



Modern health care delivery systems, care coordination and the role of hospitals

Compiled report of
the workshop organized by the Belgium Federal Public
Health Service and WHO Europe, Brussels, Belgium,
21-22 November 2011, and
the internal WHO expert meeting on roadmap
development, Copenhagen, Denmark, 12 January 2012



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ABSTRACT

The existing models of health care provision, often subject to fragmentation and insufficient coherence, appear to be one of the main causes limiting efficiency of interventions and quality of health outcomes. Ageing populations with multiple co-morbidities, increasing expectations of health service quality and safety and the ability to access these services through cross border care require due attention given to coordination mechanisms. Work in this field in the European context is closely linked to the global initiative started by the World Health Organization (WHO) headquarters on the global hospital agenda within the wider context of coordinated care. The present events aimed to move a step further on the road to better integration and coordination of health promotion and care, by creating a shared understanding of the current state of health care delivery systems and strengthen their capacity to address change, determine priority areas for research and seeking expert guidance in how best WHO can support Member States in these areas.

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Background

High performing health systems are critical to address key health challenges faced by Member States in the European region, such as changes in disease burden and population dynamics, in governance and funding mechanisms, and in technology and clinical management practice.

Against this background many countries have significantly invested in strengthening the primary care level including the development of home-based care programmes. At the same time, hospitals remain essential for the delivery of complex acute specialised care. Hospitals form an important part of health spending and play an important role in shaping public perception of the performance of countries' health systems, and, thus, their political visibility.

The World Health Organization (WHO) acknowledges that due attention must be given to all levels of care as well as the integration and coordination of functions and care mechanisms to meet the challenges of an ageing population, with increasing expectations of service quality and safety and with the ability to access these services nationally and through cross border care. Work in this field in the European context is closely linked to the global initiative started by WHO headquarters in identifying key questions to be addressed by the global hospital agenda within the wider context of coordinated care. Experiences from various countries and regions of the world can be used to initiate a review of the place, role and function of hospitals within changing health systems, to support all Member States in the challenging process to remodel their hospitals appropriately and to build capacity to support health care delivery reform.

The workshop 'Modern health care delivery systems and the role of hospitals' aimed to contribute to moving a step further on the road to better integration and coordination of health care service delivery, through

- Reviewing the current situation in relation to hospital and health system reforms across the region, including the patient choice perspective
- Creating a shared understanding of current state of healthcare delivery systems and their capacity and willingness to address change
- Sharing stakeholders experiences and best practice models, both theoretical and applied, in search of optimised solutions to increase health care delivery performance
- Identifying unanswered questions, gaps in our knowledge and areas where further research is needed
- Agreeing on priority areas for future work
- Developing a roadmap for action led by WHO Europe with stakeholders to support Member States in these areas for the coming two years

The workshop began with an opening session that set the context for workshop panel discussions. It included presentations of the WHO global approach to strengthening health systems and the WHO Europe strategy for health care delivery systems and public health, the Belgian vision of and experience in improving health care delivery and EU presidencies' priorities in promoting European health and the Health 2020 agenda. The opening session was followed by a series of panel discussions which focused on (1) Public health, primary and integrated/ coordinated care; (2) Planning for hospitals/ the future role of hospitals; (3) Governance of hospitals and integrated care; (4) Payment systems and capital investment in

health care delivery; and (5) Workforce issues. The final session of the workshop, on the development of a 'road map' of future options for the health system, priority areas and next steps, was continued with an internal expert meeting, at the beginning of 2012.

The following presents a summary of presentations and discussions at the workshop, and includes the merged preliminary discussion notes (both meetings mentioned above) on planned developments in the 'road map' section.

Setting the context

The opening session identified a set of key challenges facing health systems in the European region. These are:

- Ageing and the rising burden of (multiple) chronic conditions
- Unequal distribution of health across the region
- Financial crisis raises concerns of affordability and sustainability
- Access to technological advances and medicines
- Fragmentation, commercialisation and hospital-centric systems

The long-term nature of many chronic diseases, and in particular multiple conditions, calls for a comprehensive health system response that brings together a trained workforce with appropriate skills, affordable technologies, reliable supply of medicines, referral systems, and active engagement of people with chronic health problems to manage their own care, all acting over a sustained period of time. Many systems are not well equipped for providing this comprehensive response, coming from a tradition of an acute, episodic model of care.

It is against this background that the re-launch of discussions on the role of hospitals in health systems has been initiated¹. Pressure for change emerges from changing demographics and the burden of disease, supply issues linked to technology and workforce against financial pressures, as well as broad social changes because of globalization, government and sectoral reforms. These pressures need to be balanced against enabling people to live longer and healthier lives and participate in society, ensuring fair and equitable access to treatment and technologies, involvement in health care decision-making, being treated with respect and dignity, and enjoying the benefits of effective and efficient services.

There has been increasing convergence of equity and health systems agendas as demonstrated by the reports of the Commission on Social Determinants of Health² and the WHO reports on health financing and on health systems³, among others. These underline the need for the development of a health systems regulated framework bringing together the basic elements of organising care towards a people-centred primary care system, which acts as a hub for coordination and is

¹ Presentation by Denis Porignon

² World Health Organisation, 2008. Commission on Social Determinants of Health – final report. Available at http://www.who.int/social_determinants/thecommission/finalreport/en/index.html World Health Organisation, 2010. The world health report - Health systems financing: the path to universal

coverage. Available at http://www.who.int/whr/2010/en/index.html. World Health Organisation, 2000. The world health report 2000 - Health systems: improving performance. Available at http://www.who.int/whr/2000/en/

supported by hospitals (Figure 1). This approach sees hospitals as an important part of the wider health system, providing a highly valued 'rescue' function for life-threatening conditions, and that can improve treatment outcomes by focusing technology/expertise where necessary. At the core of this framework are primary care providers who hold the responsibility for the health of a defined population and act as the primary entry point to the health system while hospitals form part of health care networks to fill the availability gap of complementary referral care.

