



European
Commission



Memorandum of the
**EXPERT PANEL ON EFFECTIVE WAYS
OF INVESTING IN HEALTH (EXPH)**
on
Reflections on hospital reforms in the EU



EXPERT PANEL ON EFFECTIVE WAYS OF INVESTING IN HEALTH
(EXPH)

Memorandum

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Reflections on hospital reforms in the EU

The EXPH adopted this memorandum at the 14th plenary meeting of 3 May 2016

About the Expert Panel on effective ways of investing in Health (EXPH)

Sound and timely scientific advice is an essential requirement for the Commission to pursue modern, responsive and sustainable health systems. To this end, the Commission has set up a multidisciplinary and independent Expert Panel which provides advice on effective ways of investing in health ([Commission Decision 2012/C 198/06](#)).

The core element of the Expert Panel's mission is to provide the Commission with sound and independent advice in the form of opinions in response to questions (mandates) submitted by the Commission on matters related to health care modernisation, responsiveness, and sustainability. The advice does not bind the Commission.

The areas of competence of the Expert Panel include, and are not limited to, primary care, hospital care, pharmaceuticals, research and development, prevention and promotion, links with the social protection sector, cross-border issues, system financing, information systems and patient registers, health inequalities, etc.

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The memorandums of the Expert Panel present the views of the independent scientists who are members of the Expert Panel. They do not necessarily reflect the views of the European Commission nor its services. The memorandums are published by the European Union in their original language only.

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ABSTRACT

In this memorandum, the challenges facing hospitals in Europe are explored in the light of the current socio-economic and financial context and the range of responses being employed are reviewed briefly. The note concludes with some reflections for principles that can underpin hospital reforms.

Keywords: EXPH, Expert Panel on effective ways of investing in Health, hospital reforms, memorandum

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TABLE OF CONTENTS

ACKNOWLEDGMENTS 3

ABSTRACT 4

TERMS OF REFERENCE 6

MEMORANDUM 7

1. EXECUTIVE SUMMARY 7

2. THE CHANGING ROLE OF THE HOSPITAL10

3. HOSPITAL REFORMS AND THEIR IMPACT17

4. REFLECTIONS BY THE EXPERT PANEL23

LIST OF ABBREVIATIONS26

REFERENCES27

TERMS OF REFERENCE

Hospitals are an important platform for providing health care services. At the same time, expenditure in hospital care consumes a significant share of health care resources. European Union countries are developing hospital reforms aimed to improve efficiency and reinforce sustainability.

This memorandum should discuss the following points:

- 1 – Some comments on the challenges facing hospitals in Europe
- 2 – Emerging trends in hospital reforms

MEMORANDUM

1. EXECUTIVE SUMMARY

Given the many other things that are happening in European Countries, and in particular, the implementation of austerity policies, it is impossible to isolate the effects of the hospital reform from everything else.

As noted above, any assessment of hospital reforms must take account of what else has been happening over this period. In particular, it is necessary to understand how EU countries were affected by the 2007 global financial crisis.

Some of the explicit objectives of hospital reforms were:

- a. Economic sustainability (cost-containment)
- b. Hospital efficiency
- c. Improved governance
- d. Maintaining / improving quality of health services
- e. Patient empowerment

This memorandum discusses some of the challenges facing hospitals in the EU and responses that have been applied: strengthening the role of the citizen / patient; ensuring adequate funding; copayments; optimizing the health workforce; increasing efficiency of pharmaceutical expenditure; shifting activities to outpatient care; promoting primary care; promoting coordination and / or integration; improving governance; innovative methods of paying hospitals; improving quality and safety; public private partnerships; developing care pathways; reducing environmental footprints; strengthening information systems.

Some reflections that may be useful for the analysis of changes and for planning future developments are offered:

1. Hospital reform cannot be undertaken in isolation. It must be part of system wide changes that ensure that patients are managed in the most appropriate setting, which is likely to require a greater investment in primary care.

