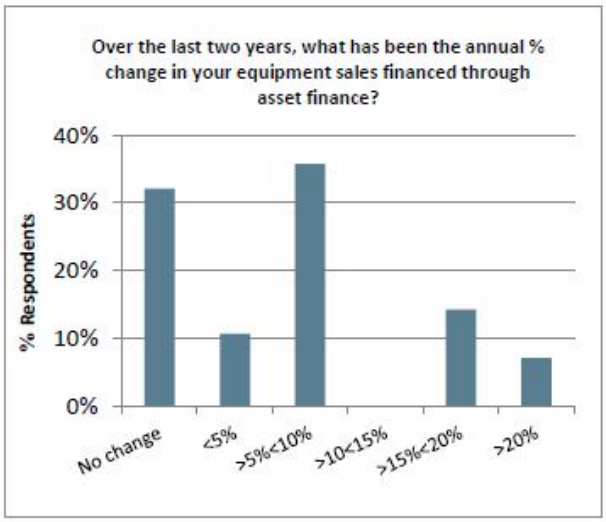
The research quizzed respondents on the recent trends in demand for asset finance from healthcare organizations worldwide, their future projections for this demand, and the country differences in demand for asset finance and its main drivers.

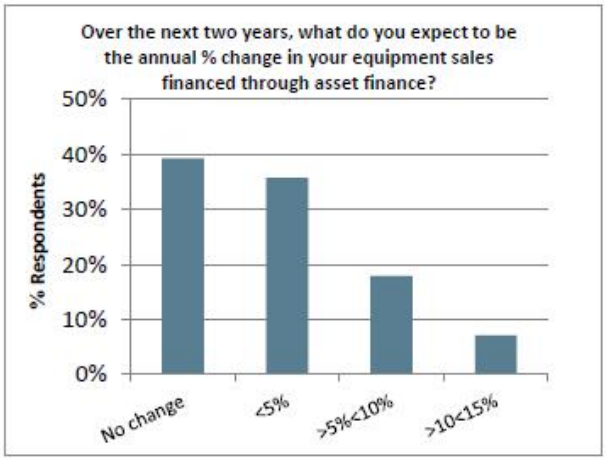
The resulting statistics reveal that:

- 68% of respondents observe that demand for healthcare equipment finance has grown in the last two years
- No respondent reported any decline in the demand for healthcare equipment finance over the last two years. In other words, all respondents either reported growth in finance penetration or no significant change



- The proportion of medical equipment sales financed through an asset finance plan has averaged a 6.9% annual growth over this period
- Looking to the future, 61% of respondents believe that this demand will continue to rise steadily over the next two years, although the penetration of medical equipment finance is expected to grow at a somewhat slower pace (3.1%)[4]

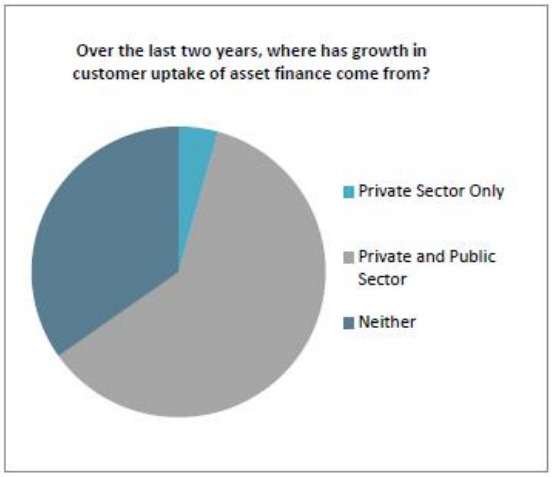


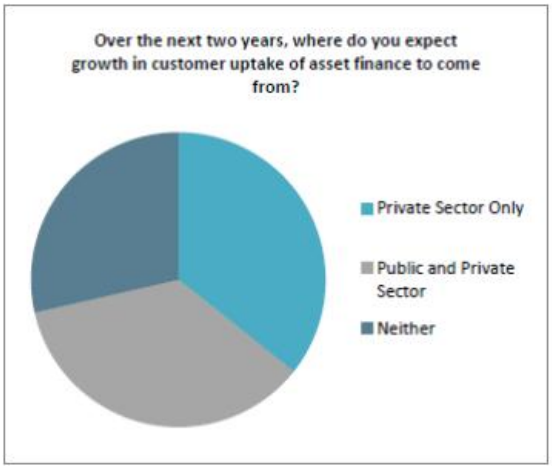


- Although the last two years saw a broadly consistent rise in demand for asset finance from public and private sector healthcare organizations, the next two years are expected to see continued growth in demand from the public sector but substantially higher growth in demand from private healthcare institutions

[3] See: MDDI, Top 40 Medical Device Companies, 17 Oct 2013 – ranked by total revenue; MDO, Top 30 Medical Device Manufacturers, 2013

[4] This research finding is conservatively consistent when compared to outputs on the subject, such as found in Global Industry Analysts, Global Medical Equipment Rental and Leasing 2013





Overall, it is clear from these research findings that asset finance is playing a key and/or an increasingly important role in medical equipment financing. The proportion of medical equipment sales financed through asset finance is either growing, or holding steady, amongst the top manufacturers – a robust indicator of swelling demand for this kind of finance. It would appear that the demand for asset finance has been heightened in the last few years, either as a result of low economic activity in mature economies, or the pressure for capital resources in economies that are rapidly building their healthcare infrastructure. While both of those different kinds of financial pressure may retrench slightly (as western economies recover and as emerging economy growth decelerates), the picture from medical equipment manufacturers is of an expanding use of asset finance, albeit at a slightly slower pace than in recent years.