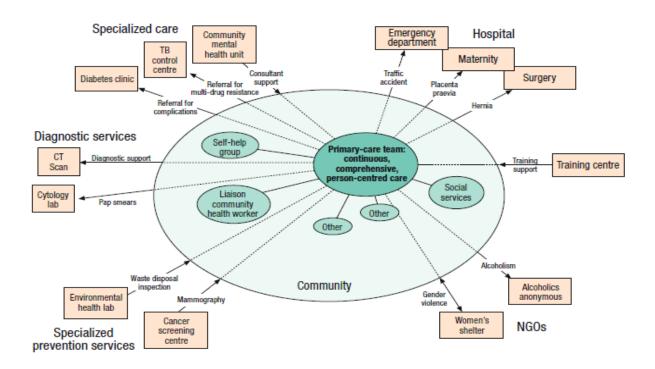


Figure 1. Primary care as a hub of coordination: networking within the community served and with outside partners⁴

Health equity, health governance, the economics of prevention, and health systems strengthening and public health form the four pillars of the WHO European Health 2020 strategy⁵, to be presented to the WHO 62nd Regional Committee in September 2012⁶. Built on the principles of the Tallinn Charter it calls for integrated action for population health that is evidence based, works across sectors and levels, and addresses inequalities.

The health system strengthening and public health component of Health 2020 highlights the key issues facing the WHO European region and sets out a new approach to health system strengthening, including a portfolio of products, tools and services already developed or in progress for use by Member States. These include the development of tools for the evaluation

⁴ World Health Organization, 2008. The World Health Report 2008 – Primary Health Care (No More Than Ever). Available at http://www.who.int/whr/2008/en/index.html

⁵ World Health Organization Regional Office for Europe. The new European policy for health – Health 2020. EUR/RC61/Inf.Doc./4. Available at

http://www.euro.who.int/__data/assets/pdf_file/0005/148946/RC61_InfDoc4.pdf

⁶ Presentation by Hans Kluge

and management of primary care⁷, as well as ongoing work on the role of hospitals in the context of integrated health care delivery⁸. While not a new framework as such, it provides a renewed focus on key health outcomes to better link health gain and health system strengthening through the removal of health system bottlenecks and aiming towards the development of a vision and strategy by WHO Europe on service delivery.

The need to refocus health system strengthening on health gain is illustrated by the challenge posed by the rising burden of multiple chronic health problems, requiring a paradigm shift from 'problem oriented' care to 'goal oriented' care⁹. A disease- or problem oriented focus may lead to a new form of inequity that is determined by the nature of the condition, so potentially creating "inequity by disease". Instead, goal orientation emphasizes patient functioning and social participation, in addition to clinical measures as the core outcomes of effective care. Such reorientation however requires better integration within and between sectors, with potential future models of care illustrated in Figure 2. Such a move will face challenges, in particular regarding the required shift of resources from hospital to ambulatory secondary and primary health care, implying a need to involve all stakeholders, with a central role for patients in this process.

Care setting

From: Hospital-based care (accident and emergency, inpatient wards, day-case surgery, outpatient clinics) and general practice

To: A community-based outpatient clinic which operates openly as a multi-agency onestop shop

Nature of intervention

From: Specialized clinical treatment

To: Remote IT monitoring, secondary prevention and psychosocial support

Duration of care

From: Extended inpatient admission

To: Health provision from multiple service settings, including health and social care and the voluntary sector

Social construction of the patient

From: Passive and dependent

To: An engaged co-producer with rights and responsibilities

Figure 2. New models of care

Source: Degeling and Erskine, 2009¹⁰

The need for such a shift is also highlighted by the European Union's draft 'Health for Growth Programme, the third multi-annual programme of EU action in the field of health for the period

⁷ World Health Organisation Regional Office for Europe. Primary Care Evaluation Tool (PCET). Available at http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/primary-healthcare/publications/2010/primary-care-evaluation-tool-pcet

⁸ European Observatory on Health Systems and Policies. Investing in hospitals of the future, Observatory Studies Series, No.16. Available at http://www.euro.who.int/ data/assets/pdf_file/0009/98406/E92354.pdf

⁹ Presentation by Jan de Maeseneer

¹⁰ Degeling P, Erskine J. New models of long-term care and implications for service redesign. In Rechel B, Wright S, Edwards N, Dowdeswell B, eds. Investing in hospitals of the future. Copenhagen: World Health Organization on behalf of the European Observatory on Health Systems and Policies, 2009: 27-44.

2014-2020'¹¹, which focuses on the links between economic growth and a healthy population. In line with Europe 2020 objectives and policy priorities¹², it is aimed at supporting Member States' efforts to improve the efficiency and financial sustainability of their health systems through the identification and implementation of innovative solutions for improving the quality, efficiency and sustainability of health systems. Specifically, the programme aims to encourage a shift of resources in the health care sector towards "the most innovative and valuable products and services" while also seeking to support a greater shift towards community care and integrated care.

The 2011 'Council conclusions; towards modern, responsive and sustainable health systems' under the Hungarian Presidency further emphasise innovative approaches and models of health care focusing on effective investment with the overall aim of "moving away from hospital-centred systems towards integrated care systems" Taken forward under the Polish Presidency, ongoing activities include further work on analyzing countries' experiences in the implementation of integrated and/or coordinated care to identify best practices and factors critical for implementation as well as exploration of options to further the hospital sector, through improving hospital management and the effective integration between the hospital and primary care sectors.