2. The design of hospital reform should be shaped by evidence on the best way of organising services to achieve the most cost-effective outcomes. This will require greater clarity on clinical pathways for major conditions, while recognising the importance of systems that can meet the needs of growing numbers of patients with multi-morbidity.
3. The demands placed on hospitals by changing demographics, disease burden, and opportunities to intervene are constantly changing. This justifies a continuing process of reform that will allow hospitals to evolve to address these changing circumstances, for example by enhancing co-ordination between them and with health and social care providers at all levels.
4. Hospital reforms often involve substantial time lags and it can be difficult to respond rapidly when circumstances change. The development of hospital policy should include foresight exercises, including scenario planning, accompanied by an assessment of the resilience of new structures.
5. It is important to ensure that those health workers best able to meet the needs of patients are given the necessary responsibilities. This will require careful assessment of roles and skill-mix, drawing on the best available international evidence.
6. It is also important to ensure that mechanisms to reward health workers are designed to ensure adequate recruitment and retention, as well as to promote high quality care. Existing payment systems should be reassessed, drawing on the best available international evidence but adapted to each national context.
7. There is some evidence suggesting that access to care may have been compromised as a consequence of some hospital reforms. This could be related to budgetary reductions affecting staff availability and their working conditions, as well as increases in co-payments (in general, not specifically to hospital care). In some cases, the expansion of exemptions may have mitigated this. The available international evidence does not support the use of co-payments so it will be important to review the overall burden and

Reflections on hospital reforms in the EU

distribution of out-of-pocket payments on both clinical services and pharmaceuticals, and the consequences for access to care. Equity in financing should be improved.

8. While determination of the appropriate level of health expenditure is ultimately a political choice, it should be informed by the emerging health needs of the population and the key health system goals of improving health and responsiveness, and also on preferences of the population and the trade-offs people want to make.
9. Successful and sustainable health reforms have a high level of popular support. It is important that the reform process includes effective engagement of public and patients. Patients and population have to be considered essential actors in all health strategies.
10. It is important to reinforce capacities and mechanisms for proper assessment of implementation and impact of hospital reform policies. A comprehensive assessment should include determinants of health, impact on coverage, adequate level of financing, quality and safety, access, equity in financing, efficiency, responsiveness, and health and economic outcomes.

2. THE CHANGING ROLE OF THE HOSPITAL

Introduction

The role of the hospital is changing in all industrialised countries, driven by changes in the pattern of disease, and in particular the growth of multi-morbidity, changing opportunities to intervene driven by new medicines and technology, including communications technology supporting exchange of information among facilities and among professionals, new models of training health professionals, including the need for greater time in the community, and the growth of medical research, with hospitals increasingly involved in recruitment for clinical trials and as settings for health services research.

In keeping with these changes, the mix of patients within hospitals is changing greatly. Many who might once have been admitted to hospital for investigation or treatment can be managed in alternative settings, such as primary care or ambulatory treatment facilities. Those needing long term care are more likely to be cared for in the community, either in their own homes or designated residential facilities. At the same time, improved survival is increasing the number of people with multiple, often complex health problems, requiring integrated care. Together, these changes are leading to a new paradigm, moving away from disease-oriented care towards goal-oriented care, focusing on the achievement of the goals of the patient (De Maeseneer J et al 2011). Goal-oriented care requires continuous interaction between hospital, primary care, patient, family, and informal care givers. Telehealth technologies, robotics, miniaturization of "big" equipments, and networked databases will offer support for "virtual" hospitalization and continuity of care. All these developments will reshape the hospital fundamentally in 2020-2030.

Edwards et al (2004) analysed the pressures for change being faced by hospitals, identifying the following: specialization (larger caseloads, larger population to be served, larger teams); changing in employment practice; improved efficiency; quality and volume; safety and quality; technology; consumerism. They argue that it is a need for re-thinking the role of the hospital, rather than simply providing more of the same.

They suggest changes in different elements: services to be provided (emergency services; inpatient care; development of day surgery; paediatric care; obstetrics;

diagnostics); dealing with the changing nature of the workforce; improving the patient experience; organisation inside the hospital; wider networks (primary care, etc.); hospitals and their communities; management and leadership.

McKee and Healy (2000) discussed the role of the hospital in a changing environment. They showed why hospitals should evolve to respond to changing health care needs and emerging technologies. They analyse three reform strategies: behavioural interventions, such as quality assurance programmes; changing organizational culture; the use of financial incentives.

Other reports, like the report "Hospitals on the edge?" (RCP 2012), or the report "Future hospital" by the Future Hospital Commission (FHC, 2013) stressed the need for radical changes of the design and delivery of inpatient care, suggesting interesting recommendations.

