Improving outcomes for patients, health systems and society

European Member States and key healthcare stakeholders are under significant pressure as they face the dilemma of fewer healthcare resources per capita to meet increasing demand for health services. Underlying this challenge are ageing populations, declining rates of workforce participation, budgetary pressure and the concurrent introduction of new treatments that are both dramatically more effective and costly. To navigate a path forward, healthcare leaders gathered in Brussels on February 10-11 with a shared commitment to improve outcomes for patients, health systems and society.

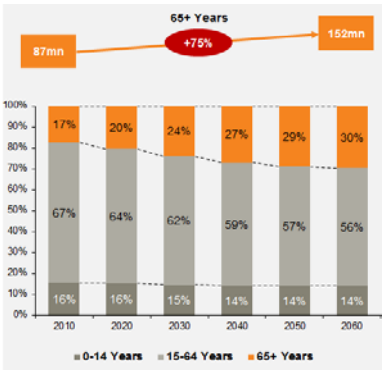
Placing outcomes at the top of the healthcare agenda allows leaders to focus on maximising patient benefit while delivering value to health systems and society. As leaders of respected healthcare institutions, many Brussels participants believe it is incumbent upon them to *"do our part to steer Europe's health systems towards the path of high-quality, cost-effective 'health' care rather than 'sick' care."* [1]

However, the roadmap to navigate this journey to health outcomes has not been drawn. Implementing an "outcomes agenda" will require a redesign of care pathways, new business models and new forms of collaboration across the system – an ambitious proposition. This document is a start to that journey and reflects the following themes from the discussion in Brussels:

Health systems face demographic, economic and technological investment pressures

The lingering effects of the 2008 fiscal crisis have created trade-offs between economic sustainability and patient access to high-impact treatments and care. According to a recent report by the Organisation for Economic Cooperation and Development (OECD), "Between 2009 and 2012, expenditure on health in real terms (adjusted for inflation) fell in half of the EU countries and significantly slowed in the rest."[2] The environment surrounding a medicine's journey from bench to bedside is in a state of flux, with regulatory and reimbursement agencies evolving their approaches to keep pace with scientific advances. These circumstances, combined with demographic shifts, have produced a range of impacts.

Expected demographic changes in



The rising burden of chronic diseases across an ageing population

The number of Europeans over age 65 is expected to increase by 75% by 2060.[3] According to one industry leader,

"In Europe we will not see the population grow, but we will see the population age." Longevity from increased life spans does not implicitly raise healthcare costs, but, as European Commissioner for Health Tonio Borg noted, "One challenge [that health systems face] is the overall ageing of European societies, which is associated with a rise of chronic conditions."[4]

Four out of five people over 65 suffer from at least one chronic disease like diabetes or cardiovascular disease.[5] Within this age group, 65% suffer from multimorbidity (i.e., two or more chronic diseases), and this number rises to 85% for the 85-year-old group.[6] In the EU, chronic diseases account for a staggering 70-80% of healthcare costs, more than €700 billion every year.[7] Alarmingly, the chronic disease burden is expected to double by 2030.[8]

According to a Dutch report, "If the prevalence of chronic diseases remains high or their burden increases, EU countries will be challenged by reduced country productivity and competitiveness, increased financial pressures on health systems, reduced health and wellbeing and threats of poverty and inequity for patients and their families."[9] Such reports have raised concern among some that Member States cannot afford to pay for healthcare today, which will eventually result in what one industry representative described as a *"rationing of healthcare that will lead to an inability for patients to access new and innovative therapies."*

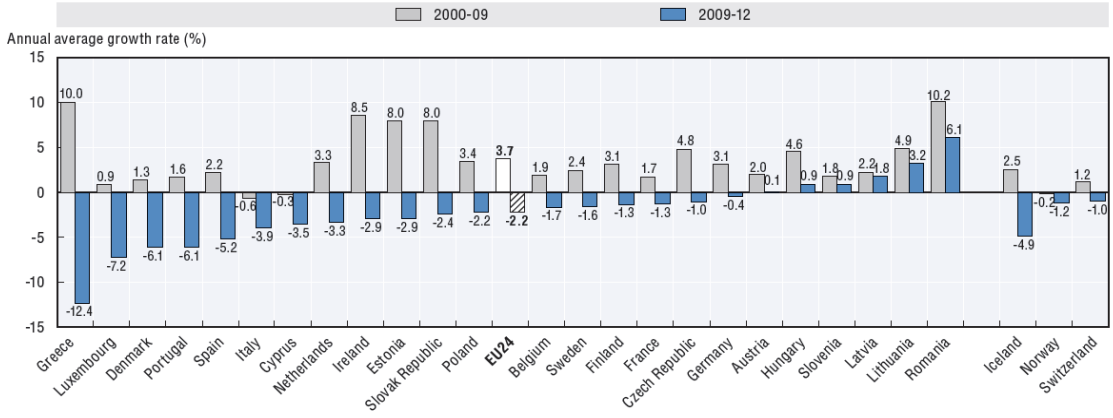
The impact of declining societal and healthcare workforce participation

