



EHMA

2025

**Taking action
to improve
health for all**

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Conference report

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The European Health Management Conference

The EHMA Conference is Europe's preeminent conference on health management. Each year it gathers the full healthcare ecosystem, including health managers and leaders, healthcare professionals, researchers, academics, industry representatives, and decision-makers from Europe, and beyond.

The EHMA Conference provides a platform to discuss the latest health management research, tools and evidence from renowned researchers, academics and professionals. It is concerned on translating research into practice. It creates opportunities for dialogue and exchange on solutions to ensure the sustainability and resilience of health systems.

EHMA 2025 was the 30th edition of the European Health Management Conference. The theme, *'Taking action to improve health for all'* encompassed the entire spectrum of health megatrends. From the digital transformation of healthcare systems and services to the ever-growing importance of sustainability, and the evolving skill sets required by the healthcare workforce, we aimed to explore how the health sector is adapting to these changes. We emphasised an ecosystem approach, promoting collaboration among stakeholders. Our aim was to facilitate dialogue on how different health care actors can work together and leverage each other's strengths to drive innovation and address pressing challenges.

The European Health Management Association (EHMA)

The European Health Management Association (EHMA) strives for excellent health management for a healthy Europe by supporting the spread of knowledge on effective health management practices. Active since 1982, EHMA exists so that Europe's citizens and communities can benefit from quality, safe, value-based care and health systems. Our focus is on enhancing the capacity and capabilities of health management to deliver high-quality healthcare and support the successful implementation of health policy. Our commitment is on supporting the provision of data and research findings for evidence-based decision-making and monitoring health policies and practices.

EHMA is the only membership organisation in Europe to bring together the full health management ecosystem, including health and hospital managers, healthcare professionals, researchers, academia, policy and decision-makers. We are a recognised and respected amplifier of best practices in the evolution of health management, and we provide an environment where evidence, challenge and experience are valued and complex debates on current topics can take place.

Table of contents

Opening ceremony – Taking action to improve health for all.....	4
Plenary session – From reactive to proactive: shaping future health systems.....	7
Plenary session – How can innovations contribute to improve health for all?	10
Plenary Session- Will innovation do the trick? New financing and payment mechanisms for enhanced health system performance	12
Focus session – Uncovering the missing links in respiratory disease management: strengthening testing and surveillance for older adults.....	15
Focus session – Automation and digitalisation of medication management: meeting the challenges of safety and efficiency 18	
Focus session – Leading the transition to environmentally sustainable and climate resilient healthcare systems.....	21
Focus session – Closing the skill-gaps for yielding the digital dividend	24
Focus session – ‘Learning from each other’: advancing RSV infants prophylaxis programmes.....	26
Focus session – Preventing the preventable: strengthening adult vaccination strategies in Europe – pneumococcal case study	28
Workshop – Innovative teaching practices in healthcare management	30
Workshop – Health Reform Tracker – learning from each other.....	32
Workshop – Sharing learnings from advancing cancer research, care, and policies in the EU (OBS-PACE)	34
Workshop – Real-world data for breast cancer treatment management	36
Workshop – Safeguarding health: testing your cyber resilience and communication capabilities.....	38
Panel discussion – Using data to drive health care improvement: moving from pilots to learning health systems?	40
PhD session – EHMA & Karolinska Institutet Medical Management Center (MMC) Research Award	43
Abstract session – Strengthening primary care: workforce innovation, access, and system efficiency.....	46
Abstract session – Innovation and ethical challenges in mental health care	48
Abstract session – Retention, job satisfaction and workforce planning for systemic change	50
Abstract session – Emergency preparedness and public health responses.....	52
Abstract session – Optimising healthcare processes and performance	54
Abstract session – Artificial intelligence for decision support in healthcare: promises, challenges and pathways to implementation.....	56
Abstract session – Workforce planning: addressing global mobility	58
Abstract session – Collaborative leadership and resilient healthcare systems	60
Abstract session – Community engagement and people centred care	62
Abstract session – Enhancing quality of care.....	64
Abstract session – Navigating the digital transformation.....	66
Abstract session – Cancer care pathways and patient experience	68
Abstract session – Mental wellbeing, resilience, and support for health care workers.....	70
Abstract session – Measuring and optimising healthcare performance	72
Abstract session – Governance, policy, and innovation in healthcare systems.....	74
Abstract session – Telehealth and digital care.....	76
Abstract session – Enhancing care continuity and coordination: strategies for integrated and patient-centred healthcare	78
Abstract session – Healthcare financing, spending and market dynamics.....	80
Abstract session – Sustainability and green healthcare	82
Abstract session – Professional roles: leadership and hybrid profiles.....	84
Abstract session – Fostering strong leadership: transforming education, organisation, and networks	86
Abstract session – Equity, diversity and inclusion.....	88

Abstract session – Innovation in healthcare operations and systems.....	90
Abstract session – Innovations in cancer care.....	92
Abstract session – Health inequalities, systematic barriers and community-based solutions.....	94
Scientific dialogue – Advancing patient-centred integrated care.....	96
Scientific dialogue – Digital transformation in healthcare.....	98
Scientific dialogue – Workforce wellbeing and organisational performance.....	100
Scientific dialogue – Innovations in health governance and policy.....	102
Scientific dialogue – Equity and access: addressing challenges across population.....	104
Scientific dialogue – Multidimensional solutions for healthcare sustainability.....	106

Opening ceremony – Taking action to improve health for all

Speakers: **Antoni Peris Grao, MD**, President, European Health Management Association (EHMA) and CEO, Consorci Castelldefels Agents de Salut (CASAP), Spain; **Mr Yannick Neuder**, Minister for Health and Access to Care, Ministère du Travail, de la Santé, des Solidarités et des Familles, France; **Prof Isabelle Richard**, Director, École des Hautes Études en Santé Publique (EHESP), France; **Mr Yannick Nadesan**, Health Advisor to Ms Nathalie Appéré, Mayor of Rennes, France; **Mr Romain Béguié**, Deputy Director of Human Resources for the Health System (DGOS), French Ministry of Health, France

Facilitator: **Prof Catherine Keller**, Director of the Health Management Department, École des Hautes Études en Santé Publique (EHESP), France

Session summary

The 30th Annual Conference of the European Health Management Association (EHMA) opened at the École des Hautes Études en Santé Publique (EHESP) in Rennes, France, marking a milestone edition co-hosted by EHESP. The ceremony set a clear tone of international collaboration, evidence-informed management, and collective action, reflecting the conference theme: 'Taking action to improve health for all'. Speakers from European and local government, academia, and the health management community underscored the urgency of shared challenges and the role of management in delivering equitable, resilient health systems.

Prof Catherine Keller, Director of the Health Management Department at the École des Hautes Études en Santé Publique, welcomed delegates to the 30th anniversary edition, noting the significance of convening once again in France after nearly two decades.

Antoni Peris Grao, MD, President of the Board of Directors at EHMA and CEO at CASAP, highlighted record attendance, with over 470 participants representing all continents, including delegates from Japan, China, Singapore, Indonesia, Egypt, Nigeria, Kenya, the United Arab Emirates, Australia, Canada, and the United States. He linked this diversity to the conference theme, emphasising that global representation is essential for collective solutions to global challenges. He outlined pressures facing health systems: shortages of health professionals in many countries, population ageing with rising non-communicable diseases, and continued preparedness needs underscored by the pandemic. He called for innovative thinking, bold ideas, and collaboration. He thanked the organisations that made the event possible. He encouraged delegates to make the most of plenaries, panels, oral sessions, posters, and workshops, noting that the work begun in Rennes should continue toward more resilient and equitable health systems.

Prof Keller introduced a video address by **Mr Yannick Neuder**, Minister for Health and Access to Care at the Ministère du Travail, de la Santé, des Solidarités et des Familles. The Minister emphasised the pivotal importance of management at every level of the health system – action and decision-making alike – in addressing equity, accessibility, and sustainability. He called for collective action across territories, services, and institutions, urging a management approach that enables all stakeholders to contribute to solutions. He underlined workforce transformation and changing expectations among new generations of professionals, who seek flexible, horizontal organisations where their voices are heard alongside work-life balance. He highlighted the link between management and quality of care and endorsed a One Health approach that integrates environmental, economic, and social determinants.

Prof Isabelle Richard, Director at the École des Hautes Études en Santé Publique, expressed pride in hosting The European Health Management Conference 2025 under the banner of Taking Action to Improve Health for All – a maxim she said could equally characterise EHESP's mission. She thanked the EHMA Board for its trust, the EHMA team for their support since the Bucharest conference, and the local organising team, recognising the leadership of Prof Keller and colleagues. Prof Richard highlighted three reasons why hosting EHMA 2025 at EHESP is

meaningful. First, it signals a strong commitment to Europe as a political and societal project grounded in solidarity and social models and affirms the shared belief that healthcare cannot be treated as a purely commercial service. Second, it recognises the need for specialised knowledge in healthcare management, beyond applying generic management principles. Third, it underscores a commitment to knowledge, facts, and public policies informed by evidence. She also stressed the value of international exchange, circulating ideas, comparing practices, celebrating successes, and candidly sharing difficulties. She hoped that conversations would spark innovations that participants might recall months or years from now as catalysts for change.

Mr Yannick Nadesan, Health Advisor to Ms Nathalie Appéré, Mayor of Rennes, noted Rennes' active scientific community and the city's financial support for nearly 100 meetings and workshops annually as part of a strategy to champion science, described as both a political and democratic commitment. Connecting to the theme, Mr Nadesan affirmed health as a fundamental human right, citing the Alma-Ata Declaration. He emphasised that around 70% of health status is shaped by social conditions and environment, making cities pivotal arenas for health action and leadership. As president of the French network of WHO Healthy Cities, Rennes applies this perspective through concrete initiatives. On mobility and climate action, the city implemented a second metro line and redeployed bus routes, reducing diesel car trips by nearly 100,000 per day. On early childhood health, city child health services conduct health check-ups for all children aged 3–4. To strengthen primary care access, Rennes is developing health centres in underserved areas, linking care with health promotion and mediation to reduce inequalities. On maternal and child nutrition, the city provides free organic and local food baskets for pregnant women, recognising the first 1,000 days' impact on lifelong health. To support the built environment and mental health, all new housing units across 43 municipalities now include balconies or small gardens. Reflecting on the 80th anniversary of France's social security system, Mr Nadesan invited a broader reflection on reorienting economic models to prioritise social and environmental quality of life as a means of creating wealth.

Mr Romain Bégué, Deputy Director of Human Resources for the Health System (DGOS) at the French Ministry of Health, underscored France's pride in hosting this year's conference. He described distinctive features of the French system, starting with its civil service foundation in the hospital sector, employing approximately 1.21 million people. He noted the specific training path for hospital directors at EHESP and reaffirmed the principle of national solidarity. The system is primarily funded by social security via national health insurance; remaining costs are often covered by employer-provided supplementary insurance. According to the OECD, France ranks among the top countries with the lowest out-of-pocket expenditure, 9.2% of total healthcare costs in 2022. The system rests on three pillars: independent health professionals with fees regulated by national health insurance; public hospitals, which provide 66% of beds; and private hospitals, which account for the remaining 34%. Mr Bégué acknowledged significant challenges such as rising demand due to ageing and chronic disease; uneven geographical distribution of professionals, particularly doctors; recruitment difficulties exacerbated by COVID-19; and financial deficits intensified by inflation. The pandemic revealed both resilience and fragility, prompting a reform agenda to preserve universality and quality while adapting to demographic, technological, and economic shifts. On workforce roles and nursing reform, a 2023 initiative seeks to modernise the nursing profession, with a forthcoming law expanding nurses' responsibilities in line with evolving practice and growth in home-based care; nursing education has been redesigned with stronger emphasis on prevention and mental health. On medical training capacity, measures are underway to address physician shortages by increasing training capacity and facilitating access to medical studies. In European and global engagement, France coordinates eight European Reference Networks for rare diseases and rare adult solid cancers, participates in the European Health Data Space and joint procurement of medicines, and supports international hospital partnerships through the International Hospital Cooperation Initiative, including in conflict-affected regions. On international workforce development, France's commitment to training partnerships is exemplified by the WHO Academy's opening in Lyon in December 2024. Mr Bégué concluded that human resources are central to meeting shared challenges and emphasised the value of EHMA as a space for international cooperation, exchange of best practices, and practical solutions. He extended a warm welcome and wished participants a productive conference devoted to improving health for all.

Prof Keller thanked all speakers and participants and encouraged attendees to take full advantage of the programme's breadth, while actively connecting with peers across Europe and beyond.

Take-home messages

- Global dialogue drives local impact – with delegates from nearly 50 countries, EHMA 2025 reinforces that shared challenges in health management demand international exchange and cross-border collaboration. This milestone 30th edition positions the European Health Management Conference as a space where diverse ideas, good practices, and candid discussions spark solutions that extend far beyond the event itself.
- Management is central to system resilience. Speakers highlighted that equitable, sustainable, and high-quality health systems depend on strong leadership, evidence-based decision-making, and innovation in workforce models.
- Evidence and solidarity remain core European values. Health cannot be treated purely as a commercial service, and must be grounded in solidarity, social models, and fact-based policymaking.
- Cities and communities are vital health actors. Examples from Rennes showed how local policies on environment, mobility, early childhood, and nutrition can directly shape population health and equity.

Plenary session – From reactive to proactive: shaping future health systems

Speakers: **Ms Charlotte Marchandise**, Executive Director, European Public Health Association (EUPHA), The Netherlands; **Natalia Allué, MD**, Medical Director, Fundació Sanitaria Mollet, Spain; **Dr Caroline Hällsjö Sander, MD**, CEO, Danderyds Emergency Hospital, Sweden; **Dr Silvia Gabriela Scîntee**, Deputy General Manager, National Institute of Health Services Management (INMSS), Romania

Facilitator: **Prof Federico Lega**, Full Professor in Healthcare Management, University of Milan, Italy

Session summary

The increasing complexity of healthcare challenges requires a shift from reactive crisis management to a proactive approach. This new direction centres on long-term strategies that promote resilience, sustainability, and equity. In this context, health systems must move beyond short-term fixes and adopt evidence-based solutions that anticipate emerging needs. This plenary session explored how health systems around the world can reimagine healthcare through innovations in sustainable infrastructure, reform of emergency care, and workforce development. Case studies demonstrated how various systems are improving efficiency, redesigning care delivery, and enhancing workforce capacity to address evolving demands. These examples highlight the importance of investing in preventive measures and in previously neglected areas of care. This drive for transformation calls for a holistic, system-wide approach, one that values not only the delivery of services but also ecological, organisational, and personal sustainability, including work–life balance. There is a growing need for a new mindset, one that critically rethinks the construction of adaptable health systems that are ready, resilient, and capable of enduring in the face of future challenges.

Prof Federico Lega, Professor at the University of Milan, outlined the evolution of access to care through three major phases. Following the Second World War, a first wave emerged, driven by the urgent need to provide rapid and widespread access to care, with a particular focus on curative services. This was followed by a second wave in the 1990s, characterised by an emphasis on managerial efficiency and tighter cost control. We are now witnessing what could be seen as a third wave, centred on the proactive maintenance of health, rather than focusing solely on curing illness. While the delivery of services remains necessary, there is a growing need for a more human-centred system. He stressed the importance of moving beyond compliance-based models and instead embracing concordance, where patients and health care professionals work together to achieve shared health objectives. This shift calls for greater integration across systems, guided by the principles of One Health, and underpinned by the capacity to measure what truly matters: meaningful health outcomes, rather than simply outputs or technological interventions. Prof Lega also underscored the need to rethink sustainability, not only in financial terms, but also through the lens of systems thinking, professional capabilities, and work–life balance. Breaking silos and fostering cross-sector and interdisciplinary collaboration, will be essential. He advocated for a mindset shift: moving towards more integrated systems that take a holistic view of the care continuum, rather than one focused narrowly on individual services. He stressed the importance of investing in both care delivery and prevention to reduce future care needs. Finally, he called for a new type of leadership. Health systems, must be guided by individuals who can challenge entrenched mindsets and driving cultural change, including policymakers who can shape long-term, structural reforms. These leaders, he concluded, must help society to view health not merely as a sector, but as a shared social responsibility.

Ms Charlotte Marchandise, Executive Director of the European Public Health Association, began by reminding the audience that today's health systems stand at the heart of a global crisis, one deeply intertwined with persistent social inequalities. These overlapping challenges are no longer theoretical. They are a daily reality for health care professionals and managers. She highlighted antimicrobial resistance (AMR) as one of her most pressing concerns, illustrating the urgent need for proactive and coordinated action. She noted that while systems continuously react and adapt, true transformation remains out of reach. The urgency to act is undeniable, but

just as crucial is the need to act differently. She argued that navigating this pivotal moment requires cultivating a new kind of leadership – training individuals to become agents of change who can guide systems through complex, multidimensional transitions. This transformation demands more than technical solutions; it calls for a cultural shift rooted in trust, openness, and collaboration across sectors and disciplines. Building trust is fundamental, not only within institutions, but also between communities, professionals, and policymakers. People must feel genuinely heard, and decision-making processes need to become more transparent and inclusive. Health facilities should be reimagined as community, safe, green, and healthy spaces that promote social sustainability and foster a sense of belonging. At the heart of this shift lies the imperative to invest in people, not only by developing their technical skills, but by strengthening their capacity to lead, collaborate, and innovate. Embracing change also means accepting failure as a valuable source of learning and openly sharing the conditions that lead to both success and setbacks. A more cooperative and integrative mindset is essential, one that prioritises the common good and recognises the interdependence of disciplines, governance levels, and sectors. Resilience in health systems, she concluded, is not solely about physical infrastructure, it is about reinforcing collective capacity and rebuilding trust. It is about creating systems that are not merely reactive, but truly responsive and transformative, capable of delivering meaningful and lasting impact.

Dr Natalia Allué, Medical Director at the Fundació Sanitaria Mollet, identified her principal concern as the environmental impact of healthcare, more specifically, the ecological footprint of hospitals. She shared her institution's journey towards becoming a green hospital, stressing that climate responsibility in healthcare is no longer optional, but essential. Achieving net-zero status, she explained, requires more than reducing emissions; it demands transformation across four key areas: structure, processes, governance, and culture. Structural change involves investing in sustainable infrastructure and technologies, but true progress comes when sustainability is embedded in governance. Making it a strategic priority ensures all departments align projects and investments with environmental goals. Equally vital is building a culture of sustainability. As one of the world's most polluting sectors, healthcare has a duty to act. Many hospitals now provide sustainability training and promote small daily actions, such as reducing waste or saving energy that together make a significant impact. These efforts also foster staff engagement and shared purpose. She did, however, offer a note of caution. At her institution, green policies were integrated very early in the development process, which made it easier to embed the associated principles. The real challenge, she emphasised, was not the infrastructure, but shifting mindsets. Building a culture where every team member recognises environmental stewardship as part of their role required long-term commitment and participatory leadership.

Dr Caroline Hällsjö Sander, CEO at Danderyds Emergency Hospital, emphasised that in Stockholm, healthcare providers have long been contending with persistent financial pressures and a chronic shortage of staff, both of which have contributed to a decline in the quality and timeliness of patient care. In response, efforts were made to optimise staffing by aligning workforce allocation more closely with actual patient needs. This shift was not only practical but also helped foster a greater sense of cooperation among health care professionals, who began to support each other more actively across roles. At the heart of this transformation was a strong emphasis on trust, both within teams and between management and frontline staff, which she described as essential to the success of any reform process. While human relationships were central to the approach, it remained firmly grounded in data. The systematic tracking and analysis of performance indicators supported informed decision-making and ensured accountability throughout the process. As a result of this balanced strategy, centred on data, trust, and shared responsibility, the proportion of patients receiving timely surgical care rose significantly, from 67% to 80%, within just 18 months. This achievement fulfilled a key state-mandated objective and demonstrated that, even under resource constraints, meaningful improvements are possible when care delivery is guided by evidence and collaboration.

Dr Silvia Gabriela Scintee, Deputy General Manager at the National Institute of Health Services Management, highlighted the critical importance of strong management capacity in driving long-term transformation within health systems. As healthcare becomes increasingly complex, skilled managers are essential to lead change and enhance efficiency. She explained that under communism, healthcare management was virtually absent, as

decision-making was highly centralised. However, since 2006, Romania has seen a significant expansion in management training, aimed at equipping leaders to meet evolving challenges. Dr Scîntee's institution, INMSS, has played a central role in this transition. The COVID-19 pandemic revealed deep systemic vulnerabilities, prompting a comprehensive revision of the management training curriculum. In collaboration with organisations such as EHMA, IESE Business School, NOVA University and University of Milan, INMSS has developed programmes designed to cultivate multidisciplinary leadership skills suited to today's complex and uncertain environment. The aim, she emphasised, is not simply to produce more managers, but to train more effective ones. Crucially, Dr Scîntee underscored that leadership training must go beyond formal management roles. INMSS has expanded its course offerings to cover digital transformation, financial management, and health administration, even integrating these subjects into medical education. Clinicians, IT professionals, and support staff are all included in this inclusive vision of capacity-building. She emphasised that competent managers are increasingly recognised as key drivers of reform. With improved pedagogical approaches and a stronger focus on real-world needs, management education is evolving to better serve the requirements of modern healthcare systems. Dr Scîntee concluded by calling for greater collaboration, echoing the words of Prof Isabelle Richard: "Health is not a competitive field, so we have to collaborate".

Addressing the complex challenges in today's healthcare systems requires a shift away from reactive, short-term fixes towards proactive, sustainable, and integrated strategies. Health systems must evolve to prioritise not only treatment, but also prevention, equity, and long-term resilience. This transformation demands more than technical reforms, it requires strong leadership, inclusive governance, and a profound cultural shift across all levels of the system. Training future leaders as agents of change, fostering a culture of trust and transparency, and promoting collaboration across sectors are essential steps in building health systems that are adaptable and forward-looking. Hospitals, as central pillars of care, hold a unique opportunity to lead by example. Becoming net-zero institutions involves aligning structure, processes, governance, and culture with environmental objectives, while also enhancing staff engagement and strengthening community connections. At the same time, examples such as Stockholm demonstrate that even in resource-limited contexts, data-driven management, combined with trust and collaboration, can result in significant improvements in the delivery of care. Ultimately, the future of healthcare depends on our ability to invest in people, share knowledge across disciplines, and design systems that serve both human and planetary health. By rethinking how we lead, manage, and collaborate, we can build health systems that are not only more efficient and inclusive, but genuinely transformative.

Take-home messages

- Health system transformation requires a shift from reactive care to proactive, sustainable, and human-centred approaches. Moving beyond short-term fixes, modern healthcare must embrace long-term strategies focused on prevention, equity, and integration across sectors. This includes rethinking how success is measured and investing both in ecological and organisational sustainability.
- Leadership, trust, and collaboration are central to system resilience and therefore meaningful change. Effective transformation depends on training leaders as change agents, fostering trust among stakeholders, and creating inclusive, transparent decision-making. Health facilities should serve as community hubs: safe, green, and socially sustainable spaces that support both care and connection.
- Good governance, data-informed management, and a strong sustainability culture are key enablers of transformation. Whether it is optimising staffing in crisis-stricken systems or developing net-zero hospitals, improvements are driven by strategic governance, reliable data, and the empowerment of people. Equipping staff and managers with the appropriate tools and mindset for innovation and cooperation is critical to building future-ready health systems.

Plenary session – How can innovations contribute to improve health for all?

Speakers: **Prof Dr François Braun, MD**, Former French Minister for Health Care and Prevention; Advisor to the DG, CHR Metz–Thionville, France; **Prof Katarzyna Czabanowska**, Professor, Maastricht University, The Netherlands; **Prof Dr Etienne Minvielle, MD**, Professor, École Polytechnique; Research Director, Centre national de la recherche scientifique (CNRS), France; **Ms Virginie Valentin**, General Director, Hospices Civils de Lyon, France;

Facilitator: **Prof Olivier Grimaud, MD**, Professor, École des hautes études en santé publique (EHESP), France

Session summary

This plenary session explored how innovation transcends clinical and technological advancements, transforming healthcare through digital tools, organisational reforms, and new management approaches. Discussions underscored the importance of creating responsive health systems capable of addressing growing health demands, ageing populations, and complex care pathways. Emphasis was placed on inclusive leadership, stakeholder engagement, and collective intelligence in fostering sustainable, patient-centred healthcare systems.

Prof Etienne Minvielle, Professor at the École Polytechnique and Research Director at CNRS, discussed digital remote monitoring (DRM) within the CAPRI cancer care model at the Gustave Roussy Hospital. He highlighted the innovative nature of this approach, describing its rapid uptake and outlining the typical hype cycle – from initial optimism to phases of disappointment and eventual maturation. The DRM system enabled kidney cancer patients to communicate with nurse navigators via digital platforms, resulting in improved chemotherapy management, reduced hospital stays, and tangible economic benefits. However, significant challenges persist, including adoption among healthcare professionals, organisational adaptability, and patient digital literacy. Prof Minvielle emphasised that digital technology alone is not sufficient; it must be combined with the expertise of health care professionals and patients to achieve meaningful transformation. Integrated digital platforms are essential for reshaping care delivery and enabling effective, personalised patient management.

Prof François Braun, Former French Minister for Health Care and Prevention, and currently Advisor to the DG at CHR Metz–Thionville, shared organisational innovation experiences from France's Emergency Care Access Service (S@S). He emphasised the need for a paradigm shift from traditional care provision to meeting actual population health needs. The S@S model integrates general practitioners and emergency doctors, employing a two-tiered call-filtering system that significantly reduced emergency visits. Prof Braun underscored adaptability and future integration of artificial intelligence as crucial for sustaining improvements in emergency care.

Ms Virginie Valentin, General Director at the Hospices Civils de Lyon, presented on managerial innovation at Hospices Civils de Lyon, emphasising that in the context of overlapping global crises, hospitals must fundamentally rethink their management approaches. She identified seven key areas for transformation, such as building systemic resilience, harnessing collective intelligence, and enabling inclusive decision-making. Ms Valentin stressed the need to restore meaning and rebuild trust within organisations, particularly in a landscape marked by fragmented care pathways and complex operational realities. Strategies at Hospices Civils de Lyon included co-designing a strategic vision with broad stakeholder engagement, encouraging bottom-up innovation, and nurturing workplace cultures that recognise the value of lived experience. In our uncertain world, she argued, healthcare organisations require new models that prioritise time and space for reflection and dialogue. Ms Valentin advocated for managerial innovation that not only reconnects healthcare teams with the broader ecosystem but also fosters continuous collaboration, a culture of recognition, and a deep commitment to experiential knowledge.

Prof Katarzyna Czabanowska, Professor at Maastricht University, reflected on the leadership required for successful healthcare innovation, emphasising critical elements such as change, leadership, and transformation. She highlighted that leaders must know how to minimise threats and maximise opportunities, cultivating a sense of urgency and building guiding coalitions to drive transformation. Prof Czabanowska also stressed the importance of relying on champions within organisations to deliver ‘small wins’ that help sustain momentum in the change process. She articulated four crucial leadership levels – personal, team-oriented, organisational, and systemic – that are vital for deeply embedding innovation within healthcare systems. Prof Czabanowska asserted that a true culture of innovation needs to be integrated into performance metrics, making progress visible and rewarding. Transformational leaders, she explained, must be ethical, fair, and adaptive; they must challenge the *status quo*, demonstrate entrepreneurship, rely on evidence, show empathy, and empower others to act. By prioritising these qualities, leaders can effectively drive and sustain innovative change throughout healthcare organisations.

The session affirmed that meaningful healthcare transformation requires an integrated approach encompassing digital, organisational, and managerial innovations. Balancing technological efficiency with human-centred care is essential. Innovation should address real population needs, improve care pathways, and foster inclusive, value-driven leadership. Practical examples underscored the importance of empowering professionals, engaging patients, and sustaining collaborative momentum through policy support, ultimately enhancing equity, quality, and accessibility in health systems.

Take-home messages

- Incremental innovation that integrates professional and patient expertise is essential for achieving sustainable digital transformation in healthcare, ensuring technology complements human knowledge.
- Organisational resilience and adaptive management models are critical for navigating healthcare crises and enabling meaningful, lasting transformation.
- Effective leadership at personal, team, organisational, and systemic levels plays a vital role in driving the successful adoption, embedding, and sustainability of healthcare innovations.
- Addressing digital literacy and fostering supportive organisational cultures are key to overcoming barriers and ensuring equitable access to innovation across diverse populations.
- Collaborative stakeholder engagement and clear, consistent communication are fundamental to the successful implementation, scaling, and long-term impact of healthcare innovations.

Plenary Session- Will innovation do the trick? New financing and payment mechanisms for enhanced health system performance

Speakers: **Prof Scott L. Greer**, Professor, Michigan University; and Senior Expert Advisor, European Observatory on Health Systems and Policies, USA; **Ms Bèatrice Durvy**, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany; **Prof Federico Lega**, Professor, University of Milan, Italy; **Dr Pamela Mazzocato**, Co-director, Karolinska Institutet Medical Management Centre, Sweden

Facilitator: **Dr Matthias Wismar**, Programme Manager, European Observatory on Health Systems and Policies, Belgium

Session summary

Financing mechanisms are increasingly recognised as powerful levers for shaping health system performance, influencing not only efficiency and sustainability but also equity, access, and quality of care. This session explored the role of innovative payment models in driving systemic change, with particular attention to the promises and pitfalls of value-based approaches. While such models aim to enhance efficiency, reduce unnecessary care, and realign incentives, their implementation is often complex, context-dependent, and prone to both intended and unintended consequences. Drawing on diverse perspectives, from international comparisons to national case studies, the discussion highlighted how fragmented insurance systems, competing governance structures, and varied policy objectives shape the design and outcomes of payment reforms. Evidence from across Europe and beyond underscores that innovation in financing is not a one-size-fits-all solution but requires careful tailoring, integration, and governance to ensure effectiveness. By critically examining advantages, limitations, and real-world feasibility, the session provided valuable insights into how novel health financing mechanisms can strengthen health systems while avoiding new risks and burdens.

Dr Matthias Wismar, Programme Manager at the European Observatory on Health Systems and Policies, stated that financing mechanisms play a crucial role in supporting innovation and possess the potential to evolve themselves. They not only influence health system performance and outcomes but also impact critical areas such as access, quality and financial protection. Among these mechanisms, value-based payment models hold significant importance as they aim to reduce unnecessary care, improve or, at least, maintain system performance and shift financial risks from payers to providers. The health insurance system, however, often faces challenges due to its fragmented nature, highlighting the need for greater integration. A key consideration in this context is whether to integrate payment mechanisms with other systems to enhance efficiency and effectiveness. Nonetheless, the implementation of such integrations presents its own set of challenges, particularly concerning feasibility and acceptability. This session therefore discusses advantages, disadvantages and implementation of payment innovations to strengthen health system performance.

Prof Scott Greer, Professor at Michigan University and Senior Expert Advisor at the European Observatory on Health Systems and Policies, stated that financing models are pivotal in enhancing health system performance, with innovative payment mechanisms playing a key role. Defining innovative payment mechanisms is however challenging. They can be defined by positive definition (what they are) and negative definition (what they are not). Attention should be paid to weak or rhetorical definitions, as well as to broad claims about the portability of a policy or the idea that a single innovation will solve problems globally. Introducing a value-based payment mechanism raises an important question: for whom is the value being created? Moreover, certain values may carry additional costs. When implemented, innovative payment mechanisms yield both intended and unintended effects. Unintended benefits often stem from organisational changes due to new policies. They may include improved patient-provider relationships, better care coordination, empowerment of non-medical staff and increased service utilisation. On the other hand, unintended consequences may include perverse incentives,

administrative burdens, professional costs like reduced autonomy and burnout, and rising care costs from higher utilisation and extended stays. There are some key considerations about payment mechanisms that should be highlighted. First, the complexity of payment mechanisms should be recognised – as the successful implementation of a payment mechanism is a true innovation in itself. Second, incentives aimed at healthcare organisations do not automatically change healthcare providers' behaviours. Further strategies on top of those incentives should also be put in place. Third, costs matter and can change system structure. Fourth, it takes time to implement a new payment mechanism and for the system to adapt to such mechanism. Fifth, while simple payment mechanisms can handle around 80% of patients, the remaining 20%, especially in the public sector, cannot be ignored and require more complex mechanisms. Consequently, scaling up successful practices remains a major challenge in real-world situations.

Ms Bèatrice Durvy, Research Fellow at the Technical University of Berlin and the European Observatory on Health Systems and Policies, shared her research on value-based payments. In her comparative research paper, five high-income countries were selected including Canada, Sweden, the UK, the Netherlands and Germany. Interviews of experts were conducted, and the results were mixed with a literature review. The countries could be grouped into two groups: Canada, Sweden and the UK, where the approach is more top-down and the value-based payment is initiated by the central governments and then applied to all providers; and the Netherlands and Germany, where there are many insurance systems in place with more private sector involvement. The objectives of value-based payment in each country differ. In the first group, the objective was to improve quality of care and increase values by increasing outputs. In the other group, the objective was to reduce costs by increase care coordination and integration, especially between the public and private sectors.

Prof Federico Lega, Professor in Healthcare Management at the University of Milan, discussed the country perspective of Italy. The health care system in Italy is fragmented and organised by local authorities. Capitation payment by age of the population was introduced in the 1990s, and a small amount of the capitation (around 1%) is funded according to specific performance such as achieving specific clinical pathways to increase value. A global budget was also introduced to independent hospitals, which accounts for most of the large hospitals in Italy. The budget is connected to value-based payment where hospitals need to be competitive and efficient to achieve certain national outcomes which then in turn decide their global budgets. However, different regions now have different payment mechanisms to increase efficiency. For example, some regions extend the DRGs (diagnosis-related groups) to community services. Additionally, some use bundle payments for specific outpatients that require similar services. It should be noted that when a new payment model is proposed, particularly the ones trying to increase value and performance, there will always be some amount of resistance. Hence, it requires strong governance to lead and negotiate novel payment mechanisms.

Dr Pamela Mazzocato, Co-director at the Medical Management Centre at Karolinska Institutet, discussed bundle payment mechanisms. The bundle payment is a payment mechanism where providers are reimbursed with a lump sum for a bundle of related services, to incentivise efficiency. Experiments of bundle payment showed that the mechanism was able to reduce waiting time and increase efficiency. In addition to bundle payments, Dr Mazzocato has been working on research focused on redesigning healthcare organisations. In Sweden, many governments have pushed for competition among healthcare providers as means of improving efficiency and quality of care. However, this has led to a significant burden on the public sector due to patient choice, where complex cases are taken care of by public hospitals. Therefore, they are now experimenting with putting forward a patient choice reform with less competition and more collaboration between the two sectors.

Paying healthcare providers to provide services is only one of the many incentives for quality of care. After implementation of a payment mechanism, providers will adapt to the new system to gain an advantage, and therefore financial incentive should not be the only incentive for quality of care. Furthermore, objectives of any payment mechanisms are context-specific, and only half of them are formally assessed. Most of the objectives are usually achieved, although partially, such as improved efficiency, integration of care and patient-provider relationship. Costs, however, are often maintained instead of reduced. Common negative consequences include administrative burdens and case selection by providers. Additionally, definitions of performances depend on the

objectives and are usually tied to specific clinical conditions such as complications after surgery. The quantitative goals are nonetheless easily set incorrectly – for example, not accounting for the difference between simple and complex diseases. Finally, achieving environmental sustainability in healthcare by financial incentive is challenging. Today around 2% of payments are decided based on environmental goals. However, there is a lack of impact measurement after attaining those goals.