The most successful hospital reform programmes will draw extensively on the available evidence related to these developments. There is now a considerable body of literature from health services research and many countries showing what is or is not effective. This evidence is important because it highlights how many ideas that, superficially, seem to be good, may not work in practice. This research also highlights the importance of ensuring that there are adequate investments in equipment and staff in those facilities to which care is to be transferred.

It is beyond the scope of this document to go into detail on how the modern hospital will have to change over the next few decades. However, certain general points can be made. The emerging evidence highlights the benefits of a range of new organisational models of care, built on components such as multi-professional teams, clinical networks, task shifting and a move to out-of-hospital care. Crucially, there is a growing recognition of the importance of putting the patient centre of change, asking how hospitals must adapt to the needs of the patient and their expectations, including changing patterns of work. However there are many barriers to better integration/coordination between primary care and hospital care. These include rigid organisational barriers, especially where providers have different ways of working, information systems, management structures, and cultures.

The components of hospital activity

The following sections explore very briefly some areas in which changes are taking place in many countries. It is now the norm in many industrialised countries for almost all births to take place in hospitals (the Netherlands is a rare exception). However, this is now changing, with moves to stand-alone birth centres run by midwives rather than obstetricians. This recognises that giving birth should be a natural process and avoids the risk of over medicalisation, something that is particularly important in countries with high caesarean rates. However the introduction of such units must be part of a wider programme to ensure that those deliveries that are high-risk, managed appropriately, as well as recognising that problems can arise unexpectedly, so there must be appropriate systems in place for rapid referral to specialist facilities where required. Such changes must also take account of the evidence that outcomes of neonatal intensive care are better in a few larger units, something that can only become more important as the management of the sick neonate becomes ever more complex.

Moving to the next stage of life, the management of sick children has changed beyond all recognition in the last three or four decades. Hospital wards no longer are filled with children with common infectious diseases, such as chest infections, diarrhoea, and hepatitis. Instead, paediatric care is increasingly dominated by chronic disease, such as diabetes and the consequences of genetic disorders among children, with those who would once have died early now surviving. This requires management by multidisciplinary teams, with close links to social and education services. The increased survival of these children also means that there is a need to put in place well-designed systems to manage the transition to adulthood. This is an area that has been particularly poorly organised in many countries. Finally, in many countries there is a growing need for improved management of children with behavioural and psychiatric disorders, much of which will have to be undertaken outside the hospital.

At the other end of the age spectrum, populations everywhere are becoming older. The evidence on whether they are becoming healthier at each age is less clear, although there is some evidence on the determinants of successful and healthy ageing. Thus, it seems that those who enter middle age with few risk factors, who remain confident, and to continue to be engaged in society, do better. Although there has been considerable concern about the cost implications of ageing

populations, this has probably been exaggerated. Instead, the main concern is about the growth of multi-morbidity, which increases markedly with advancing age. Consequently, a typical 85-year-old patient may have six or seven different conditions. Ideally, most of these will be managed in primary care, but there will be a need for occasional attendances at hospital for specialised interventions, for example the management of diabetic eye disease or assessment of cardiovascular function. The implication is that clinical guidelines, which traditionally have been focused on single conditions, must take account of this multi-morbidity, and in particular the need to integrate care across different specialties and be aware of the potential for treatment of one condition to cause problems for that of another.

There are also major changes in the management of many of the leading contributors to disease burden. While cardiovascular disease is still a leading killer in many countries, rates have declined remarkably in recent years. The management of the acute coronary syndrome has been transformed, although in some countries models of care have yet to take account of the emerging evidence. It is now clear that those who suffer a myocardial infarction should, providing there is no contraindication, receive percutaneous coronary intervention as quickly as possible. This requires that they get to an appropriate facility without delay. However, this is only the beginning, and it is essential that they then receive appropriate secondary prevention to minimise the risk of recurrence. These goals can only be achieved by having clinical networks, including rapid access to out-of-hospital care allowing definitive treatment to begin in the ambulance, based on evidence informed protocols.

Cancer is the other major killer in Western countries. Again, the management has changed dramatically in recent decades, with improved diagnosis and innovative forms of treatment. Once again, early recognition is crucial, demanding systems for rapid referral for those presenting with suspicious symptoms. Some cancers benefit from organised screening programmes, with population-based registers allowing proactive identification of those eligible, active monitoring of uptake to identify underserved groups, and integration with referral and treatment services, supported by co-ordinated quality assurance schemes. For those with suspected cancer there is a clear benefit from having the initial assessment and treatment in a specialised centre, but given that most people will now die with cancer rather than from it, so that it has been transformed into a lifelong chronic disease, it is also important to provide routine long-term care as close as possible to the patient's

home. Again, this requires the creation of appropriate clinical networks with shared protocols.

