



**COCIR REPORT**  
FOSTERING FINANCIAL SUSTAINABILITY  
OF HEALTHCARE SYSTEMS IN EUROPE **MARCH 2013**

**COCIR**  
SUSTAINABLE COMPETENCE IN ADVANCING **HEALTHCARE**

European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry



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## FOREWORD



### WHY DO WE NEED NEW WAYS TO INVEST SMARTLY IN HEALTHCARE?

In our 2008 White Paper, we commented on the need for a paradigm shift in healthcare. What we see after five years are definite moves – some of which are highlighted in this report. We continue to foresee the need to interconnect healthcare systems, providers, practitioners and other stakeholders, and to accompany the transformation from acute care settings towards care at home.

Innovative technologies are available to help address today's healthcare challenges. While their funding can be challenging for policymakers and users, their benefits in terms of quality, safety and cost-effectiveness in the long term are becoming clearer.

There is no doubt that healthcare systems need to reinvent themselves if they are to emerge stronger from the current economic challenges. New medical and eHealth technologies combined with innovative process re-engineering solutions can act as an enabler. It will not be a 'one size fits all' approach and political will associated with clear governance and supporting incentives are key success factors.

Many of Europe's leading hospitals and other care providers have recognised the value of 'smart investment' in medical and eHealth technologies leading to seamless care delivery, information exchange and increased patient empowerment.

Hospitals of Today, healthcare professionals and administrators working within the healthcare system need to have the tools and investment to cope with growing healthcare demand and contained resources. Leading hospitals will be critical players in integrated healthcare delivery systems and across Europe, pioneers of this approach have combined the implementation of innovative technological solutions with innovative financing schemes.

In this report, we will consider critical transformations in modern healthcare delivery, the value-added of the COCIR medical imaging and eHealth technologies and successful financing models that have been proven in practice. It is part of our ongoing dialogue with decision-makers in Europe and an invitation for further discussion.

**Kevin HAYDON**

COCIR President

## EXECUTIVE SUMMARY

The future of healthcare in Europe is uncertain. Healthcare faces the inevitability of having to find ways to deliver more services of higher quality at contained costs to meet increased demands for services and new 'consumer' expectations. In practice, there are massive changes to be made in the healthcare business and reimbursement mechanisms if the basic principles of universal coverage and solidarity in financing care provision are to be preserved.

Healthcare systems across Europe, and actually around the world, are facing challenges that cannot be met by a 'business as usual' approach. The continuous rise in demand, a cost explosion due to chronic and lifestyle diseases, staffing issues as baby boomer clinicians retire, and the need to reduce healthcare inequalities, make an even stronger case for the sustained innovation of healthcare systems. There is an urgent need to transform healthcare delivery at the patient level and to integrate currently fragmented processes. Hospitals are no exception and will play a critical role in participating in this paradigm shift.

Hospitals of Today must work as one element of an integrated healthcare delivery system where the hospital is the 'hub' through which patients and information flow. Enabled by innovative technologies coupled with electronic information and communication systems, connected and coordinated healthcare organisations provide numerous opportunities to deliver care for patients while offering greater transparency, flexibility and choice, and increasing access to the services available.

This will also optimise resources and the quality of care and drive efficiencies. The acquisition of the technology and the way it is procured has to be considered simultaneously. Acquiring a technology platform is about investing in products, people and processes over a longer period of time to guarantee improved efficiency. This means technology needs to be combined with associated services such as consulting, maintenance and continuous education.

New business and financing models which address the above challenges are Managed Services (MS) and Public Private Partnerships (PPP). MS stands for a technology partnership between one or more healthcare facilities and one or more technology providers for a fixed time, e.g. 10 to 15 years. Over this period, a technology infrastructure and related services are made available against a fee. The other model, PPP, is a long-term partnership between the public-sector authority, healthcare provider(s) and a consortium of companies, often for 30 years and organised via a Special Purpose Vehicle (SPV). Here the objective is to build, operate, maintain and update a modern healthcare infrastructure in a region or nation.

In the EU, the need to modernise healthcare systems and reduce health inequalities is well recognised. Significant funding has already been made available for health infrastructure, and the funds in the EU's Cohesion Policy will continue to address healthcare investments for the coming planning period. These funds are currently underutilised and Member States should prioritise healthcare for the 2014–2020 period. A simplification of the funding process will also contribute to improving utilisation.

**The healthcare technology industry is ready to work with the public healthcare authorities to build and maintain the regional and national healthcare infrastructures that offer European citizens the best healthcare services possible. To this purpose, COCIR recommends:**

1. Better use of healthcare and ICT technology and solutions which can help improve patients' health, Europe's healthcare system efficiency and economic recovery.
2. Managed Services and Public Private Partnerships should be considered in all Member States as part of the solution for providing and maintaining high quality health services.
3. "You get what you ask for" – procurement criteria need to match the demand of the healthcare provider and not ask for one thing, but expect another.
4. The European Commission should ensure and facilitate, at national and regional level, the use of Cohesion Policy funds and encourage Managed Services and Public Private Partnership projects.

## 1 TODAY'S EUROPEAN HEALTHCARE CHALLENGES

Healthcare is one of the largest sectors in the EU in terms of employment, expenditures and added value. Steadily growing over the last decades, it amounted to almost 10% of GDP in 2009. This makes it one of the largest segments of the economy.

### RISING EXPENDITURES

In the coming years, growth in expenditures for healthcare is expected to continue to outpace the economy, driven by a number of factors.

The first factor is a **rise in demand**. The number of patients with age-related chronic or degenerative diseases (non-communicable diseases or NCDs), and increasingly multi-morbidities, will grow. Demand will also rise because of an increase in patient demand with respect to the volume of services and their quality and safety as people become more educated about healthcare.

A second factor is **public health threats**, such as pandemic diseases, both new and known ones, and a rise in lifestyle diseases.

A third factor is driven by patients' expectations to have **equal access to care**. Across the EU, large health inequalities exist within and between Member States that require investment in order to improve<sup>1</sup>.



### SCARCE RESOURCES

Next to the growing demand of healthcare which will impact healthcare expenditures, available resources are becoming scarcer. The first concern relates to **staffing issues**; retirement of clinicians from the baby-boom generation, loss of staff due to migration to high-wage countries, shortages in rural areas, will all lead to underserved regions and skill set and quality standards deficiencies amongst clinicians, that impact on the effectiveness and quality of healthcare services.

Secondly, **dramatic reversals in health spending** have taken place in some of the countries hardest hit by the economic downturn<sup>2</sup>. This financial pressure may present an opportunity to implement proven collaborative operational models and innovative financing schemes. As in the EU these trends are well recognised, refocusing a range of existing funds for more direct investments in healthcare by the European Commission can act as a further accelerator.

These growing demands and scarce resources are causing **budgetary and fiscal pressure**, as well as operational issues. The focus now clearly needs to be on rationalising healthcare, driving efficiency and improving financial and clinical outcomes at the same time.

<sup>1</sup>. OECD, *Health at a glance 2011* / <sup>2</sup>. OECD, *Health at a glance 2012*

## 2 POSITIONING THE HOSPITAL WITHIN CONNECTED AND COORDINATED HEALTHCARE ORGANISATIONS

We need to move to ensure that we retain acute hospital services but also now effectively respond to the current challenges using a different approach; by looking at the delivery of services in the community and the home that would better address NCDs and better engage people in public health initiatives which address aspects of prevention.

To ensure appropriate healthcare services for the population, new, collaborative models for building and operating a modern healthcare infrastructure have been developed. In many countries, the government, healthcare providers and industry have worked together to build modern healthcare facilities that allow for continuous improvement while reducing the outlay of public capital.

### **An organising principle that is found in many countries recognises three lines of care :**

- First line care, i.e. general physicians and nurse practitioners that handle the majority of ailments and health problems; in many countries also office-based specialist consulting and some technology-based diagnosis,
- Secondary or specialised care, mainly provided by hospitals and clinics,
- Tertiary or highly specialised care such as provided by University Medical Centres.

While this principle remains largely intact, innovations are taking place at the interfaces and within the lines of care that are leading to more integrated healthcare, with the hospital at the hub.