Payment mechanisms are a good tool for improving efficiency and quality of care. However, it should be used with careful attention, as it could come with unintended consequences. Although different contexts have different payment systems, it is important to always learn from each other. Lessons learnt from other contexts should be adapted to the local context and combined with national indicators.

Take-home messages

- Financing mechanisms are critical in shaping health system performance, influencing areas such as access, quality and financial protection.
- Value-based payment models aim to enhance system efficiency by reducing unnecessary care, shifting financial risks and improving care outcomes.
- Innovative payment mechanisms yield both intended benefits (like better care coordination) and unintended consequences (such as administrative burdens and professional burnout).
- The complexity of payment mechanisms requires careful implementation, with financial incentives alone being insufficient to change provider behaviours.
- Scaling successful payment models is challenging due to diverse healthcare system structures, resistance to change and the need for strong governance.

Focus session – Uncovering the missing links in respiratory disease management: strengthening testing and surveillance for older adults

Speakers: **Dr Pascal Crépey**, Professor in Epidemiology and Biostatistics, École des Hautes Études en Santé Publique (EHESP), France; **Mr Zachary Desson**, Principal Scientific and Policy Advisor, European Health Management Association (EHMA), Belgium; **Dr Marta Nunes**, Director, Center of Excellence in Respiratory Pathogens (CERP), France

Facilitator: **Ms Alexis Strader**, Director of Policy and Research, European Health Management Association (EHMA), Belgium

Session summary

This session looked at how to better manage respiratory diseases for older adults and specifically at improving testing and surveillance for two under recognised viruses: RSV – Respiratory Syncytial Virus and hMPV – Human Metapneumovirus. These viruses can cause serious illness in older people, but they are often missed because of testing gaps, lack of awareness, or unclear case definitions. The session explored how research can be turned into action, what barriers still exist, and how to build more connected, long-term surveillance systems. The goal was to identify where to act and build stronger systems that protect everyone, especially those most at risk.

Dr Marta Nunes, Director at the Center of Excellence in Respiratory Pathogens, emphasised that Europe’s population is aging rapidly, with nearly half of Europeans projected to be over 55 by 2050, and that older individuals are more likely to experience severe illness from respiratory infections. Dr Nunes noted that although influenza and COVID-19 are well recognised, viruses such as RSV and hMPV often receive less attention, particularly in adults. A key challenge, she explained, is that standard case definitions typically require symptoms such as fever, yet RSV frequently does not cause fever in older adults, resulting in many undiagnosed cases. She presented data from the Rescue Consortium, which indicated that each year in Europe there are approximately 158,000 hospitalisations associated with RSV, with more than 90% occurring among individuals over 65 years of age. She further highlighted that older adults infected with RSV may experience worse outcomes than those with influenza or COVID-19. For instance, one study conducted in the United States demonstrated that RSV patients had a 1.5 times higher likelihood of admission to intensive care. Regarding hMPV, a virus first identified in 2001, understanding of its impact is only now emerging. Recent global estimates suggest that hMPV accounts for approximately 473,000 hospitalisations annually in adults under 65. Dr Nunes explained that without adequate testing for these viruses, their presence remains undetected, which limits the capacity for an effective response. She also discussed the WHO’s Mosaic Framework, which encourages countries to establish adaptable, multi-pathogen surveillance systems. She illustrated this with examples of existing data-sharing platforms and networks, such as the ECDC’s European Surveillance System (TESSy) and the Global Influenza Hospital Surveillance Network. Dr Nunes underscored that data collection is only the initial stage; it is essential to share, analyse, and apply the information to support vaccine planning and emergency preparedness. She concluded by calling for enhanced collaboration and investment, including support through public-private partnerships.

Mr Zachary Desson, Principal Scientific and Policy Advisor at EHMA, posed a simple yet significant question: are the current testing and surveillance systems for RSV and hMPV in adults sufficient? His conclusion was that they are not. He explained that while COVID-19 and influenza receive substantial attention, there remains a considerable gap in surveillance for RSV and, in particular, hMPV. This gap is even more pronounced among older adults. Mr Desson presented preliminary findings from an international study comparing how various countries, including Germany, France, the United Kingdom, and the United States, conduct surveillance for these viruses. The study revealed that most systems are more effective at monitoring RSV than hMPV, although both still concentrate primarily on children. He also shared results from EHMA’s recent survey of health care professionals, which assessed perceptions of national performance in this area. Respondents rated their understanding of RSV

surveillance systems at 3.5 out of 5, and of hMPV systems at only 2.4. Their assessment of national testing systems was even lower – 4.7 for RSV and 3.0 for hMPV, on a scale of 10. Mr Desson noted that even highly experienced experts lack confidence in how these systems operate, indicating that awareness and trust remain insufficient. The survey further examined whether progress had been made over the past five years. Most participants reported no improvement for RSV, and a decline in the situation for hMPV. When identifying barriers to progress, the most frequent responses included insufficient testing in primary care, fragmented data collection, underreporting, inadequate professional training, and high costs. However, the survey also highlighted potential solutions. Respondents observed that the infrastructure established for COVID-19 and influenza surveillance already exists and could be expanded to include RSV and hMPV. They also emphasised the need for increased data sharing, improved access to diagnostic tests, and additional funding. Mr Desson concluded by stating that progress will not result solely from having the necessary tools. It requires political commitment, effective communication, and a renewed effort to prioritise respiratory surveillance within public health systems.

Dr Pascal Crépey, Professor in Epidemiology and Biostatistics at the École des Hautes Études en Santé Publique, outlined the characteristics of an effective surveillance system and described France’s performance in this regard. He began by inviting the audience to consider what constitutes a ‘good’ system, before presenting the World Health Organization’s established criteria: rapid reporting, broad coverage, sensitivity, specificity, affordability, and practical usefulness. He explained that during the COVID-19 pandemic, testing capacity expanded dramatically. In early 2020, hospitals in Brittany could conduct approximately 40 tests per day; one year later, this figure had risen to over 1,000. This transformation, he noted, fundamentally changed expectations around data accessibility, with the public now anticipating regular updates on viral activity much like weather forecasts. Dr Crépey then introduced France’s Sentinel Network, established in 1984. This network comprises volunteer general practitioners and paediatricians who provide weekly reports on disease trends. Since 2014, the network has also included biological sampling, whereby general practitioners test a small number of patients each week for five viruses – namely influenza, COVID-19, RSV, hMPV, and rhinovirus. Dr Crépey demonstrated how this approach enables differentiation between a single large outbreak and multiple overlapping ones. For example, a double peak in respiratory infections observed last winter was found to correspond first to RSV, followed by influenza. He further noted that hMPV typically emerges later in the season and may be underreported, as it does not consistently cause fever—one of the key symptoms used in case definitions. He reminded the audience that no surveillance system is without limitations. Certain viruses are transient in nasal samples, which complicates detection. Nevertheless, with improved tools such as the Oculus project – which integrates hospital data in real time – France is progressing toward more comprehensive and detailed surveillance. He emphasised that models informed by high-quality data can support more effective vaccine planning and outbreak preparedness. Dr Crépey underscored that awareness and action must advance together, as meaningful improvements in surveillance depend on both understanding and implementation.

Participants raised thought-provoking points about why health often receives less attention than areas such as national defence. Comparisons were drawn between the two, noting that both can have profound societal consequences. The speakers agreed that part of the challenge lies in perception: people tend to respond more emotionally to visible threats like war than to less tangible ones such as infectious diseases. Mr Desson observed that during the COVID-19 pandemic, war-like language – phrases such as “we are in this together” and “fighting the virus” – was used to inspire collective action. Dr Crépey added that although preventive measures are widely recognised as cost-effective, they often struggle to attract funding because their benefits are only visible over time. One audience member further reflected that health does not directly drive economic outcomes; rather, it supports well-being, and as a result, is often treated as a trade-off rather than a priority.

The discussion also turned to the potential role of digital data in anticipating disease trends. Participants explored whether tools such as Google search analyses could be used to predict outbreaks. Dr Crépey explained that Google had previously attempted this through the Google Flu Trends project, which performed well during typical influenza seasons but faltered during atypical events such as the 2009 flu pandemic. The system required constant recalibration and lacked the input of epidemiologists. He concluded that while such tools hold potential,

they cannot replace established surveillance systems grounded in real-world data. Attention then shifted to the possibility of a shared immunisation strategy across the European Union. Dr Nunes noted that the EU can play a key role in coordination and data sharing, but ultimate responsibility for vaccination policy remains with individual member states. Dr Crépey added that keeping decision-making closer to local populations may strengthen public trust, even if it leads to some variation between countries.

Despite progress in respiratory disease surveillance, significant gaps persist, particularly concerning older adults. Dr Nunes emphasised that many RSV and hMPV cases in this population continue to go undetected due to outdated case definitions, limited testing, and a disproportionate focus on children. Without accurate diagnosis, it is impossible to fully assess disease burden or design effective interventions. Mr Desson reinforced this point, noting that many health professionals lack confidence in their countries' surveillance systems, particularly for hMPV. He stressed the need for improved training, clearer communication, and greater system transparency. His findings revealed that professionals within public health are motivated to enhance surveillance but face persistent challenges linked to fragmented policies, inconsistent reporting, and fluctuating political commitment. Dr Crépey highlighted that data alone is insufficient; information must be timely, shared, and trusted by both professionals and the public. The French experience demonstrated that volunteer-driven networks and biological testing can provide valuable insights, particularly when complemented by digital infrastructure and predictive modelling. Nevertheless, he reminded the audience that it is awareness, political will, and sustained investment that transform data into action.

The discussion concluded with a collective reflection that technology and scientific knowledge are not the limiting factors. What is lacking is alignment and long-term commitment. Lessons from the COVID-19 pandemic have shown that investing in surveillance yields lasting benefits, yet that momentum is waning. Building stronger systems requires acting before the next crisis rather than in its aftermath. This involves keeping respiratory health high on the public agenda, ensuring real-time feedback for healthcare providers, integrating systems across age groups, and embedding surveillance as a continuous and essential function of public health.

Take-home messages

- Older adults remain underrepresented in surveillance efforts. Existing systems continue to prioritise children, despite evidence that older adults face substantially higher risks from RSV and hMPV.
- Insufficient testing contributes to missed cases. Many RSV and hMPV infections in adults do not meet standard case definitions, resulting in underdiagnosis and reduced capacity to inform effective public health planning.
- Existing frameworks can be optimised rather than rebuilt. The surveillance infrastructures established for influenza and COVID-19 provide a strong foundation that can be expanded to include RSV and hMPV.
- Healthcare professionals require enhanced support to detect outbreaks promptly. Frontline practitioners are often the first to observe emerging infections and need practical tools such as diagnostic checklists, improved access to data, and targeted training to identify these viruses effectively.
- Sustained prevention depends on political commitment and long-term investment. Even with the availability of tests, vaccines, and robust data systems, meaningful action will not occur without dedicated policy support and consistent funding.

Focus session – Automation and digitalisation of medication management: meeting the challenges of safety and efficiency

Speakers: **Dr Nicolas Coste**, Hospital pharmacist, APHM Hospitals Academics De Marseille; President, SNPHPU – Syndicat National Pharmaciens Praticiens Hospitaliers & Praticiens Hospitaliers Universitaires, France; **Mr Léonard Dupe**, Head of Purchasing and Logistics, CHU Rennes, France; **Mr Florent Poiret**, Deputy Head of the Pharmacy Department and Associate Project Coordinator, CHU Rennes, France; **Ms Eleonora Vartnourian**, Policy Manager, European Health Management Association (EHMA), Belgium

Facilitator: **Ms Laurene Mathey**, Director of Projects, European Health Management Association (EHMA), Belgium

Session summary

The session examined how digitalisation and automation are reshaping the healthcare system, highlighting that these developments go beyond the introduction of new tools. They represent a strategic transformation requiring coordination across institutions and countries, supported by shared standards, data interoperability, and the exchange of good practices. Aligning national health policies with European strategies is therefore essential to ensure that technological advances translate into tangible improvements in healthcare delivery.

Mr Léonard Dupré, Head of Purchasing and Logistics, and **Mr Florent Poiret**, Deputy Head of the Pharmacy Department and Associate Project Coordinator at CHU Rennes, presented the major restructuring of Rennes University Hospital. The transformation consolidated medicine, surgery, and obstetrics into a single hub adjacent to a new pharmacy institute, positioning pharmacy logistics as a strategic priority. As the core of the hospital's internal supply chain, the pharmacy manages over 330 logistic containers daily. Yet, processes remained largely manual, repetitive, and prone to error, affecting both efficiency and patient safety. Inventory checks were slow and unreliable, forcing care units to maintain emergency reserves, while complex information systems further hindered performance.

To address these challenges, the hospital launched a long-term project to automate and digitalise pharmaceutical logistics with clear objectives: reduce manual handling, free pharmacists for clinical tasks, lower inventory costs, and minimise waste. New regulatory standards on quality control added urgency to the effort. The first phase centred on a targeted investment plan, developed in consultation with providers and software vendors. Four priorities were established: a new pharmaceutical information system, global dispensing automation, automated dispensing cabinets (ADCs) in critical care units, and a patient-named dispensing system—all to be operational by 2026. Three staff members were trained in data and stock management, taking over inventory responsibilities previously handled by nurses. A new warehouse management system, *Copilote* by Maincare, was adopted, and two ADCs were piloted in the intensive care unit. Large-scale deployment began in 2024 with staff training and system integration, followed by a second rollout in early 2025 alongside the opening of a new surgical centre. Currently, three robots programmed with 960 references—covering 74% of the hospital's medication needs—prepare 50,000 pill boxes daily. This has reduced pharmacy waste by 25% and saved pharmacists around 12 hours per day. The success of the project overcame initial resistance and repositioned pharmacy as a modern, strategic function. It also aligns with the broader “universitarisation” of pharmacy studies, enhancing the hospital's appeal to young professionals. The next phase will include selecting a patient-named dispensing solution by 2026 and piloting a new operating room information system in September 2025. Although full return on investment is expected in nine years, the ADCs are projected to break even within four.

Modern pharmacy operations now demand new competencies in automation, data quality, and IT collaboration. The pharmacy is increasingly viewed as a production unit requiring agility, real-time oversight, and strong data governance. In 2024, these improvements contributed to a 45% reduction in medication waste. The next challenge lies in embedding a robust data culture and ensuring continuous improvement.

Dr Nicolas Coste, hospital pharmacist at APHM Marseille and President of the SNPHPU, the union of hospital pharmacists, emphasised that automation is not merely mechanical but fundamentally logical, serving as a cornerstone of healthcare system improvement. He outlined the work undertaken at La Timone, one of the four hospitals in the APHM network. In 2011, new pharmacy software was developed to enable digital prescriptions within the hospital's IT system, with interoperability between automated devices identified as a key challenge. The following year, under an efficiency contract between APHM's management and the French National Agency for Hospital Efficiency (ANAP), the project expanded with the creation of Timone 2 - a new building featuring 30 operating theatres, a pharmacy robot, and automated dispensing cabinets (ADCs) in care units. The objective was to secure the pharmaceutical supply chain from pharmacy to bedside.

Beyond efficiency gains, the project delivered strong human benefits: reduced nurse workload and stress through support from logistics staff and nearby automation. Initially deployed at La Timone, the system was designed for expansion across the APHM network. Scaling up required a Pharmacy Information System capable of automating prescriptions, tracking stocks in real time, and tracing medication delivery by patient. A decade later, the project demonstrated that success relies on sustained collaboration among doctors, nurses, and managers, supported by continuous maintenance, training, and change management. Automation has improved patient safety, reduced medication waste, and lowered administrative costs. Looking ahead, further digitalisation—particularly in prescription quality control and sterilisation—offers new opportunities. The experience also showed that meaningful change often begins with small, motivated teams whose example gradually builds wider institutional support.

Building on these hospital experiences, **Ms Eleonora Varntoumian**, Policy Manager at EHMA, introduced the EPACT project, an Alliance for the digitalisation of hospital medication management pathways. Launched in 2022, the project aims to reduce patient and staff harm from medication errors while improving well-being by easing the administrative burden of hospital medication processes. EPACT promotes technology and automation to minimise manual tasks and errors and to establish standardised practices across hospitals. Given the wide range of stakeholders involved, stronger coordination is essential. Hospital medication remains the highest spending area, yet 33% of EU hospitals still lack inventory systems, resulting in an estimated €84 million in annual costs from waste and redundant orders. EHMA addressed this challenge through several key publications. A white paper assessed national legislation and capacity to track hospital medicine inventories. A position paper on the new EU pharmaceutical regulation advocated for standardised barcodes, systematic error reporting to the EUDRA Vigilance Database, and national safety plans to manage pharmaceutical risks and shortages, including epidemic threats. A third position paper on the European Health Data Space called for mandatory digitalisation of five core health data categories—an initiative estimated to save €5.5 billion by reducing IT fragmentation and to boost the digital health market by up to 30%, reinforcing EU health sovereignty. In parallel, EHMA supports the Critical Medicine Alliance, advises the EU Health Emergency Response Agency, and has published a Manager's Guide to assist hospitals in implementing digital pathways. A final paper on funding mechanisms is expected in September 2025.

Across the experiences of Rennes, La Timone, and the pan-European EPACT initiative, a clear message emerged: the success of digital transformation in healthcare depends as much on people as on technology. While automation delivers measurable efficiency gains, the human dimension remains the decisive factor for long-term adoption. Resistance to change often arises from uncertainty rather than opposition, making early staff involvement, comprehensive training, and transparent communication essential.

Both Rennes and La Timone showed that trust and team capacity are key to turning hesitation into collaboration. At La Timone, the project began with a small group of volunteers and progressed gradually, demonstrating the value of starting small to build confidence. In Rennes, automation marked a turning point - initial reluctance gave way to engagement once the benefits became evident. In both cases, training was vital not only for correct system use but also for fostering ownership and professional confidence. Speakers agreed that management-related challenges were often more complex than technical ones, underscoring the need to engage all professionals directly affected by change, not just leadership.

These experiences confirm that effective change management is as critical as technical readiness. Human-centred strategies – prioritising communication, inclusion, and gradual implementation – are essential to ensure lasting success. Aligning digital initiatives with broader policy frameworks, as illustrated by EPACT, further supports sustainability and interoperability beyond individual institutions.

Ultimately, the success of digitalisation and automation depends on cultural and organisational adaptation as much as on technology itself. Future projects should embed these lessons into their design to enhance sustainability, staff acceptance, and long-term impact. The session concluded that digitalisation and automation are not ends in themselves but tools to build safer, more efficient, and more resilient healthcare systems, requiring continuous investment in both infrastructure and people, guided by a shared European vision that connects local innovation to a coordinated, data-driven ecosystem.

Take-home messages

- Change management requires sustained attention and early planning. Resistance is rarely about technology itself but about organisational culture, workflow disruption, and uncertainty. Addressing these factors from the outset – through transparent communication, clear timelines, and structured feedback mechanisms – is essential to ensure acceptance and long-term success.
- Beginning with a focused pilot led by a motivated group of professionals allows institutions to test solutions, refine processes, and demonstrate early results. This incremental approach helps generate trust, gather practical insights, and create the momentum needed for wider adoption across the organisation.
- Comprehensive, continuous training for all professionals involved – from pharmacists and nurses to IT staff – is indispensable. It ensures correct system use, maximises efficiency gains, and builds ownership and confidence. Effective training also supports adaptability when systems evolve or expand.
- Engagement must extend beyond leadership to include all staff. Digital transformation succeeds when frontline professionals – those using the systems daily – are actively involved in design, testing, and feedback. Their engagement fosters relevance, practicality, and accountability, turning potential resistance into collaboration.
- Presenting measurable benefits such as reduced medication errors, time savings, or lower waste helps shift perceptions from scepticism to support. Clear evidence of impact reinforces confidence among professionals and decision-makers alike, sustaining long-term commitment to innovation.

Focus session – Leading the transition to environmentally sustainable and climate resilient healthcare systems

Speakers: **Natalia Allué, MD**, Medical Director, Fundació Sanitaria Mollet, Spain; **Mr Thomas Kergall**, Senior Technical Advisor for Health & Social Care, Council of Europe Development Bank, France; **Prof Federico Lega**, Professor, University of Milan, Italy; **Dr Alexandre Lourenco**, CEO, Coimbra's Integrated Health Delivery System (ULS), Portugal; **Mr Hamid Ravaghi**, Regional Advisor on Hospitals, World Health Organization's (WHO) Eastern Mediterranean Region (EMRO), Egypt

Facilitator: **Mafaten Chaouali, MD**, Technical Officer, WHO Regional Office for Europe, Denmark

Session summary

This focus session explored the key investments that must be addressed to transform the climate transition into a meaningful opportunity for building sustainable hospitals and strengthening climate-resilient health systems.

Dr Natalia Allué, Medical Director at the Fundacio Sanitaria Mollet, highlighted that hospitals are responsible for a significant amount of greenhouse gas emissions. The health sector ranks as the fifth largest polluter, with hospitals accounting for 4.4% of Europe's total emissions. At the same time, human health is closely linked to the environment, highlighting the urgency of sustainable healthcare practices. Spanish hospitals have experienced a remarkable transformation by reducing 90% of their CO₂ emissions over 14 years, achieving net zero emissions in 2023. Central to this Spanish achievement was a strategic plan prioritising structural changes, such as maximising the use of natural light within the hospital, adopting renewable energy sources, and enhancing waste management systems. Hospitals have also invested in electric vehicles and bicycles for staff to reduce transport emissions. There is a net zero route at the Fundación Sanitaria Mollet showing the necessity for hospitals to be ambitious in a climate resilient strategy. The strong commitment of leadership was emphasised as a key factor driving this successful transition.

Dr Alexander Lourenco, CEO at Coimbra's integrated Health Delivery Systems, shared that climate challenges, including wildfires, are the vectors of future risks to health. They are identified threats that have fuelled several public health programmes across Portugal. While lifestyle-related conditions and violence remain important health concerns in the country, climate change stands out as the most significant future threat to the health of the nation. There is a need for immediate actions, focussed leadership and vision to drive the transformation of national healthcare systems. A strategic plan of ULS Coimbra prioritises sustainability and mobility, with clear indicators monitored through a dedicated dashboard. Initiatives of the strategy include the use of electric vehicles and bicycles, tree planting, and the promotion of integrated, patient-centred care supported by digital tools. Focusing on people-centred care not only improves health outcomes but also contributes to sustainability. The mission is to enhance the well-being of the community.

Mr Thomas Kergall, Senior Technical Advisor for Health & Social Care at the Council of Europe Development Bank explained that the CEB plays a powerful role in funding social infrastructure and healthcare is among its strategic priorities for 2023–2027. The CEB views climate change as a social crisis, threatening social, economic and territorial cohesion. Environmental and social safeguards are thereby related to health issues. The CEB analyses investment proposals by screening them for several indicators, such as wastewater treatment requirements, and assesses them for alignment with the Paris Agreement framework and its six building blocks. The Bank prioritises projects that benefit vulnerable populations. In terms of climate change mitigation, the CEB supports improvements in energy efficiency, including heating, ventilation, insulation, equipment upgrades and the use of natural daylighting in healthcare facilities. It also addresses climate adaptation by promoting infrastructure withstanding floods, storms, heat stress and other extreme weather events, supported by geographical climate-risk tools. Despite their crucial roles, health care centres remain important greenhouse gas emitters. Examples of

various case studies including the German Saint George Hospital, Finland Laakso Hospital and the Serbian Tirsova Hospital, show that it is possible to reduce hospital emissions while maintaining their health capacities.

Prof Federico Lega, Professor of Health Care Management at the University of Milan, underlined that there is an urgent need for strategic leadership to future-proof healthcare. Around 70% of Italian hospitals are now over 50 years old, many of which are protected for historical reasons. This ageing infrastructure embodies a challenge for sustainability and resilience. While many hospital managers focus on immediate concerns, there is a pressing need to promote leaders who aim at building a long-term legacy. Successful transformation depends on a clear vision and the right incentives. Strategic planning must be the very starting point, followed by a commitment together with staff, to drive initiatives according to adequate resources. Implementation should be driven by measurable objectives and supported by sustainability-linked incentives, such as extra payments tied to a sustainability index. Organisational culture must also be addressed, with sustainability integrated into its core values. Raising awareness, appointing ambassadors, celebrating progress, and aligning initiatives with the strategic plan are all key steps. Finally, assigning responsibility at the organisational level, through dedicated committees, units, or chief officers, is essential, alongside fostering bottom-up commitment to drive meaningful changes.

Mr Hamid Ravaghi, Regional Advisor on Hospitals at WHO Eastern Mediterranean Region, stated that critical skills and structures are crucial to build climate-resilient hospitals, particularly in low- and middle-income countries. Despite an ongoing WHO-supported project involving eight countries in the EMRO region such efforts remain scarce. While institutions like the World Bank link more and more loans to climate sustainability requirements, only one participating country has qualified for funding so far, pointing to systemic challenges. Unlike in Europe, around 90% of hospital managers in the project region are medical doctors, that often lack basic management training. The WHO is now working to build capacity among various managers, infrastructure planners, and healthcare professionals, and to integrate sustainability into national strategies. There is a need to share knowledge among the target countries on how to face crisis and how to use limited resources in a sustainable way. Furthermore, it is important to implement operational indicators, such as energy and electricity use, which need to be monitored regularly. Though not currently mandatory, such reporting should become standard practice, both on the clinical and managerial side. This would create appropriate conditions for benchmarking across hospitals so to drive progress and accountability.

The discussion focused on the urgent need to ensure the continuity of healthcare delivery while facing escalating environmental degradations, which poses an additional direct threat to public health. Transformation towards a more sustainable healthcare system is no longer optional. When asked how to manage competing financial demands, speakers acknowledged ongoing challenges, particularly in procurement. EU funding plays a vital role, and hospital managers must consider total life-cycle costs, not just initial expenses as investments in sustainability do pay off in the long run. Sustainable procurement encourages selecting quality over the lowest price. Additionally, the human side of transformation was emphasised. In Spain, a successful case was built on a solid strategic plan, comprehensive staff training, and linking extra payments to sustainability-related achievements. New staff were trained annually, and sustainability was embedded across all processes.

Patients can play an important role in supporting sustainability within healthcare systems by actively participate in decision-making processes, such as through sustainability committees. Practical steps include following recommendations on healthy lifestyles, like sport activities, which are promoted through visible guidance within healthcare facilities. Efforts are also being made to reduce unnecessary patient travel through the design of efficient clinical pathways. In a wider understanding, building community resilience and raising awareness are essential to empowering patients to take responsibility and contribute to more sustainable and climate-resilient healthcare.

The session made clear that building climate-resilient and sustainable hospitals is not only a technical or environmental challenge but a strategic transformation of how healthcare is conceived, financed, and managed. Sustainability must be understood as a driver of quality, efficiency, and health equity rather than an isolated objective. What emerged across all contributions is the centrality of leadership, governance, and capacity-

building. Whether in Spain, Portugal, or the Eastern Mediterranean, success depends less on access to technology and more on the ability to mobilise people, align institutions, and sustain a shared vision over time. Hospitals that embed sustainability into their culture demonstrate that decarbonisation and high-quality care can advance together. Financial institutions and policy frameworks play an enabling role in translating ambition into long-term investment. Yet the most powerful change begins within hospitals themselves, through education, planning, and accountability. Empowering managers and clinicians with the skills and data needed to make informed decisions is key to bridging the gap between strategy and implementation. Ultimately, the transition to climate-smart healthcare is an opportunity to redefine resilience. Hospitals can serve as anchors of sustainable development – protecting health, supporting communities, and contributing to environmental stability. Turning this vision into practice will require sustained political commitment, collaborative governance, and continuous learning across regions and sectors.

Take-home messages

- Visionary leadership and long-term strategy are the foundations of climate-resilient healthcare. Sustainable transformation requires leaders who set clear goals, align resources, and engage staff at every level. Embedding sustainability into organisational culture ensures that environmental responsibility becomes part of daily decision-making rather than an isolated initiative.
- Investing in infrastructure and innovation generates lasting value. Structural upgrades, such as energy-efficient buildings, renewable energy systems, and digital monitoring tools, reduce emissions, improve efficiency, and enhance patient safety. Though upfront costs may be high, the long-term financial, environmental, and health benefits are substantial.
- Involving patients in sustainability initiatives, from hospital committees to health promotion activities, builds awareness and shared responsibility. Encouraging sustainable lifestyles and fostering community resilience extend the impact of climate action beyond hospital walls.
- Sustainability in healthcare depends on integration across systems and sectors. Achieving meaningful change requires alignment between leadership, financing, capacity building, and policy frameworks. When institutions, funders, and communities work together, sustainability becomes both a practical and achievable goal for health systems worldwide.

Focus session – Closing the skill-gaps for yielding the digital dividend

Speakers: **Ms Astrid Eriksen**, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany; **Prof Todorka Kostadinova**, Vice-Rector for International Cooperation, Accreditation and Quality, Medical University Varna, Bulgaria; **Ms Federica Margheri**, Executive Director, European Health Management Association (EHMA), Belgium; **Dr Gemma Williams**, Research Fellow, European Observatory on Health Systems and Policies, United Kingdom

Facilitator: **Dr Matthias Wismar**, Programme Manager, European Observatory on Health Systems and Policies, Belgium

Session summary

The session addressed the critical role of health workforce skills in enhancing health system performance. It highlighted that substantial skill gaps in both digital and green competencies continue to pose significant challenges across Europe. In response, a consortium led by the European Health Management Association, through the EU-funded project BeWell is developing a comprehensive blueprint incorporating skill matrices, curricula, and training programmes designed to support workforce transformation.

To frame the discussion, participants engaged in a poll reflecting on the extent of systematic digital skills training within their own health and education systems. The exercise revealed significant variation in provision and accessibility across European countries, emphasising the uneven integration of digital competencies into professional training. This activity set the stage for a deeper exploration of the BeWell's evidence-based strategies, summarised in policy briefs aimed at providing health system managers, policymakers, and academics with practical insights for equipping the workforce for a sustainable, digitally enabled future.

Dr Gemma Williams, Research Fellow at the European Observatory on Health Systems and Policies, explained that the project's policy brief identifies the need for healthcare professionals to acquire appropriate digital competencies to support the effective use of technologies that improve patient outcomes, working conditions, and system efficiency; to strengthen resilience and new models of care; to ensure the ethical and regulatory use of digital tools; and to facilitate the implementation of the European Health Data Space. Dr Williams outlined how digital transformation has created new professional roles such as clinical digital leads, clinical informatics specialists, biomedical engineers, and health data analysts, while also highlighting the continuing importance of technical and clinical support positions. BeWell defines five key digital competencies for Europe: information and data literacy, digital problem-solving, safety and cybersecurity including GDPR compliance, digital tool and content development, and digital collaboration and communication. Despite these frameworks, she noted that major challenges remain, including workforce shortages, burnout, rapid technological advancement, and inconsistent access to continuing education. A 2019 OECD review found that between 30 and 70 per cent of healthcare professionals reported inadequate digital skills, with training opportunities differing widely between countries and professional groups. Dr Williams emphasised that effective digital transformation depends on coherent strategies, strong leadership, and close collaboration across sectors. She introduced the BeWell Skills Monitor, an online tool designed to help professionals identify relevant courses and resources. Reflecting on the results of the opening poll, she underlined the urgency of closing the existing skills gaps to ensure that healthcare providers are both equipped and motivated to adopt digital innovations.

Ms Astrid Eriksen, Research Fellow at the Technical University of Berlin and the European Observatory on Health Systems and Policies, discussed the importance of aligning digital and green skills development to support comprehensive and sustainable health system transformation. She explained that integrating environmental sustainability into digital education fosters healthcare delivery models capable of addressing future climate and resource challenges.

Prof Todorka Kostadinova, Vice-Rector for International Cooperation, Accreditation and Quality at the Medical University Varna, focused on accreditation and quality assurance in digital and green skills training. She emphasised the need for international cooperation and harmonised quality frameworks to guarantee standardised, high-quality education across Europe. Reflecting on developments in Bulgaria, she observed that green skills remain underdeveloped but noted that initiatives such as BeWell offer valuable models for raising awareness, establishing good practices, and ensuring that national efforts align with broader EU objectives.

Ms Federica Margheri, Executive Director at EHMA, described the creation of skill matrices, curricula, and training programmes as practical mechanisms for promoting digital and green workforce development. Ms Margheri illustrated how BeWell ensures the accessibility of learning through open-access, multilingual training courses. She explained that BeWell is built on collaboration and dialogue rather than a top-down approach, stressing that bottom-up engagement is essential to ensure relevance and adoption. While acknowledging the challenge of uniting stakeholders with diverse needs, she noted that reaching consensus on essential competencies strengthens shared ownership of the initiative. Looking ahead, she underlined the importance of shifting from strategy to implementation, deepening stakeholder dialogue, and scaling up workforce upskilling efforts.

Dr Williams emphasised the importance of assessing the current state of digital skills across Europe, identifying emerging technologies, and evaluating how education systems can prepare professionals accordingly. She reinforced that engaging healthcare providers in designing and implementing digital tools and training is essential to ensure adoption. Panelists agreed that short-term solutions such as task shifting and retention strategies must be prioritised, while digital skills development can serve as a long-term incentive for younger professionals entering the sector. Further questions addressed the role of asynchronous learning in improving accessibility, the challenge of dropout rates in online training, and the potential to expand BeWell's framework beyond the European Union. The discussion also examined the complexity of measuring digital competencies, the absence of clear regulatory structures, and the importance of integrating emerging technologies such as artificial intelligence into future training and workforce planning.

The session concluded that bridging digital and green skill gaps is an urgent priority for Europe's health workforce. Strengthening these competencies is essential not only for system performance and sustainability but also for workforce retention and job satisfaction. Achieving this requires strategic leadership, coherent policy support, and inclusive collaboration across sectors.

Take-home messages

- Developing digital and green skills is essential for achieving sustainable and resilient healthcare systems. Strengthening these competencies enables health services to adapt to technological change, address environmental challenges, and deliver high-quality, patient-centred care.
- Structured and inclusive training supported by strategic leadership is vital to closing workforce skill gaps. Long-term planning, investment in education, and engagement of all professional groups ensure that digital and green skills are embedded across health systems.
- Cross-sectoral collaboration and harmonised quality assurance frameworks are key to effective skills development. Coordinated action among governments, educational institutions, healthcare organisations, and international partners ensures consistency, relevance, and scalability of training initiatives.
- Removing practical barriers and fostering supportive organisational cultures are necessary for successful integration of new competencies. Addressing time constraints, funding limitations, and resistance to change helps create environments where innovation and continuous learning can thrive.
- Enhancing digital and green skills strengthens workforce retention and contributes directly to long-term system sustainability. Empowered professionals who possess relevant skills are more likely to remain in the health sector, ensuring stability, efficiency, and improved patient outcomes.