A related issue is how to meet the needs of patients that are dying. Most people will prefer to die in their own homes, surrounded by their family, but if this is not possible, then there is overwhelming evidence that specialised facilities, such as hospices, can provide high quality care, including relief of pain and the complex mixture of symptoms that go with death from cancer and many degenerative diseases. However, hospice provision, as well as specialised palliative care teams, are inadequate in many countries.

The burden of mental illness is, and will remain important and, in some cases, people seriously affected will need hospital care. There is a large disparity between Member States in the number of psychiatric beds (Italy 9.54 / 100,000 inhabitants, Belgium 173.9 / 100,000 inhabitants). Most mental health problems should be managed in primary care and outpatient mental health facilities, although there is also a continuing need for psychiatric units in general hospitals, looking after emergencies and those with short stay hospital admissions. Long-term care in psychiatric hospitals is a thing of the past, with most now closed or drastically reduced in size.

We now turn to the departments within the general hospital. In many hospitals the emergency department has been one in which people with many different needs are mixed together, almost at random. Within the emergency department population there are minor injuries that could be managed elsewhere, exacerbations of chronic illnesses that could be prevented or managed in primary care, children, for whom the busy emergency department is definitely not the right place, and those with major trauma who require management by a skilled team of different types of surgeons and intensive care specialists. Although the evidence from Europe is mixed, there is a need to look at alternatives to emergency department treatment for those who can be managed in other places, taking account of the specific characteristics of each health system.

It is especially important to take account of changes in technology that impact on the management of hospitals. In particular, the use of intravenous anaesthetics coupled with micro invasive surgery, is radically reducing length of stay. The introduction of new diagnostic methods, such as micro-arrays, mean that many

patients no longer need to come to hospital to get complex investigations. The availability of ultrasound imaging in primary care can reduce the need for attendance for imaging.

One of most important challenges relates to the improvement of clinical processes and pathways (Pinelli N 2016). More appropriate use of the workforce will be essential, especially in the light of skills shortages affecting many countries, with task-shifting and competency sharing. This is a challenge that should not be underestimated: changing practices, attitudes and behaviors of providers at the bed side and in the consultation room very often proves to be more difficult than structural reforms. It requires well-designed long-term strategies that encompass training, reward systems, and recognition of the importance of listening to those who are best qualified to assess what needs to change, the professionals delivering the service. Many countries face major challenges in recruiting and retaining health professionals. This can only be addressed by a co-ordinated strategy that considers training needs, terms and conditions of service, and working conditions, including factors such as transport arrangements and child care for those working unsocial hours.

Finally, reform must be centred on the needs of the patient, applying principles such as those set out by the Royal College of Physicians of London in its Future Hospital Commission (Box 1).

Conclusion

All of these issues need to be taken into account when thinking how hospitals should be configured in the future. The key element in all of them is the need for teams and networks. However, the hospital is not only there to treat patients. It fulfils a number of other roles, including training and research. These changes will mean that fewer patients are in hospital and for a shorter time. This will limit the exposure that health professionals in training have to complex medical problems. Consequently, the reform programme should also explicitly look at the potential to develop new models of training for the next generation of health professionals.

Box 1: Future Hospital Commission's 11 principles of care

1. Fundamental standards of care must always be met.
2. Patient experience is valued as much as clinical effectiveness.
3. Responsibility for each patient's care is clear and communicated.
4. Patients have effective and timely access to care.
5. Patients do not move wards unless this is necessary for their clinical care.
6. Robust arrangements for transferring of care are in place.
7. Good communication with and about patients is the norm.
8. Care is designed to facilitate self-care and health promotion.
9. Services are tailored to meet the needs of individual patients, including vulnerable patients.
10. All patients have a care plan that reflects their specific clinical and support needs.
11. Staff are supported to deliver safe, compassionate care and are committed to improving quality.

Source: Future hospital: caring for medical patients. A report from the Future Hospital Commission to the Royal College of Physicians, 2013.