The ongoing recession and demographic shifts have contributed to a decline in workforce participation, resulting in a declining tax base to address the growing expense of an ageing population. Furthermore, the *healthcare* workforce has diminished in some parts of Europe, resulting in fewer workers to manage a growing patient population. By 2030, acute-care hospitals will need to provide inpatient care for 40-50% more patients.[10] Yet hospitals will no longer be able to offer the beds or staff to meet these needs. By 2020, the European Commission has warned, there will be a shortage of one million health workers; consequently, up to 15% of total demand for care could go unmet.[11]

The impact of budget cuts on health systems

Over the last few years, many health systems across Europe have scaled back their budgets. According to the abovementioned OECD report, "On average, health spending decreased by 0.6% each year, compared with annual growth of 4.7% between 2000 and 2009."[12] Health systems that reduced their budgets did so by reducing their health workforce and salaries, reducing fees paid to health providers, lowering pharmaceutical prices (see figure below), and increasing patient co-payments.[13] Government policies in Member States like Italy, for example, "have

6.4.2. Average annual growth in pharmaceutical expenditure[1] per capita, in real terms, 2000 to 2012 (or nearest year)



1. Including medical non-durables.
Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en; Eurostat Statistics Database for non-OECD countries.

focused on setting caps on pharmaceutical spending, reducing the number of hospital beds and shifting care away from acute stays, increasing co-payments and instituting new purchasing contracts for medical goods."[14]

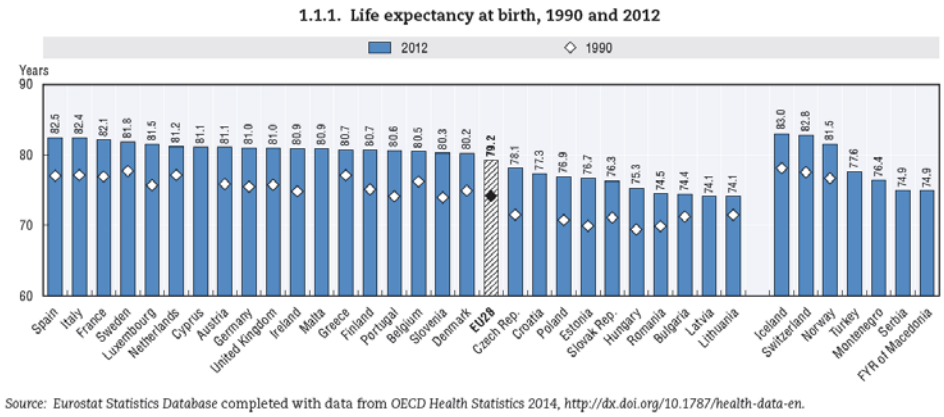
Some argue that efficiency gains from these approaches have enabled health systems to continue to function at lower cost.[15] However, it is unclear whether such short-term measures will impose long-term costs on patients. Several participants in Brussels question whether reducing healthcare budgets addresses the real challenge facing health systems tasked with delivering quality care at lower cost.

One industry leader pointed out, *"Budgets do not need to go up, nor do they have to go down. They just have to become more efficient."* A research funder agreed and cautioned the group to consider the motivation of the budget setter when implementing cost-containment models: *"Is the politician thinking about the next 10 years with an eye towards prevention measures, or are they thinking about their political tenure? The latter may lead them to favour budget cuts that might not be in the best interests of long-term health outcomes."*

Differential access to care and treatments across Europe

According to the OECD report, although Europeans enjoy a much longer life expectancy than prior generations, there are still significant inequalities in health across and within countries.[16] For many EU countries, universal health coverage has provided citizens with uninterrupted access to healthcare throughout the recent economic crisis. However, in some countries, citizens have seen a reduction in their coverage for various services and goods while their out-of-pocket contributions have increased. In places like Bulgaria and Greece, many have lost their insurance coverage entirely.