The emphasis of ongoing efforts at national, EU and pan-European, and international levels to reorient health care delivery 'away from hospital-centric models' creates a series of pressures for hospitals and systems¹⁴. These include:

- Pressures to centralize because of perceived market advantages, economies of scope and scale and challenges resulting from workforce shortages against the desire to decentralize to strengthen hospital autonomy and enable pushing budget responsibility down to lower levels of management, alongside increased interest in competition, market mechanisms and changes in ownership
- Need to improve quality, efficiency and value for money through increasing emphasis on activity-based payment systems, move towards day cases and reduced length of stay, redesign of clinical processes and the introduction of guidelines and pathways, and the use of health technology assessment and investment control
- Emphasis on accountability though the development of accreditation and performance management and the increasing use of indicators, public disclosure and transparency of information about performance
- Ongoing concerns about existing patterns of provision in particular in the eastern part of the region, including overcapacity, quality of infrastructure, and parallel hospital systems alongside the overall challenge of maldistribution especially with regard to rural areas and single-specialty/mono-profile facilities

Hospitals are not well equipped to meet these challenges because of high fixed costs, inflexible capital and staffing, and business models that are often based on growing income. In the eastern part of the European region poor infrastructure and a shortage of funds pose main barriers to

¹³ Council of the European Union. Council conclusions: Towards modern, responsive and sustainable health systems. 6 June 2011. Available at

http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/lsa/122395.pdf

¹¹ European Commission. Proposal for a Regulation of the European Parliament and of the Council on establishing a Health for Growth Programme, the third multi-annual programme of EU action in the field of health for the period 2014-2020. Available at http://ec.europa.eu/health/programme/docs/prop-prog2014 en.pdf

¹² Presentation by Tomasz Pawlega

¹⁴ Presentation by Nigel Edwards

effectively change the model although access to capital is difficult everywhere and becoming increasingly more challenging against the backdrop of financial pressures in the public sector.

Challenges for management and governance are in particular in areas around management skills, capacity and resources alongside underdeveloped financial and information systems; politicised decision making and ownership structures; and a lack of oversight and accountability for quality.

These challenges are set against more general, system-level barriers to moving to more innovative models of care, such as fragmentation between the various sectors within health and between health and social care, often reinforced by existing payment systems that frequently relate to parts of the patient pathway only and discourage integrated approaches and/or are poorly adapted to deliver strategic change; lack of skills or expertise both in primary and acute care towards organizing care that is better suited to the management of chronic health problems; and the relative isolation of mental health services from other health services.

Where reform efforts gave been initiated these tend to remain within existing structures and typically relate to the macro- or system-level rather than proposing measures that affect clinical practice at the meso- or micro-levels. However, even where promising models are available, for example in the area of e-health or around community-based models of care, it is often not clear whether these will enable the shift of care that is desired. Furthermore, where (additional) investment is required, it may be difficult to make the business case for this and to access necessary funds.

Against this background, there is a need to

- Redefine the role of hospitals in a better balanced health system (balance between specialization and generalism)
- Define the functions of hospitals (specialized services)
- Identify successes on hospital reforms elsewhere
- Describe the role of national/sub-national authorities and the international community, including that of WHO in supporting this

PANEL 1. Public health, primary and integrated/ coordinated care

Panel 1 discussions focused on describing the principle requirements for an integrated/coordinated care system from a systems and the patient perspective, with examples from a range of European countries drawing on a pan-European survey, and a case study from Hungary.

At the outset, it was noted that to effectively address the multiple challenges arising from a change in the disease burden vis-a-vis resource constraints requires short-term action as it relates to resource use ('crisis management') and long-term, transformative change to reform the delivery system. Achieving the long-term, transformative change requires an overall vision, or systems perspective on population health management along the continuum of care, balancing public health and health service interventions (Figure 3).

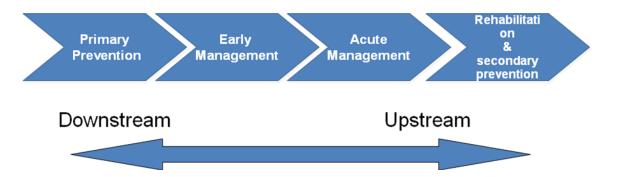


Figure 3. Population health management pathway

Source: Bengoa (2011)¹⁵

While most countries are engaging in, and improving on, the various elements of the care continuum, what is lacking is the integrated approach bringing these together by means of organisations operationalising this approach as a system at the local level. One example for such a local system is the Hungarian Care Coordination Organisation (CCO). Launched in 1999 and conceptualized as a pilot project, the CCO assumes responsibility for virtually the entire spectrum of services (from primary to tertiary care) for a population signed up with primary care (family doctors) in a given geographical area and against an adjusted capitation payment ¹⁶. CCOs can involve groups of GPs, policlinics or hospitals (who will have to contract with local GPs); they are primarily responsible for managing the patient pathway along the delivery chain although CCOs do not purchase services. The pilot was terminated in 2009 however, without formal evaluation, under the previous government; however there is a renewed interest under the current government.

While approaches such as the CCO in Hungary and other models of care that seek to better integrate services across the care pathway for a defined population are being implemented in a number of countries in Europe, typically, these are limited to experiments and/or are being established in selected geographic areas and so accessible to parts of the population only¹⁷. Where countries have implemented care models that are available nation- or region-wide, these tend to be disease-specific, typically targeting diabetes, selected respiratory conditions (asthma/COPD) or cardiovascular disease. Such approaches are however most commonly implemented within existing care structures, as a means to better coordinate different providers but without necessarily reducing barriers between sectors.