Hospitals of Today must work as one element of an integrated healthcare delivery system where the hospital is an important 'hub' through which patients and information flow. Connected and coordinated healthcare organisations place data and the patient at the heart of the healthcare process. These hospitals are of a new, higher, organisational form that is growing out of the networking of primary and secondary care facilities, often around a large hospital or University Medical Centre. Enabled by the advent of powerful and readily available innovative technologies coupled with electronic information and communication systems, and with easy to use automatic monitoring and diagnostic devices, these entities provide numerous opportunities to manage patients with non-communicable diseases in their homes, primary care physician's office, community care centre and hospitals. Additionally they enable the optimisation of resources through networking, to increase access to care, safety and quality of care and drive efficiencies.

Transformative steps towards this vision for hospitals can be taken today. Advances in medical technologies, chemistry and biology are allowing healthcare professionals to better understand and diagnose disease more accurately and earlier and to provide personalised patient management and treatment. Technology is enabling more non-invasive procedures and a rapid rise in day surgery, essential to manage the ageing population, while driving patient-centric care pathways that can improve the efficiency and productivity of healthcare.

Modern healthcare is a continuous and interlinked process. The complete care pathway consists of prevention, diagnosis, therapy, rehabilitation and long-term care. Each of these steps, as well as the continuum of care as a whole, needs to be optimised and patients need to be placed at the centre of all efforts. The goal is to help citizens increase their healthy years, to prevent hospital admissions, to support care at home and to help patients recover as quickly as possible. Working towards such a process-oriented healthcare system requires a major shift moving from only delivering (acute) care to the sick to also supporting the health of the overall population. In this complex world of new medical developments, information load and rapid change, eHealth can act as an enabler.

In other words, technology is not just advancing medical knowledge but it is also advancing how medicine can be practiced. Today's leading hospitals recognise this changing landscape and are adapting. They are using eHealth to 'virtually' break out of their structural confines, to forge better connections with patients, physicians and clinics. They also invest in healthcare technologies that enable prevention, earlier diagnosis and better targeted treatment. In short, they are transforming healthcare and 'connectivity' is the key.

### 3 MEDICAL TECHNOLOGIES & eHEALTH KEY FOR IMPROVING EFFICIENCY

Advances in diagnostics coupled with Information and Communication Technology (ICT) have enabled healthcare professionals to better understand disease and move into molecular medicine and patient management. The expertise and technologies of the fast moving medical devices industry are very relevant to today's challenges. Already the impact of new technologies such as eHealth, are extending beyond the clinical sphere into process improvements and workflow efficiencies that can improve patient safety and deliver financial gains, helping to ensure that healthcare systems derive maximum value from healthcare technology, which only accounts for approximately 4-6%<sup>5</sup> of the total healthcare expenditure in Europe.

Targeting investments which facilitate integrated care now, will not only improve the quality, productivity, safety, effectiveness and efficiency of healthcare delivery in the short-term, but will also be the foundation for engaging people in living healthier lives, supporting a more sustainable high-quality healthcare services for more people, at less cost.

#### MEDICAL TECHNOLOGIES

Technology developments move care processes towards prevention and earlier diagnosis, and new treatment options that are less burdensome for the patient.

##### **PREVENTION – while healing is good, prevention is better**

Public health programmes to reduce the impact of voluntarily taken hazardous compounds, such as tobacco and alcohol have achieved considerable success. However, other lifestyle diseases are growing in importance and claim an increasingly larger part of healthcare budgets. The economic impact of these diseases is also felt in other areas as they often lead to lower productivity and more absenteeism. Awareness and trainings programmes have been, and are being, developed to counter these trends, but as with the previous waves, it will take time to turn the tide.

In addition to primary prevention programmes, advances in secondary prevention processes, like new and improved screening and early diagnosis technologies, are being developed to further reduce major diseases such as cardiovascular disease, cancer and Alzheimer's disease. Early detection of the vulnerable plaque load in the cardiovascular system can prevent a heart attack or stroke, while early detection of a tumour can prevent the formation of metastases and give a person many cancer-free life years, and provides the opportunity for cost-efficient treatment.

##### **IN-VITRO DIAGNOSTICS – without which no disease can properly be characterised**

Modern technology that combines high throughput with short measurement time and high accuracy is driving down the cost of diagnosis and increasing the quality. Ever faster gene-sequencing equipment allows for rapid characterisation of genetic predisposition and for identification of pathogens. Whole human genome sequencing for €500 is expected within the decade, closing in on the promise of personalised medicine. Molecular biology and clinical research continues to unravel disease pathways, thus allowing for earlier diagnosis and intervention, and for preventive measures to be taken. In addition, point of care hand-held devices are under development and will dramatically reduce time-to-result.

##### **IMAGING - has revolutionised the diagnosis and treatment of many diseases**

The number of people that survive a heart attack or stroke has gone up tremendously as imaging systems enable accurate diagnosis and offer visual guidance for treatment as needed, e.g. to remove blockage of the arteries. Earlier diagnosis improves clinical outcomes and reduces treatment costs while better characterisation and staging help in choosing and targeting the right treatment.

Image-guided planning and treatment support the development of less invasive and more efficient treatments, driving the reduction of length of stay and number of beds. At the same time, efficient treatment monitoring accelerates treatment decisions and reduces the cost associated with drugs which might be providing little or no therapeutic benefit to certain patient groups.

For instance, the way cancer is diagnosed and treated is dramatically improved through early diagnosis and screening, by new methods to find and fight tumours, thus adding many healthy years to the people affected. Imaging has accelerated the understanding of the brain and its diseases, and molecular imaging agents are helping physicians to more confidently differentiate neurological disorders, and are valuable tools supporting the research and development of therapeutics for conditions such as Alzheimer's disease and other dementias.

5. MedTap, the Value Group, 2004. *The Value of Investment in Health Care: Better Care, Better Lives*



## eHEALTH TO CONNECT PEOPLE

eHealth requires a common vision and implementation strategy to which all ICT developments and funding can be related in terms of a roadmap. Clear health strategic objectives together with their implications for workflow and the re-engineering of clinical and business processes are widely regarded as an ingredient for successful future eHealth developments.

Today, there is a perception that many national and regional eHealth plans or initiatives are too technology-focused, that they fail to see technology as an enabler of transformational change in social and health services delivery.