Where is the Growth Coming From?

Respondents were also asked to nominate the areas of the world where the strongest acceleration in the take-up of medical equipment finance was likely to come from. They were asked to answer this question both in terms of percentage growth, but also in terms of financial volumes. This method of questioning was designed to eliminate strong growth from the smaller asset finance markets.

Clear consensus was seen from respondents' answers, irrespective of individual responsibility for geographical region(s) of the world. Respondents noted that, over the next two to three years, particularly strong demand is expected to come from:

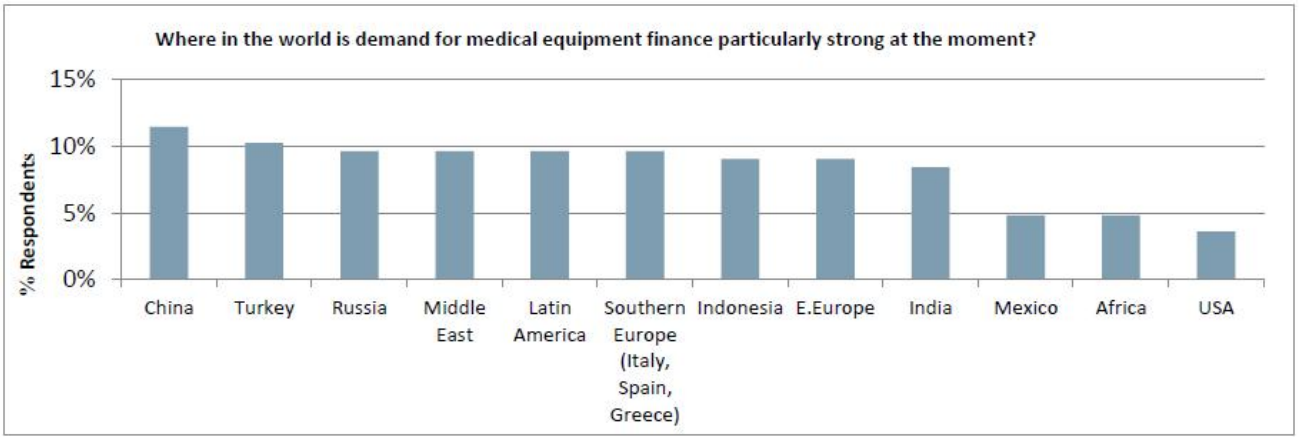
- Tier 1 and 2 hospitals in China[5]
- Russian and Indian private sector hospitals and clinics
- Eastern Europe
- The Middle East and Turkey
- South America (all countries)
- Highly pressurized healthcare organizations in Southern Europe

Affording High Specification Equipment

According to the majority of respondents, clinicians and finance directors contemplating technology investments in mature economies are feeling pressurized to consider the compromise of acquiring equipment that is 'ok for what we need' rather than always 'absolutely top specification'. On the other hand, an overall majority of respondents also emphasized how many of their customers were using asset finance to harness private sector capital, escape from the strait-jacket of limited capital budgets, spread the cost of investment, and thereby still be able to offer improved patients services (quality of care and speed of response) based on higher specification equipment. In other words, asset finance is being viewed by many healthcare organizations as a means to harness the technology they need for the best and most efficient patient outcomes.

Another common observation from respondents was a change in mindset amongst all healthcare institutions across the world (public and private) – moving from the idea of 'owning' medical equipment more towards the notion of 'cost to use' that equipment. In fact, the expression 'cost to use' appears, at least from this research sample, to be in increasingly common usage. This financially sophisticated outlook may be connected to the fact that some respondents noted a gradual shift in investment decisions away from clinicians to finance professionals (e.g. CFOs), except where technological

[5] The Chinese healthcare system is categorized into three tiers. Tier 1 hospitals have fewer than 100 beds, providing basis medical services to their own community. Tier 2 hospitals have between 100 to 500 beds, serving their city and nearby communities. Tier 3 hospitals are very large hospitals with more than 500 beds and are located in major cities. They are the most sophisticated hospitals and are the centers of medical education and research. These best-equipped hospitals provide a high level of medical care and serve patients locally and from distant areas.



advances make such a difference in performance as to offer major performance (diagnostic/clinical outcomes), productivity or safety increments.

Being able to offer clinical services based on correctly specified, up-to-date equipment and technology is critical. Firstly, from a health outcomes point of view, not having access to up-to-date medical equipment is detrimental to patients, clinicians and hospital managers alike. Apart from the size of medical technology inventories, it is widely attested that equipment age and sophistication are also important because ultimately these factors underpin the quality of services[6] and drive improved patient care. Newer, more sophisticated medical technologies can allow for shorter examination or operation times, higher quality output, and can provide the ability to offer additional services. New procedures are in general less invasive and pose less risk for patients. Diagnosis and therapy are more effective and accurate. Modern computed tomography (CT), magnetic resonance imaging (MRI), position emission tomography (PET)-nuclear medicine and angiography medical diagnostic imaging technologies improve the quality of healthcare services and offer many possibilities for rationalization.

From an organizational point of view, having the right equipment specification is also critical. In the private medical sector, healthcare organizations compete for patients and, within certain travelling distance limitations, technology capability is one of the key factors with which to attract patients and the income they bring with them. This consideration is also increasingly pertinent in the public healthcare arena. While reimbursement levels are set by the state, patient choice about where they are treated, with funds following the patient, is already a hallmark of public healthcare provision in France and Germany. This is also becoming a reality in other health systems such as the UK and Poland. Therefore, technological capabilities in these largely public healthcare systems are an increasingly important factor in attracting patients and reimbursement income.