This further illustrates the need for developing a common vision, the identification of a "common denominator", across primary and secondary care and social services. Coordination is a reflection of patient-centred care, thus requiring the identification of a common point of access to care, for example a care coordinator, that (or who) acts as the key point of contact, from health promotion and disease prevention to targeted referral to specialist care. Patient-centred care also implies active involvement of service users who have tended to be overlooked as important partners in the design and implementation of innovative models of care ¹⁹. Active patient

¹⁵ Presentation by Rafael Bengoa

¹⁶ Presentation by Peter Gaal

¹⁷ Presentation by Ellen Nolte

¹⁸ Presentation by Wienke Boerma

¹⁹ Presentation by Nicola Bedlington

engagement in their own care has been identified as a core component of effective chronic care, yet this engagement is frequently not supported by existing structures. There is a need to move towards a systems perspective that sees patients and service users as part of the solution and who can play an important role in improvement strategies. This also means investing in workforce training to enable health professionals at all levels to engage in the types of conversations suited to facilitate and encourage patient participation from decision making in their own care to contribution to healthcare decision making at meso and macro levels.

Overall there is recognition of the importance of cultural context in achieving sustainable change. It was noted that there is a need to develop cultures that can 'break silos' and to understand system levers of how to implement change. There may be considerable benefit to analyse how (successful) organizations developed to get to where they are now; the balance of top-down versus bottom-up engagement in achieving sustainable change; and assessment of the range of disincentives for providers and services users to engage in change. Therefore, there is still some way to go in better understanding of what works well in what circumstances highlighting the need to emphasise ongoing monitoring and evaluation of new ways of organizing care.

PANEL 2. Planning for hospitals/ the future role of hospitals

Panel 2 discussions aimed at exploring emerging trends with regard to the future role of hospitals, with examples from a European- and country perspective to identify gaps and/or new ideas that should be considered.

The panel discussion was introduced by the notion that the traditional vision of a hospital no longer holds. Instead many contemporary hospitals can be seen to represent a "collection of things that no longer fit together"²⁰, with elements of high specialization not suited for general work alongside lack of specialism for high specialist requirements, and the lack of integration with primary care and social services as highlighted in the opening session. There is therefore a need to rethink the role and function of the 'modern' hospital, which may involve re-orienting services away from doctor's specialism to a system which centres on procedures and/or particular types of patient problems. In this view, hospitals might be conceived as 'focused factories' for high throughput elective surgery; drawing on multidisciplinary teams for messy and complex problems; and building close links to social care to allow for rapid discharge and reduce admissions. Hospitals would not be used for rehabilitation services, end of life care or any treatment or service that is possible outside, for example in a patient's home.

In practice, change has taken place with emerging trends involving the creation of chains and networks in countries such as Sweden, Slovenia and the Netherlands, the formation of integrated providers as in the UK and Hungary, the development of regional systems as for example in Denmark and France. Other trends include a rising trend towards mergers, with examples including the UK and Norway. Indeed, in Norway, mergers have presented the main approach to more than halving the number of hospitals from around 50 since 2002²¹. This was accompanied by a number of configurational changes including for example the introduction of observational units next to A&E departments as a means to reduce admissions, as well as changes to

²⁰ Presentation by Nigel Edwards

²¹ Presentation by Jon Magnussen

management structures such as the involvement of physicians and nurses at the various levels of governance alongside investment in training of hospital managers.

These examples illustrate that change is possible although difficult questions remain such as trade-offs between centralization and decentralization, for example maternity wards; or the role of small hospitals in rural areas. It was recognized that hospitals form part of integrated population health management, and the hospital should be a full part of the pathway. However, especially in relation to the issue of geographical location discussants expressed concerns of whether the answer to multimorbidity indeed involved a shift from hospital to primary care, in particular in sparsely populated areas, or whether it might be more appropriate for training to accommodate generalist skills in the hospital setting. More broadly, this raises the general question about the appropriate 'delivery system' to respond to the challenge posed by chronic diseases.

In this context, considerable discussion also evolved around the definition of a planning unit or, more broadly, capacity in relation to hospitals, with any such definition or typology needing to recognize that a hospital is part of a network while at the same time comprising of networks itself. It may therefore be more appropriate to use the notion of 'capacity of the network' rather than of a given hospital. At the same time discussants noted that in many countries, politicians and the population view hospitals as a 'symbol' of health care, raising questions about the identity of health care in the absence of hospitals. Moreover, hospitals frequently act as economic drivers for local areas. At the same time it should be emphasized that in the public eye 'the hospital' tends to reflect a rather general concept or construct, given the existing diversity of hospitals.

Overall, discussants identified a set of 'action points' at macro-, meso- and micro-levels as a means to move forward. These included:

At the macro-level, the need

- for the development of a clear vision for system design regarding how future health care should look like
- the development of new incentives for hospitals
- to engage with the EU level (subsidiarity)

At the meso-level, the need

- to identify and implement new ways of organising primary care
- to describe the level of population health coordination
- to better understand how hospital change in terms of the delivery model has been achieved

At the micro-level, the need

- to invest in the workforce involving the development of new skills as well as redesigning the work of specialists to be better suited to chronic care
- to develop and strengthen the ability to describe and measure what is being produced
- to identify better ways of working between organizations

PANEL 3. Governance of hospitals and integrated care

Panel 3 discussions aimed at exploring emerging trends with regard to the governance of hospitals, examining issues around self-governance, quality assurance and performance assessment and benchmarking, with a case study from Moldova for further illustration.

The panel was introduced by providing principal definitions or descriptions of the topics to be covered. Thus, 'good governance' was described as involving a vision and direction, influence, transparency, accountability mechanisms and forms of participation of service users and professionals²². Governance of hospitals in particular was described further according to two dimensions, with the first axis stretching along a continuum of decentralization, from 'command and control' to 'fully independent private' vis-à-vis considerations around tools and mechanisms such as status and recognition; financing; accountability; and decision capacity on the second. Quality assurance involves a complex constellation of stakeholders and a wide range of tools and instruments, such as professional certification and re-certification; quality standards; institutional accreditation and re-accreditation; and clinical (practice) guidelines, to name but a few.