Disparity in access to healthcare contributes to inequalities in health across Member States, as evidenced by the range of life expectancies across Europe. While the life expectancy in EU Member States has increased by more than five years on average since 1990, the gap between those countries with the highest life expectancies (Spain, Italy and France) and those with the lowest (Lithuania, Latvia, Bulgaria and Romania) remains approximately eight years.[17] (See figure at right.)



Source: Eurostat Statistics Database completed with data from OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en.

Additionally, across Member States, the proportion of people in low-income groups reporting unmet needs for medical and dental care due to financial reasons was two times greater than among the population as a whole, and more than four times greater than in high-income groups.[18] Such disparities are due in large part to differences in access to and quality of care, which may have long-term health and economic consequences.[19] A patient representative challenged the group to question current approaches that enable differential access to treatments: *"Today we pay or fund medicines in Romania and Czech Republic at a higher price than UK and France. Is that normal?"*

Insufficient support for the prevention agenda

The majority of healthcare focuses on treating individuals once they are sick, not on preventing the manifestation of a disease. According to EuroHealthNet, 77% of chronic diseases are largely preventable, but only 3% of healthcare budgets are currently spent on prevention.[20] Why? At its core, healthcare is reactive, not proactive. Moreover, governments, under pressure to protect funding for acute care, are cutting other expenditures such as public health and prevention programmes. Still, as one meeting participant noted, *"Treating disease once the damage is done just escalates cost. All good solutions, at their core, have a pre-emptive prevention component."* Another added, *"It is far better not to get sick or least catch your illness in its earliest phase."* Despite this perspective, evidence suggests that prevention programmes bore an outsized portion of the budget cuts after the 2008 fiscal crisis, despite their low relative share of typical health expenditure in most Member States.[21]

Failure to invest in prevention efforts will stymie real progress on the outcomes agenda. One technology innovator captured the sentiment, saying, *"Changing the oil in your car only when it blows up is a bad idea. Why don't we have the same thinking when it comes to our own health?"* According to another technology innovator, new models for outcomes delivery should include a path towards prevention that *"replaces the patient-victim model in which interventions are done to them by others"* with a different approach where *"individuals are viewed by the health system as consumers and citizens who bear responsibility and interest in managing their health."* If individuals take on the role of personal health improvement to *"avoid sick care, we may see more significant shifts in the costs of care."* However, this approach requires significant investments up front in the hope of recouping even greater benefit downstream. Current budgets, business models and approaches to care delivery are not organised in a way that is consistent with this approach.

Science and innovative care approaches outpace regulatory and reimbursement infrastructure

The introduction of new and highly effective treatments into health systems continues in parallel with demographic and budgetary challenges. Products based on genomics, proteomics and metabolomics have helped to promote the development of "stratified" treatments and companion diagnostics in service to personalised medicine. Additionally, a new wave of therapies, including cell, gene and immunotherapies, hold the potential to transform patient care by enabling long-term therapeutic effect or curing diseases altogether.

The rare-disease model may illuminate many of the challenges and opportunities from personalised medicine. The continued introduction of rare-disease treatments suggests how to regulate and reward a future of patient-powered research – and the significant potential investments needed to realise these outcomes. As one regulator summarised, *"If science is successful, more and more people in a population will fall under a rare-disease or orphan-disease designation. It is helpful to note that the world around us is changing and we face two problems: [first, that] the evidence requirements for a new product will look like what we now have for orphans – the bricolage of evidence generation; and [second], the problem of high pricing for very few patients. Is this not at the very heart of the overall problem we are facing across healthcare?"*

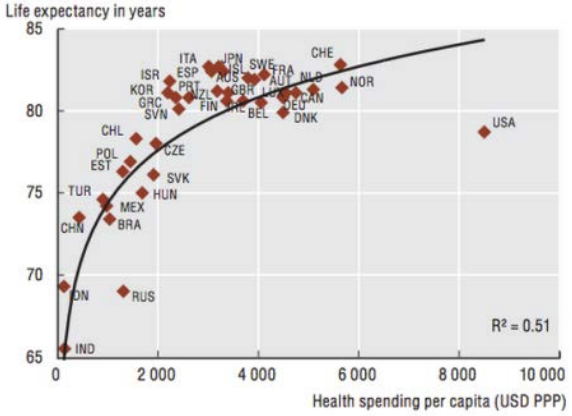
With dozens of personalised medicine and curative treatments in development globally, payers are questioning their acceptance thresholds for future products. One participant asked, *"Do we need longer-term contracting and payment models to transform healthcare? How does the historical use of annual budgets create health system challenges?"*