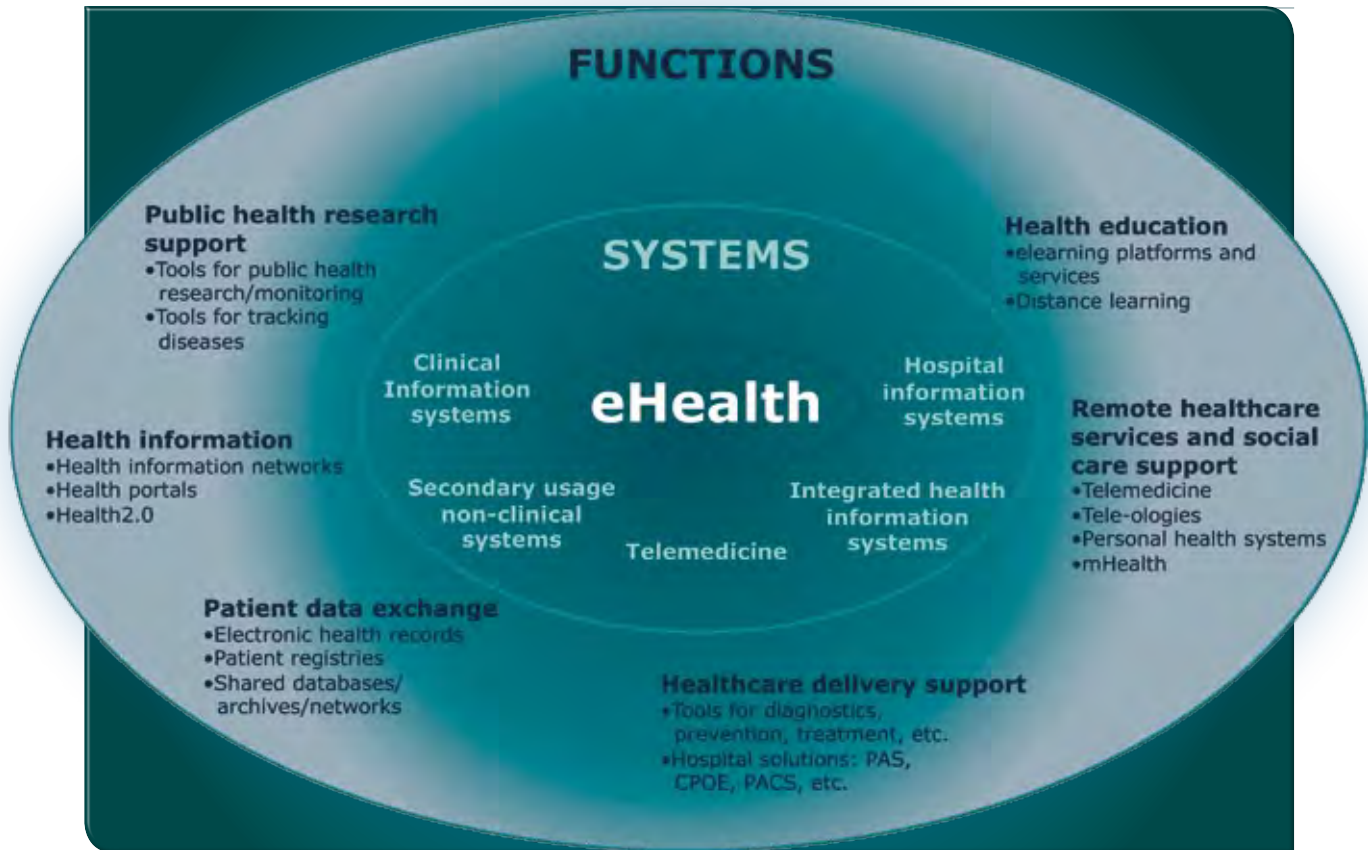
eHealth can tackle many of the care challenges and assist in improving the quality and safety of clinical care. Some, like adverse events and medical errors that carry huge financial consequences are well known, but the expectation is that many other quality and productivity issues remain undetected. Successful eHealth implementation needs to be judged on its impact on the nature and quality of care provided – not just on improvements in the technical infrastructure, better business processes and more cost-effective solutions.

In some cases, healthcare authorities responsible for care in a particular country or region may not yet be convinced about the positive impact of using eHealth and therefore are reluctant to commit. Where they are convinced, it takes time to set up a pilot experiment, but often these pilots are too small in scale to generate strong evidence and support outcome thinking.

As an investment, eHealth has a good return. Public authorities are understandably prudent in the administration of scarce resources but eHealth offers a number of opportunities to radically improve the delivery of healthcare to the benefit of all concerned. Industry needs a strong discussion with public authorities to help move away from administrative discussions and cost-saving.

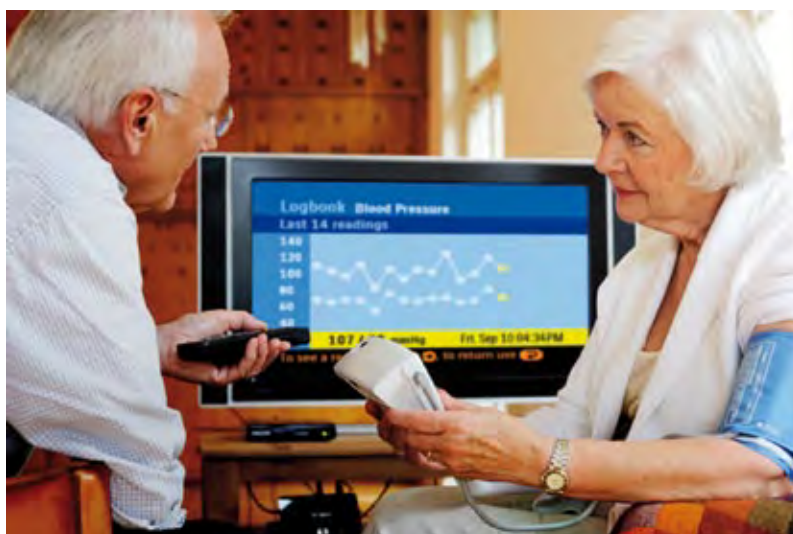
It would take less time to implement eHealth if policymakers would build a coherent vision of eHealth supported by short and long-term political goals. Achieving healthcare modernisation objectives requires immediate actions and longer-term eHealth scenarios to enable a reliable background for change in care processes.





eHealth should be about patients and clinically-driven solutions. More emphasis should be put on clinical outcomes and patient experience at the early planning stages to ensure that return on investment in eHealth technology can be measured in terms of care systems and patient centred targets.

eHealth is an enabler but cannot replace the need for political will and sustained investment. The prime onus is on national governments to set the pace and bring together the agents of transformation and shift to a sustainable financing model.



## 4 PROCUREMENT PROCESS AND AVAILABILITY OF HEALTHCARE TECHNOLOGY

Getting the right technology installed in a hospital is only the first step. The technology must be 'always available' which implies that the proper maintenance organisation is in place to support maximum uptime and minimum time to repair. Thus, acquiring technologies means funding maintenance over the life of the equipment. Next to this, it is important to optimise usage of technologies, which requires having well-trained medical staff not only at the time of the installation but also during the life of the equipment because of staff changes over time. Also, technologies are continuously improving and it may be necessary to upgrade existing installations during the life cycle to benefit from necessary new applications.

To get the best usage of the technologies, it is necessary to adapt the organisation, the patient workflow and the processes, to reduce waiting time, to increase throughput and to have 'performance improvement metrics' that are measuring the progress in improving quality and reducing costs. Acquiring a technology platform is about investing in products, people and processes over a long period of time, to guarantee improved efficiency.

The traditional procurement process and the current way of buying equipment do not always guarantee the best usage of the technology as described below. The traditional view of Capital expenditure (Capex) on one side and Operational expenditure (Opex) on the other side is not driving for efficiency improvement (equipment versus service). In a traditional procurement process, the technology evolutions over a long period of time are not always taken into consideration and this creates an obsolescence risk. In addition, there is the difficulty to combine equipment purchased with associated services (consulting, maintenance, education). In a traditional procurement process, the focus is on specifications and price of specific equipment. However, if the bigger picture is taken into account to include obsolescence risk and associated services the total costs of healthcare will decrease.



## 5 HEALTHCARE TRANSFORMATION THROUGH NEW BUSINESS AND FINANCING MODELS

In addition to innovative technologies, new business models and financing models can facilitate the paradigm shift in healthcare that is urgently needed. In the past two decades, new business and financing models have been emerging varying from simple financing or leasing, which is a pure financing tool, to ‘pay per use’ models up to ‘Public Private Partnerships’ (PPP).

In this report, we will focus on Managed Services (MS) as well as PPPs since those two models focus on a whole hospital or whole region approach. Both solutions involve collaborative partnerships, rather than relying on the traditional buyer-supplier model.

COCIR provides some best practice examples from across the EU; examples embracing many medical technology components including hardware service, software, training, consumables, and future upgrades.