Focus session – ‘Learning from each other’: advancing RSV infants prophylaxis programmes

Facilitators: **Dr Montserrat Codina**, Project Lead, Center for Research, IESE Business School, Spain; **Prof Jaume Ribera**, Emeritus Professor in the Operations, Information and Technology Management Department and Director of the Center for Research in Healthcare Innovation Management, IESE Business School, Spain

Session summary

The session focused on the implementation of Respiratory Syncytial Virus (RSV) prophylaxis programmes for infants across Europe. The discussion centred on the introduction of long-acting monoclonal antibodies (mAbs) as a novel preventive measure against RSV and explored the operational, educational, and organisational aspects required to ensure equitable access and effective programme delivery.

RSV remains one of the leading causes of lower respiratory tract infections in infants, contributing to significant morbidity, hospitalisations, and long-term respiratory complications. Despite the scale of this burden, prevention strategies have historically been limited. The recent approval of long-acting mAbs has created an opportunity for countries to reduce infant hospitalisations and health-system pressures through single-dose seasonal prophylaxis, which has demonstrated an efficacy of over 80% in clinical and real-world studies.

Participants were presented evidence from across Europe, including early experiences from France and Spain, where universal infant immunisation programmes with mAbs have led to marked reductions in RSV-related hospitalisations. The session also highlighted preliminary results from the EHMA ReSolVe II study, which surveyed health professionals and administrators across Italy, Spain, Germany, and France to assess system readiness for implementing RSV prophylaxis. The study showed broad professional consensus on the clinical and organisational benefits of mAb use, including reduced hospital and intensive care bed occupancy and shorter hospital stays. However, it also identified significant challenges, such as gaps in logistics, data interoperability, and workforce preparedness.

Discussions underlined that while regulatory approval and infrastructure for delivery are advancing, many countries still face operational bottlenecks. These include inconsistent cold-chain capacity, insufficient coordination between maternity units and primary care, and limited inclusion of RSV prophylaxis in existing immunisation registries. Participants emphasised that integrating mAb delivery within routine maternal and child-health pathways—such as linking prophylaxis with standard post-natal or well-baby visits—would help improve coverage and reduce inequalities in access.

Another critical theme concerned information systems and data exchange. Many existing digital vaccination records do not yet account for monoclonal antibody prophylaxis, which complicates monitoring and follow-up. The session highlighted examples of innovative local practices, such as linking birth notifications with primary-care schedules to identify eligible infants and using pharmacy dispensing data when electronic health records remain fragmented. Developing interoperable information systems was considered essential for ensuring continuity of care, tracking coverage, and evaluating outcomes.

Education and awareness also emerged as key enablers of successful implementation. Participants noted that because mAbs differ from vaccines in both mechanism and administration, clear communication strategies are necessary to build understanding among parents, healthcare professionals, and the wider public. Effective communication should explain passive immunity, seasonal timing, and protection duration while addressing misconceptions.

Healthcare workforce training was identified as an area requiring urgent attention. Many professionals, including paediatricians, neonatologists, nurses, midwives, and pharmacists, have limited experience with mAb

prophylaxis. Integrating relevant modules into continuing medical education programmes, combined with practical guidance on counselling parents and managing administration logistics, was considered vital for uptake and consistency.

Participants also discussed public engagement approaches to support acceptance and adherence. Initiatives such as parent-champion networks, clinician-led information sessions, and digital awareness campaigns were cited as effective in increasing trust and understanding. It was noted that success depends on collaboration between national health authorities, hospitals, and community-level actors, ensuring messages are consistent yet adaptable to local contexts.

The session concluded that introducing RSV monoclonal antibody prophylaxis across Europe represents a significant step forward in infant respiratory health protection. However, achieving sustainable, equitable implementation will require coordinated efforts across policy, practice, and education. Strengthening digital infrastructure, aligning prophylaxis with existing child-health pathways, and investing in workforce capacity are critical next steps. Beyond reducing hospitalisations, these programmes have the potential to relieve pressure on healthcare systems, improve population health, and contribute to long-term health system resilience.

Take-home messages

- RSV prophylaxis programmes are a vital opportunity to protect infants and strengthen health-system resilience. The introduction of long-acting monoclonal antibodies enables single-dose seasonal prevention, significantly reducing RSV-related hospitalisations and the burden on healthcare services.
- Integration into existing maternal and child-health pathways is essential for equitable delivery. Aligning prophylaxis with routine post-natal and early-childhood visits ensures all eligible infants are reached efficiently and consistently.
- Interoperable data systems are necessary for monitoring coverage and impact. Including monoclonal antibody prophylaxis in digital immunisation registries and linking data between hospitals, primary care, and pharmacies improves follow-up and evaluation.
- Education and communication underpin successful implementation. Clear, consistent messages explaining the purpose and benefits of RSV prophylaxis are needed to build understanding among professionals and parents.
- Workforce preparedness determines programme success. Comprehensive training for healthcare providers, supported by continuing professional development, ensures safe delivery, strong parental engagement, and long-term programme sustainability.

Focus session – Preventing the preventable: strengthening adult vaccination strategies in Europe – pneumococcal case study

Speakers: **Bianca Cucos, MD**, Medical Lead, Center for innovation in Medicine, Romania; **Dr Pascal Crépey**, Professor of Epidemiology and Biostatistics, École des Hautes Études en Santé Publique (EHESP), France; **Prof Mirella Minkman**, CEO, Vilans & Professor, Tilburg University, The Netherlands; **Mr Luis Miguel Lourenço**, Professional Secretary, International Pharmaceutical Federation, Portugal

Facilitator: **Mr Patrick Swain**, Research and Development Manager, International Longevity Centre (ILC), UK

Session summary

This session explored the importance of strengthening adult vaccination as part of a life-course immunisation approach, with a particular focus on pneumococcal vaccination. Experts presented data-driven insights, behavioural research, and policy innovations across Europe. The session addressed disparities in vaccine coverage, barriers to uptake, the role of trusted actors like general practitioners and pharmacists, and how integrated care and community-led approaches can advance prevention efforts.

Mr Patrick Swain, Research and Development Manager at the International Longevity Centre, presented the ILC Pneumococcal Vaccination Atlas (2007–2023), which maps vaccine coverage, national recommendations, and funding policies across 42 European countries. The Atlas highlights major disparities: 24 countries recommend vaccination for children, at-risk individuals, and older adults, while 15 have no guidance for older adults, and 10 for at-risk groups. While data on childhood vaccination is widely available, figures for older adults and clinical risk groups are scarce. Hungary leads childhood coverage at 99.8%, while England reports the highest adult rate coverage at 70.6%. Funding also remains uneven. Just 15 countries offer full public reimbursement for all three groups and out-of-pocket costs persist for older and at-risk adults in many countries. This fragmented picture shows that while childhood immunisation is well established, adult coverage remains suboptimal, and crucial data is still lacking. The Atlas calls for a life-course approach to immunisation, broader public funding, and consistent, annual data reporting.

Dr Bianca Cucos, Medical Lead at the Center for innovation in Medicine, presented Romania's National Immunisation Programme that has now expanded to support a life-course approach, including pneumococcal vaccination for adults. Since December 2023, vaccinations are reimbursed for those aged 65+, adults with chronic or immunocompromising conditions, healthcare workers, and children. This model has extended to HPV, flu, and COVID-19, aiming to reduce disease burden and improve long-term health outcomes. However, uptake remains low due to limited physician recommendations, especially from family doctors, and persistent vaccine hesitancy driven by misinformation and institutional distrust. These challenges are amplified in rural areas, where access is limited and reimbursement has shown little impact. Cultural barriers, particularly around HPV, also hinder adult immunisation. Surveys reveal strong public trust in general practitioners and gynaecologists, suggesting that empowering health care professionals through training and tailored outreach is key. Campaigns should promote vaccination as a way to protect families, prevent hospitalisation, and maintain independence, especially among older adults. Low COVID-19 and pneumococcal vaccination rates among Romanian adults further highlight the need for targeted, community-based approaches. A combined strategy with flu and COVID-19 campaigns could help normalise adult vaccination and improve uptake.

Dr Pascal Crépey, Professor at the EHESP, presented a study conducted in Brittany, France that examined adult responses to vaccination in the context of swine flu, used as a proxy for preparing for future pandemics. Given the risk of pig-to-human transmission, the study aimed to understand willingness to vaccinate, both among those in contact with pigs and the general population. Using interviews and standardised questionnaires, the research uncovered regional disparities in vaccination coverage and a clear age gradient, with older individuals more likely to be vaccinated. Higher education levels were also associated with increased uptake, and overall

willingness to vaccinate appears to be growing. Dr Crépey introduced a behavioural model identifying seven key factors shaping vaccination decisions: perceived risk, collective responsibility, benefit–risk analysis, social conformity, convenience, trust in vaccines, and trust in the health system. Social conformity emerged as a particularly powerful driver, underlining the importance of targeting groups likely to influence others. As vaccination programmes expand to include multiple population groups, such as infants, at-risk adults, and young seniors, tailored strategies will be essential to support uptake across diverse segments.

Prof Mirella Minkman, CEO of Vilans and Professor at Tilburg University, presented a renewed vision of prevention through integrated care, advocating for broader, system-wide action to strengthen health system resilience. Her literature review identified nine themes to guide proactive, locally grounded care strategies that help professionals reflect and act within their own contexts. She highlighted the growing role of ‘caring communities’ since 2000, local networks where individuals share responsibility for health and care. These bottom-up initiatives are reshaping how we think about sustainable care, placing home and community at the centre. For such models to succeed, national-level support and recognition of shared learning are essential. Prof Minkman emphasised that practical tools alone are not enough – lasting transformation requires structural, relational, and cultural shifts. As a concrete example, she noted that effective infection prevention depends on ‘snackable’, accessible communication. Empowering communities to co-create care solutions and supporting citizen-led mutual aid are crucial for truly preventive healthcare systems.

Mr Luis Miguel Lourenço, Professional Secretary at the International Pharmaceutical Federation, highlighted the crucial role of pharmacists in strengthening vaccination efforts and reducing pandemic risks. He emphasised the importance of pharmacy-led progress, communication, and stakeholder engagement, while noting that many still lack access to essential pharmacy services. Addressing these gaps requires policy action at all levels. Pharmacists are vital public health actors, yet barriers remain, including legal limitations, professional resistance, and logistical challenges that prevent pharmacists from accessing or administering vaccines. Mr Lourenço called for supportive legislation and systems that empower pharmacists as trusted actors in vaccination delivery.

The session highlighted that while childhood vaccination is largely established across Europe, adult vaccination remains fragmented and underutilised. To close this gap, a coordinated and systemic shift is needed to empower healthcare professionals, invest in trusted local networks, improve access to services, and promote targeted communication strategies. A life-course immunisation approach must be supported by consistent data, inclusive policies, and cross-sector collaboration to build more resilient and equitable health systems.

Take-home messages

- Adopting a life-course approach to immunisation is essential for protecting population health. While childhood vaccination is well established, older adults and at-risk groups remain underserved. Expanding vaccination strategies beyond childhood is critical to reducing preventable disease and strengthening health system resilience.
- Building trust is fundamental to improving adult vaccination uptake. Empowering general practitioners, pharmacists, and community-based health professionals as trusted messengers encourages confidence and supports informed decision-making among patients.
- Research shows that social conformity and trusted influencers play decisive roles in vaccination decisions. Tailored communication that engages families, peer networks, and community leaders can significantly enhance vaccine acceptance.
- Integrated care and community-based models are vital for sustainable prevention. Embedding vaccination within broader prevention and primary care frameworks fosters local ownership, ensures continuity, and strengthens preparedness for future health emergencies.
- Effective communication and accessible information are cornerstones of preventive health. Clear, consistent, and easily understandable messages help counter misinformation, support behavioural change, and promote vaccination as a shared responsibility for protecting families and communities.

Workshop – Innovative teaching practices in healthcare management

Facilitators: **Prof Federico Lega**, University of Milan, Italy; **Dr Lucia Ferrara**, SDA Bocconi School of Management, Researcher, CERGS, Italy; **Prof Federica Morandi**, ALTEMS – Graduate School of Economic and Management of healthcare systems, Università Cattolica del Sacro Cuore, Italy; **Dr Simon Moralee**, University of Manchester, United Kingdom; **Prof Rui Santana**, National School of Public Health (ENSP) – NOVA University, Portugal

Session summary

The session was designed as a dynamic, collaborative workshop with the aim of fostering peer learning, co-creation, and the sharing of actionable ideas to improve the teaching of healthcare management across Europe and beyond. Recognising the rapidly evolving landscape of healthcare education, the session brought together educators, researchers, and practitioners to collectively address pressing challenges and opportunities in teaching innovation. The session was organised into four thematic tables. These included distance learning, managing multiprofessional classrooms, problem-based learning, and the production and dissemination of teaching outputs. Each table was facilitated by a leading expert in the field, who guided the discussion and encouraged participants to share both the facilitating conditions for success and the potential barriers to effective implementation.

Table 1 focused on the effective engagement of students in online classes, a topic of increasing relevance in the wake of the digital transformation accelerated by global events. The group identified a range of challenges associated with balancing traditional in-person learning environments with the demands and opportunities of digital platforms. Administrative barriers, such as limited internet connectivity, bandwidth issues, and financial constraints, were highlighted as significant obstacles. Additionally, faculty resistance to adopting new technologies and teaching methods was noted as a common issue. The group emphasised the importance of designing lessons that are concise and focused, as shorter sessions tend to promote higher levels of student engagement. Training for both staff and students was seen as essential for building digital literacy and readiness, ensuring that all participants are equipped to navigate the online learning environment effectively.

To transform the digital experience and foster a sense of engagement comparable to in-person learning, the group advocated for the use of small group activities, such as breakout rooms, which can promote interaction and collaboration. The incorporation of interactive tools, such as polls, Padlet boards, and films, was also recommended as a means of enhancing engagement and accommodating diverse learning preferences. Cultural sensitivity was identified as a key consideration, with the need to recognise and respect the varied backgrounds and experiences of students in online settings.

Table 2 addressed the complexities of managing multiprofessional classrooms, where participants often come from diverse professional backgrounds and possess varying levels of experience. Cultural resistance and differences in professional norms were cited as common obstacles, often leading to misunderstandings or disengagement. Managing professional conflicts and ensuring that all participants feel included, especially when topics stray outside their direct expertise, were also recognised as significant hurdles.

To address these challenges, the group advocated for several inclusive teaching methodologies. One key recommendation was the use of practical case studies that require students to analyse problems from perspectives outside their own profession. This approach not only broadens understanding but also fosters empathy and collaboration among diverse participants. The group also stressed the importance of translating knowledge and language across disciplines, ensuring that everyone is on the same page and avoiding the pitfalls of jargon that can alienate or confuse. Improving the competence of trainers was seen as essential, equipping them with the skills and awareness needed to facilitate multiprofessional learning environments. Emotional icebreakers were suggested as a tool to build trust and rapport, though the group acknowledged the need for

sensitivity to avoid discomfort. Emphasising the question “why are you here?” was proposed as a way to uncover common ground and shared motivations, helping to unite participants around a collective purpose.

At Table 3, the focus shifted to problem-based learning (PBL) and the involvement of industry partners in the development of real-life case studies. The group highlighted the value of using case studies that push students beyond their comfort zones and areas of expertise, compelling them to adopt new perspectives and think more broadly. Facilitators, they agreed, should adopt the role of ‘guide on the side’ rather than ‘sage on the stage’, allowing students to drive the learning process and fostering a more active, participatory classroom dynamic. When it comes to sourcing case studies, the group recognised that not all institutions have the resources to write or purchase high-quality cases. In such instances, engaging local enterprises as ‘living cases’ was recommended. Inviting practitioners to speak about their daily work provides students with authentic, up-to-date insights and helps bridge the gap between theory and practice. The group also suggested setting personal learning plans with students at the outset, asking them directly what they hope to gain from the experience. This approach not only personalises learning but also helps ensure that teaching remains relevant and responsive to student needs.

Table 4 addressed the production, sharing, and utilisation of teaching outputs. This group grappled with the challenge of identifying which types of outputs are most needed and who stands to benefit from them. They emphasised the importance of producing a diverse range of outputs to engage students and trainees with varying interests and learning styles. Maintaining an internal structure and a unified approach to output creation was seen as vital for ensuring quality and consistency. However, the group also identified several barriers to effective output production. These included the challenge of gaining research recognition for teaching-related outputs, resistance to change within academic institutions, and concerns about academic integrity and originality, particularly considering the advances in artificial intelligence. The group stressed the need for clear guidelines and robust processes to address these issues, ensuring that outputs are both innovative and ethically sound.

Take-home messages

- Effective distance learning requires concise design, mutual training, and digital readiness. Overcoming barriers such as poor connectivity, administrative constraints, and faculty resistance depends on short, focused lessons and parallel digital literacy training for both educators and students to create engaging and accessible online environments.
- Inclusive teaching in multiprofessional classrooms depends on empathy, clarity, and shared purpose. Using practical case studies, translating jargon into common language, and aligning objectives across disciplines fosters collaboration and mutual understanding among learners from diverse professional backgrounds.
- Problem-based learning thrives when linked to real-world practice. Incorporating authentic, real-life case studies and involving local professionals as contributors encourages students to think beyond their expertise, strengthens applied learning, and connects academic content to professional realities.
- Partnerships with local enterprises enhance experiential education. Collaborating with community organisations or businesses as ‘living cases’ provides students with direct insights into health management challenges and solutions while offering institutions a cost-effective, practical learning model.
- Producing and sharing teaching outputs strengthens quality and innovation in health management education. Developing diverse, well-structured educational resources that meet the needs of different learners, supported by clear institutional recognition and ethical standards, ensures both academic integrity and sustainable knowledge exchange.

Workshop – Health Reform Tracker – learning from each other

Speakers: **Ms Astrid Eriksen**, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany; **Mr Nathan Shuftan**, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany; **Dr Gemma A. Williams**, Research Fellow, European Observatory on Health Systems and Policies, United Kingdom

Facilitator: **Dr Matthias Wismar**, Programme Manager, European Observatory on Health Systems and Policies, Belgium

Session summary

Europe offers an invaluable opportunity to learn from each other, with innovative ideas, impactful policies, and proven implementation strategies that can vary greatly across countries. To help harness this wealth of national knowledge and experience, the Health Reform Tracker, a ground-breaking tool designed to facilitate cross-country learning for policymakers, health managers, and their advisors, was introduced. The Health Reform Tracker provides the first comprehensive overview of health reforms since 2018, covering more than 30 countries across the WHO European Region and North America. This resource highlights key reforms and tracks their evolution over time, using a straightforward classification system and interactive graphical interfaces to make complex data easily accessible.

The Health Reform Tracker, developed by the European Observatory on Health Systems and Policies, provides an overview of the content and dynamics of health reforms in over 30 countries. The Observatory's Health System Policy Monitor (HSPM) network of experts has been reporting 'top three' health policy and system reforms for each country annually since 2018, resulting into a consolidated knowledge base of 620+ health reforms. In the tool, health reforms are clustered into themes: health system functions (governance, financing – coverage & resource generation, financing – allocation & pooling, financing – purchasing & payment, health workforce, transparency & accountability and care coordination & integrated care) and care areas (public health, digital health, primary & ambulatory care, hospital care, mental health, specialised care and pharmaceuticals).

The tool offers different perspectives that can be selected. The country perspective provides a longitudinal view of the local health reform agenda in the given country, enabling deep dives into single health reforms with specific summaries and appropriate links. The user can also opt for a comparative view, outlining areas particularly engaged over time across multiple countries. A cluster-centred perspective provides both geographical and longitudinal views of health reforms. Heat maps and visual charting ease comparative analytics and multi-dimensional (matrixial) views combining multiple thematic clusters. For all reforms reported the tool provides an updated implementation status, providing additional background information in text format for reforms that may have been delayed or abandoned. Beyond standard navigation, a keyword search feature allows to screen and filter reforms in connection to specific contexts (e.g. Covid). Finally, a specific section clarifies the methodology applied for the clustering step and the analytical rendering.

Following the live demonstration, the analytics delivered by the Health Reform Tracker were showcased across two cluster-related presentations covering health workforce reforms and reform projects in the primary and ambulatory care area. Longitudinal analysis across all countries highlighted how health workforce grew to a main agenda topic in Europe in the years following the pandemic crisis, with reform activity doubling in size between 2020–2023. The enhanced reform activity reflected a general and shared issue in lacking workforce resources and the need of enhancing attractiveness of jobs related to healthcare delivery. Notably, reform activity on health workforce topics seems to decelerate across Europe since 2024. Comparative analysis revealed specific countries (France, Hungary and Norway) as consistent reformers, whereas other countries never reported health workforce as a major reform topic. In the second case presentation, the primary and ambulatory care segment was outlined as the main area of reform. Since 2018, 105 major reform projects were tracked with a large majority

of countries reporting at least one primary care reform. Most reforms focus on impact on access, quality or efficiency leveraging changes in governance, finance and new models of care coordination. Three concrete projects in Czech Republic, Germany and Sweden were briefly shared to showcase the primary and ambulatory care reforms.

The strong interest and adherence to the presented tool translated into a rich sequence of questions regarding semantic and methodological clarifications, practical user features, potential leverage of the insights by decision-makers, as well as future developments of the presented tool. Questions referring to semantic clarifications (e.g. how is 'reform' defined and where is the borderline between improvement and transform) are tackled within the tool with specific glossary and methodology sections to provide a transparent and peer-validated understanding of terms and methods. Additionally, the selection process undergone by the local experts, restricting the reporting to three main reforms in the public policy domain, provides a natural framework towards tracking of reforms with expectedly high impact.

The possibility to track a reforming activity and its implementation status triggered the question on how background information on reform design and decision-making, reform financing and finally impact evaluation are captured. The incremental nature of reforms and the effect of potentially multiple drivers over time requires a nuanced analysis, that is better rendered by providing links and resources to more detailed reports. In need of more detailed information, it's possible to find contact details from country pages and review the country profiles as well. The interest in primary data extraction was expressed, which is however confronted with limitations in terms of intellectual rights. New developments are foreseen for new versions of the tool. GenAI features should enable to provide a faster process to get to specific evidence to the questions searched by the users.

The Health Reform Tracker represents a significant advancement in understanding and navigating the complex landscape of health reforms across Europe and North America. This innovative tool facilitates cross-country learning and enables policymakers, health managers, and advisors to identify trends and strategies in health system reform. The interactive features of the tracker, including thematic clustering and user-friendly graphical interfaces, make it an invaluable resource for stakeholders seeking to understand the dynamics of health reforms. The tool not only allows for in-depth exploration of individual reforms but also fosters a broader understanding of shared challenges and solutions across different countries. As the demand for effective health policy continues to grow, the Health Reform Tracker stands out as a useful resource for informed decision-making and strategic planning.

Take-home messages

- The Health Reform Tracker offers a comprehensive and comparative view of health reforms across Europe and North America. By mapping national reform activities since 2018, the tool enables policymakers, managers, and researchers to understand how different systems evolve, respond to shared challenges, and pursue innovation in governance, financing, and service delivery.
- A unique bottom-up reporting process ensures accuracy and diversity of insights. Drawing on national experts who identify each country's three most significant reforms annually, the Tracker compiles more than 620 reforms, revealing trends that extend beyond traditionally visible or high-profile policy initiatives.
- The tool's structure supports both broad analysis and in-depth exploration, as users can move from comparative, cross-country perspectives to reform summaries, supported by thematic clustering, visual analytics, and background materials that clarify context, implementation status, and evolution over time.
- Through intuitive navigation, heat maps, and graphical interfaces, the Tracker transforms extensive policy information into usable evidence that supports decision-making and fosters cross-county learning.
- By facilitating transparency, comparability, and collaboration, the Health Reform Tracker empowers policymakers and stakeholders to identify shared priorities, benchmark progress, and accelerate the adoption of effective reform strategies.

Workshop – Sharing learnings from advancing cancer research, care, and policies in the EU (OBS-PACE)

Speakers: **Ms Astrid Eriksen**, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany; **Mr Nathan Shuftan**, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany; **Dr Florian Tille**, Technical Officer, European Observatory on Health Systems and Policies, United Kingdom

Moderator Ms Béatrice Durvy, Research Fellow, Technical University of Berlin; European Observatory on Health Systems and Policies, Germany

Session summary

This session focused on exploring the OBS-PACE project, a collaborative initiative launched by the European Observatory on Health Systems and Policies in support of Europe's Beating Cancer Plan. The project aims to assess national and regional policy responses to cancer across EU Member States through case study research, providing actionable insights into what enables or hinders effective cancer policy implementation. Experts presented case studies from various countries, illustrating system-level approaches to challenges such as drug access, care coordination, and service delivery for cancer patients. The session provided a platform to exchange implementation lessons and build shared understanding on strengthening national cancer control policies.

The session opened with a presentation of the OBS-PACE project by **Ms Astrid Eriksen** and **Mr Nathan Shuftan**, Research Fellows at the Technical University of Berlin and at the European Observatory on Health Systems and Policies. Funded by the European Commission and supported by a network of national cancer experts, the project aims to better understand the implementation of the Europe's Beating Cancer Plan across all 27 EU Member States. Through structured case studies, OBS-PACE examines the enablers and barriers to effective cancer policies along the entire care pathway, from research and innovation to survivorship, while analysing impacts on access, equity, efficiency, quality, and safety.

The first country example came from Malta, where a Directorate for Cancer Care Pathways (DCCP) was created in 2014 to address significant delays and coordination gaps in the patient journey. The directorate launched actions to improve early diagnostics, digitalisation, innovation, and cancer care quality. Enablers included sustainable government funding, alignment with the National Cancer Control Programme (NCCP) and Europe's Beating Cancer Plan, and the introduction of quality assurance roles. Implementation barriers included staff shortages and resistance to change. Key lessons included the need for planning, clear stakeholder engagement, and transparent governance.

Slovakia's case study focused on reforming the reimbursement process for innovative cancer drugs. After a decade of declining drug reimbursement, legislative changes introduced clearer criteria and a more structured pricing and negotiation process. This led to faster access, greater transparency, and improved affordability. Enablers were strong political will and stakeholder engagement; however, budget limitations and complex negotiations were significant barriers. Lessons highlighted the importance of policy flexibility and cross-sector collaboration to navigate financial challenges and ensure timely access to innovative treatments.

From Ireland, a workforce-focused innovation was presented: the Acute Haematology Oncology Nursing Service (AHONS). Created in 2020, AHONS addressed overcrowded emergency departments and service gaps for patients undergoing systemic anticancer therapy. Key components included a digital triage line, trained oncology nurses, and standardised care tools. Outcomes showed improved care access and patient experience. Enablers included support from national health strategies and integration of digital services. However, challenges included limited 24/7 access and variation in local resources.

The final example came from the Netherlands and focused on advocacy efforts to improve care for patients with Cancer of Unknown Primary, a particularly fatal and underserved cancer type. Through coordinated advocacy and a pivotal parliamentary hearing, the group achieved nationwide reimbursement for whole genome sequencing. Outcomes included better diagnostic pathways and potential access to personalised treatments. This case highlighted the power of patient advocacy in influencing national policy and expanding diagnostic innovation.

Following the presentations, participants engaged in structured group discussions to reflect on barriers, enablers, and lessons learnt in implementing cancer-related policies. Each group focused on one of the four health system functions: governance, financing, resources, and service delivery. Participants were invited to share lessons on what had worked, what obstacles they had faced, and how these related to their chosen function, either within cancer care specifically or in their health system context more broadly.

This session showcased how countries are translating high-level cancer policy into practice across the EU. The OBS-PACE project enables learning from real-world implementation experiences to support the effectiveness of Europe's Beating Cancer Plan. The case studies highlighted how strong governance structures, committed leadership, adequate financing, patient engagement, and digital tools can enable impactful policy reforms. At the same time, cross-cutting challenges remain, including workforce shortages, resource limitations, and sustainability constraints. Participants recognised that addressing cancer as a system-wide issue requires strategic alignment, stakeholder collaboration, and ongoing monitoring to ensure high-quality, equitable care for all.

Take-home messages

- The OBS-PACE project strengthens collective learning on cancer policy implementation across Europe. By capturing real-world case studies from EU Member States, the project helps identify practical enablers and barriers in translating the Europe's Beating Cancer Plan into effective national and regional action.
- Effective cancer policy depends on strong governance, sustainable financing, and coordinated stakeholder engagement. Countries that align leadership, accountability mechanisms, and funding structures are better able to implement reforms that improve access, quality, and continuity of cancer care.
- Innovation, workforce development, and patient advocacy are powerful drivers of progress. Digital solutions, new care models, and advocacy efforts can accelerate service transformation, expand diagnostic access, and shape national policy agendas.
- Persistent challenges continue to constrain implementation across systems. Workforce shortages, financial limitations, resistance to change, and uneven capacity highlight the need for continuous investment, monitoring, and flexibility in policy design.
- Tailoring reforms to specific health system functions enhances their effectiveness and sustainability. Applying targeted approaches to governance, financing, resource management, and service delivery ensures that cancer control policies are context-sensitive, equitable, and impactful over time.

Workshop – Real-world data for breast cancer treatment management

Speakers: **Prof Anastasios Delopoulos**, Project Coordinator of the REBECCA project, Aristotle University of Thessaloniki, Greece; **Ms Linda Engström**, BCF Amazona, Sweden; **Dr Ana Miralles Marco**, INCLIVA Biomedical Research Institute, Spain; **Dr Paraskevas Bourgos**, Research and Innovation Specialist, Netcompany-Intrasoft, Greece; **Ms Sheila Romero**, INCLIVA Biomedical Research Institute, Spain; **Ms Britt Sandberg**, BCF Amazona, Sweden; **Ms Eleonora Varntoumian**, Policy Manager, European Health Management Association (EHMA), Belgium

Facilitator: **Ms Laurene Mathey**, Director of Projects, European Health Management Association (EHMA), Belgium

Session summary

The REBECCA project, funded under the Horizon 2020 programme, aims to improve post-treatment care for breast cancer patients by combining clinical data with insights from online behaviours. Built on the use of Real-World Data (RWD), the project explores how such data can enhance recovery outcomes and long-term support for patients. During the session, participants engaged in a role-play exercise, taking on the perspectives of various stakeholders, including health managers, public health authorities, technology providers, and patient organisations. The exercise focused on assessing the project's acceptability, discussing its scalability, and exploring potential strategies for adoption in real-world health systems.

Dr Paraskevas Bourgos, Research and Innovation Specialist at the Netcompany-Intrasoft, introduced the REBECCA project, which focuses on improving the quality of life for breast cancer patients and survivors by harnessing the power of Real-World Data. Instead of relying on randomised controlled trials, which often fall short in reflecting the complexity of everyday life and are difficult to scale, REBECCA uses data collected from real patients in real settings to support more personalised and effective care. The project gathers information from a variety of sources, including electronic health records, wearable devices (tracking activity, sleep, and heart rate), a mobile app (used to capture meals, locations, and questionnaires), a browser plugin (to track online activity), and data about the patient's local environment. This rich dataset helps generate detailed insights into patients' lifestyles, emotional well-being, and clinical status. For example, variability in eating patterns can be tracked via bite detection, while heart rate and step count data can indicate physical recovery. GPS data helps assess mobility and independence. Using causal modelling, the project estimates how these behaviours and environments influence outcomes such as osteopenia, osteoporosis, and general recovery. This analysis supports the development of personalised recommendations and care plans tailored to each patient's needs. Privacy is a core consideration. All data collection is based on informed consent, and patients have the option to turn off features like GPS tracking. Many participants have reported feeling reassured by the project's transparency and its strong link to hospital care. All information is integrated into the REBECCA 360 platform, which offers a clinical dashboard for healthcare providers and a mobile app for patients to view their own data and trends. A companion app also allows caregivers to contribute additional input. The project includes both observational and interventional studies in Norway and Spain, as well as feasibility pilots in Sweden and Norway, including an expansion into prostate cancer. Through this innovative use of data, REBECCA is paving the way for more personalised, connected, and proactive post-cancer care.

During the workshop, participants explored challenges in translating scientific insights into policy and practice. A key issue was the difficulty of communicating scientific language in a way that resonates with policymakers and the public. Many researchers lack the training to engage beyond academic circles, which can create gaps between evidence and policy decisions. Limited political engagement was also noted, as competing agendas or existing frameworks may hinder support for the project. To address these challenges, participants suggested strategies such as levelling power dynamics to ensure equal participation, focusing communication on user and patient needs, and promoting co-creation with policymakers to foster shared ownership.

Another major theme was the need to place people at the centre of policymaking. Tailoring policies to diverse communities and involving citizens through participatory approaches was seen as essential. Additional barriers included trust and financial constraints. Building patient trust in data sharing requires user-friendly technologies and transparency in data policies. In some settings, distrust in governments suggests the need for neutral, independent data custodians. Participants also highlighted the importance of funding trust-building efforts, particularly among healthcare professionals. Above all, they agreed that trust begins with truly understanding and responding to patient concerns.

Participants shared that, as patients, they would be willing to use the REBECCA app, provided that trust is established between them and the healthcare team. They emphasised that trust is fostered through ongoing engagement, such as regular check-ins and questionnaires that create a sense of connection and involvement. From the perspective of health managers, it was noted that creating a safe and welcoming environment, for instance, by setting up a dedicated space where patients can receive clear information and support, can significantly enhance patient confidence and willingness to participate in the project.

The REBECCA session provided valuable insights into the potential of Real-World Data to transform post-cancer care by centring patient lived experiences and promoting personalised interventions. Trust, transparency, co-creation, and patient-centred design emerged as essential pillars for successful implementation. The session underscored the importance of involving all stakeholders, from policymakers to patients, in shaping digital tools that are ethical, inclusive, and effective. As REBECCA continues to evolve, the commitment to partnership and dialogue will remain key to its impact and sustainability.

Take-home messages

- Trust is the foundation of successful health data research and patient participation. Establishing a safe, transparent, and supportive environment – both digitally and in clinical settings – is essential to ensure patients feel confident in sharing their data and engaging with digital health tools.
- Robust data governance and efficient digital platforms enable sustainable, evidence-based innovation. Clear data monitoring, secure IT infrastructure, and user-friendly interfaces are critical to achieving long-term, measurable outcomes and ensuring that digital health initiatives can be scaled effectively.
- Real-World Data unlocks new dimensions in understanding patient recovery and wellbeing. The digitalisation of daily life generates valuable insights into the interactions between lifestyle habits, mental health, and physical outcomes, offering opportunities to design truly personalised, responsive models of post-cancer care.
- Co-creation and continuous engagement strengthen adoption and policy relevance. Involving patients, health and care professionals, and policymakers throughout the process fosters shared ownership, aligns research with real-world needs, and bridges the gap between scientific evidence and practical implementation.
- Transparency and communication are central to building lasting public trust in digital health. Open dialogue about data use, privacy, and benefits helps ensure that innovation in healthcare remains people-centred, ethical, and equitable.