A focus on health outcomes will relieve pressure and provide greater health system value and efficiency

Payers and health system leaders across Europe struggle to keep healthcare costs on a sustainable trajectory. As a result, they are increasingly shifting their focus from measuring inputs to looking at outcomes and the value they deliver. As Joe Jimenez, Novartis CEO and meeting participant wrote in a recent EY report, "The only way to bring costs under control while meeting the increasing demands of patients is to deliver care more efficiently and sustainably."[22]

Rationale behind an outcomes focus

The goal of value-based care is to improve outcomes and lower healthcare costs. Historically, health systems have focused on inputs into a health system – such as the number of doctors, budgets and expenditures – but this focus has not worked. Evidence shows that the relationship between healthcare expenditures and health outcomes is not linear; thus, additional euros spent on healthcare do not result in a corresponding improvement in a population's health status.[23]

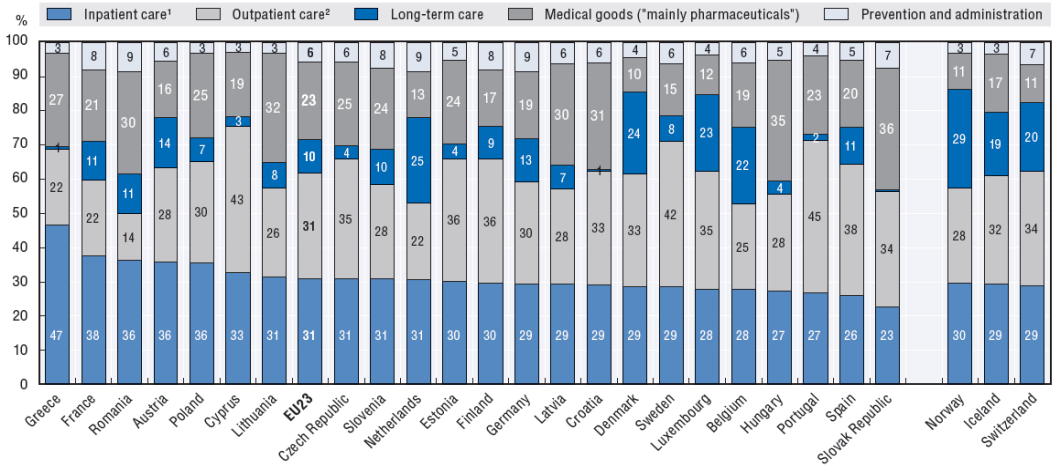


Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en; World Bank for non-OECD countries.

More generally, measuring inputs or service can obscure the ultimate goal of a healthcare system: to deliver the care patients need. An article in the *Harvard Business Review* summarised the journey from inputs to outcome succinctly: "We must move away from a supply-driven healthcare system organised around what physicians do and towards a patient-centred system organised around what patients need. We must shift the focus from the volume and profitability of services provided – physician visits, hospitalisations, procedures, and tests – to the patient outcomes achieved."[24]

It is not just how much money health systems spend, but how they spend it. (See figure below.[25]) Budget constraints can serve as a trigger event to improve the value and effectiveness of healthcare spending. Conversely, budget constraints can disproportionately focus spending cuts on one particular silo in the healthcare budget that is easier or more politically palatable to cut.

6.3.1. Current health expenditure by function, 2012 (or nearest year)



Reprioritising in service to outcomes is the best lens to use when making long-term decisions. Or, in the words of the abovementioned article, "Narrow goals such as improving access to care, containing costs, and boosting profits have been a distraction. Access to poor care is not the objective, nor is reducing cost at the expense of quality."[26]

Using an outcomes focus to drive greater efficiency into health systems

Participants acknowledged that many policymakers, payers, system leaders and industry representatives are looking for ways to reduce waste, increase the efficiency of healthcare delivery, and allocate resources to improve value in healthcare. Patients, as healthcare consumers, are equally concerned with identifying new ways to maximise patient benefit, whether through the development of health technology or the organisation of care delivery.