Total Cost of Ownership

Another key factor noted by respondents on the subject of failing to upgrade medical equipment lies in the notion of Total Cost of Ownership (TCO). This approach recognizes that capital outlay is only a fraction of total operating expenses for technology. TCO also takes into accounts administration, maintenance, service, outages (time lost when the equipment fails) and user training etc. A number of sources note that TCO can be many times the initial capital cost of a piece of equipment[7] and that older equipment tends to carry greatly inflated service and maintenance costs.[8] Effective management of total cost of use in practice, especially where equipment service and maintenance are bundled into a fixed monthly charge for the financing period, was identified by most respondents as a major advantage of asset finance for medical equipment acquisition. Hence the research finding that almost two thirds of respondents are seeing an increased focus on Total Cost of Ownership from clients across the world.

[6] See, for instance, Fraser Institute, Old and Outdated Medical Equipment, May/June 2011; also Esmail, Nadeem, and Michael Walker. How Good is Canadian Health Care? An International Comparison of Health Care Systems. 2008 Report.

[7] HFMA, Estimate Less: Pay More, 1 Feb 2013

[8] See various sources in: SFS, The Transformation of Total Cost of Ownership, March 2013

Types of Financing Arrangement

According to the research respondents, asset finance solutions tend to be of two types:

(1) where there are no significant consumable costs, then more standard leasing packages are used;

(2) where relatively costly consumables and soft costs are involved, the finance payments tend to bundle the components, sometimes taking into account the expected volumes/patient throughput.

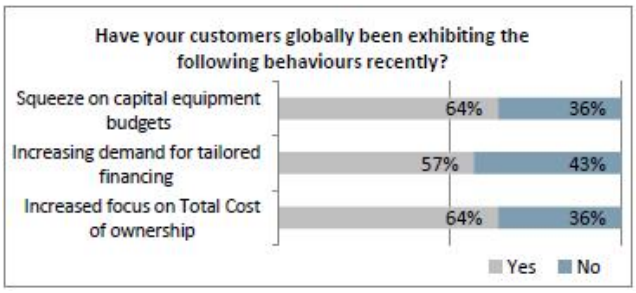
As the cohort of finance professionals in the healthcare sector grows, respondents noted that asset finance propositions are becoming more and more competitive and flexible. At a basic level, pricing of finance has to be demonstrably competitive and is coming in for increasing scrutiny (seen in the context of local prime commercial loan rates – e.g. 18.5% in Turkey and 9.3% in Russia). Of equal importance is the flexibility of plan and specialist tailoring for the healthcare market requirements that financiers can offer, with 57% of respondents noting increasing interest from the healthcare sector in tailored financing packages.

Demand is increasing for:

- combinations of equipment, consumables, software and service;
- set-up period tailored finance (grace periods);
- financing end-to-end clinical or diagnostic processes;
- refinancing deals; and
- rapid finance arrangements to meet tactical favorable taxation opportunities.

The fact that most respondents highlighted take-up of tailored, end-to-end asset financing plans may reflect a growing recognition of the need to address medical technology on the basis of TCO, rather than simply the acquisition cost of a stand-alone piece of equipment.

Such tailored, all-encompassing financing packages tend to favor – according to the survey respondents – the services of specialist financiers (often the financing division of technology firms) who have an in-depth understanding of the assets being financed and how they will be applied to improve and develop a healthcare institution's services and productivity. This allows these specialist financiers to offer flexible repayment terms without increasing risk.



Financing Challenges in Healthcare in Ten Countries across the World

While the research findings described before are applicable to all countries studied in this report, the financial pressures differ in type from country to country. This section briefly reviews the healthcare system in the following ten countries – China, France, Germany, India, Poland, Russia, Spain, Turkey, the UK, and the US. Each healthcare system is described in relation to its individual financial challenges.

CHINA: Since 2009, China has accelerated its reforms to make healthcare more accessible and affordable. By 2013, medical insurance covered 95% of the population, with 265 million people enrolled in the Basic Medical Insurance for Urban Employees (BMIUE), 271 million covered by the Basic Medical Insurance for Urban Residents (BMIUR) and 805 million enrolled in the New Rural Cooperative Medical Insurance Scheme (NRCMS).[9]

However, the semi-marketization reform has left China's public hospitals with serious financial challenges.[10] The authorities, while hugely committed to the goal of universal access to affordable healthcare, is equally keen not to let the rapidly developing system overheat, either in terms of healthcare standards, or in terms of over-leverage.

As healthcare coverage has broadened, the share of patient spending has also declined dramatically. The NRCMS pays for 75% of in-patients' costs once they are admitted to hospital and the BMIUR covers 70% of costs.[11] Yet challenges remain daunting. Even with a proportionately high level of reimbursement, patients suffering critical illnesses may still not be able to afford the difference.