Workshop – Safeguarding health: testing your cyber resilience and communication capabilities

Speakers: **Ms Agnès Catineau**, Senior Advisor, Brunswick Group, France; **Ms Nicola Hudson**, Partner, Cybersecurity, Data & Privacy Global Lead, Brunswick Group, United Kingdom; **Ms Suntka von Halen**, Partner, Lead Cybersecurity Germany, Brunswick Group, Germany

Facilitator: **Mr Louis Yau**, Associate, EMEA Cyber Practice Manager, Brunswick Group, United Kingdom

Session summary

The healthcare sector is becoming an increasingly attractive target for cyber threats due to their management of highly sensitive patient data and critical operations. During a cyber incident, healthcare companies face high stakeholder scrutiny due to their unique role as providers of life-saving services. This interactive session helped hospital management teams broaden their understanding of the ramifying impacts of a cyber incident, equipping them with practical recommendations to inform effective decision-making and communications in a high-stakes situation. This practical workshop presented participants with a fictional scenario that tested their familiarity with cyber response protocols and processes, as well as enhanced their ability to make decisions on ambiguous information and communicate effectively during a crisis to mitigate its potential fallout.

According to Kroll's 2024 Data Breach Outlook, healthcare is now the most breached industry, overtaking finance. The average cost of a data breach in the healthcare industry was USD 9.7 million. Besides the financial costs, 69% of affected healthcare organisations reported significant disruptions to patient care because of a cyberattack. One of the key vulnerabilities lies in outdated legacy IT systems, which are costly and complex to replace. The reputational and operational damage from cyberattacks can be immense. Politically motivated attacks increasingly target Western healthcare institutions. There are also emerging risks associated with artificial intelligence, such as deep fake voice messages, which could be used to deceive healthcare personnel or gain system access. It is therefore important to bring together key stakeholder groups to develop coordinated, strategic responses to these growing threats. Ensuring resilience in healthcare cybersecurity is essential to maintaining trust, continuity of care, and national security.

During a cyber crisis simulation, based on real-life incidents and stakeholder interactions, teams collaborated as representatives of a fictional UK-based private healthcare provider operating across Europe. The scenario involved a severe cyberattack that caused loss of access to patient data and theft of sensitive information, with attackers demanding ransom to prevent data release. Internal systems were heavily compromised, with recovery expected to take weeks. Staff and families demanded updates. The focus of the simulation was questions about top priorities in this situation, with whom to communicate first, and who should be included in the crisis management team. The evolving crisis introduced media inquiries, partner concerns, and a deepfake incident involving the CEO. This raised issues around managing media attention, crafting stakeholder messages, and adhering to regulatory considerations.

Key priorities identified included activating legal and IT teams, informing the relevant authorities, and developing clear communication plans. While transparency was valued, early public statements were approached cautiously due to legal risks. Patient safety and operational continuity remained the guiding principles. Operational continuity was supported by reverting to paper records and suspending data exchange with external partners. The exercise underscored the necessity of proactive preparation, including running simulations, establishing 'white plans', maintaining backup systems, and appointing a crisis leader to coordinate efforts. The need for a dedicated hotline for patients and the role of national cybersecurity authorities were also discussed as essential parts of a well-managed response. The exercise underlined the critical importance of coordinated, transparent, and timely action during a cybersecurity incident in healthcare. The top priority must always be

patient safety. Immediate steps should include stopping the use of compromised systems, switching to non-impacted backup devices, and setting up a crisis management team to lead operations and implement workarounds.

Clear and consistent communication is essential during a cyber crisis. Messaging must be unified across all stakeholder groups, and trained spokespeople play a crucial role in delivering accurate, timely information. Organisations should regularly update their cybersecurity protocols, invest in preparedness planning, and carry out crisis simulations. Comprehensive staff training is vital, not only to support an effective response, but also to strengthen preventative measures. Engagement with relevant regulatory bodies and national cybersecurity authorities is equally important. Ultimately, the session underscored that while an effective response is critical, prevention remains the most powerful line of defence. This requires robust preparation, a clearly defined crisis management structure, organisational resilience, continuous training, and a secure digital infrastructure.

Key lessons included the need for rapid activation of legal, IT, and cybersecurity teams, clear internal and external communication, and coordination with law enforcement and national cyber authorities. Transparency must be balanced with legal obligations, and messaging should be consistent, brief, and delivered by trained spokespeople. The scenario reinforced the importance of preparation: having predefined crisis teams, maintaining backup systems, and running regular simulations to test response protocols. Organisations should replace outdated systems, train staff comprehensively, and adopt a proactive cybersecurity culture. Ultimately, prevention remains the best defence. Robust processes, clear leadership, and strategic communication are critical in reducing impact and restoring operations swiftly. The session served as a powerful reminder that cyber resilience in healthcare is not just an IT issue, it is a matter of public trust, safety, and care delivery.

Take-home messages

- Healthcare has become a prime target for cyberattacks, with severe implications for safety and trust. The sector's reliance on sensitive data and critical digital operations makes it highly vulnerable, and breaches can disrupt essential care, endanger patients, and cause lasting reputational harm.
- Preparedness is the cornerstone of cyber resilience. Hospitals and health systems must invest in regular crisis simulations, maintain up-to-date cybersecurity protocols, and establish predefined crisis management teams capable of acting decisively under pressure.
- Patient safety and continuity of care must guide every decision during a cyber incident. Rapid activation of backup systems, manual workarounds, and coordinated communication ensure that essential services continue even when digital systems fail.
- Effective communication protects credibility and mitigates damage. Unified, transparent, and timely messaging helps manage public perception, maintain trust, and meet legal and regulatory requirements.
- Cybersecurity is a strategic leadership issue, not only a technical one. Building a proactive cybersecurity culture requires cross-functional collaboration, executive commitment, and integration of cyber preparedness into broader healthcare governance and risk management frameworks.

Panel discussion – Using data to drive health care improvement: moving from pilots to learning health systems?

Speakers: **Mr Suleyman Bouchmal**, PhD Candidate Data-Informed Care in Long-Term Care, Maastricht University, The Netherlands; **Ms Vera van Druten**, Senior Researcher Monitoring & Impact, Vilans, The Netherlands; **Dr Dorine van Staalduinen**, Senior Researcher, Santeon, The Netherlands

Facilitators: **Dr Bellis van den Berg**, Senior Advisor, Vilans, The Netherlands; **Dr Brent Opmeer**, Senior Researcher, Vilans, The Netherlands

Session summary

The session focused on how healthcare systems can move beyond data collection towards truly learning from data and making use of it in a meaningful way. At the heart of this discussion is the concept of the Learning Health System, which turns every patient encounter into an opportunity for continuous improvement. The session further explored how collaborative living labs connect research with practice in long-term care, how regional programmes use data tools to strengthen governance, how hospital networks share outcomes to drive transparency and learning, and how quality improvement initiatives can successfully translate evidence into daily practice. Together, these perspectives show how data-driven approaches can enhance decision-making, foster collaboration and build a culture of continuous improvement in healthcare.

Dr Bellis van den Berg, Senior Advisor at Vilans, highlighted how the rise of electronic health records has expanded data availability in healthcare, offering new insights to challenging decision-making due to complex health issues and the need for more efficient healthcare. In the Netherlands, local project focus often overlooks key behavioural factors like workflows and employee competencies, undermining organisational effectiveness. Moreover, data-driven working is usually treated as a technical project, so when the project ends the insights do not spread any further. Introduced by the US Institute of Medicine in 2007, the Learning Health System aims to integrate science, informatics, incentives and a culture for continuous improvement. This approach transforms existing healthcare systems to learn from every patient. At its core is the learning community that leverages data and knowledge to enhance decision-making and outcomes. This session explored the principles and benefits of the Learning Health System, its evolution across healthcare levels and practical applications through four case studies.

Mr Suleyman Bouchmal, PhD Candidate at Maastricht University, discussed his research on data-informed shared decision-making through the Limburg Living Lab for Aging and Long-Term Care. This collaboration between educational institutes and long-term care organisations aims to improve the quality of life for older adults and the work environment for healthcare professionals. The study integrates scientific research with practical experiences, where academic staff work 1 day/week at a nursing home, to identify barriers and enhance care quality. Despite the potential of data to inform decision-making, data maturity remains low in long-term care. Organisations rely on interviews and observations rather than effectively using electronic health records due to a lack of a clear vision, data system connection and support. Mr Bouchmal emphasised the need for interprofessional collaboration among data scientists and health care professionals to learn from each other and exchange knowledge to solve problems. To build a community of practice, three aspects should be examined: domain (what we care about); community (who cares about it); and practice (what we do together about it). In addition, building a learning health system requires connecting IT systems, fostering a data culture and involving people.

Ms Vera van Druten, Senior Researcher at Vilans, discussed the Region Strength programme. Region Strength is a Dutch national programme focused on improving regional collaborative governance within long-term care. Its primary objective is to facilitate the transition to future-proof care and to support through effective collaboration among healthcare organisations. The initiative involves 33 regions dedicated to the care of the elderly, targeting

improvements in governance and service delivery across those areas. Region Strength employs three data tools: Region Mirror that uses questionnaires to assess governance quality; Network Analysis that maps communication flows; and Project Dashboard that consolidates details of ongoing projects, promoting mutual learning. The programme encourages continuous learning through data collection, coordination of regional tables and reflective conversations. The insights and reflections on their network will lead to new improvement initiatives. Achieving widespread participation is complex but essential. Strategies include starting with a few pilot regions to demonstrate success and then scaling up, demonstrating the tangible added value of data tools to encourage broader adoption, and ensuring the sustainability and maintenance of these tools over time. Key challenges include limited direct contact with regional members and resistance to additional survey participation. To overcome these, tactics such as forming a coalition of the willing, showcasing successful outcomes, and illustrating the added value to other regions have proven effective. Feedback from 14 pilot regions shows enthusiasm for using data in learning.

Dr Dorine van Staalduinen, Senior Researcher at Santeon, outlined Santeon's journey towards becoming a Learning Health System. Santeon, a network of seven Dutch hospitals, focuses on improving patient care through transparency and shared learning rooted in value-based healthcare. Initially, hospitals operated independently, but the absence of comprehensive data on patient outcomes prompted the creation of collaboration and shared data with a focus on outcomes, costs and processes of care. Through the network, healthcare professionals learn how to look at data and how data can show opportunities for improvement by examining various cases. Santeon underscores transparency to share know-how between hospitals. Scorecards for different medical conditions have been created for benchmarking. Using the scorecards, the network go through multiple improvement cycles every year. This also allows the collaborating teams working on particular diseases to adapt their scorecards appropriately. A notable success includes reducing severe childbirth ruptures by adopting effective techniques from a peer hospital, illustrating the power of data-driven learning. The key challenge is that different hospitals use different electronic health record systems, needing the creation of a shared system, namely Health Intelligence Platform Santeon. To spread the lessons learnt, the network disseminates their knowledge through various publications including a best practice journal, online infographics and decision support instruments. Dr van Staalduinen concluded that cultivating a collaborative, non-competitive environment requires strong vision, leadership and rationale. The shared commitment to improving care makes Santeon a model for organisational learning in healthcare to be better together.

Dr Brent Opmeer, Senior Researcher at Vilans, presented the PReCePT project as a model Health Learning System aimed at translating evidence into practice. The project focused on increasing the uptake of antenatal magnesium sulphate, proven to reduce cerebral palsy risk in preterm babies by 30%, yet initially underused in clinical settings. Launching as a pilot in 2014, PReCePT developed a quality improvement (QI) toolkit and learning activities designed to enhance implementation. The initiative emphasised data-driven learning across local, regional and national levels. Data sources were local case note audits and the national audit. The project evolved into a nationwide initiative, significantly improving magnesium sulphate uptake. An economic evaluation in 2024 revealed an estimated £1.2 million in net monetary benefits. Technical building blocks to support the project included central website with downloadable QI tools, QI coaching support, tea-trolley training (short teaching session brought to staff during their normal working hours, with the subsequent reward of tea and cake) and learning events for clinical champions. Factors contributing to the success included: strong leadership and vision with clear rationale; effective project designing, planning and governance; external funding that enabled project management and implementing evaluation support; routine data infrastructure already in place; and QI network and culture shifting to perinatal care. The challenges were gaining access to good quality data, obtaining buy-in from managers, facing external factors (e.g., COVID-19) and dealing with variation in local circumstances (e.g., underdeveloped QI methods, variation in QI readiness or work pressure).

The discussion highlighted the transformative potential of Learning Health Systems in enhancing healthcare quality and outcomes. By effectively leveraging data, fostering interprofessional collaboration and cultivating a culture of continuous improvement, organisations can address complex healthcare challenges. Case studies

demonstrated the pivotal role of data-driven strategies in improving patient care, enhancing decision-making and promoting organisational learning. Key themes include the importance of integrating scientific research with practical experiences, strengthening data infrastructures and ensuring stakeholder engagement at all levels. Challenges such as data maturity and securing participation highlight the need for clear visions and sustained efforts. Moreover, fostering a collaborative environment alongside strong leadership is essential for sustainable progress. Moving forward, embracing these principles can support healthcare systems in adapting to evolving needs, ultimately improving patient experiences and health outcomes on a broader scale.

Take-home messages

- Learning Health Systems transform data into continuous improvement. By embedding learning cycles into routine practice, every patient interaction becomes an opportunity to enhance quality of care, efficiency, and outcomes.
- Data alone is not enough. Successful data-driven healthcare depends on behavioural change, workforce competencies, and leadership that fosters curiosity, reflection, and collaboration across teams.
- Interprofessional collaboration is essential for meaningful use of data. Bridging expertise between data scientists, clinicians, and care professionals strengthens decision-making, accelerates innovation, and ensures evidence is translated into action.
- Shared governance and transparency enable system-wide progress. Regional and institutional collaboration, supported by clear governance structures and shared data platforms, builds trust, accountability, and collective learning capacity.
- Quality improvement thrives on accessible tools and structured support. Practical resources such as data dashboards, scorecards, and learning networks help translate evidence into consistent, measurable change in clinical and organisational practice.
- Sustained leadership and vision ensure long-term learning. Embedding a learning culture requires investment in data infrastructure, continuous training, and leadership committed to using insights for strategic improvement.

PhD session – EHMA & Karolinska Institutet Medical Management Center (MMC) Research Award

Speakers: **Dr Amélie Lorient**, Paris Dauphine – PSL University, France; **Dr Ivana Zimonjić**, University of Belgrade – Faculty of Pharmacy, Department of Social Pharmacy and Pharmaceutical Legislation; Galenika ad Beograd, Serbia; **Dr Raphaël Kermaïdic**, École des Hautes Études en Santé Publique (EHESP), France; **Dr Robin Peeters**, Maastricht University, The Netherlands; **Dr Oemar van der Woerd**, Erasmus School of Health Policy & Management, Erasmus University, The Netherlands

Facilitator: **Dr Pamela Mazzocato**, Co-director, Medical Management Center, Karolinska Institutet, Sweden

Session summary

This session featured presentations of the shortlisted abstracts competing for the Karolinska Institutet Medical Management Centre (MMC) & EHMA Research Award, an annual award for the best contribution associated with a doctoral thesis related to health management. The following papers were presented.

Towards a hybrid patient pathway combining in-person and remote care: understanding when and how teleconsultation is appropriate and beneficial by Dr Amélie Lorient

Dr Amélie Lorient presented her research on the conditions under which teleconsultation is appropriate and beneficial in healthcare systems. She highlighted that access to care should be understood as the ability to receive the right care at the right time, and that teleconsultation can be an effective solution under the right circumstances. True access goes beyond physical accessibility and depends on patient abilities and contextual factors. Dr Lorient emphasised that not all consultations are suitable for digital formats and that adaptability and flexibility are essential to delivering appropriate care. She proposed moving toward a hybrid patient pathway, where the use of teleconsultation is guided by context-sensitive, strategic decisions. Based on a study involving patients and healthcare professionals, she identified three categories of factors influencing teleconsultation use (Andersen's Behavioural Model of Health Services Use): predisposing (e.g. medical condition, need for physical exam), enabling (e.g. digital literacy, cognitive ability, existing provider relationship), and reinforcing (e.g., care preferences, geographic constraints). Dr Lorient proposed a stepwise model to support more personalised and contextual decisions, noting that teleconsultation is not a one-size-fits-all solution. She concluded by calling for more robust, quantitative studies to strengthen these findings.

Taking action to improve pharmacy professionals' health and well-being for patient safety by Dr Ivana Zimonjić

Dr Ivana Zimonjić presented her research on the experiences of pharmacy professionals facing patient safety incidents, focusing on their psychological well-being and the broader implications for patient safety. She contextualised her work within the framework of the 'second victim phenomenon', which refers to the emotional distress healthcare workers may experience after adverse events. Her analysis of previous literature shows that such incidents commonly lead to disturbing memories, anxiety, anger, regret, and sleep disturbances. Pharmacists often respond by changing their professional behaviour, such as paying closer attention to detail and guidelines, while also experiencing increased self-criticism. Dr Zimonjić found that in public pharmacies the most frequent incidents involved inadequate pharmaceutical services and incorrect drugs being dispensed, with 63% of errors classified as dispensing failures. Notably, 50% of these were near misses, while a smaller proportion caused actual harm. Contributing factors included crowding, inadequate supervision, and poor storage systems. Her research also included the adaptation and validation of the SVEST-R scale into Serbian (SR-SVEST-R) to assess how pharmacists experience and cope with such incidents. The scale showed high validity and reliability, identifying nine dimensions such as psychological distress, institutional support, and professional self-efficacy. The data revealed that nearly half of the participants feared future events, felt exhausted, or experienced physical

symptoms, with over 22% considering quitting their job. Colleague support was identified as the most dominant and desirable form of support (72.6%). Despite this, only a small percentage found institutional support adequate. Her findings emphasise the need for tailored educational programmes that equip pharmacists with soft skills, communication strategies, stress management tools, and career development guidance. Participants favoured workshops and blended learning methods and overwhelmingly reported positive outcomes from support programmes they had attended. Dr Zimonjić concluded that supporting the mental health and resilience of pharmacy professionals is crucial for improving patient safety, reducing staff turnover, and ensuring the sustainability of public pharmacy operations, especially during health system crises.

Environmental health challenges: prioritisation by socioeconomic cost as a tool to decision making by Dr Raphaël Kermaïdic

Dr Raphaël Kermaïdic introduced a study on the ecological transition of the healthcare system by analysing environmental health challenges through the lens of socioeconomic cost. The work is grounded in the recognition that health is fundamentally linked to environmental quality, with climate change contributing significantly to NCDs, 70% of which are attributed to environmental factors. Yet, the healthcare system itself is implicated in environmental degradation, particularly through air pollution and greenhouse gas emissions. Using a scoping review approach, the study selected nine key environmental health determinants based on academic and grey literature, as well as expert input. A combined toxicological and epidemiological method was used to estimate the health burden of each determinant through dose-response relationships, with a quantitative health impact assessment producing estimates of annual socioeconomic costs, both direct and indirect. The results highlight the immense cost burden of several environmental determinants. Nutrition and physical activity ranked highest at €167 billion per year, largely due to sedentary lifestyles (€140 billion) and overweight/obesity (€20–27 billion), contributing to an estimated 38,000 premature deaths annually. Noise followed closely, with a total estimated cost of €147 billion per year, including impacts from annoyance, sleep disturbance, and cardiovascular disease. Outdoor air pollution was also highly significant, estimated at €130 billion annually, with 40,000 premature deaths attributed to PM_{2.5} exposure. The findings rely on available data and the complex, interlinked nature of environmental health factors, making prioritisation difficult. Cost estimates vary in scope, overlook social and environmental inequalities, and exclude extreme events, likely underestimating the rising financial impact of climate and biodiversity loss. Despite these limits, the study provides a valuable overview of the socioeconomic burden of environmental health risks, offering a tool for prioritisation in public health and environmental policy.

All that glitters isn't gold: examining how and why organisations collaborate to address wicked problems in healthcare by Dr Robin Peeters

Dr Robin Peeters' study explored how and why organisations collaborate through purpose-oriented networks to address complex problems in healthcare, including increasing care demands, workforce shortages, longer waiting lists, and rising healthcare costs. Although such collaboration is often seen as a necessary response to these grand challenges, many of these networks remain ineffective and fail to produce measurable improvements in outcomes. The research aimed to answer three main questions: what is already known about the determinants of network effectiveness, how can these determinants be systematically measured, and how do specific factors influence effectiveness in real-world settings. To do this, the study used a combination of literature and systematic reviews as well as a longitudinal in-depth case study approach. The findings from the literature review identified 283 different factors that influence network effectiveness, which were organised into 30 thematic categories across three dimensions: process, structure, and context. However, many existing studies only examine the effect of a single determinant on network success, whereas the reality is much more complex. Effectiveness itself is conceptualised either in terms of goal achievement or the quality of collaboration, and many of the tools currently used are oversimplified. Dr Peeters found that the administrative literature already contains many useful, validated questionnaires that could be applied to evaluate these factors more rigorously. The study also included three case studies, exploring network participation dynamics, the impact of policy changes on collaboration, and the effects of leadership transitions. Dr Peeters' research highlights the need to manage

complex networks with intentionality, including knowing when to downscale or end ineffective collaborations, and ensuring alignment between organisational and societal goals to achieve genuine public value.

The doings, workings, and meanings of caring networks: disentangling a governance order in-the-making by Dr Oemar van der Woerd:

Dr Oemar van der Woerd's presentation delved into the everyday realities of 'caring networks' within contemporary health systems. As healthcare reforms increasingly prioritise networking, this work interrogates how these abstract ambitions materialise in practice: how working patterns, boundaries, and power dynamics are reconfigured, and how the generic logic of networks with grand expectations plays out on the ground. Dr Van der Woerd defines caring networks as configurations of ties among multiple actors involved in care. While networks are often portrayed as static, placeless, and bounded governance structures, networking involves dynamic, situated interactions and practices carried out by embedded actors. The research addressed a gap in network and management studies by focusing on the everyday practices that sustain healthcare networks, often overlooked in theory. It challenges two common assumptions: that networks are abstract and context-free, and that they function as clearly bounded entities. Instead, Dr Van der Woerd proposed a practice-based, context-sensitive approach, showing how actors navigate overlapping networks and how their roles and responsibilities shift over time. Based on long-term fieldwork across five cases, including hospital directors, care platforms, regional alliances, intermediaries, and policy actors, the study examined how networking unfolds in daily actions and reveals it to be continuous, locally grounded, multi-layered, and interpreted differently by those involved. The implications for healthcare management and governance are significant. Dr Van der Woerd emphasised the need to acknowledge the mundanity of caring networks: there is no universal script, and managing through networks often involves pragmatic improvisation. It also means accepting the imperfections, contradictions, and ambiguities inherent in multi-network environments.

Abstract session – Strengthening primary care: workforce innovation, access, and system efficiency

Speakers: **Prof Paulus Torkki**, University of Helsinki, Finland; **Prof Eric Tchouaket**, Université du Québec en Outaouais Canada, Canada; **Ms Giulia Menin**, Agenzia Nazionale per i Servizi Sanitari Regionali (AGENAS), Italy; **Dr Marius-Ionut Ungureanu, MD**, Babeş-Bolyai University, Romania; **Carlos Bernades Carulla, MD** and **Oscar Garcia Gimeno, MD**, Consorci Castelldefels Agents de Salut (CASAP), Spain

Facilitator: **Antoni Peris-Grao, MD**, CEO, Consorci Castelldefels Agents de Salut (CASAP), Spain

Session summary

The session brought together professionals to examine how primary care systems can adapt to rising pressures while safeguarding equity and efficiency. The discussion covered innovative multidisciplinary team models, the economic case for nurse practitioners in home and community care, the Italian framework for Family and Community Nurses, regional disparities in Romania's community nursing workforce and the administrative and cost implications of sick leave management in Spain. Overall, these contributions shed light to the workforce and organisational reforms required to sustain accessible, resilient, and efficient primary care.

Prof Paulus Torkki presented '*Costs and health outcomes of a multidisciplinary team in primary care*', a quasi-experimental study addressing barriers to universal healthcare access through a Novel Multidisciplinary Team (MDT) model. This approach integrates Lean Management, Open Access, and the Chronic Care Model to reduce waiting times and enhance autonomy at the healthcare centre level. MDTs encourage first-contact resolution by enabling staff to consult within the team and only schedule appointments when medically necessary. In five intervention centres, the average cost per patient fell from €1,062 to €906, while in three control centres following standard practice, costs rose from €922 to €1,052. Intervention centres also saw increased patient volumes with stable visit numbers, suggesting proactive problem-solving reduced the need for follow-ups. Prof Torkki concluded that reforming the operational model can lower costs without reducing access. Ongoing analysis will examine changes in provider roles, health outcomes, hospital utilisation, and staff experience.

Dr Eric Tchouacket presented '*Nurse practitioner planned interventions provide cost savings through reduced transfers from home care to emergency departments*' and discussed the role of Primary Health Care Nurse Practitioners (PHCNPs) in increasing access to health services in home care settings. In home care and nursing home settings, PHCNPs deliver both planned interventions – such as routine follow-ups – and unplanned interventions, including visits in response to unexpected events like falls or sudden health deterioration. Current evidence shows that regular follow up of PHCNPs reduce transfers to emergency departments, hospital stays, complications, but there is a knowledge gap in the economic benefits and reduced transfer costs which is the focus of the study presented. Specific objectives include estimating intervention costs, determining transfer costs, and calculating cost-savings. The methodology was divided into three phases: time-motion study, rapid literature review, and retrospective chart review of cost-effectiveness analysis. Dr Tchouacket concluded by presenting the economic evidence to support investment in PHCNP roles for home care, which could generate a median annual cost savings of CAD 879,718. When future savings from reduced hospital transfers are adjusted using an 8% discount rate, the total savings could reach up to CAD 2,147,421.

Ms Giulia Menin presented '*The Italian Guidelines for Family and Community Nurses*', which aim to reinforce the healthcare system by establishing nurses as long-term, trusted points of contact within the community. Their role extends beyond illness management to include health promotion and facilitating collaboration among local healthcare professionals. With equity in mind, the Family and Community Nurse (Infermiere di Famiglia o Comunità - IFoC) works with all citizens, healthy and sick, in prioritising local needs and identifying vulnerable groups. Health takes place at home as much as in the hospitals, which is why the interventions span outpatient

services, home care, and community-based care. The IFoC has developed guidelines to support key skills such as health need assessment, health promotion on all levels of prevention, providing care to both healthy and chronically ill patients, therapeutic education for individuals and family, and personalised health assessments for professionals. The IFoC works with regional health services and community homes, implementing interventions based on proximity models, while being integrated with existing services in communities. There is 1 IFoC per 3,000 inhabitants, where catchment areas vary depending on orographic characteristics of the territory, such as inland areas and mountains. In comparing IFoC with homecare nurses, it has been observed that IFoC uses a more proactive approach, enabling early risk detection, by considering a broader social and health context. In conclusion, IFoC addresses social and health needs that do not fit into standard pathways, thereby redesigning the concept of community health.

Dr Marius-Ionut Ungureanu, MD presented '*Observed trends in the number of primary healthcare Community Nurses and their beneficiaries across administrative regions of Romania (2019-2022)*', a descriptive analysis of trends in the nursing workforce within the country. He emphasised the importance of community healthcare in achieving Universal Health Coverage, and how critical is the role of community nurses in the delivery of care. Strong community-based care systems help reduce inequalities in access by addressing social determinants of health, which in turn enables more equitable health systems. Dr Ungureanu discussed the ratio of Community Nurses (CNs) and their beneficiaries which revealed the significant urban-rural disparity in healthcare access the country is currently facing, with some regions showing stagnation or decline in CN numbers. While there are overall trends that indicate modest growth of CNs, it remains far from a sufficient level to meet Romania's evolving demands, especially considering country's aging population and the rise of chronic diseases. Policy and funding mechanisms need reinforcement to ensure sustainable recruitment, training, and retention of CNs.

Dr Carlos Bernades and **Dr Oscar Garcia Gimeno** discussed '*Impact of sick leave management on primary care physicians' schedules: costs and administrative burden in family and community medicine*', providing relevant data to inform legislation. Key points of the sick leave legislation include requirements and procedures (medical evaluation confirming inability to work), rights and benefits (compensation for lost income), and obligations of employers and administration (managing communication and follow up, verification and medical assessments). Dr Bernades and Dr Garcia Gimeno reported that a third of all visits concern sick leaves, with its main pathological causes being anxiety, diarrhoea, common cold, and backpain. They also presented professions with the most frequent sick leave, where administrative employees take the lead. The predominance of minor conditions raises questions about the necessity of complex administrative processes and whether clinicians should be fulfilling bureaucratic rather than medical roles. This administrative burden diverts clinical resources and adds strain to the system. Dr Bernades and Dr Garcia Gimeno advocated for greater patient self-responsibility to reduce unnecessary procedures and concluded that resilience in healthcare should not only mean withstanding pressure but also adapting effectively to systemic demands.

Take-home messages

- Reinforcing primary care is essential for equitable and resilient health systems. Rising demand, workforce shortages, and administrative burdens require innovative organisational and workforce reforms to sustain accessible, efficient, and high-quality care.
- Multidisciplinary and community-based nursing models improve access and efficiency. Integrated teams and expanded nursing roles – such as Family and Community Nurses and nurse practitioners – enhance care coordination, reduce hospital transfers, and address health needs closer to home.
- Addressing regional and professional imbalances is key to system sustainability. Unequal distribution of community nurses and limited workforce planning threaten equity; targeted recruitment, training, reducing administrative complexity, and retention policies are crucial for balanced service delivery.

Abstract session – Innovation and ethical challenges in mental health care

Speakers: **Prof Dr Ljiljana Majnarić**, University of Osijek, Croatia; **Prof Adriana Paladi**, Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova, Moldova; **Prof Viviana Mangiaterra**, SDA Bocconi, Italy; **Prof Milena Pavlova**, Maastricht University, The Netherlands

Facilitator: **Prof Monica Urbaniak**, Professor, University of Kalisz, Poland

Session summary

This session explored critical intersections between mental health, multimorbidity, and digital innovation across different age groups and care settings. It presented evidence from studies examining how physical and mental health challenges, ethical complexities, and technological solutions shape care delivery for older adults, caregivers, and young people. It called for coordinated, ethically sound, and inclusive approaches to mental health care grounded in lived experiences and responsive to both structural and personal challenges.

Prof Dr Ljiljana Majnarić presented *'Multimorbidity challenges people-centred care'*. The ageing population is a significant trend across the European Union, accompanied by a rise in chronic health conditions. Older individuals often live with multiple simultaneous conditions (multimorbidity – MM). This complicates the implementation of person-centred care. Yet, healthcare systems remain fragmented and largely focused on treating individual diseases. Data shows that MM is frequently associated with mental health issues. Advances in artificial intelligence now allow researchers to identify clusters of co-occurring conditions. The goal of the study is to identify patterns of chronic comorbidities associated with mental health disorders (anxiety, depression, cognitive impairment) in older patients in primary care. The study was conducted over six months at the Osijek Health Centre and included 190 older adults able to attend appointments independently. Clinical and demographic data, including 14 chronic conditions, were extracted from patients' electronic health records. Mental health status was assessed using standardised and validated screening tools: the Geriatric Anxiety Scale (GAS) for anxiety, the Geriatric Depression Scale (GDS) for depression, and the 6-item Cognitive Impairment Test (COG-6) for cognitive decline. Using Latent Profile Analysis (LPA), the study identified four distinct clusters of patients. One cluster, characterised by low comorbidity, served as the control group, while the remaining three were defined by specific dominant comorbidity profiles.

Prof Adriana Paladi presented *'Ethical challenges in dementia informal care and research: qualitative study in the Republic of Moldova'*. Dementia is a major global public health challenge and is recognised as a priority in mental health. In 2018, 1.57% of the European population was affected, with projections indicating an increase to 3% by 2050. Given the absence of effective treatments, care and support play a crucial role, with informal caregivers providing most of the care for individuals with dementia. The study explored ethical issues in dementia care as experienced by informal caregivers. The conceptual framework was grounded in the patients, 12 families (two men and ten women), and caregivers providing care for persons with dementia for at least six months. Three major themes identified:

- Caring for persons with dementia requires a broad range of responsibilities, and constant vigilance in response to unpredictable behaviours. Some people reported feeling vigilant even while sleeping.
- Families often feel isolated in the complexity of caregiving, without guidance or support, while bearing both physical and emotional burden. They also endure financial strain and the heavy load of unrecognised care.
- Moral stress and resilience emerge as caregivers face ethical dilemmas that require balancing the comfort and dignity of individuals with dementia with their own physical and emotional well-being.

Prof Viviana Mangiaterra presented *'Integrated care for mental health needs of children and youth: evidence from a systematic review'*. This research was elaborated from two questions: what are the common components of integrated care interventions for mental health services for children, adolescents and young people, and what is the evidence of effectiveness of integrated care interventions for mental health services for children,

adolescents and young people. The methodology used is guided by three conceptual domains: mental health needs; children, adolescents and young people as population target; integrated care interventions, across sectors of healthcare, social care and education. Children and adolescents' records from 0 to 25 years old were studied but from the 8,423 records gathered, 18 were included in the study. The research team also studied 18 international papers published in English. The conceptual framework for integrated care was used and correlated with the integrative functions of primary cares. This strategy led to a classification, a distinction from clinical integration (micro level) to systemic integration (macro level). Clinical integration refers to the extent to which patient care services are coordinated across various professional, institutional and sectorial boundaries in a system. System integration requires a tailor-made combination of structures, processes and techniques to fit the needs of people and populations across the continuum of care. The results of the study show that most integration is through clinical level and vertical integration is rather traced than horizontal integration. But it also shows that integrated care can increase compliance and commitment to care and reduce clinical symptoms and hospitalisations. To enhance the effectiveness and reach of mental health services for young people, future efforts should prioritise strengthening horizontal integration, fostering intersectoral collaboration, and addressing systemic barriers.

Prof Milena Pavlova presented '*Prevalence and effectiveness of digital mental health interventions for adolescents worldwide*'. Adolescence is a critical stage of life, and addressing the mental health needs of adolescents is becoming a growing priority. Emerging digital health technologies hold significant promise; however, the effectiveness and applicability of digital mental health interventions for this age group remain largely unanswered. Therefore, the aim of the research is to identify the prevalence of existing digital health promotion interventions for adolescents' mental health and to investigate their effectiveness. The study also reviewed successful digital health promotion interventions for adolescents but also the adolescents' engagement and usability of these interventions. Trought data's harvesting (4,503 unique records. 105 publication and 15 studies included), the research analysed the data based on Technology Acceptance Model (TAM). The study identified key criteria that define an effective digital mental health intervention. It should offer user-friendly interfaces, concise and relevant content, a logical structure, and motivating incentives. Most importantly, the intervention must be stigma-free, ensure privacy, and clearly communicate institutional support. Therefore, an effective digital intervention must be designed to meet the needs and motivations of the adolescent population. Its messaging should be simple and tailored to their environment, while the intervention itself must demonstrate technical effectiveness.

Take-home messages

- Mental and physical health must be addressed together through integrated, person-centred care. Multimorbidity, particularly among older adults, underscores the need to bridge fragmented systems and align medical, mental, and social services within holistic care pathways.
- Ethical and emotional challenges in informal dementia care require systemic recognition and support. Caregivers face moral stress, isolation, and financial strain; policies must strengthen formal support structures, ethical guidance, and psychosocial resources for families providing long-term care.
- Integrated care for children and youth demands stronger intersectoral collaboration. While clinical coordination is advancing, greater emphasis is needed on horizontal and system-wide integration across health, education, and social sectors to ensure equitable and continuous mental health support.
- Digital mental health interventions must be ethical, engaging, and youth-centred. Effective solutions rely on privacy, accessibility, and design tailored to adolescents' needs and behaviours, supported by institutional trust and evidence-based validation.