Changing the way we develop medicines and deliver healthcare will require a rethinking of current regulatory and provider infrastructure in service to greater efficiency:

- **Improving efficiency within the current regulatory model for medicines.** An investor noted that the process for research and development can take up to *"17 years before the value of a product is realised and patients can derive benefit."* A regulator added, *"We are relying on legislation of the last millennium to accommodate products being created in the new millennium. It is a very cumbersome and complex way to generate and assess evidence."* An outcomes-based approach emphasises the performance of a technology in the real world to inform appropriate clinical decision making, future development and societal value. Regulators commented that the outcomes agenda was compelling in part due to the implications for a new parallel regulatory paradigm. As one said, *"Currently we have a system where the safest drug may arrive too late to be of benefit to patients in the real world … We need to decrease the timing of development, increase efficiency, decrease the cost of time and learn quickly how the medicine will perform in the real world."*
- **Enhancing efficiency in care delivery.** A health system leader noted, *"Innovation is not only for drugs or technology but also for healthcare organisation. If you reorganise care, you can create efficiencies that will free up resources needed to support the price of innovation and maximise patient benefit."* An industry leader added, *"When talking about an outcome, it is very easy to see that our fragmented delivery system and lack of coordinated care contributes to that inefficiency. Once you have defined the outcome, you are able to define a treatment pathway and … reduce the total cost and waste in the system."*
- **Linking incentives with outcomes to realise efficiency gains.** One participant cautioned, *"There are a lot of stakeholders living off of the inefficiency of the system. When you start to improve the efficiency, you get a lot of ugly battles*." An industry leader added, *"Even in our industry, we do not have a common alignment on the [outcomes agenda] because some companies see benefit in maintaining the status quo."* One way to address this challenge is to provide incentives for achieving outcomes. An investor summarised, *"A system that rewards based on outcomes achieved rather than inputs created will force new forms of collaboration and creative solutions. Efficiency will emerge because people will be more mindful of how all parts of the care pathway inform the final outcome and return on investment."*

Defining "outcomes"

The group agreed that a focus on outcomes is important, timely and integral to the improvement of health system performance. However, reaching consensus on a definition of "outcomes" across

different actors can be difficult for a few reasons. First, the concept of outcomes is inherently abstract – some suggest the term is too difficult to define and use as the basis for commissioning a set of interventions. Unlike discrete inputs into the health system (e.g., drugs), whose efficacy is easier to determine, outcomes can be subtle and multidimensional. They involve not only physiological and functional results but also patient perceptions and valuations of their care and health status.

Second, although "outcomes" is used commonly across healthcare stakeholders, it can have very different meanings to different stakeholders, depending on how they view their contribution to care delivery. One participant explained, *"A health minister might define outcomes by how far over or under the budget they are. Regulators have much clearer but distinct definitions. A patient might simply ask, 'Am I better'?"*

In preparation for the meeting in Brussels, a draft definition of outcomes – grounded in the patient experience, patient preferences and patient-desired results – was proposed:

> Outcomes are the results that matter most to people when seeking care or treatment, including prevention, recovery, functional improvement and the ability to live healthy, productive lives. Delivering such outcomes must be considered in the context of finite resources and societal preferences within a healthcare system.

Meeting participants offered additional context on this definition:

- **Outcomes must be measurable and meaningful.** Results that matter to people should be "measurable" and not collected for the sake of collection but for the purpose of informing future health system and patient decisions. One investor noted, *"We want to be sure that this journey to outcomes serves a purpose. A meaningful outcome we might seek could be a cure, disease management or palliative care. Each would have a significant impact on a given health system."* Additionally, both health and social outcomes should be considered when identifying the outcomes that matter most.
- **Health alone may be insufficient.** It is important that healthy and productive lives are also fulfilling and happy. One industry representative elaborated, *"If an outcome sought is defined as extending life by two years, but those two years are spent with a low quality of life, then is that truly the outcome sought?"*
- **Who determines societal preferences?** An outcomes definition is understandably patient-centric. But one payer noted, *"We must consider the patient's desired outcome against the outcomes sought by those who finance the system."* An industry representative added, *"Who should decide which outcomes matter? Patients? Politicians? Citizens? The 'who' will inform how we define the term."* Ultimately, it is important to clarify who decides societal preferences. A regulator asked, *"Do we mean to focus on long-term benefit for a population or short-term benefit for political tenure? And what does that answer tell you about a focus on prevention versus 'sick care.'"* Time horizon – to invest and see returns in terms of improved health outcomes – becomes an important consideration. We should acknowledge this tension between the interests of current and future patients while *"appreciating the importance of the European social compact."*
- **Focus on available rather than "finite" resources.** The proposed definition implicitly suggests the importance of driving efficiency in the healthcare system. However, an investor noted the term "finite" is *"only defined by a lack of efficiency."* If efficiency is *"injected into a*

healthcare system," then health system stewards could unlock additional resources and reallocate accordingly.