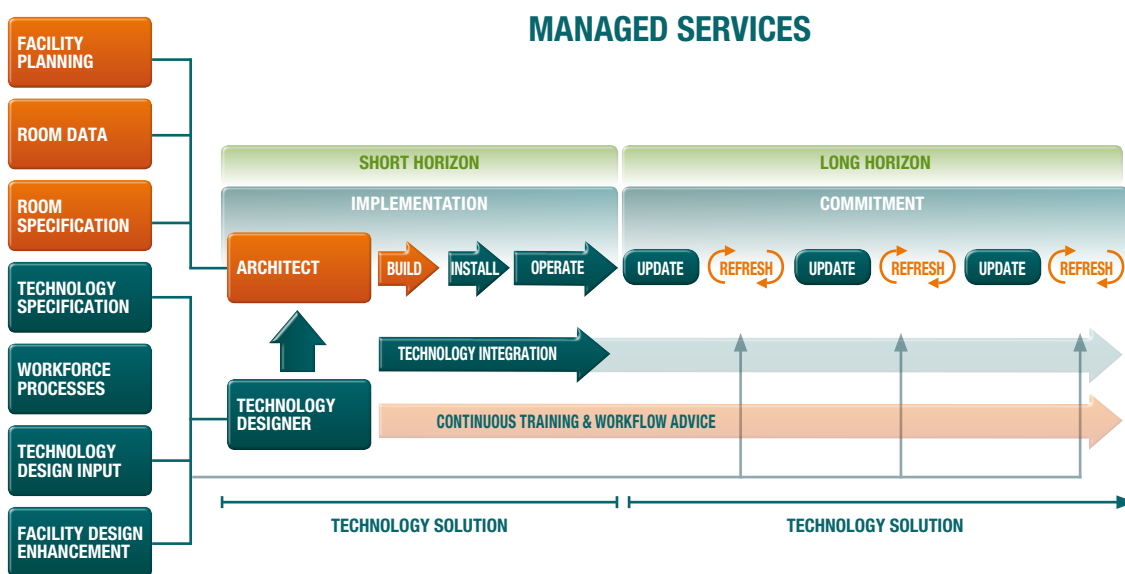
### MANAGED SERVICES

#### DEFINITION

The essence of the Managed Services model is that the technical infrastructure is not purchased by the facility but made available against a fee and that the contract is for a longer period of time, often more than 10 years. The provider of the equipment takes responsibility for the availability, quality, maintenance and upgrading over the lifetime of the technology. The fee can be based on usage with a fixed and a variable component, i.e. per patient, test or diagnosis. The equipment is not only maintained, but is regularly updated with the latest technology to guarantee a state-of-the-art performance. Thus, the facility is assured to benefit from the future improvements and innovations.

#### CHARACTERISTICS/CONTENT

A Managed Services contract, next to a capital asset and technology management plan, can also include continuous training and education of the technical and medical staff, integrator services, which takes care of the eHealth and other connectivity requirements. Workflow management, to optimise the patient flow and facility lay-out in order to reduce costs can also be brought into a MS as well as improving patient experience. Other elements of a MS can include research & development, i.e. clinical and technology development by either the facility or the technology provider, or both, to further optimise and improve the healthcare services. Also hosting services, other cloud-based services and sometimes software as a service are also added to a MS. The figure below has a schematic diagram of how a MS can look over time.



In summary, a Managed Services contract is a long-term commitment for both parties, and will include shared responsibilities. The party who is able to influence the risk most should be the one to take that risk as a responsibility.

## BENEFITS

The advantages for the hospital include no capital investment up-front. The purchasing process is simplified and there is a single point of contact, which can create savings throughout the lifetime of the contract. The hospital has ongoing predictable operational costs and there is a reduction of risk with respect to the operation and maintenance of the equipment.

Additionally, the hospital is guaranteed that the equipment remains state-of-the-art during the lifetime of the contract whereas in a pure cash transaction, the equipment becomes outdated after few years of utilisation. A Managed Services will reduce the integration risk of the technology in the facility. The support for the clinical and technology performance and optimisation through training and consulting will reduce ongoing running costs in the hospital. By having new and improved applications and application support as part of the MS, the clinical staff will have knowledge on the latest ways of diagnosing and/or treating patients with the support of the equipment.

## EXAMPLES

Managed Services agreements have been made in many European countries. As an example, Spain's Valencia<sup>6</sup> province successfully launched a «Patient Care Programme». This programme provided a complete patient care system accessible to all citizens at an affordable price. The patients benefitted from the elimination of long waiting times, better screening programs, private rooms, access to home care and various patient healthcare programmes.

Examples of a Managed Services contract with the focus on IT are Hovedstaden in Denmark<sup>7</sup> and Région sans Film, in Paris<sup>8</sup>. Both Murcia<sup>9</sup> and Sant Pau<sup>10</sup> are examples of Managed Services contracts for total medical equipment in Spain and Royal Victoria Hospital and Queens hospital are MS in the United Kingdom.

## PUBLIC PRIVATE PARTNERSHIP

### DEFINITION

Public Private Partnerships (PPP) mean many things to different people, as a variety of different models have been created. They all share the same objective: a long-term partnership between a public-sector authority, healthcare provider(s) and companies for modern, state-of-the-art healthcare infrastructure with limited capital exposure and risk for public-sector authorities and healthcare institutions. It is essentially long-term, 25 to 30 years, as the investments can only be recouped over a long period. The objective is to build, operate, maintain and update a modern healthcare infrastructure in a region or nation. The UK pioneered this approach for renewing the country's healthcare infrastructure in the 1990s and 2000s, and in the meantime, some 1400 PPPs in various fields have been set up in Europe

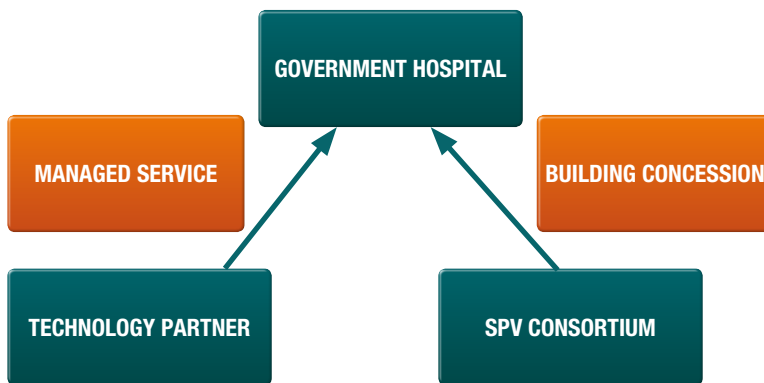
### CHARACTERISTICS/CONTENT

As part of the PPP, a Special Purpose Vehicle (SPV) is often constructed to manage the various funding and payment streams. A SPV has shareholders who can contribute assets or equity, and debtors who provide loans. Private companies take care of the construction work including the buildings, the technical facilities and the healthcare technology infrastructure. These companies in general also operate their own assets, and receive regular payments in return. The SPV services its loans with interest payments, and equity providers receive dividends.

Variations on this model exist, e.g. the technology infrastructure can be separately brought under a Managed Services agreement (as shown in the figure above), and the building concession can be separated as well. Combinations of a PPP with a Managed Services agreement are also possible, and have been implemented in practice, as shown in the example of Sant Pau in Barcelona.

6. For details about this example refer to page 23 / 7. For details about this example refer to page 17 / 8. For details about this example refer to page 18 / 9. For details about this example refer to page 19 / 10. For details about this example refer to page 21

## A MODEL OF PPP DECOUPLE INFRASTRUCTURE FROM TECHNOLOGY



### BENEFITS

The healthcare providers enjoy similar advantages as in the Managed Services approach, but for a PPP, the advantages can have greater impact, because the hospital building is part of the PPP, but it is not part of an MS. The advantages for the procuring authority are that there is no need for up-front capital investment, the operational costs are predictable, there are performance incentives for the private sector to perform through the use of payment deductions for poor service and there is risk transfer towards the SPV of the consortium.

Needless to say that setting up and running the SPV can be a complex matter and there can also be some additional challenges. The costs of financing associated with the PPP are generally higher than the government cost of borrowing; PPPs are relatively inflexible when compared to traditional contracting or MS structures due to long contract terms and the difficulty to make contract changes.

### EXAMPLES

Currently there are multiple healthcare PPPs in Europe. One of the examples is the project in Valencia in Spain where they have focused on the 'Per Capita' model. In other countries, PPPs have been put in place; however the medical technology has been kept out of the SPV and has decoupled infrastructure from the medical technology. The hospital was built via a PPP and the medical technology via an MS.

**IN SUMMARY**, the Managed Services and PPP models allow healthcare providers to renew their infrastructure at no, or much lower capital requirements, while reducing the risks of operations. Partnering between healthcare providers and the medical technology industry can offer a breadth of services that can effectively and efficiently utilise both public and private funding. Greater flexibility in funding mechanisms are used creatively to ensure new and existing hospitals and ancillary providers are equipped, serviced, connected and staffed to consistently deliver the services they were intended for.