Abstract session – Retention, job satisfaction and workforce planning for systemic change

Speakers: **Anna Klesmite–Bluma, MD**, European Junior Doctors Association, Brussels, Belgium; **Mr Nantapong Butakhieo**, The Education University of Hong Kong, New Territories, Hong Kong; **Prof Odessa Dariel**, École des Hautes Études en Santé Publique (EHESP), France; **Dr Shawn Drake**, Workforce Edge, Canada

Facilitator: **Dr Eszter Kovacs**, Health Services Management Training Center, Semmelweis University, Hungary

Session summary

Healthcare systems are facing workforce shortages, burnout and imbalanced care delivery. This session explored evidence from diverse studies examining strategies to retain health professionals, improve working conditions and revalue care work, prioritising supportive structures, ethical alignment, and sustainable investments.

Dr Anna Klesmite–Bluma presented '*Retention crisis: analysing strategies to retain Junior Doctors in Europe's underserved regions*'. Quality of care starts with a healthy workforce, and workforce well-being leads to workforce retention. This study aimed to evaluate the effectiveness of national strategies in addressing uneven workforce distribution. In 2024, a survey was carried out among junior doctors in 26 European countries with 8 countries selected for in-depth case studies based on their retention strategies. The term 'junior doctor' refers to medical professionals who have completed their postgraduate training less than ten years ago, or less than five years ago if they have not held any leadership positions. The results revealed two main types of strategies: motivational strategies that focused on autonomy, mentorship, support and career growth; and mandate-based strategies that employed compulsory rural service and forced contracts. Mandate-based approaches, although widespread, were less effective than motivational strategies in retaining junior doctors long-term. For example, after an implementation of motivational strategies in Lithuania, the percentage of junior doctors voluntarily working in rural areas increased from 15% to 35%. The strategies focused on creating meaningful career opportunities, mentorship, diverse choices in training, decent working conditions, financial incentives and work-life balance. Therefore, the study underscored the need for frameworks and policies to harmonise retention strategies across Europe by shifting from mandate-based to motivational approaches. In addition, monitoring systems for retention policies should be put in place to evaluate the effectiveness of those policies.

Mr Nantapong Butakhieo presented '*Job satisfaction and turnover intention among healthcare professionals in Thailand: a comparative analysis of experienced vs less experienced*'. The study compared job satisfaction and turnover intentions between less experienced and experienced healthcare professionals in Thailand, and examined whether and to what extent relationships with supervisors and salary were associated with job satisfaction. It used a mixed-method design combining a survey and interviews. The less experienced group was defined as those with <10 years of work experience, and the experienced group as those with ≥10 years. A total of 187 healthcare professionals completed the survey and 30 participated in interviews; most respondents were women and nurses across different age groups. Findings showed that less experienced professionals had higher turnover intentions, whereas experienced professionals reported higher job satisfaction. Positive relationships with supervisors and higher salaries were associated with greater job satisfaction only among the less experienced group. In contrast, higher job satisfaction reduced turnover intention only among the experienced group. Qualitative findings indicated that less experienced professionals were more dependent on supervisors and salary, making these key drivers of satisfaction. However, even when satisfied, many wished to work closer to their families, so satisfaction did not necessarily reduce their intention to leave. Experienced professionals demonstrated lower willingness to change workplaces; when satisfied with working conditions, their intention to leave decreased accordingly. For this group, job satisfaction was no longer strongly linked to supervisors or salary.

The study highlighted the importance of considering generational differences when designing workforce retention policies.

Prof Odessa Dariel presented *'Time to care: can financial incentives alone cultivate caring?'*. In recent years, the French home care system has prioritised economic models and bureaucratic administration over patient care, leading to devalued work, limited time for care, burnout and nurse shortages. Fee-for-service (FFS) models incentivise specific interventions and discourage holistic care. A new model in France, inspired by the Buurtzorg approach in the Netherlands, seeks to redesign home care by shifting from FFS to hourly payment, from top-down control to self-management, and from task-based to relationship-based care. The study evaluated the impact of this model, grounded in Tronto's care ethics, through 63 semi-structured interviews. Results showed several advantages. The model enabled nurses to identify unmet needs and strengthened attentiveness ('caring about') and responsibility ('caring for'). It also enhanced professional competence and responsiveness ('care giving' and 'care receiving'). Together, these changes reduced time-related stress, reinforced professional ethics and improved job satisfaction and work-life balance, with expected gains in quality of care. The model fostered reciprocity ('caring with') as a basis for policy change centred on shared human values. Following implementation, the system required time to adapt and maintain previous patient loads. Patients observed greater teamwork and more time spent with them. Successful self-management depended on robust IT systems and strong administrative support. Prof Dariel concluded that health systems must move beyond payment reform alone and redesign organisational strategies by embedding care ethics into policy.

Dr Shawn Drake presented *'Optimising workforce wellness: strategies for effective planning scheduling and deployment'*. Workforce wellness depends on strategic planning, efficient scheduling and smart deployment. Poor scheduling leads to inefficiencies, reduced work-life balance, higher turnover and financial strain. Surveys in the US, Canada and Belgium showed that 55% of employees received schedules less than four weeks in advance, although 80% preferred more notice. Only 28% were moderately satisfied with current practices and 21% were dissatisfied. Stability was limited: 40% had stable schedules, while 30% experienced frequent changes. In addition, 57% were assigned shifts on days off and 54% faced last-minute changes within three days. Most respondents (84%) required more than 24 hours' rest before accepting new shifts. Redeployment also posed challenges, with 55% lacking adequate skills for reassigned roles. Addressing these issues requires comprehensive solutions such as the Workforce Edge Model, which uses modern technology to optimise master schedules. Automated tools collect data on tasks, availability and staff competencies to generate multiple scheduling options, from which care teams select the most suitable. A case study from CHU de Québec, employing over 18,363 health and social service staff, demonstrated optimised schedules, reduced overtime, improved collaboration, lower turnover and budget savings. Overall, strategic, technology-supported scheduling enhances workforce wellness, operational efficiency and financial sustainability.

Take-home messages

- Motivational strategies that prioritise autonomy, mentorship, career development and work-life balance are more effective for long-term retention of healthcare professionals than mandate-based approaches such as compulsory service.
- For less experienced professionals, positive relationships with supervisors and higher salaries significantly improve job satisfaction, but do not necessarily reduce turnover intentions due to personal factors such as family proximity. For experienced professionals, however, higher job satisfaction directly lowers their intention to leave.
- Transitioning from task-based, top-down care models to self-managed, relationship-based systems promotes holistic care, strengthens professional competence, improves work-life balance and increases job satisfaction, ultimately enhancing quality of care.
- Data-driven and participatory approaches to scheduling and staff deployment contribute to greater workforce wellness, lower turnover and improved organisational and financial sustainability.

Abstract session – Emergency preparedness and public health responses

Speakers: **Ms Karina Rojas Salvador**, European Joint Action on Antimicrobial Resistance and Healthcare-Associated Infections (EU-JAMRAI), France; **Dr Michael Hanrahan & Ms Caralyn Horne**, Health Service Executive, Ireland; **Dr Eva Krczal**, University for Continuing Education Krems, Austria; **Prof Dr Rojan Gümüş**, Dicle University, Turkey; **Dr Olivier Grimaud**, École des Hautes Études en Santé Publique (EHESP), France

Facilitator: **Prof Tiago Correia**, Professor, Institute of Hygiene and Tropical Medicine, NOVA University Lisbon, Portugal

Session summary

This session explored innovative strategies to enhance emergency preparedness and public health responses across Europe. Through diverse case studies, it highlighted the importance of collaboration, cross-sector coordination, and inclusive practices.

Ms Karina Rojas Salvador presented '*Building One Health Management through collaboration: key insights from a European Joint Action on antimicrobial resistance*'. Antimicrobial resistance (AMR) is a complex challenge driven by diverse actors and interrelated factors across sectors. In recent years, a One Health approach has gained traction, recognising the interconnection between human, animal, and environmental health. Within this context, One Health Management has emerged, emphasising leadership, coordination, and especially collaboration. While collaboration between ministries, public bodies, NGOs, and health systems offers diverse perspectives and strategies, it remains difficult to implement in practice. The EU-JAMRAI project, which supports the development and implementation of National Action Plans (NAPs) on AMR, highlights that One Health Management must be tailored and flexible, requiring an understanding of national governance and implementation contexts. Key enablers include dedicated budgets, institutional support, clearly defined structures, and a shared vision. Equally important are trust, dialogue, and mutual understanding. These social factors are just as vital as technical coordination. Strengthening One Health Management will depend on greater investment in interdisciplinary training, deeper knowledge of collaborative governance, and leadership capable of facilitating cross-sector cooperation.

Dr Michael Hanrahan and **Ms Caralyn Horne** presented Ireland's '*BOTP-IPA Catch-Up Vaccination Programme*', developed in response to the rising number of people arriving from Ukraine and others seeking international protection. Many had incomplete or undocumented vaccination histories due to disrupted healthcare systems, increasing the risk of vaccine-preventable diseases. A shortage of general practitioners in Ireland, who typically deliver childhood vaccines, added to the challenge. To respond, the Health Service Executive established a National Operations Planning Group in late 2022. Mobile community vaccination teams were deployed to deliver vaccines in accommodation centres and high-density areas. Implementation followed nine core strategies, including community engagement, peer support, valuing lived experience, and using evidence and technology effectively. Preparatory visits, interpreters, and peer supporters played a key role in building trust and improving communication.

Dr Eva Krczal presented the study '*Exploring teamwork in Fluid Multiteam Systems (MTS): a qualitative case study on team effectiveness in public health emergency response teams*', which examined how multiteam systems operate during public health emergencies. These systems are characterised by rapidly changing team members, tasks, and timelines, making coordination particularly challenging. Drawing on the Input-Mediator-Output (IMO) framework, the study gathered data from focus groups, interviews, surveys, and workshops involving professionals from different management levels. The findings highlighted the importance of a shared goal, streamlined information flows during shift handovers, and psychological safety in supporting effective

collaboration. Leadership, stress management, and trust were also identified as key enablers of successful teamwork.

Prof Dr Rojan Gümüş presented the study *'The effect of safety climate on safety performance in pre-hospital emergency health services'*, examining how perceived organisational commitment to safety influences the behaviour of emergency health professionals in high-pressure environments. Based on data from 778 emergency healthcare workers across Turkey, the study found that a strong safety climate, reflected in leadership, trust, and open communication, significantly improves adherence to protocols and teamwork. Key strategies included regular team meetings, peer support, and ongoing training. However, persistent challenges such as workplace violence remain. Prof Dr Gümüş emphasised the need for a strong safety culture underpinned by trust, leadership commitment, and clear protocols that enable staff to speak up without fear. When asked what kind of studies or interventions could help reduce violence, he noted that the research process itself fostered greater peer collaboration and team solidarity, thereby strengthening the overall sense of safety.

Dr Olivier Grimaud presented the study *'Fighting health crises with solidarity: managing the surge of severe patients at the start of the COVID pandemic'*, which examined the TRANSCOV initiative during France's first COVID-19 wave (March–April 2020). The project enabled the transfer of 661 critically ill patients from overwhelmed ICUs in eastern France and Paris to less affected regions through both inter-regional and international transfers. A key innovation was the deployment of ICU trains, developed in partnership with the French national railway company (SNCF), which made large-scale medical evacuations possible. The evaluation, based on a retrospective cohort study and interviews, identified no major adverse events and found a lower 28-day ICU mortality rate among transferred patients, attributed to improved care conditions in receiving hospitals. Trust, solidarity and operational confidence were central to the initiative's success, demonstrating the importance of cooperation over competition during crises. Although ICU trains were not initially embedded in official emergency response plans, they are now part of France's national emergency preparedness framework, with established protocols and technical readiness for future deployment. The TRANSCOV experience demonstrated that the imperative to protect human life can unite diverse actors and mobilise systems beyond institutional inertia. Despite structural fragmentation within the French health system, the response emerged organically, driven by trust and exceptional collaboration, including SNCF's decision to provide ICU trains free of charge. Regarding costs, Dr Grimaud noted that financial details could not be disclosed due to confidentiality. He concluded that while highly effective, the ICU train model is intended for rare and exceptional circumstances rather than routine patient transport.

Take-home messages

- Cross-sector collaboration is a foundational requirement for tackling complex public health threats such as antimicrobial resistance; it demands context-sensitive governance, sustained institutional support, dedicated resources and leadership capable of building trust across sectors.
- Vaccination programmes targeting displaced and vulnerable populations must combine structured national coordination with culturally sensitive, community-driven implementation to ensure equitable access and high uptake.
- Effective emergency response in fluid multiteam systems depends on clearly shared goals, strong information flows, psychological safety and adaptive leadership that can sustain coordination under pressure.
- A strong organisational safety climate—grounded in leadership commitment, trust and open communication—directly improves safety performance in pre-hospital emergency services.
- Solidarity, trust and pre-existing cooperation mechanisms can overcome systemic fragmentation in times of crisis, enabling large-scale, life-saving coordination such as the ICU transfers implemented in France during COVID-19.

Abstract session – Optimising healthcare processes and performance

Speakers: **Prof Stefano Villa**, Università Cattolica del Sacro Cuore; Centro di Ricerche e Studio in Management Sanitario (CERISMAS), Italy; **Dr Virginie Fortineau**, Meedia, France; **Dr Nico Gamalliel**, Universitas Indonesia, Indonesia; **Ms Inka Sylgren**, University of Helsinki, Finland; **Dr Guido Noto**, CREMS – University of Messina, Italy; **Dr Giorgia Rotundo**, University Magna Graecia, Italy & **Dr Roberta Muraca**, Bocconi University, Italy

Facilitator: **Prof Lucia Ferrara**, Professor, Cergas SDA Bocconi, Bocconi University, Italy

Session summary

This session presented innovative approaches to improving healthcare delivery, patient flow and system efficiency across diverse national and organisational contexts.

Prof Stefano Villa presented '*Evaluating the effectiveness of split-flow models in reducing Emergency Department overcrowding insights from a benchmark analysis of 39 Italian Emergency Departments (EDs)*'. Emergency Departments are expected to operate efficiently based on clinical necessity, yet length of stay (LOS)—including waiting, treatment and boarding time—remains high due to multiple factors. The study compared organisational processes to reduce ED LOS through a benchmark analysis of 39 EDs across 27 Italian hospitals. Results showed that arrivals peaked on Mondays, especially between 9 and 10 am. Older patients were more likely to have longer stays and require admission. A subgroup of patients, including those with psychological and/or social problems, visited the ED four or more times per year. However, most attendances involved minor, non-urgent cases. ED visits were lower where outpatient clinics were available nearby. The national target for ED LOS is under six hours, yet performance varied widely: in some EDs, fewer than 40% of patients were treated within six hours, while others met the target for most cases. The findings highlight the importance of tailoring organisational processes, including proactive planning for peak periods, dedicated pathways and fast tracks for specific groups, and improved management of minor cases through separate units or nurse-led models.

Dr Virginie Fortineau presented '*Healthcare Process Modelling (HPMo), a new organisational framework enabling outpatient pathways scheduling and fundamentally transforming the care organisation to achieve the ambulatory shift*'. Although medical day care pathways are generally predictable, limited resources create significant planning challenges. The study explored how to improve scheduling efficiency using HPMo, a modelling method that optimises planning based on outpatient pathways as its core input. Clinical settings applying HPMo were compared with those that did not. Findings showed that HPMo reduced both scheduling time and patient waiting time. Introducing dedicated time slots for day care further improved results. Optimal solutions depended on resource constraints such as workforce, equipment and space; easing these constraints increased the likelihood of effective schedules. A mixed patient case-mix also led to better planning outcomes than homogeneous profiles, consistent with lean management principles. The study concluded that improving day care planning requires both methodological change and a shift in mindset, as engineering-based approaches remain unfamiliar to many healthcare professionals. In addition to HPMo, dedicated time slots and standardised outpatient pathways can further enhance planning performance.

Dr Nico Gamalliel presented '*Evaluating Indonesia's health service delivery: a qualitative study using the WHO Health System Performance Assessment Framework*'. Health systems are increasingly complex and face significant challenges, particularly in low- and middle-income countries (LMICs). This study evaluated health service delivery in Indonesia using the WHO framework, with a focus on quality and governance. Data were collected through one focus group and five in-depth interviews. Findings revealed marked geographical inequities and difficulties in implementing evidence-based medicine. There was also a lack of robust systems to monitor, maintain and improve service quality. The Indonesian health system was described as fragmented, with limited continuity of care, weak patient involvement and insufficient community empowerment. The study highlighted the need to balance universal health coverage with quality of care, and to align user and provider perspectives. Expanding access must go hand in hand with improving quality, particularly through evidence-based interventions and reducing disparities. Strengthening governance and collaboration, including engagement with the international academic community, was identified as essential for progress.

Ms Inka Sylgren presented *'Assessing time spent on care information management in home care in Finland'*. Multi-morbidity rises with age, affecting around 55% of people aged ≥ 65 years. Managing complex needs in home care requires access to information from home care, emergency care, primary care, specialised care and social services. In practice, however, information systems are fragmented, making relevant and up-to-date data difficult to access, while data quality is often compromised by missing or conflicting information. The study estimated the time healthcare professionals spend on information management and examined associated factors. A survey of Finnish home care providers yielded 755 responses (17% response rate). Participants reported time spent on retrieving information, care coordination, contacting clients, responding to client contact and interprofessional communication. Doctors and nurses spent approximately 6 and 9 hours per week, respectively, on these tasks. Time use was associated with profession, level of direct client care, region and employment status. The findings show that information management accounts for a significant portion of professional time, underscoring the need for better organisational and technological support. Further research should explore how IT systems can enhance data integration and whether coordination-relevant information can be predefined and automatically collected.

Prof Guido Noto presented *'Measuring "impact" through sentiment analysis: an artificial intelligence approach to evaluating the performance of public healthcare organisations.'* While impact is often defined in terms of achieved outcomes, the broader public value generated for communities is less visible and harder to measure. The study explored whether artificial intelligence (AI) could assess perceived community impact. Using sentiment analysis software (Brand24), news and social media posts referring to public hospitals in Sicily (January–March 2025) were analysed. AI clustered content by relevance and classified it as positive, negative or neutral, enabling benchmarking across hospitals. Findings indicate that AI can help evaluate community-perceived public value and inform performance improvement. However, limitations include unequal social media use and the risk of bias when organisations are not explicitly mentioned.

Dr Giorgia Rotundo and **Dr Roberta Muraca** presented *'Examining the role of digital health technologies in supporting managerial processes in Belgian public hospitals: a replication study'*. Belgium's multilevel federal governance and Bismarckian system contribute to relatively high public health expenditure. Following the digital acceleration triggered by COVID-19, the study examined how digital technologies support managerial processes in Belgian public hospitals. Using the Delphi method and semi-structured interviews (22 questions) with nine public health experts, the study replicated research conducted in Italy in 2024. Experts agreed that emerging technologies, particularly artificial intelligence used by administrative staff, can strengthen managerial processes, especially in chronic heart disease and cancer care. Drivers of adoption included organisational efficiency, innovation and a supportive environment, while barriers centred on limited staff skills and financial resources. Further mixed-method research was recommended to deepen understanding of digital transformation in hospital management.

Take-home messages

- Emergency department overcrowding cannot be addressed through volume control alone; it requires tailored organisational redesign, including proactive peak-period planning, differentiated patient pathways and alternative management models for minor cases.
- Structured process modelling approaches such as Healthcare Process Modelling (HPMo) can significantly improve outpatient scheduling, reduce waiting times and optimise resource allocation, provided organisations are willing to adopt engineering-based planning mindsets.
- Expanding universal health coverage must be matched by strengthened governance, reduced geographical inequities and systematic implementation of evidence-based care to ensure that access and quality advance together.
- Fragmented information systems in home care consume substantial professional time; integrated digital infrastructures and better organisational support are essential to improve coordination and free up clinical capacity.
- Artificial intelligence tools, including sentiment analysis and digital management technologies, offer new opportunities to assess public value and strengthen managerial decision-making, but require investment in skills, governance and critical oversight to avoid bias and inequity.

Abstract session – Artificial intelligence for decision support in healthcare: promises, challenges and pathways to implementation

Speakers: **Dr Beatriz Sêco**, Unidade Local de Saúde de Coimbra – Serviço de Urgência Básica, Portugal; **Dr Brent Opmeer**, Vilans, The Netherlands; NIHR ARC West, University of Bristol, United Kingdom; **Dr Francesca Dal Mas**, Venice School of Management, Ca' Foscari University, Italy; Collegium Medicum, SAN University, Poland; **Ms Anna-Maria Hiltunen**, Nordic Healthcare Group, Finland; **Dr Cheryl Chong Zhiya**, National University Health System, Singapore; **Ms Batool Aljasim**, Anglia Ruskin University, United Kingdom & Almoosa Health Group, Saudi Arabia

Facilitator: **Dr Luca Giorgio**, Assistant Professor, ALTEMS – Università Cattolica del Sacro Cuore; Università Europea di Roma, Italy

Session summary

Healthcare systems face ageing populations, workforce shortages and increasing stakeholder pressure. Artificial intelligence is emerging as a tool to help clinicians and managers make faster, better-informed decisions. This session examined real-world applications of AI and encouraged dialogue between hospital managers and academics. Speakers also addressed AI-related risks and the need for safer, more responsible implementation.

Dr Beatriz Sêco presented *'The integration of Artificial Intelligence (AI) tools in hospital management'*. Her study examined how AI can enhance decision-making in hospital management. Using a qualitative exploratory approach, her team conducted 15 semi-structured interviews with Portuguese hospital managers. Ethical integrity emerged as a primary concern among participants. At the same time, they highlighted the significant difference between decision-making processes with and without AI, describing AI as a potential game changer in healthcare organisations. Hospital management often relies on complex organisational models characterised by fragmented communication, dispersed data and sometimes manual, inefficient processes. AI, by contrast, can support more strategic and analytical management approaches. However, Dr Sêco emphasised that the human dimension remains central. AI should be used to support, not replace, human-based decision-making. Engaging professionals in implementation is essential to reduce resistance and mitigate ethical risks. She also stressed that AI adoption must be tailored to national contexts and individual healthcare organisations to address specific local challenges.

Dr Brent Opmeer presented *'Body of evidence and knowledge mobilization are pivotal for informed decision making, effective implementation and scaling-up AI- and other data-driven innovations in health care'*. His study explored how AI can strengthen healthcare management through an evidence-based approach. While AI holds strong potential to improve efficiency and reduce administrative burden, its deployment remains limited due to the immaturity of many solutions. He highlighted that numerous digital innovations fail to scale beyond pilot stages, a phenomenon he termed "pilotitis" – where tools are tested but not fully integrated. Consequently, solutions neither mature nor achieve system-wide impact. The study stressed the need for a clear, long-term strategy to embed AI into routine practice, guided by fundamental questions about priority-setting and the evidence underpinning decisions. Dr Opmeer introduced the Cycle of Rational Use, a framework for structured implementation and scaling. It involves identifying needs, assessing evidence and available solutions, defining implementation guidelines and continuously evaluating emerging needs. The model is currently being applied in the Netherlands to support AI- and data-driven innovation in healthcare management.

Dr Francesca Dal Mas presented *'Digital transformation and the sustainable and ethical use of Artificial Intelligence in trauma and emergency surgery. Results from a World Society of Emergency Surgery worldwide investigation'*. She reported findings from a global survey exploring trauma and emergency surgeons' acceptance of AI-based solutions. The study highlighted a rapidly evolving field with implications beyond clinicians, extending to academia and industry. AI shows potential in coordinating care teams and supporting diagnosis, including rare conditions, yet its use in surgical practice remains limited. Pioneering initiatives, such as AI-supported robotic thoracic surgery at Massachusetts General Hospital in Boston, demonstrate advanced applications. However, they raise concerns regarding maintenance costs, procedural transparency, patient consent and broader ethical implications. Conducted in 2021–2022 with the World

Society of Emergency Surgery, the survey gathered 650 responses from 72 countries. Opinions were divided: about half of respondents were enthusiastic about AI as a decision-support tool, while others preferred relying on personal judgement or peer consultation. Ethical concerns centred on data protection, preserving human oversight and clarifying responsibility in case of adverse outcomes. Trust and acceptance were influenced more by national and institutional context than by age. Dr Dal Mas concluded that future progress depends on collaboration between surgeons, developers and hospital managers to ensure safe and effective AI integration.

Ms Anna-Maria Hiltunen presented *'Evaluating the ethical and legal considerations of AI-based clinical decision support: insights from a multinational iCARE-tool pilot study with healthcare professionals'*. She outlined the iCARE4Old project, part of an EU-funded initiative (2021–2025), which tested an AI-based tool to improve care for older adults with complex conditions. The project used machine learning to develop a digital platform to support clinical decision-making. The pilot involved 139 healthcare professionals across seven countries, primarily in Europe and the USA. Most participants were doctors and nurses experienced in geriatric care. Half had previously used digital tools, and 25% had experience with predictive applications. The tool generated risk predictions, such as hospital readmissions, and participants reviewed and adapted their decisions accordingly. Nearly half (48.2%) reported no ethical or legal concerns and felt comfortable using the tool, while others raised reservations. Key concerns included data security, patient consent and the risk of reducing care to numerical outputs rather than maintaining a human-centred approach. Perceptions differed more by country than by age. Ms Hiltunen emphasised that the tool was intended to support, not replace, human judgement, and that addressing security and data governance challenges requires broader societal and regulatory solutions beyond healthcare alone.

Dr Cheryl Chong Zhiya presented *'Artificial intelligence affecting hospital systems: a managerial perspective'*, examining how AI reshapes hospital systems from a management standpoint. The study synthesised best practices and emerging trends in AI implementation. It highlighted three main areas: improved operational efficiency through automation and better patient flow; enhanced patient engagement via easier communication, access to information and predictive analytics; and improved clinical outcomes supported by remote monitoring and personalised treatment. However, implementation also raises managerial challenges, including data privacy, staff training needs and the requirement for robust governance frameworks, potentially through international collaboration. Dr Chong emphasised prioritising AI applications that demonstrate clear return on investment.

Ms Batool Aljasim presented *'Integration of artificial intelligence into Saudi Arabian primary healthcare centres: applications, barriers, and alignment with vision 2030'*. Her scoping review analysed recent literature (January 2019–April 2025) on AI use in Saudi primary care, aligned with the national Vision 2030 strategy and Healthcare Technology Strategy. AI is primarily used for prescribing (71.4% of GPs), diagnosis (52.4%) and administrative tasks (42%). On the patient side, around 33% of applications involve chatbots to support engagement and information access. Despite political commitment and technological progress, barriers persist, including interoperability gaps, limited infrastructure, insufficient training and cultural resistance. Many primary care professionals lack confidence in using AI, and some clinics lack the equipment or connectivity required for effective implementation.

Take-home messages

- Artificial intelligence must remain a decision-support instrument that strengthens, rather than replaces, human judgement and professional accountability in healthcare management and clinical practice.
- Widespread adoption of AI requires robust ethical and legal frameworks at national, European and potentially international levels to address data protection, responsibility, transparency and patient consent.
- Successful implementation depends on investing in workforce training, organisational support and meaningful engagement of healthcare professionals throughout design and deployment.
- Patients and families must remain at the centre of AI initiatives, ensuring that digital innovation enhances rather than undermines human-centred care.
- AI solutions must be tailored to local health system realities, infrastructure and resources, and demonstrate clear added value and sustainable return on investment.

Abstract session – Workforce planning: addressing global mobility

Speakers: **Dr Alina Breazu, MD**, World Health Organisation, Romania; **Ms Giulia Menin**, AGENAS, Italy; **Dr Eszter Kovacs**, Health Services Management Training Centre, Semmelweis University, Hungary; **Dr Mario Masiello**, Università Cattolica del Sacro Cuore, Italy

Facilitator: **Dr Marius-Ionut Ungureanu, MD**, Professor, Babeş-Bolyai University, Romania

Session summary

This session examined the evolving landscape of health workforce planning across Europe and beyond, with a focus on global mobility, system sustainability and planning innovation. It brought together national experiences and regional initiatives to demonstrate how improved data, forecasting models and policy tools can strengthen health systems. The research underscored the urgency of developing flexible, data-driven and forward-looking strategies to address workforce needs in an increasingly interconnected and mobile world.

Dr Alina Breazu presented '*Health Workforce Migration – Romania (case study)*', providing an overview of Romania and its healthcare system. Romania, an EU Member State and presidential republic with a diverse population, organises healthcare across national, county and local levels. The Ministry of Health regulates the system and manages 59 public hospitals, including 39 teaching hospitals, while the National Health Insurance House administers the national insurance fund. Over the past two decades, Romania has experienced sustained outmigration of healthcare professionals, driven by system constraints and more attractive pay and career opportunities abroad. A major migration wave in 2001 saw nearly 22,000 doctors leave, 90% relocating to nine countries, including France, Germany, the US, Israel and the UK. By 2005, more than 1 million Romanians had emigrated to OECD countries, nearly a quarter with higher education degrees. EU accession in 2007 further accelerated medical migration through mutual recognition of qualifications. Between 2011 and 2021, the number of Romanian doctors in France and Germany doubled, becoming the second-largest foreign medical group in both countries. Italy has been the main destination for Romanian nurses, partly due to linguistic proximity. Brexit led to a 70% decline in Romanian nurses in the UK between 2016 and 2021, with similar decreases in Israel and Canada. By 2023, Romania employed around 400,000 healthcare workers (2% of the population). Although the workforce is relatively young, prolonged emigration has reduced access to experienced clinicians.

Dr Giulia Menin presented '*Calculating staffing needs in the Italian National Health Service*', outlining a methodology adopted in January 2023 after extensive collaboration between the Ministries of Health and Economy, regional authorities, healthcare institutions, universities and public and private stakeholders. The initiative responds to outdated 1988 standards and new pressures such as population ageing and the COVID-19 pandemic, aiming to ensure equitable, sustainable and data-driven workforce planning. The model replaces theoretical planning with a dynamic, production-based approach using real service delivery data. It applies to hospitals and home care and supports regional planning through a central digital platform. Ten regions are participating in the pilot phase, and from 2024 data will also be shared with the Ministry of Economy and Finance. Drawing on multiple data sources (including DRGs, outpatient data and staff hours), the system estimates required Full-Time Equivalents (FTEs) across professions such as physicians, nurses, social health workers, midwives and technicians. Staffing calculations are based on indicators including workload, births, care complexity and emergency network roles. Adoption of the methodology is now a legal condition for accessing an additional 5% of the regional health fund. Overall, it provides an objective, needs-based framework that balances national standardisation with regional flexibility.

Dr Eszter Kovacs presented '*On the way to more precise health workforce planning – Combining quantitative datasets with qualitative information*', highlighting progress in strengthening workforce planning across Europe. Drawing on long-standing experience, she emphasised efforts to improve health workforce data collection and its use in evidence-informed policymaking. Semmelweis University has contributed to several EU initiatives,

including the Joint Action on Health Workforce Planning and Forecasting (HEROES), aimed at improving understanding of labour market dynamics and planning systems. A major achievement was the development of a minimum data set for workforce planning to address communication gaps among EU Member States. This standardised core indicators for national planning, including workforce mobility, although only a few countries initially provided such data. Today, 19 countries are involved in updating and expanding the dataset. Dr Kovacs described the evolution towards an advanced minimum data set that integrates qualitative information to better capture labour market realities. This includes data on workers' mental and physical health, organisational changes linked to digital transformation, AI, telemedicine and skill-mix innovation. She also underlined systemic barriers, such as limited funding and weak governance, which affect planning outcomes. She concluded that workforce planning is an iterative process requiring continuous adaptation and collaboration among Member States.

Dr Mario Massiero presented '*Should I stay or should I go? Exploring the motivations behind the decision to leave (or stay) of Italian healthcare professionals*', an ongoing study examining why Italian healthcare professionals choose to remain in or leave the national health system. Conducted with colleagues Dr Ella Saporiero, Giancarlo Gualtieri, Antonio Cossu and Federica Morandi, the research seeks to inform targeted retention strategies. Italy's health system faces complex work environments, professional dissatisfaction and rising workloads, pressures intensified by COVID-19. The pandemic exposed limited recognition and career opportunities, contributing to a "great resignation" dynamic. Many professionals are leaving, while others remain under increasing strain due to workforce shortages. The study groups influencing factors into four categories: individual, workforce-related, socio-economic and political. A 25-question survey (June 2024–January 2025), distributed via email and social media, gathered 275 responses (164 doctors and 101 nurses). Analyses included descriptive comparisons and chi-square tests. Results show that 61.1% are considering changing jobs, while 39.9% intend to stay. Professional factors—such as autonomy, mutual respect, positive work environments and career development—were more influential than economic considerations for both groups. Job satisfaction averaged 3.1 out of 5, with lower satisfaction linked to higher intention to leave. The findings suggest that retention strategies should prioritise improving professional environments, including team building, shared values, task shifting and workload management, rather than focusing solely on financial incentives.

Take-home messages

- Sustained health workforce outmigration, enabled by EU mobility and driven by unmet professional expectations and better working conditions abroad, can significantly weaken national clinical capacity despite domestic training efforts.
- Embedding a legally mandated, data-driven staffing methodology into funding mechanisms represents a structural reform in health workforce governance and strengthens accountability in resource allocation.
- Combining quantitative workforce data with qualitative indicators—such as staff wellbeing, organisational change, digital transformation and skill-mix evolution—enables more accurate, forward-looking and cross-country workforce planning.
- Retention strategies must prioritise professional environment factors—including autonomy, mutual respect, career development and manageable workloads—as these consistently outweigh purely financial incentives in influencing workforce decisions.

Abstract session – Collaborative leadership and resilient healthcare systems

Speakers: **Prof Wilma van der Scheer**, Erasmus University, Rotterdam & Erasmus Centre for Healthcare Management, Netherlands; **Prof Martin Gerard Curley**, Maynooth University, Ireland; **Ms Lisa Baldini**, AGENAS, Italy; **Prof Neringa Gerulaitiene**, Kaunas University of Technology, Lithuania; **Dr Rosa Vidal**, Catalan Hospital, Health and Social Services Association (La Unió), Spain

Facilitator: **Dr Zoltan Cserhati, MD**, Assistant Professor, Health Services Management Training Centre, Semmelweis University, Hungary

Session summary

Complex systems such as healthcare cannot be managed through linear decision-making alone; they require coordinated, multidisciplinary collaboration. This session explored how collaborative leadership, adaptive governance and systemic innovation strengthen resilience, inclusiveness and performance. It highlighted practical lessons on how shared leadership enables organisations to become more responsive and effective in complex environments.