Self-governance

Recent years have seen a number of trends in the governance of hospitals. These include for example a move away from centralised approaches to autonomous entities which has provided managers with tools that are typically not available in the public sector and so enable operation in a more business-like manner, such as the use of financial incentives and more managerial discretion internally²³.

The evidence of the effects of these changes has remained mixed however. Thus, there is some evidence that hospital boards are beneficial and necessary for improving accountability, but not sufficient. Evidence further points to the notion that boards are more effective when related to fiduciary responsibility rather than when related to 'community well being'. Also, where decentralisation occurs without involving providers or the public it is less likely that there will be noticeable change in the 'way the system works'. Similar to discussions in Panel 3, the organizational level needs to carefully balance top-down and bottom-up in order achieve sustainable change.

In terms of moving forward the following points were identified:

- Regulate hospital governance with particular emphasis on issues around composition of boards, independence
- Involve providers in governance
- Realize the opportunity to involve patients and citizens in governance
- Creatively regulate autonomous hospitals without killing their autonomy or creating perverse incentives
- Encourage and learn from the positive deviants

²² Presentation by Josep Figueras

²³ Presentation by David Chinitz

Quality assurance

The session on quality assurance focused on safety in hospitals, highlighting a number of concerns of relevance for further discussions. A main consideration centred around the use (and usefulness) of accreditation programmes, guidelines and indicators. Thus, there remains considerable uncertainty about the boundaries between licensing, certification and accreditation, and the responsibilities for who should be defining these²⁴. Likewise, the evidence of whether or not standards indeed improve patient care remains mixed. Indeed, it may be assumed that up to 50 percent of accreditation programmes fail. This may be because of lack of funding to ensure implementation, systems are not regulated, or the programme is not mandatory. This also raises the question as to whether accreditation does form the appropriate means to ensure patient safety ('safety should not be an option') and whether other means should be employed instead, based on the wide range of sources on safety available in Europe, including those issued by the Council of Europe, the WHO, the European Commission, alongside NGOs an national agencies.

In terms of moving forward the following points were identified:

At the 'hyper-macro' level

- Share information, learning
- Adopt common requirements across borders
- Make aid more effective

At the macro-level

- Define national policy on safety; evaluation, planning
- Evaluate impact, scope of regulation
- Require doctor participation
- Define minimum public info on hospitals

At the meso-level

- Test internal systems
- Use external peer review

Performance assessment

There have been numerous activities at national and international level to enable the more systematic comparison of hospitals. A range of indicators is available with for example at the international level the OECD Health Care Quality Indicator project providing data on a range of indicators including mortality, complication rates, readmission rates, and, more recently work on patient experience.

However, several challenges remain. These relate for example to the selection of indicators, and the need to identify and describe who and what the information is for. For example, is the information used to inform quality improvement or for accountability purposes and if so, what are the mechanisms for inputting these into the quality governance cycle. There is also a need to ensure an adequate information infrastructure involving administrative databases, registries, electronic health records, etc. in order to enable meaningful assessment of performance.

²⁴ Presentation by Charles Shaw

Establishment of such system may require political willingness and needs to be balanced against privacy issues.

It will further be important to not view performance assessment in isolation but to link it in with other quality policies such as accreditation and guideline development. Finally, the measurement agenda needs be linked in with the integrated care agenda to enable operationalising the performance assessment of the 'transition of care' outside hospital.

In summary, the following key points for further action were identified:

In the area of management/governance the need to

- support the creation of effective Boards & Governance structures, and to develop effective ways of regulating governance
- balance top down and bottom up initiatives at organizational level
- better understand and identify those elements of the governance structure that are less or not effective
- develop Governance between organisations & networks
- understand and conceptualise leadership as well as management development
- be accommodate the trade-off between health care, financial responsibilty and community orientation

In the area of quality assurance the need to

- involve managers in the design of accreditation mechanisms in order to enhance their effectiveness
- develop learning tool kits around safety
- define the information needs and requirements for reporting on hospitals
- develop and implement peer review systems
- support effective governance

In the area of performance assessment the need to

- select the right indicators fit for different purposes
- advance databases and coding, including data linkage to enable meaningful reporting
- balance privacy and the public good
- create integrated approaches between performance assessment, guidelines, licensing and accreditation
- develop measurement systems that support integrated care

PANEL 4. Payment systems and capital investment in health care delivery

Panel 4 discussions aimed at exploring emerging trends with regard to payment systems and capital investment.

The panel discussion set out with a description of diagnosis-related groups (DRGs) as a financing tool, demonstrating that DRG-based hospital payment is the main method of provider

payment in Europe²⁵. However, systems vary across countries, with different patient classification systems, different approaches in how payment is operationalised (eg budget allocation vs. case-payment) and differences in the regional/local adjustment of cost weights/conversion rates. In most settings, DRG-based payments is operated in conjunction with other payment mechanisms.

The ability of DRG-based payment systems to explain variation in resource use remains mixed. For example, in the case of appendectomy, for England, Sweden and Estonia DRGs explain costs 'better' than patient characteristics, this is not the case for a number of other countries such as Austria, Finland, Germany and Ireland. There is some evidence that DRG-based payment systems can enhance hospital efficiency with trends in Europe pointing to a fall in average length of hospital stay following the move to the DRG-based payment, and a rise in discharge rates to post-acute institutions. At the same time, in most European countries, the introduction of DRG payment increased total hospital costs, partly due to higher activity levels. With regard to the impact of DRGs on quality, the available evidence does not suggest for changes in the payment system to having negatively influenced health outcomes such as mortality and readmission rates (Italy, Norway, Sweden, England). However, there have been changes in coding practices and overall quality may be an issue in DRG based payment. Against this, in the future it will be important to ensure the availability of a strong information system to enable monitoring of quality and efficiency, alongside the establishment of a flexible and transparent governance structure suitable to support continuous fine-tuning of the incentive structure.