## 6 EU COHESION POLICY FUNDS TO SUPPORT INVESTMENT IN HEALTHCARE

### A KEY FUNDING OPPORTUNITY

Health-related innovations are currently funded, directly or indirectly, through various EU financing instruments. Most notably, these include FP7<sup>11</sup> funds for research and the CIP<sup>12</sup> for innovation and deployment activities. In the upcoming 2014-2020 period, FP7 and CIP will be joined under the new Horizon 2020 programme; in addition, the 'Connecting Europe facility' will provide a new funding mechanism to develop cross-border infrastructures for e-services, including eHealth.

Although FP7 and CIP funds are essential funding instruments, they tend to have a pan-European nature and are not always well known or integrated in regional healthcare systems, which remain at the heart of healthcare delivery in Europe. Another, perhaps more effective way to introduce change at the regional and local levels is to optimise the use of Cohesion Policy funding.

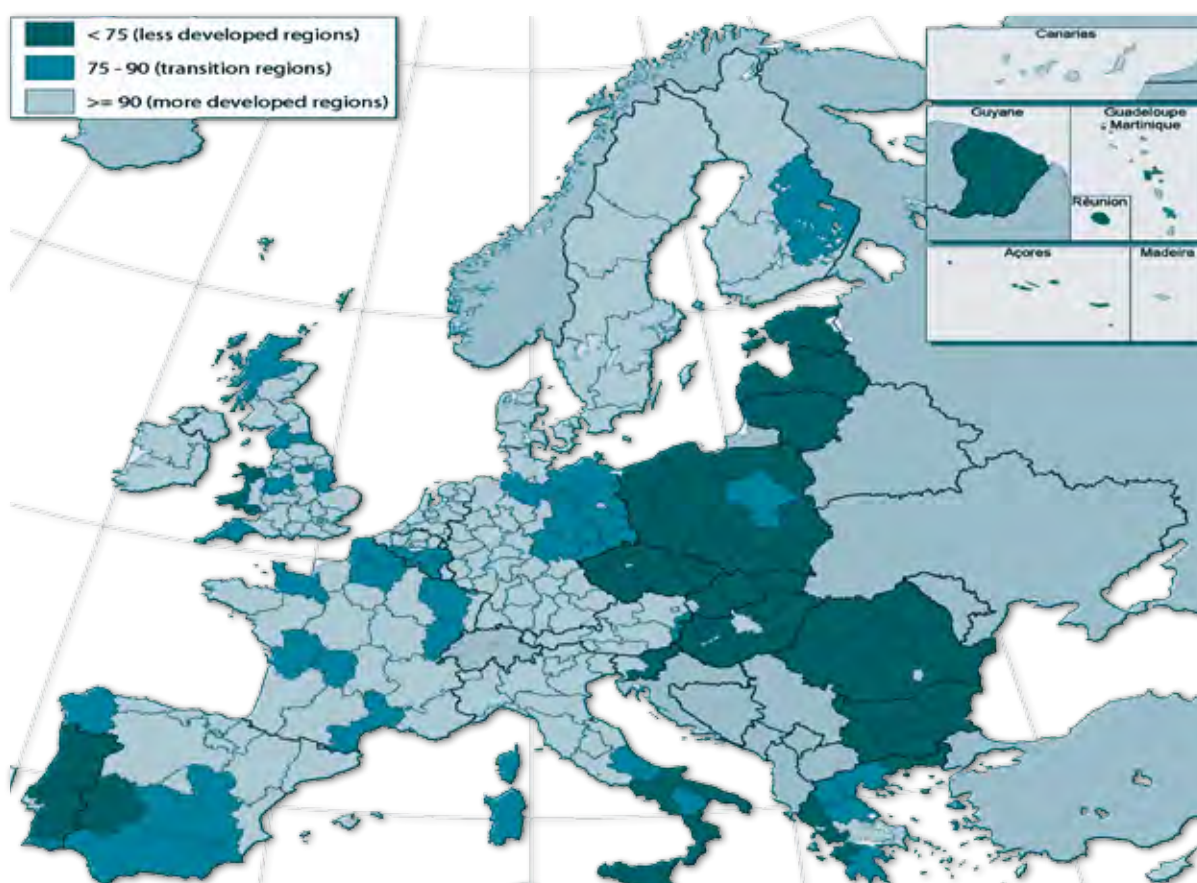
Disparities have been identified in healthcare between Western and Eastern Europe, as indicated by lower health expenditure per capita and health quality indicators in the latter. Also, investments in medical equipment and technologies that improve healthcare delivery systems are lower in Eastern Europe. In addition, as the EU recognises, disparities in access to and quality of healthcare exist within many Member States, often directly correlated to poverty and social factors.

In total, around €5 billion<sup>13</sup> was available for health infrastructure (1.5% of the total budget) throughout the 2007-2013 Cohesion Policy period and an additional €6 billion earmarked where healthcare was one of the potential targets (such as e-services including eHealth or active ageing).

Cohesion Policy funds are an important financial mechanism for the European Union Member States to invest in healthcare and can contribute to balancing these inequalities between and within Member States. Their ultimate aim is to assure that access to healthcare does not depend on the region in which European citizens live.

### COHESION POLICY FUNDS 2014-2020: ELIGIBILITY SIMULATION

In the 2014-2020 programming period, EU regions will be split in 3 categories according to their GDP/head: less developed, transition and more developed regions. These categories will determine the level of funding they will receive as well as the thematic objectives they will have to focus on.



11. FP stands for Framework Programme / 12. CIP stands for Competitiveness and Innovation Framework Programme / 13. Source: European Commission, DG Regio

## CURRENT CHALLENGES

Unfortunately, as is well known, there are currently a number of issues associated with the use of Cohesion Policy funds. This funding opportunity is currently not being leveraged to its maximum by the potential and actual beneficiaries. Although the Cohesion Policy funds have been in existence for a number of years, their absorption in many Member States is progressing slower than expected. The main reason for that is the **lack of knowledge** with the beneficiaries, the **lack of resources** to identify the opportunities and the **lack of experts** to prepare sound projects. In the majority of Member States, the beneficiaries also **lack the capability to manage large-scale investments** and to cope with the administrative burden.

**Financial issues** are the second main obstacle to the optimal utilisation of Cohesion Policy funds in health. The beneficiaries (hospitals, public and private bodies) need to match the EU funding with equity. This co-financing requirement is often preventing Member States from applying for the funds, or implementing the granted projects as in many countries the budget for healthcare is not even sufficient to cover the operating expenditures. Another significant problem is in the fact that deploying a large-scale project requires a strong cash flow and secure pre-financing.

Finally, the **procurement challenges** represent a real bottleneck to the effective use of public funding in healthcare. In addition of being too lengthy (up to four years), the procurement procedures often lack transparency, essentially due to the fact that the tenders are only published in local language. The criteria of selection described in the tenders are most of the time too restrictive and technical and thus risk becoming obsolete before their time.

## OPTIMISING UTILISATION

Working with some of the leading hospitals and healthcare providers over many years, COCIR and its members have developed experience, knowledge and competencies in understanding how to leverage funding to drive efficiencies and better outcomes. This experience suggests there are three key actions that the EU and Member States should focus on in order to optimise the use of funding targeted at healthcare:

- 1. Member States and their regions need to prioritise funding for healthcare under the 2014-2020 Cohesion Policy programme.** Health expenditures should not be considered a cost but rather an essential investment – in both citizens' health and in Europe's innovative healthcare technology sector – each helping to create and sustain employment and driving economic growth and recovery. Therefore, it is crucial that Member States put health as a priority investment area in their national plans. The plans should also be explicit that financing is sought for projects that will contribute to more efficient and sustainable healthcare systems. The investments in health infrastructure need to be framed in sound national health strategies and a clear vision for better healthcare. Thus, the funds can be used for healthcare innovations to improve citizens' access to healthcare systems, the availability, quality and efficiency of services, and to facilitate the uptake of innovations in eHealth. This will ensure that the Cohesion Policy funds will have an impact on the modernisation of healthcare systems.
- 2. Member States and their regions should be able to have access and share best practices from across Europe.** In order to increase the chance of obtaining financing for more sustainable healthcare projects, Member States and regions should be able to have access to and share best practices and key success factors from across Europe. It would allow managing authorities to learn from past experiences and replicate the good examples in their country or region.
- 3. The European Commission should create mechanisms facilitating an optimal use of the funds.** At a time of limited public resources, the European Commission should consider creating mechanisms that encourage the use of EU funds to support healthcare. To address the issue of fund absorption, especially in regions or sectors where difficulties have appeared in the present budget period, the system for accessing and administering EU funds must be simplified. A conditionality system could be complemented by technical assistance for Member States for project design and implementation.