Prof Wilma Van der Scheer presented *'Shared leadership in healthcare: working up towards a systemic understanding of engaging with wicked problems'*. She described intertwined challenges such as ageing populations and resource shortages that demand collective problem-solving. Shared leadership moves beyond vertical models towards collaborative, distributed practices grounded in reciprocity and moral commitment. However, it requires willingness to engage in societal change and navigate tensions. The study examined three settings. In daily practice, targeted training for nurses, elderly care professionals, patients and informal caregivers strengthens communication, confidence and teamwork. In organisational networks, hospitals and specialists collaborate through formal and informal structures; success depends on trust and sustained dialogue, supported by dedicated governance mechanisms. At societal level, COVID-19 exposed limits of top-down governance and triggered grassroots leadership and adaptive decision-making. Prof Van der Scheer concluded that shared leadership holds strong potential but demands continuous dialogue, transparency and trust-building.

Prof van der Scheer also presented *'Learning to adapt. Lessons from managing an unfolding crisis'*, analysing how management evolves during prolonged crises. Based on interviews, focus groups and sector-wide dialogues, the study used two lenses: four dimensions of managerial work (organisational, relational, normative and reflexive) and deep crisis theory. Three phases were identified: acute response, prolonged adaptation and future-oriented transformation. Crises act as both disruption and catalyst, reshaping roles and values. Lessons from COVID-19 emphasise ethical reflection, continuous learning and adaptive governance as foundations for resilient health systems.

Prof Martin Gerard Curley presented *'Guided open collaborative ecosystems as a major disruption in health systems'*. He delivered a clear message: "Stay left, shift left, 10x." "Stay left" refers to keeping people well and preventing illness before acute intervention is required. "Shift left" means enabling patients to return home sooner and moving care closer to communities. "10x" challenges health systems to deliver technologies that are ten times better, faster and more cost-effective. He argued that a new healthcare model is urgently needed, driven by digital transformation and a shift from treatment to prevention, and from activity-based to outcome-based care. Central to this approach is open innovation, including the use of smartphones for data collection and the promotion of open-source solutions. He called for an open, collaborative ecosystem grounded in shared vision and values, fostering high-trust, high-capacity partnerships among healthcare providers, industry, pharmaceutical companies and other stakeholders, working together with shared purpose and enabling digital tools.

Ms Lisa Baldini presented '*A collaborative approach for resilient healthcare: insights from the HEROES Joint Action*'. The project brings together 19 countries and 51 partner organisations, with the EU funding 80% of its €8.7 million budget. Its aim is to strengthen Member States' capacity to plan, organise and manage their health workforce. Priorities include developing workforce supply and demand databases, improving forecasting tools, enhancing planners' skills and fostering inclusive stakeholder engagement. Activities include assessing national systems, defining sustainable workforce intelligence frameworks and piloting good practices at national and regional levels. HEROES also supports a community of practice through twinning, seminars and workshops, and will prioritise policy dialogues in 2025 to advance evidence-based reforms. By promoting structured knowledge exchange and country learning clusters, the initiative addresses shortages, burnout, inequalities and digital transformation, strengthening the resilience and sustainability of Europe's health workforce.

Prof Neringa Gerulaitienė presented '*Fostering resilience in healthcare: factors impacting organisational resilience*', introducing the Horizon Europe-funded Apollo 2028 project. The initiative aims to improve the mental health, wellbeing and resilience of healthcare professionals in response to growing system pressures. Apollo 2028 analyses resilience at individual, team and organisational levels, identifying risk and protective factors to develop evidence-based solutions. The consortium includes eight universities and hospitals from Hungary, Ireland and the United States, using longitudinal research and interviews. Proposed outputs include AI-supported decision tools for managers, policy recommendations and stakeholder co-designed interventions. Training programmes aim to strengthen workplace mental health management. The project seeks to reduce burnout, improve wellbeing and enhance collaboration across Europe, delivering practical guidelines, scenario tools and policy recommendations for lasting impact.

Dr Rosa Vidal presented '*The Catalan healthcare model: a model of governance and professional management oriented towards results*', examining how management quality influences healthcare outcomes. La Unió represents diverse providers across territories and ownership structures, fostering innovation and cross-organisational learning while also revealing disparities. The study assessed whether outcomes are more strongly linked to management quality than ownership status, hypothesising that effective management is the decisive factor. Using 2022 data from the Catalan central results registry, the analysis compared centres across selected indicators of adequacy, effectiveness, efficiency, user experience and sustainability. Significant differences were observed, particularly in primary care indicators such as inappropriate antibiotic use, avoidable hospitalisations, comprehensiveness of home care assessments and user experience. The findings support the conclusion that management quality has a measurable impact on health outcomes.

Take-home messages

- Complex health systems require integrated, cross-sectoral collaboration and distributed leadership rather than purely top-down, linear decision-making models.
- Shared leadership depends on trust, reciprocity, transparent goals and protected space for dialogue, enabling professionals, patients and communities to co-create solutions across levels.
- Crises act both as disruption and opportunity, accelerating innovation and exposing governance gaps, and therefore require adaptive, ethical and forward-looking leadership approaches.
- Effective organisational and inter-organisational networks need formal recognition, dedicated coordination structures and alignment of incentives to sustain collaboration over time.
- Digital transformation must support prevention, community-based care and outcome-driven models, and delivers value only when embedded within open, high-trust collaborative ecosystems rather than implemented as isolated technological fixes.

Abstract session – Community engagement and people centred care

Speakers: **Mr Hamid Ravaghi**, World Health Organization's (WHO) Eastern Mediterranean Region (EMRO), Egypt; **Dr Francesca Moschetti**, Health Science Interdisciplinary Research Center, Italy; **Dr Etienne Gnonlonfin**, École des Hautes Études en Santé Publique (EHESP), France

Facilitator: **Prof Viviana Mangiaterra**, Professor, Cergas SDA Bocconi, Bocconi University, Italy

Session summary

This session focused on strengthening people-centred health systems through innovative tools and strategies that elevate user voices, community engagement and performance accountability. Drawing on experiences from community health planning in the Eastern Mediterranean, nursing care evaluation in Italy and behavioural policy initiatives in French academic settings, the presentations illustrated how participatory, evidence-based approaches can foster more equitable and responsive systems. Overall, the session highlighted the importance of listening to users, translating feedback into action and strengthening institutional capacity to enable sustainable and inclusive health system transformation.

Mr Hamid Ravaghi presented '*Advancing people-centred care and social participation through community health needs and assets assessment in the Eastern Mediterranean Region: Guide development*'. He described the development and piloting of the CHNAA tool, designed to strengthen people-centred care and social participation across 22 countries with diverse income levels. The tool responds to country requests for structured approaches to better understand and address community health needs. He stressed that people-centred care must be accessible, integrated and responsive, grounded in community voices and aligned with the primary health care principles reaffirmed in the 2018 Astana Declaration. Achieving health for all requires engagement beyond service delivery, including action on social determinants of health. CHNAA is presented as a participatory, cyclical and collaborative process that identifies both needs and community assets. Unlike traditional deficit-based assessments, it promotes strengths-based planning and aims to institutionalise community assessment within national systems. Currently, such assessments are rarely mandatory or standardised in the region. The tool has been piloted in Iran and is being introduced in Oman, Yemen and Pakistan. Implementation challenges include reaching vulnerable populations and ensuring ethical, culturally appropriate processes. He concluded that institutionalising CHNAA, building local capacity and translating findings into policy are essential for strengthening community health systems and advancing universal health coverage.

Dr Francesca Moschetti presented '*Making patient measures count: bridging patient-reported nursing care indicators and health system performance for people-centred management in Tuscany*'. Her research examined how nursing care indicators influence patient satisfaction and contribute to people-centred system performance. Building on existing literature and tools, her team analysed which nursing care dimensions most strongly predict patient satisfaction in Tuscany. She described the FMS Observatory, operating across all 47 public hospitals in the region, which collects real-time digital feedback from discharged patients and integrates standardised indicators into the regional performance dashboard. These data feed directly into the official evaluation system, supporting continuous benchmarking and improvement. The study addressed two questions: which aspects of nursing care most strongly correlate with institutional satisfaction, and how these relationships evolved between 2019 and 2023. Using processed data from the Directorate of Performance Evaluation, regression and correlation analyses showed that teamwork between nurses and doctors was the strongest and most consistent predictor of satisfaction. Dignity also had a significant, though more variable, impact, while other indicators showed weaker associations. Despite overall improvements in satisfaction, willingness to recommend declined slightly, possibly reflecting broader system factors. Dr Moschetti concluded that what patients value evolves with context, with relational sensitivity and meaningful communication gaining importance. She emphasised that patient-reported experience data must be treated as central to governance, not peripheral

feedback. Structured patient experience measurement is both a managerial tool and a moral imperative for building responsive and inclusive health systems.

Dr Etienne Gnonlonfin presented '*Understanding how smoke-free campus initiatives influence user behaviours: a logic model associated with this policy*'. He introduced his work as part of a doctoral project in social practices, focusing on how smoke-free campus policies affect student smoking behaviour and the campus environment. He reported that tobacco use remains a major public health concern in France, with 29.3% of individuals aged 18–24 being daily smokers. Although smoke-free campuses are common in countries like Canada and Australia, they remain rare in Europe. EHESP was the first to adopt this policy in France in 2018, banning smoking indoors and outdoors but still allowing vaping outside. Several supportive activities were implemented, such as peer support, ambassador networks, targeted communications, and designated smoking shelters. He stated that the study aimed to build a logic model to understand how specific campus interventions lead to behavioural change. The team collected 128 institutional documents (2016–2024), conducted 23 semi-structured interviews with students and staff, and carried out 20 hours of non-participant observation. Data were analysed using MDMO software, and a simplified logic model was validated through individual interviews and focus groups. He highlighted that this was the first logic model developed for a smoke-free campus in France and possibly in the academic literature. He stressed the importance of evaluating the underlying assumptions built by staff and students to ensure the model's validity and usefulness in guiding future public health policy on campus smoking bans.

Take-home messages

- People-centred health systems require structured mechanisms that systematically capture and integrate community and patient voices into governance, planning and accountability processes.
- Participatory and strengths-based tools, such as Community Health Needs and Assets Assessments, can institutionalise social participation and support equitable, context-sensitive health policy across diverse settings.
- Patient-reported experience measures, particularly those reflecting teamwork, dignity and communication, are critical performance indicators and must be embedded in formal evaluation systems to drive continuous improvement.
- Behavioural public health interventions, such as smoke-free campus policies, require clearly articulated logic models to understand causal pathways, test assumptions and ensure sustainable, evidence-informed impact.

Abstract session – Enhancing quality of care

Speakers: **Anna Klesmite-Bluma, MD**, European Junior Doctors Association, Belgium; **Dr Corentin Le Bot**, University of Rennes, France; **Dr Ionut Chiriac, MD**, CASAP, Spain

Facilitator: **Dr Simon Moralee**, Head of the Health Management Group and Associate Professor, University of Manchester, United Kingdom

Session summary

This session brought together diverse strategies aimed at strengthening quality of care across healthcare systems, highlighting the importance of workforce well-being, standardised management practices and medical education. The contributions illustrated how quality of care can be enhanced through systemic reforms, empowered teams and meaningful collaboration.

Anna Klesmite-Bluma, MD presented *'Healthier teams, safer care: a summary of workforce-driven insights for quality of care'*. The aim was to outline workforce-driven strategies to improve quality of care (QoC) by improving working conditions. Up to 10% of patients in Europe are affected by gaps in care and safety, linked to workforce shortages, ageing populations and poor working conditions. Burnout and excessive working hours increase the risk of errors and contribute to staff turnover. Standardised indicators—such as safety training, working hours and rest times, digital tool use and burnout rates—remain underdeveloped. Monitoring workforce well-being and its impact on QoC is essential, as staff well-being underpins safe, high-quality care and long-term system sustainability. Strategies such as task shifting and digital tools can reduce pressure and improve efficiency, while mental health support strengthens workforce resilience. The presentation called for safer working conditions, greater investment in staff well-being and aligned training programmes. Proposed reforms included fatigue management measures and the use of AI tools to address workforce shortages. A related paper will be published to further elaborate on these proposals. The discussion that followed focused on fatigue management tools.

Dr Corentin Le Bot presented *'The role of standardized management practices in improving quality of care: Evidence from healthcare chains'*, examining how standardised management practices may improve QoC. The impact of network integration on performance remains debated, particularly in regulated healthcare markets with limited differentiation between providers. In France, all public hospitals are part of territorial networks. Data collection is ongoing through 30 interviews. Preliminary findings shed light on which practices are standardised, how they are adopted across hospitals and which performance dimensions are affected. The study aims to clarify the link between hospital networking and QoC, identify practices that enhance performance and analyse mechanisms facilitating their adoption. The results are expected to inform public authorities on market regulation and network development and may offer insights applicable to other countries. The discussion included reflections on hospital networks in other contexts and a suggestion to include primary care perspectives in future research.

Ionut Chiriac, MD presented *'Examining specialist referrals and diagnostic tests in Primary Care: patterns and outcomes'*. His presentation evaluated referral and diagnostic test patterns within an urban primary care team of 12 doctors serving 2,200 patients with comparable age and disease profiles. Referral rates varied significantly between doctors (151 to 539), with no correlation to patient comorbidities. Diagnostic test use also ranged widely (98 to 434 per doctor) and was not linked to patient health status. More experienced doctors tended to order fewer referrals and tests. There was no correlation between the number of tests ordered and referrals made. These findings suggest that practice variability is driven more by individual physician behaviour than patient characteristics. Recommendations included regular guideline reviews, team discussions to align practice, structured feedback and promotion of evidence-based, data-driven decision-making to reduce inconsistencies. The discussion addressed referral practices across countries and emphasised the importance of education and professional support. An attendee from Liberia shared the "We Are All Patients" (WAP) model, a collaborative,

patient-partnered approach that promotes empathy and shared decision-making. The model has improved patient rights awareness, early detection and mortality outcomes, demonstrating how locally adapted, patient-centred innovations can enhance quality of care even in resource-constrained settings.

Overall, the session highlighted the central role of the healthcare workforce in delivering safe, high-quality care. Monitoring workforce well-being and investing in supportive conditions and training are essential for system sustainability. Hospital network integration may enhance quality, though further research is needed to identify and scale effective practices. Variability in primary care practice underscores the need for standardised guidelines, team collaboration and data-informed decision-making. The session emphasised leadership, training and evidence-based policy as key levers for strengthening quality of care and building more sustainable healthcare systems across Europe.

Take-home messages

- Protecting workforce wellbeing is a prerequisite for safe, high-quality care and long-term health system sustainability; monitoring burnout, working conditions and fatigue must become integral to quality governance.
- Standardised and well-coordinated management practices within hospital networks have the potential to improve quality of care, but their effectiveness depends on clear adoption mechanisms, leadership commitment and supportive regulatory frameworks.
- Significant variation in referral and diagnostic practices, often unrelated to patient characteristics, highlights the need for consistent clinical guidelines, structured feedback and evidence-based, data-informed decision-making in primary care.

Abstract session – Navigating the digital transformation

Speakers: **Prof Mohamad Alameddine**, University of Sharjah, United Arab Emirates; **Dr Lior Naamati-Schneider**, Hadassah Academic College, Israel; **Mr Juan Lopez**, Université de Montpellier, France; **Dr Francesca De Domenico**, University of Messina, Italy; **Ms Estella Posthuma**, Erasmus University, Rotterdam, The Netherlands

Facilitator: **Dr Zoltan Cserhati**, Assistant Professor, Health Services Management Training Center, Semmelweis University, Hungary

Session summary

The digital transformation of healthcare is reshaping professional practices, organisational structures and patient experiences across diverse contexts. This session explored how digital technologies both enable and challenge healthcare systems. Discussions focused on professional training, ethical dilemmas, technostress, value destruction, co-production of care, regulatory compliance and the redefinition of professional roles. Across the presentations, digital technologies were shown to offer opportunities for optimisation, learning and improved outcomes, while simultaneously introducing new burdens, tensions and responsibilities. A critical, reflexive and inclusive approach emerged as essential to ensure that digital innovation contributes to equitable and effective healthcare.

Prof Mohamad Alameddine presented *'The use of Artificial Intelligence and gamification in the training of health care students and professionals: evidence from the UAE'*. He discussed the integration of AI and gamification into professional training programmes in the United Arab Emirates. Findings indicated positive feedback from healthcare professionals, suggesting that these approaches enhance engagement and support personalised learning pathways. AI-driven tools and gamified formats were presented as promising methods to strengthen professional development and improve training effectiveness.

Dr Lior Naamati-Schneider presented *'Digital transformation in healthcare's VUCA world: ethical complexities and moral dilemmas of healthcare professionals'*. Her research examined the ethical tensions faced by healthcare professionals operating in a volatile, uncertain, complex and ambiguous (VUCA) digital environment. She identified key conflict areas, including innovation paradoxes, potential compromises in treatment quality, information overload and clashes with personal and professional values. The findings underscored the importance of robust organisational support systems to help professionals navigate ethical uncertainty and sustain moral resilience.

Mr Juan Lopez presented *'Value destruction associated to digital healthcare platforms'*. He analysed the dual nature of digital platforms, highlighting that alongside value creation, digitalisation may also generate value destruction. His work identified different forms of value loss, including inefficiencies, unintended consequences and misaligned incentives. He emphasised the need to anticipate and mitigate these risks during the design and implementation phases to ensure that digital platforms contribute to sustainable health outcomes.

Dr Francesca De Domenico presented *'When technology heals but also hurts: the impact of technostress on general practitioners' performance between clinical and administrative technologies'*. She explored the effects of technostress on Italian general practitioners, distinguishing between clinical technologies and administrative systems. Her findings showed that administrative technologies generated higher levels of technostress, negatively affecting performance and contributing to burnout risks. She advocated for targeted training, better system design and organisational support to protect clinical time and reduce administrative burden.

Ms Estella Posthuma presented *'Reinventing professional roles and identities: how technology reshapes care practices in the digital age'*. Drawing on ethnographic research in disability care in the Netherlands, she examined how digital technologies reshape professional roles and identities. She highlighted challenges associated with

remote assessments and digital mediation of care, stressing the continued importance of skilled professionals, trust-building and adaptive capacity in maintaining high-quality care practices.

Audience discussions reflected shared concerns about ethical complexity, technostress and value destruction. Participants emphasised the need for practical solutions, including targeted training, supportive infrastructures, balanced efficiency and patient-centred approaches, and continuous evaluation of digital tools. Questions consistently highlighted the importance of organisational cultures that support professional resilience and responsible innovation.

The session concluded by reaffirming the dual-edged nature of digital healthcare transformation. While digital tools offer significant opportunities for improvement, they also introduce ethical, organisational and professional challenges. Robust support systems, inclusive policy frameworks, targeted education and continuous reflection are essential to ensure that digital transformation strengthens rather than undermines equitable, effective and patient-centred healthcare.

Take-home messages

- Digital transformation is not merely a technical upgrade but a systemic shift that reshapes professional identities, organisational cultures and patient relationships; ethical reflection and governance must evolve in parallel with technological innovation.
- Protecting professional well-being is a strategic priority: technostress, administrative overload and moral dilemmas directly affect performance, retention and quality of care, making organisational support and targeted training indispensable.
- Artificial intelligence and digital platforms can generate substantial value through optimisation, personalisation and enhanced learning, but without careful design and regulation they may also create inefficiencies, inequities and unintended harms.
- Sustainable digital innovation requires proactive governance frameworks that integrate value creation, risk mitigation and co-production with healthcare professionals and patients from the outset.
- Effective digital healthcare transformation depends on inclusive infrastructures, strong leadership, adaptive organisational cultures and continuous evaluation to ensure that technology strengthens, rather than undermines, equitable and patient-centred care.

Abstract session – Cancer care pathways and patient experience

Speakers: **Prof Lucia Ferrara**, Cergas SDA Bocconi, Bocconi University, Italy; **Ms Anne-Laure Delaunay**, University Paris-Saclay, University Evry, IMT-BS, LITEM, France; **Ms Carla Oliveira**, University of Porto (FMUP) & Institute of Molecular Pathology and Immunology of the University of Porto (IPATIMUP), Portugal; **Dr Monica Georgiana Brînzac**, Babeş-Bolyai University & European Public Health Association (EUPHA), Romania; **Dr Hannes Vanpoecke**, Ghent University, Belgium

Facilitator: **Prof Nicolas Sirven**, Professor, Ecole des hautes études en santé publique (EHESP), France

Session summary

This session explored some of the most pressing yet underexamined challenges in contemporary cancer care, addressing ageing, multimorbidity, prevention, territorial inequalities and patient wellbeing. Drawing on EU-funded projects, qualitative research and real-world data, the presentations highlighted how fragmented systems, invisible caregiving roles and missed preventive opportunities continue to shape outcomes. Across diverse contexts, speakers called for more integrated, equitable and human-centred approaches to cancer care.

Prof Lucia Ferrara presented '*Exploring oncology care pathways for multimorbid older adults: insights from the IMPLEMENT study across five European countries*'. She examined the growing complexity of cancer care for older patients living with multimorbidity, noting that approximately two-thirds of patients over 70 have at least one comorbidity. Despite the need for coordinated and integrated pathways, current systems remain fragmented, often leaving patients navigating siloed services. Drawing on the GERONTE project, she discussed two complementary studies: the FRONE trial in France (Type 1 hybrid design), which evaluates the clinical effectiveness of a new care intervention, and the IMPLEMENT study (Type 3 hybrid design), which maps oncology care pathways in Belgium, France, Ireland, Italy and the Netherlands. Using policy analysis, interviews and focus groups, IMPLEMENT identified significant variation in organisational models and highlighted the central role of interdisciplinary collaboration, referral mechanisms and digital tools. Prof Ferrara stressed that improving care for multimorbid older adults requires not only structural reform but also outcome-oriented models that prioritise continuity, collaboration and patient-centred design.

Ms Anne-Laure Delaunay presented '*From hospital to home: organisational paradoxes in the delegation of paediatric cancer care*'. She reported findings from a two-phase qualitative study conducted with the French National Cancer Institute and Imagine for Margo, involving 81 narrative survey responses and 25 in-depth interviews with parents. The study explored how the transition home transforms rather than concludes care. Parents assume expanded responsibilities for treatment management or remission monitoring, blurring the boundary between home as a recovery space and as a site of medical care. Four paradoxes structured parents' experiences: belonging (balancing identity and caregiving), learning (coping with uncertainty and limited support), organising (managing autonomy alongside institutional control) and performing (handling acute and chronic care simultaneously). Applying paradox theory, the research revealed the complexity of caregiving across domestic and institutional regimes. Ms Delaunay called for caregiver-focused protocols and greater recognition of the invisible labour families perform in sustaining paediatric oncology care.

Ms Carla Oliveira presented '*Rare Tumour Risk Syndromes (RTRS): clinical and economic impact of prevention vs. treatment in hereditary diffuse gastric cancer – insights from the PREVENTABLE multicentric cohort*'. She outlined findings from the EU-funded PREVENTABLE project, which focuses on hereditary conditions such as Hereditary Diffuse Gastric Cancer (HDGC), often linked to CDH1 mutations. The study assessed three care pillars—surveillance, preventive surgery and treatment for advanced disease—across 203 patients. Results demonstrated that prevention was 2.7 times more cost-effective than treatment and associated with significantly better survival outcomes: only one of 19 patients in the prevention group died of cancer, compared with 17 of 43 in the treatment group. Preventive strategies also reduced hospital stays and monthly healthcare costs. To strengthen awareness

and engagement, the project launched the communication initiative “Making RTRS Visible”, producing tailored video formats for patients and professionals. Ms Oliveira argued for a systemic shift towards prevention, highlighting its economic sustainability and transformative impact for families at genetic risk.

Dr Monica Georgiana Brînzac presented ‘*Applying a “medical deserts” lens to cancer care services in the North-West region of Romania from 2009 to 2022 – a mixed-methods analysis*’. Her study examined cancer care accessibility through the concept of medical deserts—areas where unmet needs result from infrastructure gaps, workforce shortages, financial barriers and social inequities. Using quantitative analysis of national data (2009–2022) and 15 qualitative interviews, the study mapped regional disparities in oncology infrastructure and staffing. While Cluj functions as a regional hub, rural counties such as Sălaj and Satu-Mare face significant deficits in radiotherapy and palliative care services. Participants described fragmented pathways, long waiting times and limited professional support. Dr Brînzac called for urgent reforms, including digitalisation, updated cancer protocols and improved workforce planning, to ensure more equitable territorial access to care.

Dr Hannes Vanpoecke presented ‘*Scanxiety, more than fear alone: a design-thinking approach to reduce scanxiety for patients and relatives*’. He examined “scanxiety”, the distress associated with cancer-related imaging, affecting up to 83% of patients. Using diary studies, surveys and co-creative workshops with patients, relatives and healthcare professionals, the research mapped scanxiety across three phases: pre-scan uncertainty, scan-day stress and post-scan anxiety while awaiting results. Interventions proposed included clearer communication, improved care environments and faster, personalised delivery of results. The study emphasised that scanxiety is multifaceted and extends beyond the imaging moment itself. Addressing it requires flexible, patient-centred solutions spanning the entire diagnostic pathway.

Take-home messages

- Multimorbidity in ageing populations demands integrated oncology pathways that prioritise coordination, continuity and interdisciplinary collaboration rather than fragmented, siloed services.
- Family caregivers in paediatric oncology carry significant, often invisible responsibilities; formal recognition and structured support mechanisms are essential to ensure sustainable home-based care.
- Preventive strategies in hereditary cancer syndromes are clinically superior and more cost-effective than treatment-centred models, underscoring the need to reorient systems towards early identification and risk reduction.
- Territorial inequities in cancer care, conceptualised as medical deserts, reveal structural gaps in workforce distribution, infrastructure and service availability that require targeted policy intervention.
- Emotional dimensions of cancer care, such as scanxiety, are integral to patient wellbeing and must be addressed through holistic, co-designed interventions across the entire diagnostic and treatment journey.

Abstract session – Mental wellbeing, resilience, and support for health care workers

Speakers: **Ms Yannai DeJonghe**, Ghent University, Belgium; **Ms Anna-Kaisa Vartiainen**, University of Eastern Finland, Finland; **Prof Dr Henk Nies**, Vrije Universiteit; Ben Sajet Centrum, The Netherlands

Facilitator: **Prof Todorka Kostadinova**, Professor, Medical University Varna, Bulgaria

Session summary

The session emphasised the crucial role of healthcare workers in maintaining resilient and effective healthcare systems. It highlighted the importance of organisational strategies, emotional preparedness and compassion-driven support in fostering workforce wellbeing. Healthcare workers were described as the engine of the system, underscoring the urgent need to protect, support and empower this vital component of healthcare delivery.

Ms Yannai DeJonghe presented '*The moderating role of managerial support in the association between missed care and risk of burnout in nursing homes – A cross-sectional multicentre study*'. She reported findings from a multicentre cross-sectional study examining the relationship between missed care—defined as any required patient care that is omitted or significantly delayed—and burnout risk among nursing home staff. With ageing populations and increasingly complex long-term care needs, maintaining quality and sustainability in nursing homes is becoming more challenging. The study assessed missed care across activities of daily living, rehabilitation, monitoring, documentation and social care, alongside burnout indicators such as emotional exhaustion, depersonalisation and reduced personal accomplishment. Burnout risk was identified in 23.3% of registered nurses, 23.9% of care assistants and 11.2% of allied health professionals. Importantly, when managerial support was perceived as strong, the negative association between missed care and burnout was significantly reduced. Where support was lacking, missed care was more strongly linked to burnout. The findings highlight the need for adequate staffing, balanced workload distribution and professional development opportunities. Although causality cannot be established due to the study design, the results point to the importance of strengthening managerial leadership to improve both staff wellbeing and quality of care.

Prof Dr Stefanie Scholz presented '*Preparing future nurses for paediatric end-of-life care: bridging emotional resilience and professional competence*'. She addressed the challenge of equipping nursing students with the emotional and professional skills required to provide paediatric end-of-life care. The presentation emphasised the emotional intensity of this field and the need to integrate resilience-building strategies into nursing education. Preparing students requires not only technical competence but also structured emotional preparation, reflective practice and mentorship. Prof Scholz argued that embedding compassion, ethical reflection and communication training into curricula is essential to ensure that future nurses can deliver high-quality, humane care in highly sensitive clinical contexts.

Ms Anna-Kaisa Vartiainen presented '*The effectiveness and economic evidence of organisational and management interventions to promote mental wellbeing and resilience in elderly care workers – a systematic review*'. Following PRISMA guidelines and PICOS criteria, the review included seven studies from the USA, Canada, Italy, the Netherlands and the UK (2019–2023). Results showed limited evidence for interventions directly targeting elderly care workers, with only three studies focusing on this group and mixed outcomes reported. Some positive effects were associated with mindfulness-based interventions and Acceptance and Commitment Therapy, though methodological limitations reduce certainty. Stronger evidence was found for interventions supporting informal caregivers, particularly counselling and technology-assisted care management. The review revealed a substantial gap in system-level and leadership-focused interventions, with only one organisational-level study identified. Most outcomes focused on negative indicators such as stress and depression, and only one study

included an economic evaluation. The findings indicate that sustainable improvements in mental wellbeing require stronger organisational strategies and more robust research into leadership and cost-effectiveness.

Prof Dr Henk Nies presented *'Improving the resilience and mental wellbeing of formal and informal carers in long-term care'*. He introduced a collaborative European project addressing the mental health of both formal and informal carers in long-term care (LTC). In the EU, 6.3 million people work in LTC and over 52 million provide informal care weekly, with women representing around 80% of both groups. Both formal and informal carers face heightened risks of anxiety, depression and burnout, exacerbated by the COVID-19 pandemic. The project aims to strengthen support through partnerships, evidence dissemination and the development of innovative solution prototypes. It includes systematic reviews of scientific and grey literature, co-design activities and local implementation teams. An example highlighted was "The Village Support Worker Austerlitz" initiative, which successfully built community-based networks connecting residents with formal and informal care. Evaluation results showed improved perceived health, reduced loneliness and lower depression risk, alongside reduced welfare costs. The project demonstrates the potential of community-based models, though adaptation to diverse national contexts requires flexible design, stable funding and strong connector roles.

Ms Batool Aljasim presented *'Taking (compassionate) action to improve health care workplaces and systems'*. She focused on the role of compassionate leadership and organisational action in strengthening healthcare workplaces. Her presentation emphasised that improving systems requires not only structural reform but also a culture grounded in empathy, psychological safety and inclusive practices. Compassionate action at organisational level can improve staff morale, reduce burnout and enhance care quality. She advocated for embedding compassion into governance, policy frameworks and daily practice to create sustainable and supportive healthcare environments.

Take-home messages

- Managerial leadership and supportive organisational cultures significantly mitigate burnout risk and reduce the negative impact of missed care in long-term care settings.
- Preparing healthcare professionals for emotionally demanding fields, such as paediatric end-of-life care, requires integrating resilience-building and reflective practice into education and training.
- Current evidence on interventions to promote mental wellbeing in elderly care workers remains limited, particularly at system and leadership levels, highlighting the need for stronger organisational and economic evaluation research.
- Community-based, partnership-driven models can enhance resilience and mental wellbeing among formal and informal carers, but require contextual adaptation, stable funding and strong coordination mechanisms.
- Compassionate organisational action and inclusive leadership are critical levers for improving workplace conditions, strengthening caregiver motivation and sustaining high-quality healthcare systems.

Abstract session – Measuring and optimising healthcare performance

Speakers: **Prof Mincho Minev**, Medical university of Varna, Bulgaria; **Mr Joost Van der Heiden**, HU university of applied science, The Netherlands; **Dr Luca Giorgio**, Università Europea di Roma, Italy; **Mr Andrew Partington**, Flinders University, Australian Institute of Health Innovation, Macquarie University, Ecole des Hautes Etudes en Santé Publique (EHESP), France; **Mr Michele Dolcini**, Politecnico di Milano, Italy

Facilitator: **Dr Guido Noto**, Assistant Professor, CREMS – University of Messina, Italy

Session summary

The session examined diverse approaches to evaluating and enhancing the effectiveness of healthcare systems across different national contexts. It highlighted the multifaceted nature of healthcare performance, emphasising that robust decision-making must account for financial sustainability, infrastructural capacity, clinical quality and population health outcomes. The presentations demonstrated the importance of data-driven methodologies, context-sensitive evaluation tools and sustainable strategies to balance efficiency, equity and quality in modern healthcare delivery.

Prof Mincho Minev presented *'Assessing the financial performance of teaching hospitals: insights from Bulgaria'*. His study evaluated the financial performance of state-owned teaching hospitals using data from official registries between 2017 and 2023, including the COVID-19 period. The analysis examined liquidity, leverage, profitability and economic efficiency indicators. Results showed a notable increase in liquidity ratios, suggesting greater investment in long-term assets, particularly during 2020–2021 when hospitals expanded capacity and equipment in response to the pandemic. Profitability improved overall, with the average net profit margin rising from –2.02% in 2017 to +1.85% during the peak pandemic phase. Financial leverage remained relatively stable, although recapitalisation processes require closer scrutiny. Economic efficiency showed modest improvement. While the general financial trend was positive, the study emphasised the need for targeted strategies to strengthen profitability and long-term sustainability.

Mr Joost Van der Heiden presented *'Key performance indicators for organisational performance in physiotherapy primary healthcare organisations'*. This study explored which key performance indicators (KPIs) are most relevant for small physiotherapy practices operating as private enterprises within the Dutch managed competition system. Using a scoping review based on the Arksey and O'Malley framework, supported by artificial intelligence screening and expert validation, the research distinguished between business-oriented and healthcare-specific KPIs. Financial stability indicators—such as net profit margin, liquidity and solvency—were identified as essential for long-term viability, even though many practitioners prioritise clinical quality over profitability. The study also examined health-related KPIs, highlighting the tension between guideline adherence, administrative workload and productivity. The findings stress the need for a balanced KPI framework that supports both financial sustainability and high-quality patient care, while avoiding excessive administrative burden.

Dr Luca Giorgio presented *'Evaluating health outcomes: correlating the new guarantee system indicators with population health in Italy'*. The project assessed whether Italy's "New Guarantee System" of healthcare performance indicators accurately reflects population health outcomes. Using a two-level analytical approach, the study correlated regional performance scores and individual indicators with population health measures such as life expectancy. Results showed that screening rates, home care coverage and hospital appropriateness indicators were positively associated with improved population health outcomes. Regions delivering higher quality services demonstrated better life expectancy figures. The findings confirm that comprehensive, well-designed indicators can support more effective resource allocation and reduce regional disparities. Continuous evaluation and refinement of performance metrics are essential to ensure equity and system responsiveness.

Mr Andrew Partington presented *'Early economic evaluations to develop and manage health services: experience of an action learning set within an Australian local hospital network'*. The study examined how early economic evaluation and modelling can support decision-making in the introduction of new technologies and service redesign within hospital networks. Using qualitative methods combined with economic analysis and data mining techniques, the research analysed internal hospital dynamics, patient flows and resource allocation processes. The findings showed that local health networks can improve efficiency, particularly by reducing length of stay, though gains are often accompanied by revenue adjustments and require significant investment. The study highlighted the value of modelling as a decision-support tool, while cautioning that models cannot fully capture complex organisational realities. Stakeholder engagement remains critical to interpreting and applying economic insights effectively.