- **New systems, tools and stakeholder roles are necessary to deliver better outcomes.** New infrastructure and innovative approaches must be introduced in order to capture, monitor and enable continuous learning from outcomes over the lifetime of a patient and the life cycle of a health technology. A regulator commented, *"It is not that we have all of the tools we need to deliver improved outcomes and we just need to 'apply ourselves' better."* Rather, the delivery of improved health outcomes may require regulators to reconsider the pathways needed for approval. It may require payers to introduce new reimbursement models that are linked to achieving long-term outcomes. Providers may need to rely on new registry-based science to inform clinical decision making. Patients may need to become more consumer-oriented in order to take control of their well-being and achieve better health outcomes.

The group agreed that achieving consensus on a single definition of "outcomes" warranted further multistakeholder discussion. One participant observed that the group had *"only hit the tip of the iceberg in terms of how we define outcomes. While the definition of 'outcomes sought' may be health system specific, this group should focus on the underlying 'outcomes' principles that serve the interests of all of Europe's health systems."* Several participants agreed *"there is more work to be done"* and challenged to group to continue in its collaborative design of the ideal health systems outcomes framework for European health systems.

New models of leadership and collaboration are needed to advance the outcomes agenda

No single institution or stakeholder acting alone can fully advance the outcomes agenda. As one participant noted, *"What does it take to generate an outcome? Not just the medicine but the very best clinical practice, the appropriate setting of care, and how well the patients are supported while they are taking particular medicines. We must move away from single silos and collaborate across the system to see how we can get the best outcomes for patients."*

Participants in Brussels identified four specific contributions they could make to advance the outcomes agenda.

1. Strengthen commitment to change across stakeholders by sustaining a European healthcare leadership network

- **Objective:** Building upon the momentum generated in Brussels, participants recommend developing a network of healthcare leaders in Europe committed to improving population health and health system outcomes.
- **Value:** The network would serve as a steering group to champion and launch ideas in service to the outcomes agenda. It would also foster continued relationship building across stakeholders to increase mutual understanding and alignment. As one health system leader noted, *"The value of meetings like this is the exchange of opinions and dialogue. This is a forum that we, as healthcare leaders, can use to share ideas. We can take what we learn in this forum back to our institutions to carry these ideas forward."*
- **Next steps:** Identify and engage additional stakeholders who need to be involved to help enable the shift to improved outcomes (e.g., providers, additional payers, patients, health system leaders, technology and pharmaceutical industry developers).

2. Improve outcomes through new partnerships, care pathways and business models

The group asked, *"How can [we] lead the transformation of a health system to achieve improved health and well-being?"* One participant proposed the creation of outcomes-based agreements between health systems and industry whereby leaders from each sector would work together to examine and improve specific care pathways through multi-stakeholder efforts within a few health systems.

- **Objective:** Bring together health systems, companies and additional stakeholders to optimise care pathways, develop new forms of collaboration and establish novel business models.
- **Value:** Steer health system investments to interventions that improve outcomes and reduce waste at minimum cost. Partnerships will encourage new business models and long-term agreements to ensure prevention and treatment plans are supported.
- **Next steps:** First, confirm health system interest in a demonstration project at scale. Next, identify and prioritise disease areas and patient populations (initial suggestions include heart failure, respiratory/chronic obstructive pulmonary disease, oncology and mental health).