When addressing the 16th National Congress of the All-China Federation of Trade Unions in late 2013, Premier Li

[9] China.org.cn, Healthcare Reform Rolls On, 10 Nov 2013
[10] China Medical News, Roundup, 12 Nov 2013
[11] China.org.cn, Healthcare Reform Rolls On, 10 Nov 2013

Keqiang emphasized the importance of establishing a critical illness coverage system. "There are 3 million people every year who can't afford to pay for the bills when diagnosed with critical conditions despite the reimbursement," he pointed out.[12]

Interestingly, the Chinese authorities see a significant role for the private sector in healthcare developments. At the 18th National Congress of the Communist Party of China (CPC), China renewed its health policies and for the first time the congress report explicitly stated, "We should encourage the development of private hospitals."[13]

So, from a financing perspective, in an atmosphere of rapid development where there are concerns about attracting sufficient volumes of trained clinicians and care professionals, asset finance solutions are providing Chinese hospitals and clinics with an important financing technique that frees liquidity for immediate tactical needs, and efficiently aligns the cost to use of medical equipment with the benefits the institution (and its patients) are gaining from that technology.

FRANCE: The EU has recently said that France, which last year was given two extra years to bring its budget deficit below the EU ceiling of 3% of GDP, was "projected to miss both headline deficit and structural adjustment targets over the entire forecast period."[14]

Nevertheless, progress is being made on the running deficit in the healthcare system. Cost control is a key issue, as the health insurance scheme has faced large deficits over the past 20 years. More recently, however, the health insurance scheme's deficit has fallen, from an annual €10 billion to €12 billion (US$13.5 billion to US$16.2 billion) in 2003 to €7.7 billion (US$10 billion) in 2013.[15] Two-thirds of all hospital beds are in government-owned or not-for-profit hospitals (all university hospitals are public). The remaining third of hospitals are private, for-profit clinics, owned either by individuals or increasingly by large health corporations. Rationalization of medical services is a key theme in France, where patients traditionally have had many options in determining their care. New measures recently were introduced to control spending on medical devices, similar to those implemented on pharmaceuticals.[16]

France's Social Security Finance Bill (PLFSS) for 2014 foresees major budgetary savings. In particular, the French government tabled a legislative text which would limit the national target for year-on-year spending growth in

expenditure on public healthcare (ONDAM) for 2014 at 2.4%. The new target would considerably limit expenditure growth compared to the ONDAM 2013 target of 2.7%.

France also has another challenge. The country continues to lag behind its European neighbors in some high technology fields, most notably imaging and radiotherapy equipment.[17] A second five-year plan to increase capabilities to cope with cancer has now been launched in France. The state-mandated scheme seeks to boost the number of MRI scanners and increase the number of specialists, including radiotherapy technicians. This will not only increase big-ticket capital expenditure, but also recurrent support spending.[18]

In short, rationalization pressures, when combined with a desire to invest in higher levels per capita for certain medical technologies, means that French institutions and private clinics need to access efficient financing tools, such as asset finance techniques, so that precious funds are not tied up in outright purchases.

GERMANY: The German healthcare system is recognized worldwide as providing good quality care, short waiting lists and attentive service.[19] Yet demographic change is forcing the German government to deal with escalating demand for health services in a country where the average age is 45 (the oldest population in Europe). There are currently a record 2.5 million elderly Germans in need of special care and too few healthcare personnel to take care of them. Despite its economic outperformance in comparison with its European neighbors, government funding for hospitals has remained capped in recent years.[20] Purchasing managers of public facilities often feel constrained to maintain existing

[12] ibid
[13] China Medical News, Roundup, 12 Nov 2013
[14] RFI, France to miss deficit reduction targets, 11 Feb 2014
[15] The Commonwealth Fund, International Profiles of Health Care Systems, 2013
[16] European Medical Device Technology, Western Europe's Medical Device Market under increasing Pressure, 24 July 2013

[17] OECD Health Statistics 2013
[18] ibid
[19] Civitas, Healthcare Systems: Germany, (update) January 2013
[20] Die Welt, New German government sets priorities for 2014, 29 Dec 2013

equipment, rather than acquire newer technology. This contributes to one of the key trends in Western Europe's medical device sector: extension of the replacement cycle.[21] In some cases, public hospitals running at a deficit might not have the financial means to replace aging equipment and hence have to send their patients to bigger hospitals for diagnostic analysis. Such larger-sized hospitals serve as centers of competence where demand for diagnostic requirements from the neighboring local areas can be met at one central location.

Where Germans are treated is changing too. Anticipating the draining effects of an aging population, Germany has implemented a series of major healthcare reforms over the past 20 years. The new Healthcare Provision Act took effect at the beginning of 2012. The legislation aims to deliver more efficient use of resources by offering patients treatment as close to their home as possible. Financial incentives will encourage doctors to operate in rural areas, and more telemedicine and mobile services are expected to be employed throughout the sector.

Despite all this, the German healthcare system may be seen as demonstrating resilience, at a time when others in Western Europe are straining under the pressure. National insurers have even produced a surplus of billions of Euros recently.[22] No wonder the Federal Ministry of Health says the statutory health insurance system is in relatively good financial shape. For instance, analysis released by the Federal Statistics Agency indicated a slowdown in the growth of hospital inpatient procedures.[23]

Nevertheless, competition in various sectors of healthcare is something that Germany values.[24] Individuals have free choice among general practitioners, specialists, and, if referred to inpatient care, hospitals. A central tenet health reform legislation enacted in 2007 aimed to encourage competition in healthcare services, leaving institutions with the dilemma of acquiring up-to-date, high specification equipment that attracts patients, but also needing an affordable and transparent means (such as leasing) to afford that equipment and spread the financial burden of acquisition.

INDIA: Between 2004, when the United Progressive Alliance (UPA) coalition came to power, and today, expenditure on public health has almost quadrupled. This is the result of major programs such as: the National Rural Health Mission (NRHM), which has substantially reduced infant mortality; early and periodic health screening of children through the Rashtriya Bal Swasthya Karyakram; increased institutional deliveries through skilled birth attendants with the Janani Suraksha schemes.