These issues need to be placed in the wider context of the global recession and continued financial imbalances and inadequate regulation of financial markets which creates challenges for accessing capital²⁶. Public private partnerships (PPP) have been suggested as a means to overcome these challenges, and there are examples of a range of hospital PPP models across European countries. A perceived (or real) risk associated with an increasing role of the private sector in health care may be to reduce the degree of transparency and public control over the health sector. Approaches to address some of these risks and challenges may include to

- develop contracts which more explicitly allow for later service configuration flexibility
- re-orient the contractual culture so that "partnership" is real rather than rhetorical, and incentivises flexibility
- reposition the envelope broader than accommodation to foster whole-system healthcare evolution involving 'bundling' of services as well as infrastructure, and of primary care as well as secondary care.

PANEL 5. Workforce issues

Panel 5 discussions aimed at exploring emerging trends with regard to the healthcare workforce, with a case study from Kazakhstan for further illustration.

The panel was introduced by setting out a series of questions to be discussed during the session. These were:

- Where should the health workforce work?
- What are the right numbers?
- What are right skills and skill mixes?

²⁵ Presentation by Pascal Garel

²⁶ Presentation by Stephen Wright

- How can we improve the validity of workforce data?
- How can we successfully retain health workers

Some of the immediate answers include that, on average, about 70 percent of nurses in the EU currently work in hospital but with wider variability across countries and hospitals²⁷. It is however difficult to estimate a precise figure for the 'right' number; this is a question of dose. There is some evidence suggesting a link between nurse staffing and patient outcomes but this will vary, depending on case load. What is certain however is that there is likely to be shortage of health care workers, with estimates that about 15 percent of health care needs might not be covered by 2020, taking account of ageing of the workforce²⁸. The figure of a shortage of one million health care workers by 2020 across the EU is likely to be twice as high if long-term care and ancillary health professions are taken into account.

The question on skill mix concerns the professions, patients and their carers in relation to preventive, diagnostic, therapeutic, psychological, psycho-social, administrative, communicative, managerial skills etc²⁹. There has been increasing focus on advanced nursing roles across OECD countries, in roles as diverse as routine preoperative assessment, management of minor illness in general practice, nurse practitioners in primary care, nurse prescribing, and others.

Human resources represent 60 percent of expenditure in the health sector. There is a need to invest in people and the environment to enable them to 'do their job'. The EC Joint Action under the Health Programme on forecasting health workforce needs and workforce planning (2012-2015) aims to address the impending shortage of health workforce in the EU by providing a common platform for Member States to work on:

- Data for health workforce planning,
- Exchange of good practice with planning methodologies,
- Horizon scanning (forecasting future health workforce needs)
- Sustainability of the results of the Joint Action and framework of impacting on policy

Discussants highlighted the need for bringing together the evidence presented at the European level to enable cross-country learning, in particular information on activities at country level that is not easily accessible otherwise. On a broader level and against the workshop discussions around care integration and coordination and the role of hospitals it was noted that a focus on quantity of health care workers will have to be complemented by a simultaneous focus on quality. Thus, there is a need to rethink the type of professional needed for the future whose skills would be more suited to meeting the needs for this with multiple chronic health problems. These issues tend to be neglected at the educational level. Here, an important issue arises around the location of training, that is in hospitals or practices and the organizational arrangements for delivering an education and training system that will produce these required skills and competencies.

Developing a roadmap

The need for innovative design of a modern coordinated health service delivery framework, connecting various levels of disease prevention, as well as health and social care was discussed,

²⁷ Presentation by Walter Sermeus

²⁸ Presentation by Daniel Reynders

²⁹ Presentation by Matthias Wismar

having at core the Health2020 values and key definitions. It has been agreed that such approach has to reflect relevance to health needs, equity and quality, cost effectiveness and innovation.

Cost effective health care services of acceptable quality, making the best use of resources available, supporting and promoting population health improvement are the main goal of health systems. Therefore, conceptualizing integrated care needs to start from health and disease outcomes, services and pillars, and requires a wide network of entities close to the primary care team.

In this context it was recognized that hospitals are institutions valued by the public, with a growing contribution to health improvement and health equity (territoriality). Rethinking the health service delivery framework in the current context of increasing health needs (ageing populations, co-morbidities, chronic diseases) and primary care repositioning, has to consider difficult issues like the regulations applying to both public and private sectors, territoriality, competition and collaboration, capital investment and purchasing power parity initiatives, control of technological investment, as well as care coordination, patient empowerment and participation. There seems to be no shortage of conceptual information for improving health system delivery. However, a shortage of practical evidence is a current challenge. Policy debate also circles this issue in balancing both evidence base needs and the human rights dimension.

The following key issues where flagged by the last session working groups for drafting road map pace and direction:

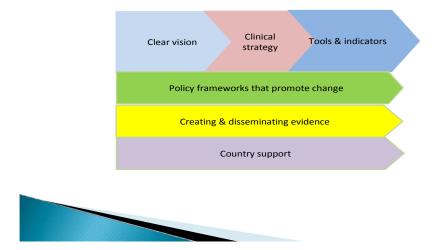
- Aging population and workforce, with chronic diseases and multiple morbidity, requires structural integration (based on defining needs of population groups in integrated ways)
- A bigger change in terms of increasing efficiency and reshaping public and provider expectations is needed, and case studies (e.g. chronic condition management, emergency response etc) evaluating consistency and efficiency of interventions should be used to develop recipes for success (common denominator solutions)
- The new approach to generalism appears to be the real challenge, and requires a transforming scenario leading to a new pattern of services provided and accessed by educated patients, populations and providers

WHO role in this process was seen as benchmarker for best practices, knowledge broker improving the information flow between systems, providing implementation advice/ and/ or transformation assistance, in full coordination and cooperation with national and international partners and stakeholders.