3. HOSPITAL REFORMS AND THEIR IMPACT

EU INVOLVEMENT IN HOSPITAL REFORMS

Some governments have requested financial support from EU institutions, for example in Economic Adjustment Programmes which may include conditions related to the health sector. In some of these, hospital reforms were encouraged, with an emphasis on cost-containment. For example, in the MoU for Portugal, a reduction in hospital expenditure of €100 million was agreed for 2011, with the same amount in 2012, and a further reduction in operational costs by at least another 5% in 2013. Other related to quality assurance processes, reallocation of health workers, new information technology systems, and a shift of care from hospitals into the community.

The European Union also participates in the process of hospital reform through funding (Structural Funds; European Investment Bank, etc.), or other instruments (European network of reference centers; HTA; eHealth , etc.)

In the following sections we review some contemporary issues relating to hospital reforms in Europe.

STRENGTHENING THE ROLE OF THE CITIZEN / PATIENT

Although this is a key element of hospital reforms, and some measures have been taken, such as increased information being available to citizens, the creation of advisory councils, and easier access to information on the process of care, it is still unclear how much progress has been made in this area. Empowerment of patients offers a means to improve interaction between with the hospital services, reducing unnecessary provision, enhancing patient outcomes and experiences, facilitating outpatient treatment and care, and potentially reducing costs (EXPH 2014-1).

ENSURING ADEQUATE FUNDING

During the crisis many Member States have sought to reduce growth of hospital expenditure. According to the OECD, the average growth in expenditure on hospital care was negative between 2009 and 2013 in 12 OECD countries (OECD 2015).

The sustainability of public health systems depends on efficient use of resources, but it also requires adequate provision of necessary resources. This requires a fair and efficient tax system.

While determination of the appropriate level of health expenditure (“adequacy”) is ultimately a political choice, it should be informed by the emerging health needs of the population and the key health system goals of improving health and responsiveness, and also on preferences of the population and the trade-offs people want to make, recognising that reducing funding is likely to have an adverse impact on access and quality.

COPAYMENTS

The majority of EU countries have been utilising some co-payments for hospital care in public financed services, although others do not, such as the U.K or Spain (HOPE 2015). Some recent reforms have introduced or increased co-payments for hospital services. As a consequence accessibility might have been adversely affected (EXPH 2015-1).

OPTIMIZING THE HEALTH WORKFORCE

In order to contain / reduce costs, one of the measures adopted has been the reduction of staff, and reductions or freezes of wages. Other reforms have changed methods of payment, introducing pay for performance. This approach has to be carefully managed, and may have positive or negative effects on quality and cost. Usually, payment by salary tends to contain costs, while payment by activity increases costs. Motivation of health professionals is a complex issue, and it must be promoted using a balanced combination of different possibilities: external motivations (economic remuneration; recognition by managers and colleagues;

gratitude from patients; adequate working conditions; participation in an exciting project, etc.), and internal motivations (satisfaction with a job well done; encouragement to learn and discover; sense of deep satisfaction when a patient's life is saved, or their disease is cured, etc.).

Availability of competent staff, adequate remuneration systems, and efficient organisation (including participation of health personnel) are necessary conditions to ensure timely access to quality and safety services (Repullo, Freire, 2009). Reductions in staff or worsening of their working conditions could affect negatively access and quality.

INCREASING EFFICIENCY OF PHARMACEUTICAL EXPENDITURE

Some countries (Portugal, Ireland, Spain, France, etc.) have tried to reduce spending on branded medicines, improve the appropriateness of prescribing, and other ways of rationalising spending on hospital pharmaceuticals.

ADJUSTING HOSPITAL CAPACITY

Develop and maintain optimal capacity is a necessary step in hospital reform. During the crisis many countries delayed investment in hospital facilities and equipment. It can be an opportunity to reorient investment now and in the future (Rechel B et al, 2009).

Some countries are considering reducing their installed capacity (Austria, Belgium, Czech Republic, or Germany). Other countries are revising the organisation of their infrastructures, creating networks, referral systems, and clusters of hospitals (Croatia, France, Finland, Portugal, or Slovenia). There is no ideal model for every country in relation to the degree of concentration of hospital resources (McKee and Healy, 2000).

When defining national referral networks, the European Network of Reference Centres may be considered in order to optimise the effective investment of resources. The possibilities of Cross-Border care should also be taken into account (EXPH-2015-2).