## 7 COCIR RECOMMENDATIONS

To ensure that European healthcare systems maintain their financial sustainability in the coming years, all stakeholders need to take collaborative actions now. In that regard, COCIR is putting forward four key recommendations to European and national policymakers:



- 1. Better use of healthcare and ICT technology and solutions which can help improve patients' health, Europe's healthcare system efficiency and economic recovery.**

It is crucial that smart expenditure in healthcare is considered as an investment for growth rather than a cost.

- 2. Managed Services (MSs) and Public Private Partnerships (PPPs) should be considered in all Member States as part of the solution for providing and maintaining high quality health services.**

Those models would allow healthcare providers to renew their operational needs with no or much lower capital requirements, while reducing their risks.

- 3. "You get what you ask for" – procurement criteria need to match the demand of the healthcare provider and not ask for one thing, but expect another.**

When writing out a tender, when a clinical provider wants to have a long-term partnership, which takes ownership beyond providing the equipment, the right decision and evaluation criteria must be written down. Today, there are quite a few tenders where the hospital management is looking for a long-term technical partner, while the tender criteria states the lowest offer will win.

- 4. The European Commission should ensure and facilitate, at national and regional level, the use of Cohesion Policy funds and encourage Managed Services and Public Private Partnership projects.**

To support healthcare and healthcare infrastructure improvements, more flexible rules on co-financing and simplification of the process to access and manage the funds are needed. The European Commission should develop a technical and financial guide to help Managing Authorities use Managed Services and PPP schemes in the implementation of Cohesion Policy.



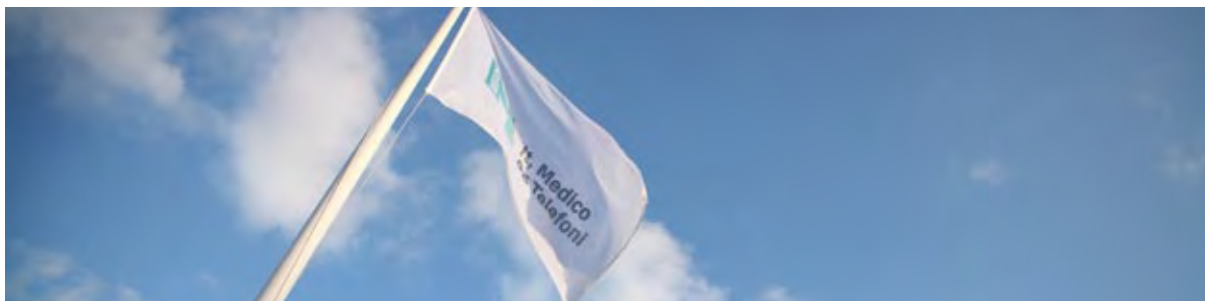


# ANNEX: BEST PRACTICES



## 1 REGION HOVEDSTADEN (DENMARK)

### CATEGORY: CAPITAL INVESTMENT AND MANAGED SERVICES (MS)



#### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

Denmark represents one of the most advanced nations worldwide in terms of the investment in and adoption of eHealth. The first major step took place in 1977 with the rollout of the National Hospital Patient Registry and since then Denmark consistently has been implementing new clinical and infrastructure applications. The current focus of this advanced healthcare system is to improve and optimise care delivery through the coordinated workflow, consolidation of the existing IT solutions and the economies of scale within five health regions.

In 2011, the Region Hovedstaden – the capital region of Denmark – started the process of selecting a health ICT vendor that would fulfil their sophisticated requirements of consolidating RIS/PACS environment across its 13 hospitals that jointly produce 1.6 million annual radiology examinations. Being experienced with the rollout of large IT initiatives, it was critical for the region to select the vendor with proven and extensive experience of such projects.

#### 2. CUSTOMER NEEDS AND KEY CHALLENGE

Jan Thomsen, Co-project Manager, IMT summarises the project objectives in the following manner: “We wanted to be able to use regional diagnostic resources, such as technologists, secretaries, radiologists and modalities, in a more efficient way across the hospitals in the region, implementing workflows so that we could utilise available resources on an as-needed basis, rather than where they were located.”

#### 3. SOLUTION AND BENEFITS

The industry is in the process of delivering its broad Radiology IT portfolio at the moment utilising industry standards. Once completed, the project will enable radiologists to have access to the patient’s complete history of radiology images and reports across the region irrespectively of the source of that information. Hence, it will improve the quality of care by ensuring access to the prior clinical information as well as save the costs by eliminating the need for duplicated exams and optimising the diagnostic workflow.

Moreover, authorised clinicians and other healthcare staff will have secure access to data for their patients, when and where they need it - at the point of care. The region’s resources will be shared across all hospitals and healthcare staff will participate in the same clinical workflows, helping to achieve the region’s centrally determined efficiency goals while supporting an expected 4-5% annual growth in diagnostic imaging studies.

According to the project team, “For Denmark, the Capital Region project marks a major healthcare milestone, which prepares the region to meet the current and future challenges”.

#### 4. KEY FIGURES

- The Capital Region is one of five administrative units in Denmark providing healthcare, regional development and research for 1.7 million inhabitants, about 30% of Denmark’s population.
- The area comprises 13 hospitals, together employing 36,000 staff. In total, the hospitals carry out 1.6 million diagnostic procedures per year.
- Image storage requirements are expected to exceed one petabyte (or 1 million gigabytes) over the expected lifetime of the new RIS/PACS.
- With expected annual growth of 4-5% in diagnostic imaging studies, the region is well-prepared to meet challenges today, and in the future.

## 2 RÉGION SANS FILM, ÎLE-DE-FRANCE (FRANCE)

### CATEGORY: **MANAGED SERVICES (MS)**



#### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

In 2009, the Ministry of Health initiated a 'Région sans film' 29 million euro project to deliver PACS and RIS health ICT applications to the "Île-de-France", one of the country's most populous regions. The idea was to drive productivity and increase efficiencies through rapidly increasing usage of digital technology. This synergistic public and private partnership was established to build and run a cloud-embedded platform which delivers imaging services to health structures, GP and radiologist practices of the 12 Million habitants region of Paris.

#### 2. CUSTOMER NEEDS AND KEY CHALLENGE

Previously, local platforms delivered PACS services within healthcare organisations, but hospitals were having trouble managing image archives after several years of use due to increasing maintenance costs. This new platform deliver PACS and the archiving of imaging services from the cloud as well as image distribution to the local general practitioners via the internet to 93 hospitals, 100+ private practices, 500+ radiologists while covering 600 modalities.

#### 3. SOLUTION AND BENEFITS

The resulting platform now enables hospitals to become an important 'healthcare hub', able to connect previously disparate services, enabling process improvements, workflow efficiencies and the delivery of better patient safety and healthcare outcomes.

Currently 33 of the 93 targeted regional hospitals are connected to this new cloud-based platform and are benefiting from the very rapid deployment and simple implementation of the required software services. Many hospitals have reported immediate increases in productivity, as users easily transitioned to the system. All the technical support and management is included within the service offering; performance and availability are guaranteed. Thus, the hospitals can dedicate their IT staff to focus on users and other applications, and do not have to hire highly skilled specialists for PACS systems.

With radiologists now using computers instead of film (or paper) the potential for duplicative efforts are reduced, and the opportunity to share information increased. The creation of this software service, combined with higher Internet connection speed, is enabling the development of tele-radiology services between two or more health structures; access to images produced in hospitals can now be shared with GPs, and accessed by specialist radiologists from their homes. Not only are diagnostic turnaround times quicker, but GPs have easier access to patient images.