Maternal mortality ratio of India also reduced by 50% between 2000 and 2010. Providing government-run health insurance to below poverty line (BPL) workers and their families through Rashtriya Swasthya Bima Yojana (RSBY) is yet another milestone of healthcare reform, protecting BPL households from major health expenses that could wipe out their life's savings and, since its inception in 2008, around 35 million families have enrolled in the programme.

Polio has been targeted with a massive immunization and awareness programme. Life expectancy has increased by five years over the last decade. And continuous phases of activity have been contributing to the ultimate goal of universal health coverage.

The private sector has also emerged as a vibrant force in India's healthcare industry,[25] lending it both national and international repute. Private sector's share in healthcare delivery is expected to increase from 66% in 2005 to 81% by 2015. Private sector's share in hospitals and hospital beds is estimated at 74% and 40%, respectively.

There is substantial demand for high-quality and specialty healthcare services in larger cities.[26] To encourage the private sector to establish hospitals in these cities, the government has relaxed the taxes on these hospitals for the first five years.

Private sector growth is strong, but frequently hits a financing ceiling as facilities are developed and expanded. Alongside equity and debt finance, this is where asset financing techniques offer most value in the Indian context, providing another alternative equipment financing (or sometimes refinancing) channel, especially from financiers who really understand how the technology is applied, and can therefore design and flex financing arrangements while at the same time mitigating risk through that same technological expertise.

[21] Scrip, Pricing and reimbursement strategies for medical devices, Feb 2012
[22] Germany Trade & Invest, 4 Jan 2014
[23] European Medical Device Technology, Western Europe's Medical Device Market under increasing Pressure, 24 July 2013
[24] The Commonwealth Fund, International Profiles of Health Care Systems, 2013
[25] The Economic Times, 'India's healthcare sector to grow to $158.2bn in 2017', 2 Dec 2013
[26] ibid

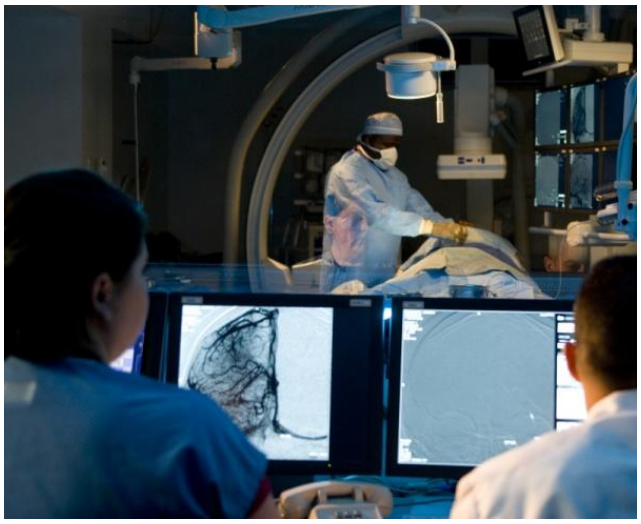
POLAND: Poland shares with a group of other OECD countries the following characteristics related to its healthcare system: a heavily regulated public system in which the budget constraint is stringent; significant provider choice for patients; restricted sub-national government autonomy and thin private insurance markets.[27] In addition, private financing is mainly in the form of out-of-pocket expenses covering pharmaceuticals and specialist medical services, while private insurance does not formally exist.[28]

Funding for healthcare in Poland is principally through the health insurance system. The National Health Fund (NFZ) was established in 2003, replacing the 16 Regional Health Funds. The government is looking to decentralize the NFZ in 2014-15.[29] Financing remains a problem,[30] although Poland has boosted spending levels since 2004. In 2011, it spent around 6.7% of GDP on healthcare compared to 6.2% in 2004. This, however, still does not fully cover the cost of medical equipment and upgrades required in hospitals.

The Polish healthcare system faces a number of challenges and in the European Health Care Index 2012 (EHIC) it was ranked 27th out of 33 rated countries.[31] The OECD acknowledged the problems troubling Polish healthcare in a previous report, describing the system as inefficient due to poor healthcare management. Other points raised in the report are: long waiting lists for procedures; low levels of digitalization; and a disproportionately small private healthcare market.[32]

The OECD suggests that the allocation and use of resources would be improved by: shifting resources from hospitals to primary and long-term care, potentially by integrated healthcare delivery models; strengthening primary medicine's gate-keeping role; providing clearer incentives to hospitals to rationalize their resource use; promoting the development of hospital management skills; and streamlining the responsibilities of the NFZ and central and local governments.[33]

In 2013, the NFZ strengthened the role of outpatient specialists for some minor surgical procedures. Pilot projects testing different forms of co-ordinated care are taking place in 2014. Planned decentralization would streamline responsibilities between independent regional centres in charge of assessing health needs and investment planning, and a national authority in charge of pricing, quality control and technology assessment.