The diagram below 30 summarizes the structural framework proposed, and the starting point for the follow up internal expert meeting (01/12, Copenhagen) on developing a road map for health service delivery summarized below.

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³⁰ Presentation by Nigel Edwards



Work on strengthening and developing systems of health care delivery is work on sustainability, and discussions during the internal expert meeting aimed to define the 'what' and the 'how' of road map development.

Two approaches were considered for population centred health service delivery (HSD): upstream population management and downstream health/clinical management. At system level, expectations would link clinical behaviour with financial consequences and provide incentives for better care for individuals and improved population health and reduce inefficiencies. This top down and bottom up approach would require clinical strategy re-thinking and (no) disease specific approaches. At patient level the focus remained on scaling up information, capacity of self-management and coordinated care.

The economic crisis of the decade was viewed as an opportunity to further stimulate change and organizational development to pull up efficiencies and re-stratification starting from local level. Consideration was given to disease oriented models versus disease broader care, and the Wagner model, Kaiser Permanente and IHI Triple Aim were given as examples of functionality design.

Due to its health and economic growing impact, NCD management requires amplified operational integration and population coverage, supported by models of risk assessment to estimate and control trends. Packaging world best practices in the field and increasing levels of patient activation are already part of the chronic care - patient empowerment interface. Due to high local dynamics, defining the basic benefit package would require a preliminary design of existing coordinated patient centred flow of delivery.

Within the context of cross border mobility of patients and provider and the increasing mandate in health, it is expected that mechanisms to make available comparable data on coordinated services will be soon regulated at EU level. These are expected to expose and assist in addressing existing variation in care, which causes significant problems, including financial loss.

In WHO AMRO region, work on coordination of care is being done since 2007. This led to the development of a position paper drawing on latest evidence and promoting three concepts: comprehensiveness, autonomy-coordination-integration and life long continuity of care

(continuum of life course). As a result of the regional underlying consultation process, 14 attributes that make the system integrate were identified, as well as typologies of integration. While considering inter-regional differences in terms of taxonomies and organizational specifics, this already existing important amount of work could provide valuable inspiration.

There is space for WHO to conceptualise HSD, including actual service delivery of professionals to patients and patient perspectives. Work around chronic conditions has validated financial viability and is further applicable to acute conditions, emphasizing integration of personal care, public health care and social care.

Health21 – health for all policy, remains a clear and valid statement in the development of HSD, and provides a structured approach. The move to integration can be done through national governments and regulatory capacity with evaluation of subsequent market response. Integrated system logic, supported by the expenditure scenario, is expected to provide options of work.

The proposed entry points would build around:

System design – **patients/ population:** The patient seen within the context of the wider population and community is empowered and can participate in decision making about own care, supports self-management and delivery of care as close to home as is safe and cost effective. It requires design around the needs of the patient incorporating the aspects of care that they value including continuity, co-ordination and longitudinal continuity. Particular attention need to be given to the excluded and disadvantaged, vulnerable populations.

System design – **systematic care:** In a primary care centred system, high levels of co-ordination need to be ensured, including home care, social care, ambulances, NGOs and specialist care with pathways, shared record systems and other systems to support. Evidence based and systematic care could reduce variation in service delivery provision. The growing burden of illness and the increasing connection between mental ill health and physical illness requires increased attention.

Institutional providers: There is a clear benefit in reconsidering the pattern of hospital care, and the development of new models to provide treatment for emergency care. Investment in infrastructure which is flexible enough to keep pace with changes in medicine and patterns of demand should be part of the deployment of methods to ensure that safety is a key design element, to reduce waste and continuously improve quality. Ensuring co-operation within and between organizations is required to create co-ordination of care

Workforce – **health & support:** Increasing demand and expectations generated by growing epidemiology challenges require a more flexible multi-skilled workforce, able to manage complex care and support patient empowerment. A culture of continuous learning and improvement, supported by measurement, feedback and appropriate incentives will support team based approaches to service delivery.

Payers: The development of smarter payers able to create contracts for value and payment systems that support integrated/coordinated care and population health management, are expected to incentivise quality improvement and patient self-management.

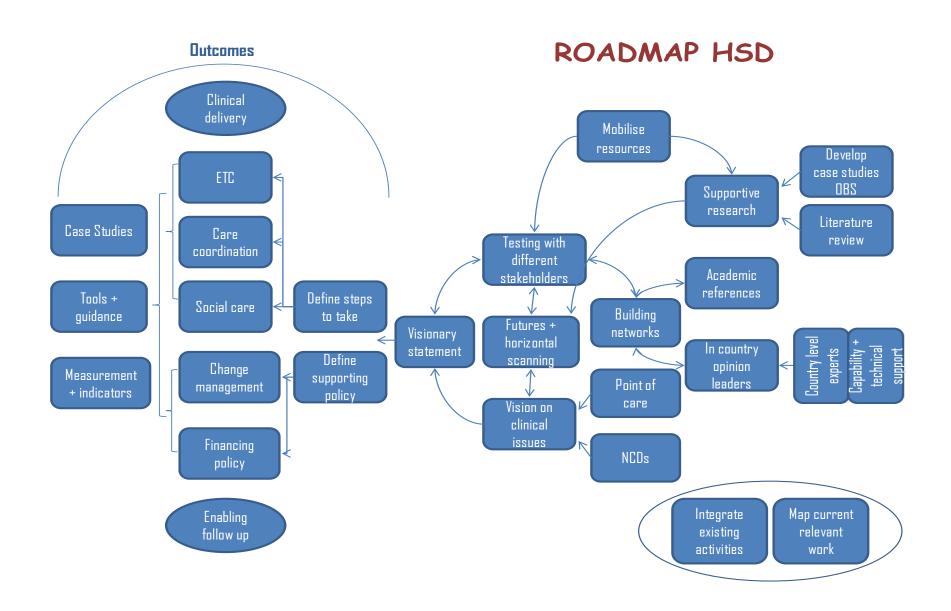
Governance: Regulatory systems should ensure application of minimum standards for delivery and promote improvement including clear objectives and well developed mechanisms for accountability, high levels of transparency of information for patients, public and policy makers about quality, safety and patient experience.