SHIFTING ACTIVITIES TO OUTPATIENT CARE

Many of the diagnostic and treatment procedures that years ago required hospitalization may be performed today on an outpatient basis: day hospital, outpatient surgery, home hospitalization, tele-health, etc. This is a trend seen in many Member States (Czech Republic, France, Finland, Slovenia, etc.) that can increase efficiency, lowering costs without losing quality.

PROMOTING PRIMARY CARE

Successful hospital reforms can only be achieved by strengthening Primary Care. If Primary Care is well developed and appropriately equipped, many health problems that might need hospital services can be addressed at primary care level (EXPH 2014-2). Such reforms, including better coordination, enhanced gatekeeping, and better support from hospitals can be seen in several countries (France, Slovenia, Czech Republic, Austria, Portugal).

PROMOTING COORDINATION AND / OR INTEGRATION

The hospital is being transformed to become a more flexible institution, using information and communication technologies, and participating in health promotion activities. Integrated systems allow better coordination between primary care and specialised care, and between health and social care. A major focus of some reforms has been on new means of delivering care, promoting consultations by specialist in primary care, developing the role of care coordinators, and exploring the potential of tele-health. There are also some experiences of integration of networks, including hospitals and primary care centers (Spain, Finland, etc.), seeking to enhance continuity of care, and improve efficiency.

IMPROVING GOVERNANCE

Improving the governance of hospitals is a frequent objective of hospital reforms (Saltman R et al, 2011), and different European countries are reinforcing their

capabilities in this respect (Croatia, Czech Republic, Slovenia, Portugal, Spain, Finland, Sweden, United Kingdom, etc.).

Reform strategies should incorporate appropriate managerial structures; adequate selection systems for senior management; training and evaluation of managers; strengthening participation of health personnel, users and community representatives; improving transparency; developing effective procurement systems; transforming public hospitals into non-profit, or for-profit organisations, etc.

INNOVATIVE METHODS OF PAYING HOSPITALS

Some reforms have introduced, or plan to introduce new ways of paying hospitals with the objective of increasing efficiency (Ireland, Portugal, Slovenia, Czech Republic). There is no consistent evidence that payment for activities will improve efficiency of the health system, increasing quality and reducing costs. Paying by activity will often lead to more being done by the hospital. If this is the objective, the incentive could be appropriate. But, if the objective is to improve efficiency of the system, the effect could be the opposite, producing unnecessary and more expensive services.

IMPROVING QUALITY AND SAFETY

Quality and Safety has been and should continue to be at the heart of hospital processes (AHA, 2011). This has been discussed in the Opinion of the EXPH on Future EU agenda on quality of health care with an especial emphasis on patient safety (EXPH-2014-1). Before the financial crisis, many reforms were oriented to improve quality and safety but there are concerns that, since the crisis, some reforms have been focused on cost-containment without measuring the impact on quality.

PUBLIC PRIVATE PARTNERSHIPS

Public-Private Partnerships, in which a private partner makes an investment and the public partner compensated them over a period of 30 or more years, have been used in several countries including the UK, Portugal and Spain. However, there is little evidence to support this model and considerable evidence of the risks and problems involved (EXPH 2014-3).

DEVELOPING CARE PATHWAYS

There is growing recognition of the benefits that can be obtained from standardising pathways for common conditions, using evidence-based protocols that seek to co-ordinate the many inputs required. One example is the implementation of Clinical Pathways in Italy (Pinelli N, 2016).

REDUCING ENVIRONMENTAL FOOTPRINTS

Hospitals are energy and resources intensive consuming facilities that have a significant environmental impact (energy consumption, waste disposal, etc). Many countries are developing specific strategies (controlling the use of hazardous substances; reducing energy consumption; re-using; recovering; re-cycling, etc.) to promote and integrate environmental sustainability into the routine functioning of hospitals (NHS 2009; McGain F, Naylor C, 2014; GGHH 2011; GGHH 2015). "Improving environmental sustainability can also be a cost saving exercise and strengthen healthcare systems and institutions" (IFMSA, 2015).

STRENGTHENING INFORMATION SYSTEMS

Hospitals require well functioning information systems in order to manage inputs, activities, quality, safety and costs (health records, clinical pathways, inventories, etc.). However, many projects seeking to implement modern information systems have been problematic, reflecting the complexity of the systems needed.