The service provision has been built on a 'pay as you go' billing model priced by exam, decreasing the cost per exam by up to 30%. To date, over 2 million patient examinations are stored, which can be viewed using the platform.

Where healthcare pressures are increasing, many more local and regional hospital-centred networks are developing to provide an improved service to an ever more demanding and informed patient. Public and private investments in healthcare technologies and research are driving this steady evolution in healthcare, set to benefit the lives of millions of Europeans, and contribute to economic prosperity.

### 3 MURCIA AREA (SPAIN)

#### CATEGORY: **MANAGED SERVICES (MS)**

##### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

The Ministry of Health of the Spanish coastal area Murcia planned to improve the quality of healthcare services to their citizens, particularly to increase patient satisfaction and decrease waiting lists.

A 15-year PPP contract ensured the opening of two government-run hospitals Santa Lucia University Hospital (Cartagena) and Los Arcos del Mar Menor University Hospital in 2011 (656 and 329 beds respectively).

**The customer ambition is to:**

- Satisfy healthcare needs adequately and efficiently for the next 25 years
- Equip two government-operated hospitals with state-of-the-art medical technology during an economic crisis that is causing budget fluctuations in the public healthcare sector
- Enhance the quality of the state-funded healthcare sector while achieving the best possible cost-benefit ratio



##### 2. CUSTOMER NEEDS AND KEY CHALLENGE

**The customer needs are to:**

- Remain competitive and be able to offer the best possible and cost-efficient treatment to patients and the medical professionals in a rather rural region
- Satisfy growing healthcare demand in a rural area
- Access to the latest imaging and lab technology and IT
- No worries about system maintenance, management or investment budget restrictions

### 3. SOLUTION AND BENEFITS

The industry implemented its Managed Services (MS) model, assuming responsibility for providing the initial range of state-of-the-art medical technology and IT systems, financing these items, service and maintenance, and providing a 15-year innovation guarantee for the systems.

As part of the partnership, the industry has provided the hospitals with more than 18,500 items including 100 imaging systems, such as computed tomography (CT) scanners and magnetic resonance imaging (MRI) systems, as well as systems for molecular imaging, mammography, ultrasound and lab systems in only seven months.

The systems will be replaced in predefined intervals with the newest model of the respective product line.

The provider also set up the entire hospital information and communications system and all of the laboratory systems at both facilities. The integrated IT-solution enables physicians from specialised care and primary care to communicate and exchange patient information and pictures thereby providing access to specialised healthcare services on the one hand and also overcoming the disconnection of the different care sectors on the other hand.

#### The benefits are:

- Financing and planning certainty for the government healthcare sector
- Guarantee of innovation, updates, and replacements for the future
- Access to state-of-the-art medical technology enables quality enhancement and an increased range of treatment and intervention methods
- Facility rises to become a regional and national benchmark hospital
- Workflow consultancy and training/education provision
- Increased efficiency due to optimised processes in patient treatment at a time when European healthcare systems are under increasing pressure
- Long-term sustainable solutions through the use of integrated and innovative technologies
- Financial certainty for planning purposes, even during an era when difficult economic times affect public budgets

#### Outcome = Potential to achieve optimal patient care at an affordable price

- Average waiting time for an appointment with a specialist: Murcia 29 days (average in Spain is 53)
- Average waiting time for surgical interventions: 51 days (average in Spain 61)
- Patient satisfaction: two out of three residents of the Murcia region rated the public health system as good and gave healthcare staff top marks among all public servant groups
- Many of the best specialists moved to the new hospitals

#### Expected outcome for the next years

- Faster appointments for non-emergency operations
- Significantly less time to receive test results
- Shorten the postoperative processes to free up beds more quickly
- Avoid patient movements to hospitals through integration between primary care and hospitals with better diagnostics and IT

## 4 HOSPITAL SANT PAU, BARCELONA (SPAIN)

CATEGORY: **HOSPITAL BUILT: PUBLIC-PRIVATE PARTNERSHIP (PPP)**  
**EQUIPMENT: MANAGED SERVICES (MS)**



### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

Sant Pau is the oldest and largest hospital in Spain providing healthcare throughout Catalonia. It is a reference centre for several specialties, with an international reputation for providing healthcare, research and teaching. The project was signed in 2009. The customer ambition is to be a world class healthcare provider and a renowned centre for treatment, research and education – using technology as a key enabler.

### 2. CUSTOMER NEEDS AND KEY CHALLENGE

Hospital Sant Pau moved to a new building, during the summer of 2009. The hospital needed to be fully equipped by both moving some of the existing equipment and incorporating a significant amount of new items. The new Imaging department was to be up-scaled to allow the hospital to fulfil its new growth and clinical ambitions. The economic situation in Spain and high value of imaging equipment makes it a challenge to remain at the forefront of innovation.

### 3. SOLUTION AND BENEFITS

**The solution offered was a 10 year partnership that went beyond equipment and included:**

- Supply of all equipment in the Imaging department including Magnetic Resonance, Computed Tomography, General X-Ray, Nuclear Medicine, Ultrasound
- Timely renewal, upgrade and maintenance of technology with an on-site team
- Procurement, installation and commissioning, with performance guarantees
- Capital asset plan, workflow consultancy and training/education provision
- Research collaboration between San Pau and company in a jointly Partnership Steering Committee
- Fixed monthly fee for total service for the duration of the contract. No EU funds except for grants for Nuclear Medicine.

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**The benefits are:**

- **Future proofing technology:**

Radiology staff now has access to the latest technology at all times and know when their equipment will be renewed according to a schedule. This comes with flexibility to renew according to the latest innovation at the time of renewal and growth areas in clinical activities.

- **Transferring technology risk to the medical equipment provider:**

The service fee is fixed and indexed for the duration of the contract providing an affordable and predictable technology expenditure outlook that is part of the hospital's operating budget. The risk of future technology changes and fluctuating costs are transferred to the medical equipment manufacturer.

- **Collaborative approach:**

A research collaboration project is included in the partnership to drive innovation in healthcare.

- **Performance guarantees:**

The contract includes performance guarantees giving security and assurance that the hospital can rely on its technology to deliver on its care targets.

#### **4. KEY FIGURES**

- 34,000 admissions
- 150,000 emergency cases
- 71 beds for day admission
- 634 hospitalisation beds
- 19 surgical rooms

## 5 VALENCIA PROVINCE (SPAIN)

CATEGORY: **PUBLIC-PRIVATE PARTNERSHIP (PPP)**



### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

Valencia Province launched with great success, approximately 12 years ago, a 'Patient Care Programme'. This success identified with a complete patient care system, accessible to everyone at an affordable price. The entire programme is focused on the patient, taking into account the availability of all medical services that are needed to manage health. It starts with the family doctor and the specialist, advancing towards highly-specialised medical procedures as and when needed.

### 2. CUSTOMER NEEDS AND KEY CHALLENGE

Patient had poor access to healthcare, long waiting times, long travel distance therefore high dissatisfaction from the patients and the costs were high.

### 3. SOLUTION AND BENEFITS

**The benefits to the patient are:**

- No waiting time
- Screening programs
- Private rooms
- Home care
- Patient healthcare programmes

Over twelve years of experience, patient satisfaction has been rated >9 (scale 10) which is a clear endorsement of success.

To be financially successful with this model, reimbursement is calculated on the basis of 'Per Capita' insurance. With a defined amount of members (insured persons via taxes) in a specified region, the operator can optimise his healthcare programme with a predefined budget. The operator employs a dedicated quality management structure to ensure the success of this optimisation.

**The quality management structure is based on:**

- One medical patient record
- Optimised clinical procedures
- Incentive payrolls



- Controlled material usage
- Optimised infrastructure usage
- Enterprise Resource Planning (ERP)
- Patient satisfaction rate

The operator must satisfy the patient. The patient has freedom of choice in choosing a healthcare provider. The patient may exercise the option to go to another region to secure care if they believe the care to be better. In this case, the provider has to pay for this patient based upon a clinical procedures price list, but with an additional fine factor. This competition element motivates the provider to manage their very best effort to keep the patient within his/her region.