3. Ensure early alignment on outcomes to better develop and reward new treatments

Payers, providers, health technology assessors and patients should seek to understand how a drug reduces unnecessary or ineffective treatments or improves on existing treatment options. New approaches to quantify these changes will impact how drugs are researched, manufactured, marketed and priced. To address this shift in thinking, participants proposed an *"early dialogue pilot that will inject outcomes-based thinking to research and development early in the development process."*

- **Objective:** Integrate outcomes-based approaches and evidence generation into advice dialogues and capture effective practices from multiple pilots.
- **Value:** The pilots provide a mechanism to identify *"the important outcomes at the end of a care pathway and how industry can tailor development of new medicines to measure and deliver these outcomes."* Integrating outcomes-based methodology into the advice dialogues introduces greater efficiency into development, aligning evidence requirements across stakeholders and Member States with the goal of in-principle agreements. Moreover, a focus on outcomes aligns with the new adaptive-pathway development model. A regulator commented, *"We know that we have preferred regulatory endpoints, but they don't necessarily take payer, patient and health system perspectives fully into account. An outcomes-based approach would integrate their perspectives early on in the regulatory pathway and create long-term value by optimising resource allocation."* An industry leader added, *"Payers are looking for new ways to determine real-world clinical and cost effectiveness after a product has launched. This approach may help."*
- **Next steps:** Identify specific therapeutic area(s) of focus and leverage existing early-advice/adaptive-pathway channels to align endpoints with valuable outcomes for medicines in development.

4. Make the case for improving health outcomes through a shared public narrative

Outcomes-based thinking is a tool to unlock value, improve clinical and economic evidence, improve patient care and benefit, and build trust across multiple stakeholders. Still, it is not clear whether the institutions, systems and organisations that all stand to benefit from this approach

understand its potential. Participants proposed the launch of a campaign to articulate the promise of outcomes-based thinking for patients, health systems and society and to showcase demonstration projects that highlight what is possible.

- **Objective:** Shape the public narrative across Europe, provide tools for stakeholder communication and highlight the urgency and value of a shift to outcomes-based approaches.
- **Value:** A public narrative on patient and health system outcomes will generate institutional and political support as stakeholders undertake new efforts. The narrative will provide a roadmap to healthcare leaders for the long-term outcomes journey and highlights each stakeholder's responsibility in this paradigm shift to outcomes.
- **Next steps:** Confirm influential participants in campaign; develop draft of campaign plan and initial outcomes white paper; and identify publication options and key media to engage during a health system and patient outcome campaign.

Conclusion

There is no single evidence-based model or blueprint to instruct healthcare leaders on how to achieve positive health outcomes for patients, health systems and society. Instead, healthcare leaders will need to experiment with various demonstration projects and new models to identify the best path forward. The results of such projects should be measurable and scalable. Furthermore, each demonstration project will require continuous learning, clear evaluation, open governance and the appropriate culture and infrastructure to support it.

Given the shift in demographics, increased demand for care, limited resources and an influx of novel treatments and technology, many have questioned whether Europe's health systems are equipped to meet the challenges of tomorrow. The Brussels gathering proved that a committed group of healthcare leaders could move beyond *"discussions of urgency, cost constraints and reactive healthcare"* into collective progress on outcomes for patients, health systems and society. As one participant opined, "*Europe is at a crossroads now. Either we do business as usual or we are able as a group of leaders to cut the cord and see how we can put benefit back into the system."*

Attendee List

Participants

- EFPIA President – Joe Jimenez, CEO, Novartis
- EFPIA – Richard Bergström, Director General
- EFPIA Executive Committee Chair – Jane Griffiths, Company Chairman EMEIA, Janssen Pharmaceutical Companies of Johnson & Johnson
- EMA – Hans-Georg Eichler, Senior Medical Officer
- EMA – Guido Rasi, Principal Adviser on Strategy
- EMA – Tomas Salmonson, Chair, CHMP
- EURORDIS – Yann Le Cam, Chief Executive Officer
- European Commission – Ruxandra Draghia-Akli, Director, Health Directorate, DG Research
- European Patients' Forum – Nicola Bedlington, Executive Director
- Haute Autorité de Santé (HAS) – Jean-Luc Harousseau, Président
- Innovative Medicines Initiative 2 – Michel Goldman, Former Executive Director
- International Association of Mutual benefit Societies (AIM) – Menno Aarnout, Executive Director
- Medicines Evaluation Board (The Netherlands) – Hugo Hurts, Executive Director
- Novartis International AG – Petra Laux, Head of Global Public & Governmental Affairs
- Principia sgr – Paolo Siviero, Senior Advisor and Fund Manager
- Royal Philips – Yvette van Braam Morris, Vice President of Global Public Affairs
- The Wellcome Trust – Richard Seabrook, Head of Business Development
- Vaccines Europe President – Andrea Rappagliosi, Vice President of Market Access, Health Policy & Medical Affairs at Sanofi Pasteur MSD