Mr Michele Dolcini presented *'Facility management costs for hospital infrastructures: insights from the Italian healthcare system'*. The study investigated the costs of managing hospital infrastructures in Italy, with particular attention to Lombardy. Nationally, 6–8% of hospital operating costs are devoted to facility management. A sharp increase of 33.5% in utility costs between 2021 and 2022 was observed, largely driven by rising energy prices. Annual utility costs were calculated at €128.78 per square metre, with maintenance costs averaging €32 per square metre. Italian hospital beds incur an annual cost of €18,509, approximately twice that of standard European hospitals. While older hospitals tend to have slightly higher facility management costs, infrastructure complexity and geographic factors play a more decisive role than building age alone. The study underscores the importance of infrastructure planning in achieving financial sustainability.

Take-home messages

- This session presented a variety of methodological approaches and practical insights for evaluating and improving healthcare system performance across diverse contexts and countries, highlighting the importance of both financial and health outcome indicators.
- Hospital management costs are influenced by multiple factors, including the quality of care provided, the age and complexity of infrastructure, and the effective allocation of resources; achieving a sustainable balance between cost efficiency and maintaining high-quality, equitable healthcare is a fundamental challenge.
- Health workforce management and technology adoption play critical roles in driving efficiency and quality improvement, but their implementation must carefully consider organizational dynamics, patient needs, and local contexts.
- Public policy frameworks, such as managed competition and targeted financial incentives, significantly shape the sustainability of healthcare systems and the viability of practitioners, requiring ongoing evaluation to ensure equitable access and optimal resource use.

Abstract session – Governance, policy, and innovation in healthcare systems

Speakers: **Prof Marija Jevtic**, University of Novi Sad; Institute of Public Health of Vojvodina, Serbia; Université Libre de Bruxelles (ULB), Belgium; **Dr Martin Henman**, Trinity College, Ireland; **Dr Maarten Janssen**, Erasmus University, **The Netherlands**; **Ms Astrid Eriksen**, European Observatory on Health Systems and Policies; Technische Universität Berlin; Germany; **Prof Dr Guido Offermanns**, Karl Landsteiner Institute for Hospital Organization; University of Klagenfurt; Austria

Facilitator: **Dr Simon Moralee**, Head of the Health Management Group and Associate Professor, University of Manchester, United Kingdom

Session summary

The session brought together diverse perspectives on how health systems across Europe and beyond are navigating complex challenges through governance reforms, policy development and innovation. Across regional, national and organisational levels, the presentations illustrated how policy harmonisation, cross-sector collaboration and structured innovation governance can support more sustainable and patient-centred reforms. At the same time, they highlighted persistent gaps in implementation, coordination and evaluation that must be addressed to achieve meaningful progress.

Prof Dr Marija Jevtić, MD presented *‘Overview of the Western Balkans Region on its pathway towards modern health policy’*. She framed the Western Balkans not as isolated national systems but as a region facing shared demographic, economic and social challenges, including ageing populations and rising non-communicable diseases. She questioned how health is conceptualised within society, arguing that the aim is not perfect health but healthier environments created through cross-sectoral action. Modern health policy in the region increasingly acknowledges links between health, climate change, digitalisation, sustainability and innovation. Prof Jevtić emphasised the importance of managing public-private relations, strengthening primary care, addressing environmental risks and improving human resource governance. She called for implementation of the WHO 10-point roadmap and for embedding a “Health in All Policies” approach across sectors. While EU health frameworks are gradually being adopted, weak implementation and political interference remain barriers. She concluded by stressing unity, cross-border cooperation and stronger management capacity to safeguard health collectively.

Dr Martin Henman presented *‘Council of Europe’s guidelines to harmonise the Medication Review process in Europe’*. He addressed the growing complexity of medication use, including prescriptions, over-the-counter products and supplements, which can lead to adverse events and avoidable hospital admissions. Medication Review (MR) was presented as a structured process involving patient identification, data collection, reconciliation, prioritisation of issues and development of a personalised care plan. Patient engagement is central, as individuals live with the long-term consequences of medication decisions. Developed as a Council of Europe soft-law resolution grounded in democracy, human rights and the rule of law, the guidelines aim to standardise MR practices across diverse systems. Implementation requires interprofessional collaboration, integration into health records, data protection safeguards and adequate training. Harmonised MR processes can strengthen pharmaceutical safety, equity and efficiency across Member States.

Dr Maarten Janssen presented *‘Governance of innovation in healthcare organisations in the Netherlands: strategies, challenges and practices from over >150 organisations’*. Drawing on analysis of 176 MBA-health assignments, he examined how organisations conceptualise and govern innovation. Using the Situated Novelty framework, he highlighted four elements: defining innovation, understanding it as an ongoing process, recognising the normative dimension of values, and practising governance beyond formal structures. Findings revealed frequent misalignment between innovation strategies and operational practice, as well as confusion

between innovation, improvement and change. Many organisations retain linear thinking focused on adding new solutions, with insufficient reflection on what should be discontinued. Dr Janssen emphasised that innovation governance must be adaptive, reflective and embedded in organisational culture. He called for more empirical research and context-sensitive approaches that integrate learning, critical reflection and strategic coherence.

Ms Astrid Eriksen presented '*A cross-country comparison of policies to tackle delayed discharges from hospital in six European countries*'. The study compared policies in Denmark, France, Germany, the Netherlands, Norway and Sweden to address delayed discharges, defined as hospital stays extended for non-medical reasons after patients are fit for discharge. Using a qualitative survey and comparative framework, initiatives were categorised at hospital, community or cross-sectoral levels. Most policies focused on discharge management rather than upstream prevention. Key lessons included the need for clear responsibility allocation, strong coordination mechanisms and adequate community-based resources. Financial incentives can support reform but may also create unintended consequences. Delayed discharge was identified as a symptom of broader structural weaknesses rather than a standalone issue. While no universal best practice emerged, shared principles can guide mutual learning and continuity-of-care reforms.

Prof Dr Guido Offermanns presented '*Analysis of multidisciplinary tumor boards (MDTs) in Austria: Are there differences in the quality of presented patient information within the same organizational setting?*'. His study assessed variation in the quality of patient information presented in MDTs within a major Austrian academic hospital. Despite MDTs being considered the gold standard in oncology, significant disparities were found in information completeness and consistency. Lower-quality information was associated with treatment delays and repeated case discussions. The research combined systematic review, interviews and survey data from 72 respondents across seven MDTs. Recommendations included standardised presentation checklists, digital tools, clearer role allocation, communication training and performance monitoring using quality indicators. The study underlined the need for continuous evaluation to ensure MDT effectiveness and consistency.

Take-home messages

- Health system reform requires integrated governance that connects regional cooperation, cross-sector policy alignment and strong organisational management capacity.
- Harmonised, structured processes—such as medication review and multidisciplinary decision-making—improve safety, equity and quality when supported by training, data integration and clear accountability.
- Innovation must be governed as a reflective, context-sensitive and strategic process, aligned with organisational identity and capable of discontinuing ineffective practices.
- Delayed hospital discharges are indicators of systemic coordination gaps; effective reform requires clear responsibilities, community capacity and carefully designed incentives.
- Implementation capacity, evaluation mechanisms and reduced politicisation are essential to translate policy frameworks into sustainable, patient-centred outcomes.

Abstract session – Telehealth and digital care

Speakers: **Ms Ana Isabel Santos**, ULS São José, Portugal; **Ms Sofia Di Pippo**, Università Cattolica del Sacro Cuore, Italy; **Prof Immanuel Azaad Moonesar**, Mohammed Bin Rashid School of Government, United Arab Emirates; **Mr Filip Dumez**, AZ Sint Blasius, Belgium; **Mr Luuk Baltissen**, Tilburg University, The Netherlands

Facilitator: **Prof Olivier Grimaud, MD**, Professor, École des hautes études en santé publique (EHESP), France

Session summary

The session explored how digital solutions are reshaping healthcare delivery, highlighting innovative telemonitoring systems, telehealth policy frameworks and the organisational transformations required for long-term integration. Across diverse national contexts, speakers examined how digital tools can improve efficiency, patient engagement and chronic care management, while also exposing structural, cultural and regulatory barriers that limit adoption and scale.

Ms Ana Isabel Santos presented '*Atento – Telehealth Centre of ULS São José*'. She described a telehealth centre model that integrates clinical expertise with advanced digital infrastructure to monitor chronic diseases and anticipate risks through algorithm-based systems. The centre combines physicians, nurses, administrative and IT professionals to deliver teleconsultations, remote patient monitoring, rehabilitation and self-assessment tools. Certified as a medical device, the system ensures regulatory compliance while supporting personalised care pathways. A structured prescription process identifies patients' technical and clinical needs at enrolment. Institutional branding contributes to patient engagement and belonging. Reported outcomes include reductions in hospital admissions, emergency visits and length of stay. The first year focused on infrastructure, system integration and multidisciplinary involvement. The main challenge now lies in increasing referrals and achieving sustainable scale.

Ms Sofia Di Pippo presented '*Organisational changes in an Italian paediatric center: the role of telemedicine*'. Her research at Meyer Paediatric Hospital in Florence examined healthcare professionals' propensity to use telemedicine. Although telemedicine had been adopted before COVID-19 and demonstrated safety and cost-effectiveness, the pandemic accelerated uptake and exposed gaps in digital literacy. A survey of 51 professionals showed that in-person care remains dominant. Telemedicine use was strongly associated with perceived usefulness and individual attitudes rather than patient-related factors. While familiarity with basic digital tools was adequate, gaps emerged in advanced systems and clinical data management. The study highlights the importance of digital confidence and professional attitudes in shaping adoption, while acknowledging limitations due to its single-site, small-sample design.

Prof Immanuel Azaad Moonesar presented '*Digital divides and digital bridges: a comparative analysis of telehealth policy implementation in the UAE and France (2021–2022)*'. He compared telehealth implementation in two contrasting systems. In the UAE, where most clinics are privately operated and expatriates comprise 88.5% of the population, a national health information exchange enables unified patient records and supports AI integration. Teleconsultations are reimbursed but at lower rates than in-person visits. Key challenges include privacy concerns, provider resistance and digital literacy gaps. France, by contrast, demonstrates stronger primary care integration, supported by structured reimbursement policies. The comparison underscores the importance of policy design, reimbursement frameworks and contextual factors in shaping telehealth success.

Mr Filip Dumez presented '*Challenges in implementation of telemonitoring and how to overcome them*'. He outlined practical barriers to remote patient monitoring (RPM), including interoperability, authorisation processes, dashboard usability, legislative constraints (including GDPR), reimbursement limitations and digital literacy disparities. A central monitoring unit staffed by dedicated professionals was proposed to ensure coordinated

oversight. Successful RPM requires careful patient selection, co-design with users, alignment with existing care pathways and structured change management strategies. Collaboration with partners and a strong focus on health equity are essential. Although patients may incur costs, RPM can enable earlier discharge, as illustrated in large bowel surgery use cases.

Mr Luuk Baltissen presented *'Two is a pair, three is a crowd – Reviewing the three sides of XR-tele-rehabilitation adoption'*. Focusing on rehabilitation, where digital uptake remains below 5%, he analysed adoption barriers across clinicians, developers and patients. Misaligned incentives hinder progress: patients prioritise comfort and usability, clinicians require strong medical evidence, and developers face financial and regulatory constraints. Current models largely operate business-to-business, limiting patient-driven demand. The presentation highlighted the need for integrated perspectives that address technical performance, clinical validation and sustainable business models simultaneously.

The panel discussion reinforced that digital tools can enhance monitoring, efficiency and patient engagement, supporting autonomy and reducing unnecessary travel. Suggested performance indicators included alarm frequency, patient numbers, clinical outcomes and cost savings. While patient satisfaction is generally positive, adoption remains uneven. Education, training and supportive organisational cultures are critical to overcoming resistance. The objective is not to redefine care, but to deliver it more efficiently and equitably in the face of workforce shortages and rising demand. Digital solutions were ultimately framed as essential components of future health system resilience.

Take-home messages

- Digital transformation requires not only technological infrastructure but also organisational redesign, professional digital literacy and sustained referral pathways to achieve scale and long-term impact.
- Reimbursement models, regulatory clarity and national information infrastructures are structural levers that determine whether telehealth remains peripheral or becomes embedded in routine care.
- Successful telemonitoring depends on structured implementation strategies, co-design with patients, interoperability and change management that integrates digital tools into existing care pathways.
- Professional attitudes and perceived usefulness are stronger drivers of telemedicine adoption than clinical evidence alone, highlighting the importance of education, training and cultural change.
- Emerging technologies such as XR-tele-rehabilitation will remain underutilised unless stakeholder incentives are aligned, clinical validation is strengthened and sustainable business models are developed.

Abstract session – Enhancing care continuity and coordination: strategies for integrated and patient-centred healthcare

Speakers: **Dr Éidín Ní Shé**, Graduate School of HealthCare Management, RCSI, Ireland; **Mr Olman Elizondo**, AQUAS – Agency for Health Quality and Assessment of Catalonia, Spain; **Mr Franco Amigo**, Duke University School of Medicine, USA; **Dr Nathan Ramos**, École des Hautes Études en Santé Publique (EHESP), France; **Ms Anu Vehkamäki**, Aalto University School of Science, Finland

Facilitator: **Prof Viviana Mangiaterra**, Professor, Cergas SDA Bocconi, Bocconi University, Italy

Session summary

The session explored innovative strategies to strengthen care continuity and coordination across healthcare systems. With a focus on integrated, interprofessional and patient-centred models, the discussion brought together diverse perspectives on how collaborative approaches can enhance service delivery, improve patient outcomes and support more resilient and efficient health systems. Across presentations, a recurring theme was the need to break silos, align incentives and redesign organisational structures to meet increasingly complex and long-term care needs.

Dr Éidín Ní Shé presented '*Interprofessional collaboration amongst interdisciplinary integrated community care teams of older people – testing programme theories of what works*'. Her research, conducted within Ireland's Enhanced Community Care programme and aligned with the WHO ICOPE framework, examined what enables effective interprofessional collaboration (IPC) in integrated care teams for older adults. She highlighted persistent barriers, including differences in professional training, values and care approaches, alongside hierarchies, power dynamics and hybrid working models. Effective collaboration, she argued, requires continuous "teaming" rather than static team structures. Community specialist teams in Ireland conduct comprehensive geriatric assessments and provide multidisciplinary support for up to six weeks, enabling older people with complex needs to remain at home. Through a realist review and stakeholder engagement, seven refined programme theories were developed. Key enabling factors operate at multiple levels: leadership and professional development (macro), strong internal networks (meso), and psychological safety, role clarity and engagement (micro). Future work includes testing interventions such as serious games and developing an IPC measurement toolkit using the ECLECTIC Framework.

Mr Olman Elizondo presented '*Systemic implementation of Harmonics high-value integrated stroke care: analysis from Catalonia and Portugal*'. Addressing stroke as a major EU health burden, the Harmonics initiative seeks to implement a harmonised, value-based stroke care model. It responds to unmet needs such as fragmented communication, misaligned incentives, inconsistent data systems and burnout. The project introduces integrated care pathways, interoperable digital tools, shared KPIs and dedicated stroke case managers. A maturity readiness framework assesses scalability and adoption potential. Implementation in Catalonia and Portugal demonstrated the importance of aligning reforms with regional strategies and preparing for institutional heterogeneity. Outcomes include clinical improvements, harmonised interventions and economic evaluations. The project emphasises that systemic transformation requires implementation science, strong stakeholder engagement and public and patient involvement to achieve sustainable, value-based reform.

Mr Franco Amigo presented '*Clinical coordination between care levels and influencing factors: an exploratory analysis in 41 areas in Catalonia, Spain*'. The study analysed coordination between primary and specialised care within Catalonia's public system using survey data from 2,277 physicians. Clinical coordination was conceptualised as both information coordination and management coordination. Findings showed that organisational support significantly strengthens information transfer and treatment alignment. Inter-professional familiarity across care levels was associated with improved joint planning, particularly for complex

patients. Shared electronic medical records and virtual consultations facilitated smoother coordination. The research concludes that strengthening organisational backing and fostering professional relationships are essential levers for improving integrated care performance.

Dr Nathan Ramos presented *'Coordinating healthcare pathways: sociology of collective action in the field of physical activity for health'*. His research examined France's "Maison de sport-santé" as a coordination mechanism within public health policy. Using longitudinal qualitative methods across six sites, the study identified significant coordination challenges rooted in professional resistance, divergent interpretations of physical activity for health and territorial inequalities. Institutional support and financial sustainability were crucial determinants of success. Existing coordination structures could either support or hinder implementation. The findings highlight the importance of understanding local political and institutional ecosystems to enable effective, context-sensitive integration of preventive and therapeutic pathways.

Dr Märt Vesinurm presented *'Patient journey disruptions as an approach to manage complex healthcare operations'*. His work explored how analysing disruptions in patient journeys can provide operational insights into system inefficiencies and coordination failures. By mapping bottlenecks and breakdowns in care transitions, the study demonstrated how operational analytics can inform redesign strategies that improve flow, reduce delays and enhance system responsiveness. Viewing disruptions as diagnostic tools rather than isolated failures offers a new lens for managing complexity in healthcare operations.

Ms Anu Vehkamäki presented *'Continuity of care – How to go forward?'*. Her research focused on chronic patients within Finland's fragmented healthcare system. She examined relational, informational and management continuity, arguing that current measurement approaches rely too heavily on relational indices. Using qualitative datasets from public and private healthcare contexts, the study identified two key themes: system architecture (clear roles, communication protocols, remote care support) and care process management (patient self-management and continuous information use). Although Finland has extensive health data infrastructure, it is not fully leveraged to support continuity. The research calls for balancing relational strategies with codification strategies, strengthening data integration and validating continuity models across diverse contexts.

Take-home messages

- Breaking silos requires more than structural reform; it demands cultural change, shared accountability and deliberate investment in interprofessional competencies across macro, meso and micro levels.
- Integrated care models such as Harmonics demonstrate that scalable transformation depends on aligning clinical, economic and experiential value through shared metrics, interoperable systems and strong implementation governance.
- Organisational support, professional trust and digital coordination tools are decisive enablers of seamless care across primary and specialised services.
- Coordination initiatives must be context-sensitive: local power dynamics, professional identities and territorial inequalities strongly shape implementation outcomes.
- Strengthening continuity of care requires balancing long-term patient-provider relationships with systematic data use, operational redesign and clearer system architecture to support chronic care pathways in fragmented systems.

Abstract session – Healthcare financing, spending and market dynamics

Speakers: **Prof Mesut Çimen**, Acıbadem Mehmet Ali Aydınlar University, Turkey; **Prof Yusuf Çelik**, Acıbadem Mehmet Ali Aydınlar University, Turkey; **Dr Gregory Orewa**, University of Texas at San Antonio, USA; **Dr Riina Hiltunen**, Kela; University of Turku, Finland; **Prof Jiajia Li**, Shandong University, China; **Prof Dr Dr Wilfried von Eiff**, Center for Hospital Management (University of Muenster), Germany

Facilitator: **Dr Guido Noto**, Assistant Professor, CREMS – University of Messina, Italy

Session summary

This session examined how financing models, ownership structures, transparency mechanisms and regulatory decisions shape healthcare system performance, efficiency and equity. Across diverse national contexts, the presentations demonstrated that spending levels alone do not determine outcomes; rather, the design of financing arrangements, governance frameworks and incentive structures profoundly influences sustainability, quality of care and financial protection. Together, the studies provided evidence to inform more value-based and equitable healthcare financing strategies.

Prof Yusuf Çelik and **Prof Mesut Çimen** presented '*Performance evaluation of health spending models based on infant mortality and life expectancy during the 1980–2022 period: multidimensional scaling and cluster analyses for Türkiye and OECD countries*'. He analysed the relationship between financing mechanisms and health outcomes, comparing Bismarck-type, government-mandated and out-of-pocket-dominated systems across OECD countries. Using multidimensional scaling and cluster analysis, countries were grouped into high-, medium- and low-performing clusters based on life expectancy and infant mortality. Government-mandated systems generally performed better than those relying heavily on out-of-pocket payments. Türkiye, structurally aligned with government-mandated systems such as Poland and Estonia, nevertheless underperformed in outcome indicators. This gap suggests that governance quality, resource allocation efficiency and infrastructure use are as important as overall spending levels. The findings underline that equity and efficiency in allocation are critical determinants of health system performance.

Dr Gregory Orewa presented '*Profit over care: a systematic review of private equity's impact on U.S. nursing homes*'. Drawing on agency theory and the Donabedian model, he examined how private equity ownership affects care quality, workforce conditions and financial outcomes. The review found that staffing hours for Certified Nurse Assistants and Licensed Practical Nurses often declined following acquisition, while Registered Nurse hours showed only modest increases. Care quality indicators worsened, including higher mortality, hospitalisations and regulatory citations, although some process indicators improved. Financial gains were inconsistent over the long term. The study highlighted the need for stronger regulatory oversight, minimum staffing requirements, greater ownership transparency and reimbursement mechanisms linked to staffing quality. While private equity may bring capital and restructuring capacity, safeguarding resident welfare requires robust governance and long-term accountability.

Dr Riina Hiltunen presented '*Does price disclosure lower prices in private MRI?*', analysing two regional price transparency initiatives in Finland. Using national insurance claims data and a difference-in-differences approach, she found that the 2012 disclosure had no measurable price effect, largely due to insufficient detail. In contrast, the 2015 initiative generated a short-term average price reduction of 5.2%, with longer-term market savings of approximately 10.6% when patient switching behaviour was considered. Price disclosure was most effective in concentrated markets and for standardised services such as MRI scans. The study demonstrated that transparency tools can reduce information asymmetries and stimulate competition, but their effectiveness depends heavily on design features and market structure. External validity remains limited, particularly for less standardised services.

Prof. Jiajia Li presented *'Can supplementary private health insurance reduce vulnerability to expected poverty and catastrophic health expenditure?'*, focusing on China's inclusive Supplementary Private Health Insurance scheme introduced in 2020. Complementing the public three-tier system, the scheme covers co-payments and excluded services at relatively low cost. Using survey data from Shandong Province, the study found that enrolment significantly reduced the probability of catastrophic health expenditure and vulnerability to poverty. Effects were particularly strong among older adults, urban residents and those without chronic illness. Despite positive impacts, enrolment remains relatively low. The findings suggest that well-designed supplementary insurance can strengthen financial protection and advance equity, particularly in middle-income settings, provided that coverage reaches vulnerable populations.

Prof Dr Dr Wilfred von Eiff presented *'Does banning Latex from surgery improve patient care and productivity? The insight into the Iceberg makes hidden costs and benefits visible'*. He examined the clinical, economic and regulatory implications of transitioning to latex-free surgical environments. Latex allergy affects a significant share of healthcare workers and patients, contributing to peri-operative complications. Although latex-free alternatives appear more costly initially, incorporating hidden costs such as allergic reactions, staff absenteeism and longer hospital stays significantly narrows the cost gap. Evidence from U.S. states implementing latex bans indicates substantial reductions in allergic symptoms and antibody prevalence. The analysis demonstrates that regulatory decisions addressing safety risks can improve productivity and outcomes with only marginal net cost differences when full economic effects are considered.

Take-home messages

- Financing design matters as much as funding volume: government-mandated public financing models generally achieve stronger population health outcomes, but efficiency and governance determine whether investment translates into results.
- Ownership structures influence care quality: private equity can introduce capital and restructuring capacity, yet without strong oversight it may compromise staffing levels, quality and long-term sustainability.
- Transparency is powerful but conditional: price disclosure can reduce costs in standardised and competitive markets, yet its effectiveness depends on detailed design, data clarity and patient responsiveness.
- Supplementary insurance schemes can strengthen financial protection: when well regulated and accessible, they reduce catastrophic expenditure and poverty risk, particularly in systems with persistent out-of-pocket burdens.
- Regulatory and procurement choices affect both safety and productivity: evaluating hidden costs alongside direct expenditures reveals that quality-enhancing reforms, such as latex bans, can be economically justified as well as clinically beneficial.

Abstract session – Sustainability and green healthcare

Speakers: **Natalia Allué, MD**, Fundació Sanitària Mollet, Spain; **Dr Cheryl Chong Zhiya**, National University Health System, Singapore; **Prof Pamela Mazzocato**, Karolinska Institutet, Sweden; **Prof Aline Corvol**, University of Rennes, France; **Dr Selien Vancaillie**, Ghent University, Belgium

Facilitator: **Prof Federico Lega**, Full Professor in Healthcare Management, University of Milan, Italy

Session summary

As healthcare systems face mounting pressure to reduce their environmental footprint, the need for sustainable and climate-resilient solutions has become increasingly urgent. Globally, healthcare accounts for nearly 5% of total CO₂ emissions, comparable to some of the world's most polluting countries. This session brought together diverse institutional experiences and research to examine how health organisations can lead climate action while maintaining high-quality care. It aimed to provide practical and strategic insights for health managers seeking to address climate change and its consequences.

Natalia Allué, MD presented '*Improving sustainability from hospital processes: green hospital, green healthcare*'. She shared a comprehensive case study from Fundació Sanitària Mollet in Catalonia, Spain, designed as a green hospital since its establishment in 2010 with support from the Catalan Government. Sustainability was embedded into infrastructure, processes, governance and organisational culture. Architectural innovations such as light wells, radiant ceilings, rainwater harvesting systems and 100% certified renewable energy (including geothermal and solar power) significantly reduced environmental impact. Process redesign reduced unnecessary hospital stays, each generating approximately 7 kg of solid waste per day. Home-based care and fast-track surgery were promoted to cut patient transport emissions, which account for 7% of total hospital CO₂ output. Digital tools such as virtual visits and remote rehabilitation reduced travel and improved efficiency. Pharmaceutical waste decreased by 29% through semi-automated medicine cabinets, and anaesthetic gas capture systems reduced emissions. Governance and culture were central: 49% of staff actively participated in sustainability initiatives and 44% received training on climate-related health impacts. Over 14 years, the hospital achieved a 92% reduction in direct CO₂ emissions (with the remainder offset), a 26% decrease in electricity consumption and a 36% reduction in water use, positioning itself as a Net Zero institution.

Dr Cheryl Chong Zhiya presented '*Sustainability in healthcare institutions: managerial implications*'. Based on a systematic review of 36 studies, she identified three core domains for sustainability action: energy efficiency and renewable energy adoption, waste reduction and management, and green procurement. Interventions such as reducing desflurane use, upgrading electrical systems and improving waste segregation were highlighted as high-impact strategies. Sustainable procurement, including biodegradable materials and recyclable supplies, was presented as foundational. From a managerial perspective, strong leadership is essential to embed environmental goals into strategy and decision-making. Dedicated teams should monitor performance using measurable indicators and share benchmarks across institutions. Collaboration between hospitals accelerates learning and scalability. The presentation emphasised that sustainability must be integrated into strategic planning, supported by staff training, data-driven monitoring and continuous evaluation, including assessment of return on investment.

Prof Pamela Mazzocato presented '*Top managers' uncertainty on how to navigate climate goals and actions in health care – a qualitative study in a Swedish hospital*'. Through 15 interviews with senior managers, the study examined how climate goals are interpreted and operationalised. Despite global targets, local translation into actionable objectives remains limited. Managers experienced "choice uncertainty" (what to prioritise) and "outcome uncertainty" (how effective actions will be), often leading to focus on limited "low-hanging fruit" rather than systemic change. The research described a virtuous cycle of climate action, where goals are clear, aligned and supported, contrasted with a vicious cycle of inaction when goals appear abstract or peripheral. Integration

of climate objectives with core priorities such as patient outcomes, cost control and workforce wellbeing was identified as essential. The study stressed the need for stronger managerial capabilities, cross-sector reflection and regional monitoring systems to measure and coordinate emissions reduction efforts.

Prof Aline Corvol presented *'How to reduce low value care? The pragmatic "Choosing Wisely" approach of the French Geriatric Society'*. The initiative promotes appropriateness as a driver of care quality, aiming to reduce unnecessary interventions. Based on a bottom-up, clinician-led approach, it involves professionals and patient representatives in shared decision-making. Five key recommendations address overuse of antipsychotics, benzodiazepines, proton pump inhibitors and unnecessary urinalyses. The initiative has expanded across nine regions, engaging over 200 facilities and 430 services, including 35% of French long-term care units. A structured toolbox of algorithms, educational materials, audits and e-learning supports implementation. The programme demonstrates how reducing low-value care contributes simultaneously to quality improvement and environmental sustainability by limiting unnecessary resource use.

Dr Selien Vancaillie presented *'Exploring the role of temporal structures in experiences of chronically ill patients and their relatives'*. Her qualitative study examined how institutional time structures shape patient and caregiver experiences. Patients navigate multiple overlapping temporal demands imposed by healthcare institutions, workplaces and family life. Conflicts between institutional schedules and personal rhythms create stress and reduce perceived autonomy. The concept of "temporal schemata" was introduced to describe how individuals interpret and adapt to institutional time. The study called for more flexible and patient-centred scheduling systems and highlighted time as both a logistical and experiential dimension of care. Recognising temporal dynamics can improve responsiveness, patient experience and organisational design.

The session concluded that climate resilience and sustainability in healthcare require systemic transformation rather than isolated initiatives. Architectural redesign, process optimisation, reduction of low-value care, managerial capability development and attention to patient-centred organisational structures all contribute to lowering environmental impact while preserving care quality. Sustainable healthcare demands alignment between strategic leadership, staff engagement, governance frameworks and cross-sector collaboration.

Take-home messages

- Healthcare sustainability requires systemic transformation across infrastructure, clinical processes, procurement and governance, not isolated green initiatives.
- Strong leadership and managerial clarity are essential to translate abstract climate goals into measurable, aligned and actionable strategies at hospital level.
- Reducing low-value care improves quality and simultaneously lowers environmental and resource burdens, linking appropriateness with sustainability.
- Collaboration, benchmarking and data-driven monitoring across institutions accelerate learning and scalability of climate-resilient practices.
- Sustainability must be integrated with patient-centred design, workforce wellbeing and operational efficiency to ensure long-term, equitable and high-quality care delivery.

Abstract session – Professional roles: leadership and hybrid profiles

Speakers: **Dr Tina Kowalski**, University of York, United Kingdom; **Dr Beatriz Seco**, Escola Nacional de Saúde Pública, Portugal; **Dr David Piney**, CH de Luneville & Conférence nationale des Présidents de CME des Centres Hospitaliers, France; **Dr Francesca De Domenico**, University of Messina, Italy; **Dr Elena Maggioni**, Sant’Anna School of Advanced Studies, Italy

Facilitator: **Dr Monica Georgiana Brînzac**, Babeş-Bolyai University & European Public Health Association (EUPHA), Romania

Session summary

Across Europe, healthcare systems are under growing strain from ageing populations, rising care complexity and the lasting effects of the COVID-19 pandemic. In this evolving landscape, traditional professional roles are being reshaped. This session focused on the transformation of healthcare leadership and the rise of hybrid professional identities that combine clinical, managerial and strategic responsibilities. The presentations explored how leadership capacity is embedded within organisational structures and institutional frameworks, and how new competencies are required to navigate hybrid roles. By highlighting tensions between clinical and managerial logics, the session called for more intentional career support, targeted training and competency-based frameworks. Investing in the evolving nature of healthcare leadership was presented as a central lever for sustainable system transformation.

Dr Tina Kowalski and **Dr Rooss Golstine** presented *‘Exploring management capacity and capability in the NHS: Implications for policy and practice’*. Their study, part of a wider programme of work, examines current management capacity within NHS Trusts in England. Despite persistent negative narratives portraying NHS managers as ineffective, evidence shows that they are fewer in proportion than in other UK sectors (2% versus 9.5%) and contribute positively to organisational performance and innovation. The research addresses four objectives: assessing existing management capacity, evaluating its adequacy for future demands, examining managers’ ability to drive innovation and identifying factors that could strengthen managerial capability. The methodology combines national-level analysis using Care Quality Commission and performance data with seven in-depth case studies across acute, mental health and ambulance trusts. Both external pressures, such as regulation and financial constraints, and internal factors, including leadership styles and administrative tools, were analysed. Early findings highlight variation across institutions and the importance of aligning capacity, innovation and stakeholder engagement to meet system demands.

Dr Beatriz Séco presented the *‘European Health Management Survey (Portugal)’*. The survey aims to strengthen the professionalisation of healthcare management across Europe by mapping leadership roles, educational backgrounds and training pathways. Through literature review and expert workshops, the study developed a pragmatic framework outlining core competencies and career trajectories. Findings show a relationship between hospital size and manager age, with smaller hospitals often led by younger professionals. Thirty percent of respondents had more than eight years of management experience, and 43% had undertaken executive training within the previous two years. The research highlights significant diversity in leadership models across Europe and advocates for adaptable career frameworks rather than a single uniform model. The objective is to provide structure for progression while respecting national contexts.

Dr David Piney presented *‘Strategic management of career transitions for presidents of medical commissions in French healthcare institutions’*. The study investigates career trajectories of Presidents of Medical Commissions (PCMEs) in French public hospitals, who serve four- to eight-year mandates representing medical communities and shaping hospital strategy alongside chief executive officers. Using mixed methods and surveying 262 PCMEs, the study found that leadership roles significantly affect clinical practice: 31% reported fully stepping away from clinical work and 46% partially. However, only half felt prepared to return fully to clinical practice after their

mandate. Seventy-five percent indicated insufficient information about career progression options. An action plan is being implemented, including training for advisory roles, networking opportunities, a national managerial passport recognising leadership experience, an online support platform and clearer accreditation mechanisms. The study aims to formalise recognition and create structured pathways for medical governance leadership.

Dr Francesca De Domenico presented *'Understanding the process underlying managerial career intentions: hybrid professionals and their managerial roles'*. Conducted with colleagues from the economics department at the University of Messina, the study examines psychological determinants influencing clinicians' intentions to pursue managerial careers. Many medical professionals fear that managerial responsibilities may threaten their clinical identity. Using survey data from 145 medical students, the research explored links between personality traits and managerial aspirations. Negative affectivity, including tendencies towards sadness or irritability, was associated with stronger managerial intentions, potentially reflecting motivation to improve organisational conditions. Although limited to students, the findings highlight the complex emotional and motivational drivers behind hybrid career choices and call for further research involving practising professionals.

Dr Elena Maggioni presented *'Designing and delivering managerial training for the turnaround of a National Health System – lessons from the Romanian NHS'*. Combining literature review with stakeholder interviews and surveys among hospital staff and middle managers, the study developed a general framework for effective managerial training. It distinguishes between knowledge acquisition, practical know-how and self-management competencies, all essential for transformational leadership. Critical success factors include selecting motivated participants, ensuring trainer credibility, aligning content with real-world challenges and securing accreditation to provide formal recognition. Understanding contextual governance structures, mapping stakeholders and benchmarking internationally are also key. The research emphasises that legitimacy, certification and visible recognition strengthen professional engagement and long-term impact.

The session concluded with strong consensus on the urgency of supporting hybrid leadership across Europe. Clinical professionals are increasingly assuming managerial and strategic roles but face fragmented career pathways, limited recognition and identity tensions. Structural, institutional and psychological factors shape both capacity and willingness to embrace hybrid roles. Formal recognition of leadership experience, structured progression frameworks and context-sensitive training programmes were identified as essential. Hybrid professionals were framed not as exceptions but as necessary actors in navigating complex health systems. Investing in their development is critical to building resilient, responsive and equitable healthcare systems.