RUSSIA: In January 2013, the government approved a national healthcare development plan for the 2013-2020 period. The programme consists of 11 initiatives that focus on several areas including preventive care, health & wellbeing of mothers & babies, and medical rehabilitation/physiotherapy.[34] This complements the Health 2020 initiative, which is designed to improve the level of healthcare coverage through a universal health insurance system.[35] In 2014 a pilot patient reimbursement programme was launched in some regions and will extend to all regions in 2015 with a view to full implementation by 2019. However, all this should be seen in the light of healthcare budget reductions recently implemented in favor of increases in defence spending.[36]

In Russia, the private sector is playing an increasingly prominent role in the health system. It has developed in a rather similar way to the rest of the private services sector in Russia once the free market was introduced. Liberalization began in 1990; growth of the private medical sector thereafter was initially chaotic; then the emergence of fierce competition over the last ten years, coupled with the global economic crisis, have weeded out ineffective market participants to leave a robust and thriving private market. Private clinics are most actively developing in dentistry, urology, gynaecology and ophthalmology.[37] In some areas, though, even these niches are still not filled with a competitive market. So there is plenty of room for further development. The Russian private healthcare market is expected to maintain the current high growth rate of 12% in the near future.[38] Not that there are no obstacles to contend with, principally strict government regulation,

[27] OECD, Improving the healthcare system in Poland, May 2012
[28] Espicom, The Medical Devices Market; Poland, 2014
[29] OECD, Economic Review, Poland, 2014
[30] Warsaw Business Journal, Prescription for Disaster, 24 Sept 2012
[31] Source: Health Consumer Powerhouse
[32] Wyborcza.biz, OECD ocenia polska opieke zdrowotna duze kolejki, 29 March 2012
[33] OECD Economic Surveys: Poland, March 2014

[34] Source: Espicom
[35] PM Live, Russia's approach to health reform, 2013
[36] RIA Novosti, Russia to Boost Spending on Defense Contracts by 25% in 2014, 20 Nov 2013
[37] Source: Frost & Sulllivan
[38] Source: Russian Ministry of Health

citizens' credit profiles and a lack of qualified specialists[39] (in this respect similar to the Chinese and Turkish health sectors).

The main drivers of growth in the private sector are quality, organization, and timeliness issues in the public healthcare services.[40] In the US, healthcare is based on a developed system of private medical institutions, constituting not less than 60% of all the nation's medical facilities; by comparison, around 20% of healthcare expenditure in Russia is served by the private sector, but this proportion is growing fast.[41]

In the Russian context, then, it is the private sector that is most likely to develop its take-up of asset finance to sustainably finance the medical equipment that helps institutions deliver top quality clinical services to patients, and thereby attract patient income in an increasingly competitive landscape.

SPAIN: To improve the efficiency of medical services provision in Spain, the Health Cohesion & Quality Law (published back in 2003) aimed to guarantee a unified national health system despite devolution of autonomy in the regions. However, the economic downturn which so badly affected Spain has left the government having to outsource swathes of the health service to the private sector in a bid to cut costs, resulting in a series of 'White Tide' public demonstrations by health sector workers.[42]

Spain already has one of the lowest public expenditures on healthcare in relation to its Gross Domestic Product (GDP) in the EU. National health budget cuts of over a billion euros in 2013, and parallel regional budget cuts to health and social care services coincided with increased demands on Spain's health system, particularly affecting the elderly, disabled people and those with poor mental health.

Other key changes made by the Spanish government include excluding undocumented immigrants from accessing free healthcare services and increasing the co-payments that patients must make for extra treatments such as drugs, prosthetics and some ambulance trips. Authorities with devolved powers in 17 regions across Spain have also been required to make further cuts, and in Madrid and Catalonia this has led to a move towards privatization of hospitals, increases in waiting times, cutbacks in emergency services and fewer surgical procedures.[43]

On top of this, the growth rate of private health insurance has slowed, increasing the burden on the state-run system.[44]

All this has exacerbated a number of fundamental shortcomings in the medical device sector. Equipment replacement cycles have tended to be lengthy. And there is considerable disparity between institutions and regions. In one case, a facility will have the full spectrum of high-grade equipment and products; in another, clinicians and care staff are coping with outdated machines and shortages of basic goods.[45]

Spain is a health system in crisis, facing huge financial pressures and, as a result, is anxious to access any form of finance that releases much needed funds for frontline provision. Asset finance is just one of the available financing techniques that allow Spanish institutions to optimize their working capital position to the benefit of their patients.

TURKEY: Turkey has made some important changes in its healthcare system in the past ten years, the cornerstones being the establishment of a family physician-based system for primary health care, a mandatory health insurance fund based on payroll tax run by the Social Security Institution (SSI), and the development of state-private sector partnership for hospital management.[46] Public Private Partnership (PPP) in particular is playing a key role in the construction of huge integrated health campuses all around Turkey. The country has seen steadily decreasing infant mortality rates and steadily increasing life expectancy as the reforms have taken hold.

However, some important issues remain. Premiums collected through the SSI only support half of overall health spending, resulting in an increase in co-payments and additional health insurance policies. In addition, elements of healthcare in Turkey are being privatized. This is noted to have particular advantages, such as effective and timely implementation of new technologies and better quality healthcare, in addition to decreasing the burden on the general budget; but healthcare access for the disadvantaged sections of society still remains a challenge.[47]

Cost is a concern too. Total health expenditure has outstripped GDP growth, at a time of economic boom.[48]

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[39] Moscow Times, How Russian Middle Class is Driving Private Healthcare, 12 Dec 2012
[40] The Russia Corporate World, The Future of the Russian Private Healthcare Market, 2013
[41] MD Clinics, Our Markets
[42] RT, Thousands of Spanish medical workers protest healthcare cuts, privatization, 13 Feb 2013
[43] Helena Legido-Quigley, Laura Otero, Daniel la Parra, Carlos Alvarez-Dardet, Jose M Martin-Moreno, Martin McKee, Will austerity cuts dismantle the Spanish healthcare system?, BMJ 2013;346:f2363
[44] European Medical Device Technology, Western Europe's Medical Device Market under increasing Pressure, 24 July 2013
[45] ibid
[46] Atun, Aydın, Chakraborty, et al. Universal health coverage in Turkey:enhancement of equity. Lancet 2013; 382: 65-99
[47] A Ozdemir Aktan, Kayihan Pala, Beyazit Ilhan Health-care reform in Turkey: far from perfect, Lancet 2013; 383: 25-26
[48] Financial Times, Reforms prove bitter pill for Turkey's doctors, 30 Apr 2012

Furthermore, an abiding additional challenge for the Turkish healthcare system is a skills shortage as the health infrastructure rapidly develops.