4. REFLECTIONS BY THE EXPERT PANEL

In our review of hospital reform processes, it has been difficult to find evidence of how research on innovative models of care and the changing role of the hospital has been used. Clearly, it is possible that it is being taken into account in some of the local reorganisations that are taking place, but it seems important to stress that hospital reforms should be based on a systematic approach to change, backed up by detailed consideration of the implications for changes in practice and in the roles of different health professionals.

The Expert Panel has noted how many of the reductions in expenditure in some countries have been achieved by cutting either numbers of staff or their salaries. This may lead to shortages of health workers. There is one area that is a matter of particular concern. This is the reduction in nursing numbers. There are sound reasons for transferring much chronic care, such as the routine management of patients with asthma or hypertension, to nurses, providing that they have been adequately trained. This would suggest the need for a review of staffing trends. Clearly, this may also require attention to the pay levels of nurses.

Evidence on how hospital reform has affected European citizens is very limited. However, studies that have analysed the EU Survey of Income and Living Conditions do give some cause for concern. Clearly, it is impossible to attribute the increased level of unmet need to changes in the hospital system, but this does mean that hospitals, as well as other parts of the health system, will need to review their operating practices to develop ways to respond to the problems that so many citizens do seem to be facing (EXPH 2015-1). In addition, there would seem to be a case for revisiting the argument about copayments. These are not supported by the international research evidence, both in terms of their inability to raise money and their indiscriminate deterrence of those in need of health care.

Hospital reform cannot be undertaken in isolation. It must be part of system wide changes that ensure that patients are managed in the most appropriate setting, which is likely to require a greater investment in primary care.

The design of hospital reform should be shaped by evidence on the best way of organising services to achieve the most cost-effective outcomes. This will require greater clarity on clinical pathways for major conditions, while recognising the

importance of systems that can meet the needs of growing numbers of patients with multi-morbidity.

The demands placed on hospitals by changing demographics, disease burden, and opportunities to intervene are constantly changing. This justifies a continuing process of reform that will allow hospitals to evolve to address these changing circumstances, for example by enhancing co-ordination between them and with health and social care providers at all levels.

Hospital reforms often involve substantial time lags and it can be difficult to respond rapidly when circumstances change. The reform of hospitals should include foresight exercises, including scenario planning, accompanied by an assessment of the resilience of new structures, as is done in the stress tests to which financial institutions are subjected.

It is important to ensure that those health workers best able to meet the needs of patients are given the necessary responsibilities. This will require careful assessment of roles and skill-mix, drawing on the best available international evidence.

It is also important to ensure that mechanisms to reward health workers are designed to ensure adequate recruitment and retention, as well as to promote high quality care. Existing payment systems should be reassessed, drawing on the best available international evidence but adapted to the national context.

There is some evidence suggesting that access to care may have been compromised as a consequence of some hospital reforms. This could be related to budgetary reductions affecting staff availability and their working conditions, as well as increases in co-payments (in general, not specifically to hospital care). In some cases, the expansion of exemptions may have mitigated this. The available international evidence does not support the use of co-payments so it will be important to review the overall burden and distribution of out-of-pocket payments on both clinical services and pharmaceuticals, and the consequences for access to care. Equity in financing should be improved.

While determination of the appropriate level of health expenditure is ultimately a political choice, it should be informed by the emerging health needs of the

Reflections on hospital reforms in the EU

population and the key health system goals of improving health and responsiveness, and also on preferences of the population and the trade-offs people want to make.

Successful and sustainable health reforms have a high level of popular support. It is important that the reform process includes effective engagement of public and patients. Patients and population have to be considered partners in health promotion and health care.

It is important to reinforce capacities and mechanisms for proper assessment of implementation and impact of hospital reform policies. A comprehensive assessment should include determinants of health, impact on coverage, adequate level of financing, quality and safety, access, equity in financing, efficiency, responsiveness, and health and economic outcomes.

LIST OF ABBREVIATIONS

EC	European Commission
EU	European Union
EXPH	Expert Panel on effective ways of investing in Health
GDP	Gross Domestic Product
HLY	Healthy Life Years
HOPE	European Hospital and Healthcare Federation
HTA	Health Technology Assessment
IMF	International Monetary Fund
LEB	Life Expectancy at Birth
MEUR	Million Euros
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
NHS	National Health Service
OECD	Organisation for Economic Co-operation and Development
PHC	Primary Health Care
US	United States of America
WHO	World Health Organisation

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