#### To satisfy members, the Provider offers:

- Easy access to healthcare
- No waiting times
- Screening programs
- All medical procedures
- Home nursing
- Private rooms
- Free family hospital visits with lodging
- Complete family care

Valencia medical regions such as Alsira, Torrevieja, Elce and others, are using this patient care system with an income of €600/capita. This can only be achieved by implementing a quality management system using the latest technology:

- A complete IT system,
- EMR, HIS, LIS, RIS, PACS, EPR and Telemedicine are included
- Good education programme for professional staff
- Latest operation techniques, like one-day surgery
- Latest imaging technology

The Valencia government decided to use a PPP model when implementing this healthcare programme, where the providers are private investors. This has contributed to the success of the programme. Competition plays a key role in keeping the investor awake while maintaining the benefit to the patient.

The 'Per Capita' model with a reimbursement of €600/capita (for Spain) makes it very feasible to introduce this system in many other countries, especially in Central and Eastern Europe.

#### 4. KEY FIGURES

	TORREVIEJA HOSPITAL	AV. SPAIN HOSPITAL
Patient waiting times		
Surgery waiting list	20 days	90 days
Outpatients	18 days	120 days
Outpatients radiology	15 days	150 days
Other test	10 days	120 days
Emergency	30 min	2 hours
<b>PATIENT PROPHYLACTICS</b>		
Number of surgery acts		
Similar production capacity	14,000	7,000
<b>SATISFACTION</b>		
0-10	9	6
All ratios are valued by iasist (independent consultancy)		
Average days of hospitalisation	4.2	6.5
Mortality	90	100
Complications	87	100

## 6 QUEEN'S HOSPITAL, ROMFORD (UNITED KINGDOM)

### CATEGORY: **MANAGED SERVICES (MS)**



#### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

Barking, Havering and Redbridge University Hospitals NHS Trust serves a population of around 700,000, from a wide range of social and ethnic groups, making it one of the largest acute hospital trusts in England.

From the two main hospitals, Queen's Hospital in Romford opened in 2006 and brought together the services previously run in two other hospitals.

In July 2003, the construction of the new 939-bed acute hospital began. It was handed over in October 2006 and became fully operational in December 2006. Queen's is today a premier acute hospital providing complex care and specialist services.

#### 2. CUSTOMER NEEDS AND KEY CHALLENGE

The key challenge is to ensure high quality medical equipment with high availabilities but without using too many resources for management and procurement, the consortium responsible for building the new hospital decided to request a Managed Service.

#### 3. SOLUTION AND BENEFITS

The Catalyst Healthcare consortium including Bovis Lease Lend, Bank of Scotland and Sodexo, decided to contract a 33-year vendor independent Managed Services agreement. It includes supply, maintenance and management of all medical equipment, from MRI and CT to anaesthetic machines (approximately 4,000 items) and telecommunication infrastructure.

#### The benefits are:

- **Transferring risk**

Through the MS, the NHS transfers all the risk associated with maintaining and renewing major items of equipment to the MS provider, leaving the customer to concentrate on providing first class patient care.

- **Right equipment, right time**

The MS gives the NHS more flexibility in using latest technology when needed. Especially in complex projects as building a new hospital, ongoing changes in quantities of medical equipment occur. With a partner, the NHS had the chance to transfer what is written in the contract to what is really needed in reality with highest quality in time and in budget.

## 7 ROYAL VICTORIA HOSPITAL, BELFAST (UNITED KINGDOM)

### CATEGORY: **MANAGED SERVICES (MS)**



#### 1. GENERAL OVERVIEW AND CUSTOMER AMBITION

The Royal Hospital is the biggest and best known hospital complexes in Northern Ireland. Made up of four linked hospitals (the Royal Victoria, Royal Jubilee Maternity Service, Royal Belfast Hospital for Sick Children and the Dental Hospital) the Royal provides almost all of the medical, surgical and dental specialty services for Northern Ireland.

Royal Victoria Hospital (RVH) is Regional Centre for Trauma, Cardiac Surgery, Vascular Surgery, Neurosurgery, Women and Children Services. With almost 7,000 staff, it is also the largest healthcare employer in the country. RVH is now part of the Belfast Trust, which has an annual budget of £1.2 billion.

The project was signed in 2006.

The customer ambition is to improve health and wellbeing and reduce health inequalities. In partnership with others and by engaging with staff, the goal is to deliver safe, improving, modernising, cost effective health and social care.

#### 2. CUSTOMER NEEDS AND KEY CHALLENGE

The hospital has undergone an ambitious plan of redevelopment, spanning some 10 to 12 years and costing in the region of £800m. A major part of the plans has been the creation of a new, £25m Imaging Centre. Completed in March 2007, the centre has revolutionised the way in which imaging services are provided within the Trust.

Although the construction of the new centre was funded by public capital, it was decided to do the procurement of its medical equipment and clinical information systems via a Managed Service route. By taking the Managed Service approach, the Trust would be able to avoid the capital constraints of the Health Service and ensure the Imaging Centre employed state-of-the-art equipment that was fit for purpose and future-proofed.

#### 3. SOLUTION AND BENEFITS

**A 15-year Multi-Vendor (70/30) partnership that goes beyond equipment and includes:**

- Managed Services for Radiology, Cardiology and ATICS (anaesthetics, theatres, intensive care)
- Managed Clinical Information Services (RIS, PACS, CVIS, ICIP, TMS)
- Timely renewal, upgrade and maintenance of technology with on-site team
- Procure, install, commissioning and train with performance guarantees (asset uptimes, quality failures)
- Fixed, monthly, unitary payment

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**The benefits are:**

- **Future proofing technology:**

Staff at the hospital can now work with the very latest equipment and technology to maximise the quality of patient care. This will continue over the 15 years of the contract, ensuring that The Royal keeps up with any advances in technology and stays at the forefront of healthcare provision. In addition, as the equipment is standardised across departments, the risk of clinical error is also reduced.

- **Transferring technology risk to medical equipment provider:**

The strategic partnership allows the Trust to transfer any risk associated with technology investments onto the provider. The contract frees up valuable capital and minimises any down time due to equipment failure, allowing the hospital to meet the hospital's challenging targets.

- **Performance guarantees:**

The contract includes performance guarantees giving security and assurance that the hospital can rely on its technology to deliver on its care targets.

- **Service management:**

The vendor provides on-site management of all aspects of the service, to free clinical staff from administration duties, so that they can focus on the specific duties of patient care and treatment.

- **Profit Sharing:**

The provider has incorporated a number of schemes that allow the Trust to gain financial rebates within the payment regime.

- **Asset Management:**

The provider operates a computerised asset management tool (OPTIM) and provides regular reports on all aspects of individual devices. In addition to performance information, it track reports from the Medical Devices Agency on all equipment alerts and monitor and report on any Adverse Incidents.

- **Consultancy:**

The provider has supported the clinical users in evaluating potential improvements in the Patient Treatment Pathways, particularly in Cardiology.

- **Education:**

The vendor has provided free access to its Learning Centre, which provides recognised and approved e-learning opportunities, for post graduate training and development.

#### 4. KEY FIGURES

- 80,000 admissions
- 350,000 outpatients
- 40 emergency/intensive care beds
- 500 day hospital beds
- 15 surgical rooms

## GENERAL INFORMATION ABOUT COCIR

Founded as a non-profit trade association in 1959, COCIR represents the radiological, electromedical and healthcare IT industry in Europe. As such, our members play a driving role in developing the future of healthcare both in Europe and worldwide.

COCIR is committed to supporting its members and communicating with its partners in Europe and beyond on issues which affect the medical technology sector and the health of EU citizens.

COCIR also works with various organisations promoting harmonised international standards and fair regulatory control that respects the quality and effectiveness of medical devices and healthcare IT systems without compromising the safety of patients and users.

We encourage the use of advanced technology to support healthcare delivery worldwide.

COCIR's key objectives include promoting free worldwide trade of medical devices and maintaining the competitiveness of the European health sector.

## COCIR COMPANY MEMBERS:



## NATIONAL TRADE ASSOCIATIONS MEMBERS:



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