Given that Turkish base rates recently underwent a massive rise (an issue for private health sector borrowing costs), and given the sheer pace of development in the Turkish healthcare infrastructure, the attraction of asset finance packages that might bundle equipment, maintenance, service and set-up period together, is very strong. Single, tailored arrangements such as this provide a clear, reliable and transparent financing method which helps to manage the financial outlay and avoid hidden cost escalation.

UNITED KINGDOM: Everyone in the UK healthcare sector is highly aware of the 2015 Nicolson target of £20 billion in 'efficiency savings' (doing more with the same resources) and, as the country fast approaches the deadline it is apparent that there is ground to make up. The National Health Service (NHS) is reported to be behind on efficiency savings,[49] and a survey of NHS Finance Directors last year by the Kings Fund[50] predicts that the NHS will not meet the 2015 targets. Even as the strain is telling on the health service in the short term, few are remembering that 2015 will then be followed by a stretch target of £50 billion in efficiency savings by 2020.

Even as the financial efficiency pressure mounts, the recent structural changes to the NHS are imposing other anxieties on Acute Trusts.[51] Clinical Commissioning Groups ('CCGs' – made up of groups of primary care doctors) are now responsible for planning buying services for their patient community. The ability of patients, and their general practitioners, to make an objective choice about where, and by whom, the patient will be best treated, has been further enhanced by an initiative from the Royal College of Surgeons which resulted in 3,500 surgeons publishing the outcomes of their operations.

This makes the impact of 'funds following the patient' a much clearer and more present concern for Acute Trust planners and financial managers. Even while the operating cost squeeze is on, Trusts need to maintain standards of excellence, and be in a position to offer the latest technological capabilities, in order to keep a high commissioning level from the CCGs, who will be concerned to offer their patients the best available health services.

The desire to outsource some Acute Trust services and the impetus to move some care provision away from large facilities and into the community appears to be manifesting itself in genuine opportunities, and there is a consensus that the austerity agenda is forcing the public sector to engage with its private colleagues for solutions.[52]

In short, both the public and private sector need to maximize their available funds, harnessing external capital through techniques including asset finance and Private Finance Initiatives (PFI), and attract patients with the highest standards of clinical excellence, enabled through access to top notch medical technology.

UNITED STATES: Annual health expenditure per capita in the United States (US) is the highest in the world. Total national health expenditures have historically increased faster than national income, although recent years have seen unusually slow growth rates. Total expenditures reached 17.7% of GDP in 2011 (the last year reported) and are expected to reach 19.6% by 2021, if current trends continue.[53]

In the free market in healthcare provision found in the US, the need to invest in up-to-date medical technology is mainly as a competitive differentiator between healthcare providers. Recently the competition has become much greater due to a number of different factors.

The Affordable Care Act aims to expand access to insurance to over 30 million Americans (most of whom were previously uninsured) and increase insurance coverage of pre-existing condition. The Act has already expanded coverage of young adults by allowing them to stay on their parents' plans until the age of 26. It has also made it illegal to impose lifetime limits on what a health insurance policy will cover. The cost of drugs for seniors on Medicare has been reduced, enabling around 12 million people to get premium rebates totaling over a billion dollars. And access to free preventive care has been extended for all patients.[54] 2014 sees the Act introduce mandatory cover – in other words, insurers must offer cover to everyone, and there will be financial and legal penalties for any individual who remains uninsured. Commentators concur that all this will drive down reimbursement rates for treatments.

Recent quarters have seen business lending volumes and criteria pick up – a good sign for healthcare organizations wishing to raise capital. Yet, even though the lending climate has improved in recent times and the bond market has picked up gradually, market activities still have not reached the level seen prior to the financial meltdown in 2008. There is also an increasing trend for mergers and acquisitions within the healthcare sector, driven by weaker hospitals' desire to be acquired by financially more robust hospitals to improve financial conditions as well as strong hospitals' ambitions to increase market share or revenues in

[49] BMJ 2013;347:f5297

[50] Public Finance, NHS will not meet £20bn savings target, 4 June 2013

[51] An NHS organization providing acute hospital-based services

[52] Health Investor, Healthcare Industry Barometer 2013

[53] Source: OECD

[54] Consumer Reports, Update on Healthcare Reform, June 2012

light of the reductions in private and government insurance reimbursement rates.

The combination of these important market dynamics has increased the competitive pressure between US healthcare providers in the battle to win customers/patients. It is also arguable that such competitive pressures are also driving greater efficiency in the US healthcare sector. Hospitals in the United States have turned up the volume of their advertising and marketing, often using their powerful, up-to-date medical technology facilities as a key attractor for would-be patients. This recent growth in healthcare advertising is widely corroborated,[55] and has provoked major debate about the proportion of budget that should be devoted to acquiring new patients, and furthermore, whether there should be geographical restrictions – stopping more remote healthcare providers encroaching on the natural catchment of a more local provider.

The combination of downward pressure on reimbursement rates, along with increasing competition for patients, means that hospitals are looking to optimize all their sources of finance, and asset financing techniques present another vital and attractive source of funds.