Additional leaders interested in the next phase

- Agenzia Italiana del Farmaco (AIFA) – Luca Pani, Director General
- Allianz Private Krankenversicherung – Daniel Bahr, CFO and former Minister, Ministry of Health, Germany
- Comité Economique des Produits de Santé (CEPS) – Dominique Giorgi, Président
- EFPIA Member Company non-executive director – Göran Ando, Chairman, Novo Nordisk
- EFPIA Vice President – Stefan Oschmann, Vice Chairman of Executive Board and Deputy Chief Executive Officer, Merck KGaA
- EMA – Andreas Pott, Acting Executive Director
- Google X – Andrew Conrad, Head of Life Sciences

Additional leaders interested in the next phase *continued*

- Gemeinsamer Bundesausschuss (G-BA) – Josef Hecken, Impartial Chair
- Gemeinsamer Bundesausschuss (G-BA) – Thomas Müller, Head of Pharmaceuticals Department
- HTAi President – Carole Longson, Director, Centre for Health Technology Evaluation, NICE
- NHS England – Simon Stevens, CEO
- NHS England – Sir Malcolm Grant, Chairman
- Stockholm County Council – Toivo Heinsoo, Chief Executive Officer

Endnotes

[1] This document reflects the use of a modified version of the Chatham House Rule whereby comments are not attributed to individuals, corporations or institutions. Meeting participants' comments appear in italics.
[2] Organisation for Economic Cooperation and Development, *Health at a Glance: Europe 2014* (Paris: OECD Publishing, 2014), page 10.
[3] European Commission, *The 2012 Ageing Report: Economic and Budgetary Projections for the 27 EU Member States (2010-2060)* (Brussels: European Commission, 2012), page 27. Figure at right: European Federation of Pharmaceutical Industries and Associations, *Health and Growth in Europe* (EFPIA, June 2014), page 6.
[4] Tonio Borg, *"Impact of Austerity Measures on Health"* (speech, European Policy Center briefing, Brussels, 4 March 2014).
[5] CHRODIS and EuroHealthNet, "Chronic Diseases and Healthy Ageing: Experts Are Joining Forces Today in Madrid," news release, 24 October 2014.
[6] Ibid.
[7] European Commission, The EU Explained: Public Health (Brussels: European Commission, 2013), page 4.
[8] Ibid.
[9] MM Harbers and PW Achterberg, eds., *Europeans of Retirement Age: Chronic Diseases and Economic Activity* (Dutch National Institute for Public Health and the Environment, 2012).
[10] MedTech Europe, *Contract for a health Future*, 2012
[11] Paola Testori Coggi, *"Health Trends and Challenges in the European Union"* (presentation, Connaissance & Vie, Antwerp, 23 November 2010).
[12] Organization for Economic Cooperation and Development, *Health at a Glance: Europe 2014*, page 10.
[13] Ibid.
[14] European Observatory on Health Systems and Policies, "Budget Cuts and Regional Disparities Increase the Pressure on the Italian Health System," news release, 11 November 2014.
[15] Borg, "Impact of Austerity Measures on Health."
[16] Organization for Economic Cooperation and Development, *Health at a Glance: Europe 2014*, page 10.
[17] Ibid., pp 10, 16-17.
[18] Ibid., page 114.
[19] Ibid., page 9.
[20] CHRODIS and EuroHealthNet, "Chronic Diseases and Healthy Ageing: Experts Are Joining Forces Today in Madrid."
[21] Organization for Economic Cooperation and Development, *Health at a Glance: Europe 2014*, page 124. ("Many countries also took early measures to reduce or postpone spending on prevention and public health services, with a slight recovery in spending observed since 2011.")
[22] Joseph Jimenez, "Three Steps to Shaping Sustainable Health Systems," in *Progressions: Navigating the Payer Landscape* (London: EYGM Limited, 2014), page 4.
[23] European Commission, *Investing in Health* (Brussels: European Commission, 2013), page 3.
[24] Michael E. Porter and Thomas H. Lee, *"The Strategy That Will Fix Healthcare," Harvard Business Review,* October 2013.
[25] Organization for Economic Cooperation and Development, *Health at a Glance: Europe 2014,* page 125.
[26] Porter and Lee, *"The Strategy That Will Fix Healthcare."*