Change management: Implementing change has complex ramifications in both quality and deployment of performance, including (inter) institutional operations. Innovative cross sector learning on supporting change management, to be successful, will require a drive for change, supported by evidence, regulation and vision.

The following diagram presents a generic roadmap for supporting modern health service delivery, with the visionary statement at its core, to be considered work in progress.

Next steps in this direction include:

- A workshop on applied models of coordinated health services tackling chronic diseases (case studies across the region, to identify shared challenges and lessons learned)
- Development of a position paper drawing from the work and shared experience to date, for wider expert consultation
- A regional consultation on the position paper and the regional visionary statement for a transformative system design supporting coordinated health care services with particular emphasis on addressing chronic disease management and its extrapolation to acute care



Annex 1. Scope and Purpose

High performing health systems are critical to address key health challenges faced by Member States in the European region, such as changes in disease burden and population dynamics, in governance and funding mechanisms, and in technology and clinical management practice

Over the last decades, many countries have significantly invested in strengthening the delivery of services at the primary care level giving lesser attention to the role of referral facilities. While primary care and home-based care programmes are being developed, hospitals remain essential for providing complex acute specialized care and continue to represent an important part of health spending. In addition, hospitals play an important role in shaping population perception on how health systems function in countries, which gives them political visibility.

Fragmentation and insufficient coherence in health care services are often considered as one of the main causes limiting the efficiency and quality of care, as well as the health system's responsiveness to the needs of the population. The existing models of health care provision do not seem to have changed sufficiently to face the challenges of an ageing population, with increasing expectations of service quality and safety and with the ability to access these services on national grounds and through cross border care.

The World Health Organization (WHO) acknowledges that due attention must be given to all levels of care as well as the integration of functions and coordination of care mechanisms. This requires evidence about where and how coordination between all levels of care can be significantly improved - a review of service delivery models proved most effective and consideration of barriers to process.

Work in this field in the European context is closely linked to the global initiative started by WHO headquarters in identifying key questions to be addressed by the global hospital agenda within the wider context of coordinated care. Experiences from the various countries and regions of the world can be used to initiate a review of the place, role and function of hospitals within changing health systems, to support all Member States in the challenging process to remodel their hospitals appropriately and to build capacity to support health care delivery reform.

The present workshop aims to move a step further on the road to better integration and coordination of health care service delivery, by providing the scene for

- 1. Reviewing the current situation in relation to hospital and health systems reform across the region, including patient choice perspective
- 2. Creating a shared understanding of the current state of health care delivery systems and their capacity and willingness to address change
- 3. Sharing stakeholders experiences and best practice models, both theoretical and applied, in the search of optimized solutions to increase health care delivery performance
- 4. Exploring criteria for determining which areas should be prioritized and the potential methods for addressing challenges identified

- a) At the operational level improving effectiveness, quality, safety, patient experience and efficiency
- b) At the organizational level governance, budgeting, health workforce development and distribution etc
- c) At the financial level payers and policy makers
- d) In integrating systems and levels of care to support and strengthen improvement at all of the levels mentioned above
- 5. Identifying unanswered questions, gaps in our knowledge and areas where further research is needed
- 6. Seeking expert guidance in how best WHO can continue supporting Member States in these areas.

Annex 2. Programme

Monday 21 November

Monday 21 November			
09.30 - 10.00	Registration + Coffee		
10.00 - 10.30	Official opening		
10.30 -10.45	WHO global approach to strengthening health systems, towards universal access to quality and safe heath care services		
10.45 -11.00	WHO Europe strategy for health care delivery systems and public health		
11.00 -11.20	Belgian vision and experience in improving health care delivery		
11.20 -11.35	EU presidencies priorities in promoting European health and the Health 2020 agenda		
11.35 -12.00	Discussion		
12.00 -12.30	Key issues, stakeholders and expectations		
12.30 - 13.30	Lunch		
13.30 -15.30	Panel block 1: Public health, primary and integrated/ coordinated care - Public health, health promotion, disease prevention - Primary care and its interfaces - Mechanisms and routes of patient referral - Care coordination - Role of e-technologies in delivering integrated care		
15.30 – 16.00	Coffee break		

15.30 – 16.00	Panel block 2: Planning for hospitals/ the future role of hospitals	
	- Emerging trends	
	- What is the evidence/ what works/ what does not work	
	- Country examples	
	- What gaps/ new ideas should be explored	
19.00	Welcome dinner	

Tuesday 22 November

Tuesday 22 No	vember	
09.00 - 10.30	Panel block 3: Governance of hospitals and integrated care	
	- Emerging trends	
	- What is the evidence/ what works/ what does not work	
	- Country examples	
	- What gaps/ new ideas should be explored	
10.30 - 11.00	Coffee break	
11.00 - 11.30	Payment systems and capital investment in health care delivery	
11.30 -12.45	Panel block 4: Workforce issues	
	- Emerging trends	
	- What is the evidence/ what works/ what does not work	
	- Country examples	
	- What gaps/ new ideas should be explored	
12.45 - 14.00	Lunch	
14.00 -16.00	Developing a 'Road Map' (round table discussion on priority actions)	
	- Where do we agree about the future options for the system	
	 What are the priority areas where more needs to be done to understand issues7probelms/ solutions 	
	 What should be done next by each of the levels indicated in the scope and purpose of event 	
16.00	Conclusions and close of meeting	

Annex 3. List of Participants

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The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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