The Size of the Financial Challenge and the Role of Asset Finance

Finally, in order to give an idea of the scale of the challenge posed by medical equipment acquisition in each of the countries studied in this paper, the figures in the table on the following page offer readers the projected capital cost of equipment acquisition in the health sector over the next three years (2014-16 inclusive). This figure is then expressed as a proportion of GDP in order to view its significance in the light of each national economy. Finally, so that the percentage of GDP represented by medical equipment acquisition is given extra perspective, total healthcare expenditure is also expressed as a percentage of GDP (using the latest published figures – 2011).

In Europe, the significant financial strain under which the global healthcare system is being put will inevitably impair its ability to deliver quality healthcare services. Budgetary constraints have also resulted in the deferral by some healthcare organizations of acquisition of the latest healthcare technology and equipment. With capital spending being suppressed, under-investment in medical technology can lead to diagnostic and treatment inefficiency, directly undermining standards of patient care. At the same time, some of the capital that is made available is often in the form of last-minute annual surpluses, which has to be spent before the year closes (in public healthcare systems such as the UK). This produces distortions in planning and is not conducive to careful and sustainable equipment investments. Previous studies from SFS have highlighted the volumes of capital in Europe and Asia that are currently 'frozen' in outright medical equipment purchase, which could be freed for frontline service through the use of asset finance and leasing.[56]

The creation of financially sustainable healthcare systems is therefore imperative. As has been the case for a long time in the US, methods of accessing private capital are vital. Financing techniques, where monthly payments can be considered in relation to monthly patient throughput rates and quality of diagnosis and care, enable healthcare finance managers to more easily understand, allocate and calculate cost-per-treatment/diagnosis and therefore manage costs more closely, accurately and effectively. This explains why forward thinking finance managers are increasingly using asset financing techniques for medical equipment, including leasing and renting, to match cash flows with diagnosis/treatment advances, as well as operational/clinical efficiencies.

Evidence, from SFS-commissioned research[57] and from third party research sources, indicates that annual growth rates for medical equipment leasing and renting is outpacing growth in the healthcare equipment market as a whole. The natural conclusion from this data is that a steadily increasing proportion of healthcare equipment is being acquired through an efficient financing plan, in the form of leasing or renting.

[55] Beckers Hospital Review, 10 Challenges and Opportunities for Hospitals in 2014, 16 Dec 2013; UBM Medica, Hospitals and Digital Marketing, 2012; New York Times, A Healing Touch from Hospitals, 12 Sept 2011; Beyond Madison Avenue, Hospitals Add New Dose of Advertising, 2012; Beckers Hospital Review, Hospitals Increase Ad Spending to Stand Out in Competitive Market, 23 Jan 2012;Health Leaders Media, In Defense of Hospital Ad Spending, 19 Dec 2012; Upstate University Hospital, Hospital Advertising and Marketing, 7 Dec 2012; Hartford Business Journal, Hospitals Hike Ad Spending to Gain Market Share, 23 Jan 2012

[56] See, for instance, Siemens Financial Services, Medical Equipment and Frozen Capital, 2011

[57] Siemens Financial Services, Melting the Iceberg, May 2012

Country	Medical Device Expenditure, 2014-16 (US$m)[58]	Medical Device Expenditure as % of estimated GDP, 2014[59]	Total Health Budget as % of GDP, 2011[60]
China	65,581	0.13%	5.2%
France	49,137	0.67%	11.6%
Germany	80,275	0.76%	11.1%
India	19,684	0.11%	3.9%
Poland	8,657	0.31%	6.7%
Russia	20,927	0.24%	6.2%
Spain	12,060	0.28%	9.4%
Turkey	8,754	0.21%	6.7%
UK	31,500	0.41%	9.3%
US	396,785	0.78%	17.9%

Conclusions

Western healthcare systems are under increased pressure to improve healthcare outcomes while capping or even reducing budgets, even in the face of growing demand for healthcare in these countries. Research evidence presented in this paper shows that asset finance is increasingly being used to spread payments and avoid large upfront capital expenditure, as well as more clearly and reliably managing treatment/reimbursement through transparent cost-to-use calculations.

Healthcare systems in emerging economies are also under pressure – mainly due to rapid infrastructural growth as they seek to extend access to affordable healthcare to their entire populations and improve health outcomes. Central authorities are keen that new healthcare institutions do not take on unsustainable levels of debt, and institutions are often looking for additional sources of finance where their standard borrowing limits have been reached and refinancing is required.

As a result, growth in medical equipment asset finance has been steady over the last two years and is expected to continue to rise over the next two, albeit at a slightly lower rate. No research respondent reported any decline in medical equipment asset finance.

Finally, increasing financial professionalism in the healthcare sector, along with increased competition, is driving the need for increasingly competitive offers, not just in terms of price, but also in the level of flexibility with which the financing package can be tailored to the customer.

All of this, according to research respondents, tends to favor specialist financiers that have the experience and insight to offer flexible financing packages without increasing risk.

The delivery of quality healthcare is a universal goal for countries around the world. The realization of this goal, however, can only be achieved through sustainable financing. With the proper financing techniques, not only can healthcare institutions afford necessary investments, but also increase financial agility and stability which are crucial components for the long term success of any organization.

[58] Sources: Espicom, Forrester, PMR, Business Monitor, EMDT, National Depts of Business & Export, et al

[59] Sources: Previous column, World Bank, OECD, various others. 2014(e) - estimated as published before the end of 2014

[60] Source: World Bank

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