Take-home messages

- Hybrid professionals who combine clinical expertise with managerial competence are becoming central actors in health system governance and transformation.
- Clear career pathways, formal recognition and structured accreditation are essential to legitimise hybrid roles and retain leadership talent within healthcare systems.
- Leadership development must integrate practical management skills, strategic thinking, emotional intelligence and self-management to support sustainable career transitions.
- Organisational context, governance structures and institutional culture significantly influence managerial capacity and the success of hybrid roles.
- Supporting hybrid leadership is not optional but strategic: it is fundamental to strengthening innovation, accountability and resilience in European healthcare systems.

Abstract session – Fostering strong leadership: transforming education, organisation, and networks

Speakers: **Dr Daniel West**, Commission on Accreditation of Healthcare Management Education (CAHME), University of Scranton, USA; **Dr Ahmet Yesildag**, Karadeniz Technical University, Turkey; **Prof Lucia Ferrara**, Cergas SDA Bocconi, Bocconi University, Italy; **Prof Federica Morandi**, Università Cattolica del Sacro Cuore, Italy; **Dr Dorine van Staalduinen**, Santeon; Martini Hospital, The Netherlands; **Dr Yoel Angel**, Tel Aviv Sourasky Medical Center – Ichilov; Tel Aviv University; Israel

Facilitator: **Prof Wilma van der Scheer**, Professor, Erasmus University Rotterdam & Erasmus Centre for Healthcare Management, The Netherlands

Session summary

The session outlined how education, organisational design, behavioural leadership and professional networks collectively shape the development of resilient, future-ready healthcare leaders. Across diverse national contexts, the presentations explored how leadership capacity is built, formalised and sustained through accreditation systems, behavioural models, organisational transformation processes and structured career pathways. Together, they highlighted the need to professionalise healthcare leadership while recognising the cultural, institutional and individual factors that influence its effectiveness.

Dr Daniel West presented *'Benchmarking for success: transforming accreditation in graduate healthcare management education to ensure well-prepared future leaders'*. The presentation examined how accreditation can move beyond curriculum review to focus on measurable outcomes, including competency attainment, employment rates and career progression. The Commission on Accreditation of Healthcare Management Education (CAHME) currently accredits 76 programmes, with additional institutions undergoing review. Accredited programmes submit annual datasets covering tuition costs, acceptance rates, graduate salaries, employment outcomes and satisfaction indicators. Benchmarking tools enable institutions to compare performance across key metrics and identify areas for improvement. This data-driven approach supports transparency, return-on-investment discussions and continuous quality improvement, strengthening the preparation of future healthcare leaders through measurable standards.

Dr Ahmet Yesildag presented *'Assessment of the relationships between r.i.g.h.t. leader behaviour, organisational silence, work engagement, and extra role behaviours in hospitals'*. Drawing on Turkey's resource-constrained health system, the study explored how leadership behaviours influence staff engagement and discretionary performance. Using the "Right Leadership" framework – recognition, involvement, growth and development, health and safety, and teamwork – the research validated the scale in the Turkish context with over 300 respondents. Findings showed that leadership behaviours reduce organisational silence and increase work engagement, which in turn enhance extra-role behaviours. Leadership did not directly drive performance; its impact was mediated through employee engagement and psychological climate. The study emphasises that supportive, inclusive leadership fosters stronger commitment and improved performance in pressured healthcare environments.

Prof Lucia Ferrara presented *'Navigating healthcare transformation: leadership and change management in Italy's National Health Service'*. The case study examined the Local Health Authority of Ferrara amid digitalisation, institutional mergers and community care restructuring funded by Next Generation EU resources. Through analysis of over 60 documents and 50 stakeholder interviews, the research highlighted how integrated leadership, weekly cross-team coordination and clear strategic communication supported transformation. Strong top-level leadership was essential in aligning stakeholders and sustaining momentum, yet ongoing uncertainty regarding formal institutional merger approval poses risks to long-term stability. The case

demonstrates the importance of blending structured governance with staff engagement to maintain coherence during complex reforms.

Prof Federica Morandi presented *'Exploring micro-foundation within professional network: evidence from healthcare CEOs in Italy'*. The study investigated why certain hospital chief executive officers occupy central positions in informal professional networks. Based on interviews with ten Italian public hospital CEOs, the research identified four central actors distinguished by trust in networks, strong communication skills, crisis management capability and ongoing professional engagement, including teaching roles. These traits appear to reinforce network centrality and influence. Although limited in scale, the study highlights how individual behaviours and competencies shape informal leadership structures and coordination capacity within decentralised health systems.

Dr Dorine van Staalduinen presented *'Leadership teams in Condition-Based Organisations: generic profiles and job descriptions for the medical, nursing and operational leaders'*. Within the Dutch Linnean Initiative, over 50 hospitals collaborated to clarify leadership roles in patient-centred, condition-based units. The project developed detailed profiles for three core roles – medical leader, nursing leader and operational leader – defining responsibilities, behaviours and competencies. Together, these leaders form an integrated unit responsible for performance, quality improvement and resource coordination. The research underscores that clearly defined, standardised role descriptions support recruitment, professional development and multidisciplinary collaboration in value-based healthcare settings.

Dr Yoel Angel presented *'Subspecialty in medical administration as a scalable solution for management training of physicians'*. Israel has established a formal medical subspecialty in Medical Administration, mandatory for physicians seeking senior leadership roles. The programme requires completion of a base clinical speciality, a master's degree (MPH, MBA or MHA), and a two-year apprenticeship including cross-sector rotations, followed by written and oral examinations. Since 2013, certification numbers have increased steadily. While participation remains concentrated in metropolitan areas and certain specialities, the model demonstrates how structured, nationally regulated leadership training can institutionalise management competence among physicians and strengthen governance capacity.

Take-home messages

- Preparing future healthcare leaders requires measurable accreditation standards, benchmarking systems and outcome-based evaluation to ensure accountability and quality improvement in management education.
- Leadership behaviours that promote recognition, inclusion and psychological safety enhance staff engagement and reduce organisational silence, indirectly improving performance in strained systems.
- Successful healthcare transformation depends on coordinated governance structures, clear communication and sustained leadership alignment across organisational levels.
- Informal professional networks are shaped by individual trust, communication skills and behavioural competencies, reinforcing the importance of micro-level leadership traits.
- Clear role definitions and structured leadership pathways, including formal subspecialties in medical administration, strengthen national capacity and support sustainable system transformation.

Abstract session – Equity, diversity and inclusion

Speakers: **Prof Dr Stefanie Scholz**, SRH University of Applied Sciences, Germany; **Dr Alessandra Spedicato**, Anao Assomed; FEMS European Federation of salaried doctors, Italy; **Ms Esther Franquet Barnils**, Fundació Puigvert, Spain; **Prof Amanda Rodrigues Amorim Adegboye**, Coventry University, United Kingdom

Facilitator: **Prof Olivier Grimaud, MD**, Professor, École des hautes études en santé publique (EHESP), France

Session summary

The session explored how leadership, institutional policy, education, digital representation and organisational redesign intersect with equity, diversity and inclusion (EDI) in healthcare. Across diverse European contexts, the presentations examined structural inequities in visibility, career progression, care delivery and professional education. The session emphasised that advancing equity requires more than symbolic commitments: it demands proactive leadership, inclusive governance, participatory design and sustained institutional transformation to amplify underrepresented voices and address systemic barriers.

Prof Dr Stefanie Scholz presented '*Gender disparities in online visibility: Analysing the online representation of female leadership in the healthcare sector using AI-driven algorithms*'. The study examined whether female healthcare leaders are underrepresented and differently portrayed online. Using AI-driven algorithms, over 81,000 search results from Google and DuckDuckGo were analysed for gendered leadership terms and thematic differences. Male leadership terms appeared more than twice as often as female equivalents. Male leaders were primarily associated with credentials, policy influence and organisational impact, while female leaders were more frequently framed through age or gender, often portrayed as exceptions. Biased and negative language appeared more commonly in portrayals of women. Although limited to the German healthcare sector and online snippets, the findings reveal a significant digital visibility gap that may reinforce stereotypes and restrict role modelling for future generations. Strengthening equitable digital representation is therefore essential to reshape leadership narratives.

Dr Alessandra Spedicato presented '*Health management and women doctors to improve health for all*'. Drawing on survey and qualitative research in Italy, France, the Czech Republic and Croatia, the study explored women physicians' access to leadership roles and systemic barriers. Despite women now outnumbering men in medicine, they remain underrepresented in top management positions, particularly in Italy. While higher proportions of respondents in the Czech Republic and Croatia held leadership roles, many described these positions as isolating and difficult to reconcile with family responsibilities. Country-specific priorities varied, from structural reforms and pay equity to workplace wellness and professional networks. Across contexts, the need for structured leadership training, mentorship and institutional backing was clear. The presentation underscored that strengthening women's leadership is not only a matter of gender equity but also central to improving governance and health outcomes.

Ms Esther Franquet Barnils presented '*The rethinking of processes and structure for an inclusive care model: expectations of trans people*'. The presentation described an institutional transformation process at Fundació Puigvert in Spain to better support transgender individuals in assisted reproduction pathways. Through co-creation workshops and design thinking methodologies involving transgender focus groups, the organisation identified 14 improvement areas, prioritising nine for implementation. Key actions included revising language protocols, adapting clinical documentation systems beyond binary categories, creating shared decision-making tools, improving digital resources, enhancing privacy in facilities and providing professional training in inclusive communication. Structural barriers such as prejudice, binary-only systems and limited scientific data were acknowledged. The initiative demonstrates how inclusive redesign of processes, infrastructure and governance can improve patient experience and clinical outcomes while embedding ESG and value-based principles.

Prof Amanda Rodrigues Amorim Adegboye presented *'Enhancing diversity and inclusion in paramedic education: exploring educator and learner perspectives on asset-based initiatives'*. The study examined ethnic underrepresentation in UK paramedic education and profession, where only 3.6% of paramedics are from minority backgrounds. Using surveys, interviews, focus groups and workshops, the research explored the challenges faced by minority students, including cultural isolation, discrimination during placements and limited representation among staff. Rather than focusing on deficits, the project adopted an asset-based approach, recognising students' strengths and community resources. While awareness of this approach was low, most students and educators saw its potential to improve engagement and retention. However, rigid curricula, limited institutional support and lack of diversity among educators were significant barriers. The findings highlight that culturally responsive teaching and systemic commitment are necessary to translate inclusive intentions into sustainable practice.

In conclusion, the session demonstrated that equity, diversity and inclusion must be embedded across leadership structures, digital spaces, educational systems and care processes. Whether addressing gender visibility gaps, barriers to women's leadership, inclusive care for transgender patients or ethnic disparities in professional education, the studies converge on a shared insight: meaningful change requires structural redesign, participatory approaches and sustained institutional accountability. Leadership must be empathetic, data-informed and willing to confront systemic bias in order to foster more equitable and representative healthcare systems.

Take-home messages

- Enhancing women's leadership in healthcare requires structural reforms, mentorship, and leadership training to address underrepresentation and support career progression, while also improving organisational outcomes.
- Digital and media visibility of female leaders is critical for shaping perceptions, challenging stereotypes, and inspiring younger generations, emphasising the importance of equitable representation both online and offline.
- Ethnic minority and transgender individuals face systemic barriers in healthcare and education due to lack of representation, rigid systems, and insufficient cultural sensitivity.
- Inclusive, co-designed approaches like asset-based frameworks and design thinking can help identify gaps and develop solutions tailored to community needs.
- Institutional commitment, educator/professional training, and structural changes (e.g. non-binary forms, inclusive language, peer support) are essential to make inclusion sustainable and effective.

Abstract session – Innovation in healthcare operations and systems

Speakers: **Prof Stefano Villa**, Università Cattolica del Sacro Cuore, Italy; **Dr Mario Masiello**, Università Cattolica del Sacro Cuore, Italy; **Dr Allyson Hall**, University of Alabama at Birmingham, United States of America; **Dr Sara Melo**, Queen's University Belfast, United Kingdom; **Dr Rosa Vidal**, Catalan Hospital, Health and Social Services Association (La Unió), Spain; **Ms Monique van den Hoed**, Department of Health Services Research; Living Lab in Ageing and Long-Term Care, The Netherlands

Facilitator: **Prof Dr Mirella Minkman**, CEO, Chair of the Board of Directors, Vilans, The Netherlands

Session summary

Transforming healthcare operations and systems requires innovative and structured approaches to improve efficiency, quality and adaptability while responding to the growing complexity of patient needs. The session explored advancements in healthcare operations management (OM), organisational change, learning health systems, business intelligence, strategic foresight and innovation readiness across diverse contexts. A common thread across all contributions was the recognition that healthcare systems require strategic, consistent and context-sensitive management approaches to achieve their intended objectives and deliver sustainable value.

Prof Stefano Villa presented *'Foundations to frontiers: charting the evolution of healthcare operations management and the patient journey'*. Drawing on a bibliometric systematic literature review of the Web of Science Core Collection, the study analysed thematic trends, key authors and institutions in healthcare OM research over the past 30 years. Four phases of development were identified. In the 1990s, OM gained traction in response to resource scarcity, focusing on hospital bed shortages and emergency department congestion. In the 2000s, attention shifted towards planning and scheduling frameworks to optimise operating rooms and emergency departments. In the 2010s, more integrated and strategic approaches emerged, linking operational decisions to patient experience and system-wide efficiency. In the 2020s, OM research increasingly focused on clinical effectiveness, patient flow and quality of care. The thematic evolution moved from efficiency and waste elimination towards lean management and, more recently, patient-centred clinical pathways. The study emphasised that OM tools must be applied thoughtfully and tailored to specific problems. Emerging priorities include supporting multidisciplinary teams, embedding patient-centred design and managing resources across broader care networks beyond hospital walls.

Dr Mario Masiello presented *'Transforming relationships: how organisational change reshapes networks in healthcare'*. The study examined how major organisational change, specifically the introduction of clinical pathways in a cardiovascular department of an Italian teaching hospital, reshaped professional relationships. Using social network analysis and a survey of 67 participants six months after reorganisation, the research explored change-supportive behaviour and interprofessional ties. Findings showed that pre-existing advice ties played a crucial role in facilitating knowledge sharing and the development of new subject-matter expert connections during change processes. Individuals with stronger advice networks were better able to acquire complex skills and integrate new information. Conversely, lack of motivation to engage with change limited the formation of new ties, reflecting homophily dynamics. The study concluded that healthcare managers should actively assess existing professional networks and leverage them to enhance adaptability and resilience during organisational transformation.

Dr Allyson Hall presented *'Building learning health system capacity: leveraging lessons from an evaluation of a SEPSIS Clinical Decision Support Tool'*. The University of Alabama at Birmingham implemented Sepsis DART, a clinical decision support tool embedded in the electronic medical record to enable automated, real-time detection of sepsis and monitoring of treatment bundle compliance. Using an embedded mixed-methods design, the evaluation combined surveys, interviews, observation and electronic record data analysis. Qualitative findings identified challenges such as alert fatigue, compliance difficulties and emergency department

overcrowding. Quantitative analysis suggested that exposure to DART was associated with improved outcomes, including lower 30-day readmission rates. The study underscored the importance of learning health systems that integrate research and practice. Successful implementation of decision support tools requires sustained uptake, user feedback and long-term evaluation to ensure adaptability and effectiveness at scale.

Dr Sara Melo presented *'The design and implementation of a successful Business Intelligence system at a large teaching hospital'*. In a Portuguese teaching hospital, a Business Intelligence (BI) system was developed through collaboration between the hospital and a computer science department. Based on 45 interviews with clinical and non-clinical staff, the case study showed that a tailored, user-centred approach was essential. Indicators and functionalities were designed around users' actual needs, enabling real-time decision-making and continuous refinement through feedback. A dedicated BI department and the development of internal technical capabilities were critical to success. The study demonstrated that centralised coordination, customisation and collaboration are key to embedding BI systems into routine healthcare management.

Dr Rosa Vidal presented *'+FUTUR: a strategic foresight approach for sustainable and resilient health and social systems'*. Led by La Unió in Catalonia, the FUTUR 2024 foresight analysis addressed global pressures including population ageing, technological advances and resource constraints. Using trend and geo-humanist analysis, the framework identified four axes for transformation: limited resources, inequalities and vulnerabilities, understanding and reliability, and co-responsibility and new leadership. The strategy promotes sustainable financing, inclusive practices, trust-building, professional accountability and humanistic leadership. The foresight approach culminates in concrete action lines to support organisations in implementing forward-looking, inclusive and sustainable transformations aligned with evolving health and social care needs.

Dr Monique van den Hoed presented *'The Maastricht Innovation Readiness Approach (MIRA): development, validation and feasibility in long-term care organisations'*. The study addressed innovation readiness, defined as an organisation's capacity to implement innovations effectively. Using photocards and a Q-study methodology, participants identified four core dimensions: supportive management, participation of clients and employees, organisational conditions and decision-making structures, and clarity of roles and responsibilities. The MIRA tool, based on a concise questionnaire and followed by consensus meetings, provided actionable insights and fostered shared understanding across disciplines. Participants reported increased awareness of innovation readiness. Future developments include a web-based application, training programmes and longitudinal research to assess how innovation-ready organisations evolve, particularly in long-term care settings.

Take-home messages

- Innovation readiness depends on early preparation, strong leadership, cross-disciplinary engagement and a culture that supports learning and adaptation over time.
- Operations management has evolved from efficiency-driven tools to integrated, patient-centred system strategies that link logistics, clinical pathways and outcomes.
- User-centred digital solutions, such as Business Intelligence systems and clinical decision support tools, improve quality and decision-making when supported by sustained implementation and organisational alignment.
- Strategic foresight and structured readiness frameworks enable organisations to anticipate long-term pressures, balance limited resources and embed sustainability into transformation efforts.
- Managing change effectively requires understanding existing professional networks and social dynamics, ensuring that innovation is grounded in real organisational relationships and behaviours.

Abstract session – Innovations in cancer care

Speakers: **Prof Dr Yusuf Çelik**, Acibadem University, Turkey; **Ms Chloé Pierret**, École des Hautes Études en Santé Publique (EHESP), France; **Ms Alexis Strader**, European Health Management Association (EHMA), Belgium

Facilitator: **Ms Eleonora Varntoumian**, Policy Manager, European Health Management Association (EHMA), Belgium

Session summary

This session explored how predictive modelling, comorbidity management, and digital health interventions are reshaping the future of cancer care. With cancer incidence rising across Europe and complex patient needs becoming increasingly common, innovative research and technology-driven approaches are essential. The studies presented offer new ways to understand and respond to these challenges, from forecasting disease burden to supporting personalised prevention and long-term care. This dialogue brings together diverse disciplinary perspectives and methodologies to inspire reflection, spark discussion, and encourage cross-sector collaboration in advancing equitable, data-driven cancer strategies.

Prof Dr Yusuf Çelik presented *'Future projections of cancer burden in Europe: Insights from the Box-Jenkins Approach'*. He presented a study using ARIMA modelling to forecast the cancer burden across Europe up to 2050, offering vital insights for healthcare planning and policymaking. Drawing on data from the Global Burden of Disease (GBD) database, the research analysed cancer-related disability-adjusted life years (DALYs), a metric combining years of life lost due to premature death and years lived with disability, across all European countries between 1990 and 2021. The projections revealed significant disparities between countries. While some, such as Belgium, Austria, Ireland, and Switzerland, showed improving cancer outcomes, others, particularly Romania, Poland, Lithuania, and Hungary, faced a rising burden. These diverging trends reflect broader inequalities in prevention, screening, and access to treatment. The study underlined the urgency for Eastern and Southeastern European countries to invest in oncology capacity and early detection programmes. Prof Dr Çelik highlighted that the strength of ARIMA forecasting lies in its ability to support proactive, data-driven decision-making, helping governments allocate resources more effectively and equitably.

Ms Chloé Pierret presented *'Impact of cancer on multiple sclerosis-related healthcare and disease-modifying drug use: a multi-national cohort study'*. She presented a retrospective matched cohort study investigating the impact of cancer on healthcare use and treatment among people with multiple sclerosis (PwMS). Multiple sclerosis is a chronic autoimmune condition often diagnosed between the ages of 25 and 40 and typically treated with disease-modifying therapies (DMTs) to slow progression. The coexistence of MS and cancer presents unique challenges, particularly in managing ongoing MS care. The study explored whether a cancer diagnosis alters MS-related healthcare consumption and DMT use. Using data from British Columbia (1991–2020) and France's national health database (2009–2021), individuals with MS and cancer (alive at least two years post-diagnosis) were compared with matched MS patients without cancer. Matching criteria included age, sex, residence, index date, DMT use, and deprivation level. Outcomes analysed included neurologist visit rates, MS hospitalisation rates, and the proportion of DMT users. Mixed-effect models with piecewise linear splines were applied to evaluate pre- and post-cancer differences. Results showed no significant change in neurologist visits or hospitalisations following cancer diagnosis. However, there was a notable decline in DMT use, particularly in France. This reduction is likely due to shared decision-making between neurologists and patients rather than disengagement from care. The findings highlight the importance of coordinated and nuanced care planning for PwMS facing cancer.

Ms Alexis Strader presented *'Multimodal engagement and sustainable lifestyle interventions optimising breast cancer risk reduction supported by Artificial Intelligence (MELIORA)'*. She presented the MELIORA project, a four-year initiative focused on promoting sustainable lifestyle changes for breast cancer prevention, treatment, and

survivorship. With breast cancer cases projected to rise by over 40% by 2040, and 30% of cases linked to modifiable risk factors, the project addresses an urgent need for personalised and accessible health guidance. MELIORA targets three groups – women at risk, patients, and survivors – through a structured three-phase approach: knowledge acquisition, intervention development, and evaluation. Central to the intervention is an AI-powered Virtual Coach App, which supports users with tailored lifestyle recommendations, motivational guidance, food and alcohol tracking, and self-monitoring tools. The app's content is built on evidence-based guidelines and behaviour change techniques, offering structured learning paths that include videos, quizzes, and personalised goals. Designed with input from stakeholders and patients, the tool aims to increase physical activity, promote healthier diets, and reduce harmful behaviours such as alcohol use and sedentary time. Its long-term impact will be assessed at a six-month follow-up to evaluate the sustainability of behavioural change. MELIORA demonstrates how digital tools, co-designed with users, can provide scalable and personalised support for cancer prevention and improved quality of life for those affected by breast cancer.

This session underscored that addressing Europe's rising cancer burden requires an integrated approach combining predictive modelling, personalised care for patients with comorbidities, and scalable digital prevention tools. The studies presented highlight the need to invest in early detection, ensure continuity of care across conditions, and support behaviour change through user-centred digital health interventions.

Take-home messages

- Predictive modelling can guide proactive and equitable resource allocation to address the future cancer burden across Europe.
- A cancer diagnosis does not necessarily reduce access to neurological care for people with multiple sclerosis, but it may influence treatment decisions regarding disease-modifying therapies.
- AI-powered and digitally supported lifestyle interventions can enable sustainable behaviour change for breast cancer prevention and survivorship.

Abstract session – Health inequalities, systematic barriers and community-based solutions

Speakers: **Mr Addisu Alemayehu Gube**, University of Pècs, Hungary; **Annemarie Vos van't Riet**, Treant, the Netherlands; **Dr Nicola Spezia**, Sant'Anna School of advanced studies, Italy; **Dr Marius-Ionut Ungureanu, MD**, Babes-Bolyai University, Romania; **Dr Ian Yi Hang**, National university of Singapore

Facilitator: **Dr Silvia Gabriela Scîntee**, Deputy General Manager, National Institute of Health Services Management (INMSS), Romania

Session summary

This session explored the social, economic, and structural factors driving health disparities and influencing access to care in urban and rural settings. It highlighted how systemic barriers, workforce distribution, and inefficiencies in patient flow interact with social determinants such as education, income, and community cohesion to shape health outcomes. The session emphasised the value of community-based solutions, participatory initiatives, preventive programmes, and well-staffed services in reducing inequities, highlighting how strong local engagement, social networks, and targeted interventions improve service quality, build trust, and support resilient, inclusive, and effective healthcare systems.

Mr Addisu Alemayehu Gube presented *'Health inequities in the distribution of communicable and non-communicable diseases among adults in the city of Pècs, Hungary, 2024'*. The presentation explored how unjust and preventable differences in health outcomes persist despite being avoidable. Health inequalities undermine economic productivity, social cohesion, and welfare, costing the EU an estimated €980 billion annually. They are closely linked to social and economic conditions, with education, income, and housing shaping disease prevalence and life expectancy. The study used an ecological framework to analyse health inequalities across the entire population of Pècs, examining links between socio-demographic factors and disease prevalence using data from the National Health Insurance Fund and the Hungarian Central Statistical Office. Health inequities were assessed through basic measures (differences and ratios) as well as concentration indices and curves. Findings showed significant variations in educational attainment, employment, and housing across neighbourhoods, which correlate with higher rates of circulatory diseases, respiratory conditions, cancers, and neoplasms in disadvantaged areas. These patterns mirror broader European evidence, where low-income populations face greater exposure to risk factors such as smoking, poor diet, and inactivity, leading to higher mortality and morbidity. The study underlined that reducing health inequalities requires tailored, community-based interventions, including targeted healthcare funding, housing improvements, and employment programmes.

Ms Annemarie Vos van't Riet presented *'Why patients medically ready for discharge wait in hospital despite vacant spaces in rehabilitation care: a qualitative case study on artificial variability'*. The study examined artificial variability, an avoidable source of inefficiency in patient flow within Treant's network of hospitals and rehabilitation facilities in the Netherlands. Unlike natural variability, artificial variability does not add value and delays transfers to rehabilitation care. Reducing artificial variability can shorten patient waiting times and optimise the use of hospital and rehabilitation resources. The research employed a qualitative case study approach, collecting data from project documents, working and steering groups, and meetings with management teams and healthcare professionals. Findings were validated through focus groups involving stakeholders. The patient transfer process was mapped, and 33 factors of artificial variability were identified across different steps, including registration errors and suboptimal rehabilitation planning, which caused unnecessary delays or misallocation of beds. Recognising and addressing these factors enables targeted interventions to streamline patient flow.

Dr Nicola Spezia presented *'The impact of sense of community on perceived health service quality: rethinking the role of local communities in future rural health policy'*. Rural areas face significant public health challenges

due to low population density, limited infrastructure and services, migration, and ageing populations, which together create structural disadvantages and constrain health outcomes. The study emphasised the role of community engagement in addressing these challenges. A strong sense of community, defined as the feeling of belonging to a social group, promotes commitment, resilience, and more sustainable health behaviours, while also supporting financial and resource efficiency in health systems. The research combined a literature review with empirical analysis of citizen interactions with health services in rural areas, leading to the creation of a collective observatory on community engagement and health service evaluation. Findings indicate a clear link between stronger community bonds and improved perceived quality of health services, highlighting the importance of social resources in navigating public health demands and fostering trust in health policies.

Dr Marius-Ionut Ungureanu, MD presented '*How can community health worker availability affect marginalisation rates across Romania?*'. The Romanian health system faces structural challenges, particularly in rural areas, with health expenditures below the EU average and a decreasing number of health workers over the past two decades. These factors contribute to health inequalities and increased marginalisation. Using a prospective database, the study analysed inputs from community nurses, home care workers, and general practitioners, alongside social factors such as housing costs and local migration. Statistical models assessed relationships between healthcare staffing levels and marginalisation rates. Results indicate that higher numbers of general practitioners and community health workers are associated with lower marginalisation rates, while vacancies in these positions correspond to increases in marginalisation. The study highlights the critical role of adequately staffed health services in mitigating social and health inequalities in Romania.

Dr Ian Yi Hang presented '*Participation and perceptions of Healthier SG*'. Singapore, with a population of 6.04 million, a life expectancy of 83 years, and a median age of 42.8, is confronting challenges associated with an ageing population and declining birth rates. In response, the Ministry of Health launched Healthier SG in 2023 to strengthen preventive healthcare through consistent health screenings, vaccinations, and the promotion of healthy lifestyle behaviours. The programme is fully subsidised for citizens and permanent residents and includes financial incentives to encourage participation and enhance access to primary care services. A cross-sectional survey examined factors influencing participation in the programme. Adults aged 21 and above were recruited, with questionnaires distributed over a seven-month period to capture information on demographics, housing, income, and programme awareness. Among respondents aged 48 and older, only 8% were aware of the programme, while 56% reported understanding the services offered. Gender did not significantly influence participation, whereas private housing ownership and ethnic background were associated with higher enrolment. Vaccination coverage was generally high, with many respondents indicating they would have been vaccinated regardless of the programme. These findings underscore the need for targeted outreach and awareness initiatives to enhance participation among older adults and other underrepresented groups.

Take-home messages

- Health inequalities are strongly associated with socio-economic deprivation, including higher unemployment and lower educational attainment, and correlate with increased prevalence of chronic diseases and neoplasms in disadvantaged areas.
- Artificial variability in discharge processes creates avoidable delays in transferring patients to rehabilitation care, even when beds are available, and can be reduced through targeted organisational interventions.
- A strong sense of community is positively associated with perceived health service quality, demonstrating that social capital and local engagement are critical resources in public health systems.
- Higher availability of general practitioners and community health workers is associated with lower marginalisation rates, confirming that adequate workforce distribution is essential to reducing health and social inequalities.

Scientific dialogue – Advancing patient-centred integrated care

Speakers: **Dr Emmanuelle Leray**, École des Hautes Études en Santé Publique (EHESP), France; **Bianca Cucos, MD**, Centre for Innovation in Medicine, Romania; **Mr Nathan Shuftan**, European Observatory on Health Systems and Policies, Belgium; Berlin University of Technology, Germany; **Dr Marzia Cettina Severino**, Scuola Superiore Sant’Anna, Italy; **Ms Camille Forcier**, INRAE – INSERM, National Research Institute for Agriculture, Food and the Environment, University of Rennes, France; **Mr Egidio de Mattia**, Università Cattolica del Sacro Cuore & Fondazione Policlinico Agostino Gemelli, Italy

Facilitator: **Ms Alexis Strader**, Director of Research and Policy, European Health Management Association (EHMA), Belgium

Session summary

This session examined innovative approaches to enhancing care models that are responsive to the specific needs of individuals, with a strong emphasis on person-centred and integrated care. It brings together insights from patients, caregivers, healthcare professionals, and policymakers to inform strategies that are both inclusive and evidence based.

Dr Emmanuelle Leray presented *‘Developing patient-centred care (PCC) in multiple sclerosis: French preliminary results from a European project’*. Dr Leray explained that the Horizon Europe-funded project explores how MS Care Units can lead to better care integration and improved outcomes for people living with multiple sclerosis (MS) and the professionals supporting them. The central research question examines under what conditions, and how, these care units can respond more effectively to the needs of all stakeholders. A core principle of the project is the integration of diverse perspectives, including patients, caregivers, and healthcare professionals, through a participatory approach. The consortium combines qualitative and quantitative methodologies to capture the complexity of MS care. The project is implemented in France and Italy, selected for their contrasting MS care models: France has 23 centres officially designated by the Ministry of Health, whereas Italy has several hundred facilities aligned with the MS Care Unit concept. Rather than deciding whether to implement MS Care Units, the project evaluates existing initiatives in order to assess impact and guide improvements. The ambition is to generate findings that stakeholders can identify with, thereby supporting efficient and sustainable real-world transformation.

Bianca Cucos, MD presented *‘Innovative living lab methods for primary cancer prevention: a people-centred approach to health governance and leadership’*. Dr Cucos presented the 4P-CAN project, a European collaborative initiative involving 11 partners and focused on citizen engagement and identifying barriers to cancer prevention and care. Early findings revealed widespread pessimism about cancer prevention and early diagnosis, combined with distrust towards public authorities. To address these challenges, a Living Lab model was developed in Argeş, Romania, as a real-world testing ground for participatory, citizen-led health initiatives. The project uses citizen juries to identify and prioritise local health needs and applies a personalised, multi-level communication strategy to ensure inclusivity. So far, 130 stakeholders across governance and community levels have been identified. The model is planned to expand to other villages and into Bulgaria. The long-term aim is to develop grounded, context-sensitive solutions that inform secondary care strategies and follow-up efforts.

Mr Nathan Shuftan presented *‘Person-centred care among adult multimorbid populations: a systematic review of its effectiveness’*. Mr Shuftan addressed the challenges health systems face in managing care for people living with multiple chronic conditions, particularly discontinuity and poor coordination across conditions and sectors. Person-centred care has emerged as an approach that empowers individuals with knowledge, skills, and confidence to manage their health. A systematic review examined person-centred care interventions for individuals with multimorbidity in outpatient settings, assessing alignment with the quintuple aim: patient experience, health outcomes, cost-effectiveness, and the experiences of patients and caregivers. Twelve studies

met the inclusion criteria. Preliminary findings suggest that person-centred care enhances self-management, increases patients' sense of control, and improves quality of life. The research team is applying the Mixed Methods Appraisal Tool (MMAT) to assess methodological quality and identify best practices for future outpatient interventions.

Dr Marzia Cettina Severino presented *'The experience of family caregivers along the palliative care pathway: a qualitative case study'*. Dr Severino examined the experiences of informal family caregivers along the palliative care pathway, emphasising their essential role as partners in delivering care. Caregivers assume responsibilities ranging from daily home support to emotional and social care. The study included caregivers with diverse backgrounds and relationships to patients. Findings show that caregivers' needs evolve over time. In early stages, professional home support and targeted training are critical. In later stages, especially near end of life, emotional support becomes central, with many caregivers reporting isolation. The study highlights the need for adaptable and compassionate care models that recognise the changing realities of both patients and caregivers.

Ms Camille Forcier presented *'Feasibility and acceptability of mobile-assisted screening and brief intervention for multiple health behaviours in medical settings'*. Ms Forcier described the MECC (Making Every Contact Count) approach and the CliniCAP intervention, which targets alcohol use, smoking, physical activity, and diet. Implemented in liver disease, diabetology, and endocrinology departments, CliniCAP integrates brief interventions of approximately 20 minutes into routine care. Outcomes vary depending on physician engagement, but 89% of participants found the digital app useful, indicating high acceptability. The approach supports early identification of risky behaviours and integrates prevention into everyday clinical practice without significantly increasing provider workload.

Mr Egidio de Mattia presented *'A multi-professional perspective tool to assess the implementation and perception of the VBHC model: development and preliminary Delphi results'*. Mr de Mattia discussed the transition to Value-Based Health Care (VBHC), where value is defined as health outcomes that matter to patients relative to cost. The "Bridging Perspective" project developed and validated an assessment tool to measure alignment between hospital leadership and healthcare professionals during this transformation. The tool evaluates both the implementation of VBHC elements and the change management strategies supporting the transition. Developed through operational strategy design and a Delphi process involving 54 international experts, the final questionnaire includes 30 items across two domains: the Value Agenda and Change Management. Designed as a mirror survey, it enables comparison between senior leadership and frontline staff perceptions, providing a structured framework to guide VBHC implementation.

The session highlighted the importance of integrated, person-centred approaches in managing chronic conditions, prevention, palliative care, and system transformation. It emphasised participatory methods, stakeholder engagement, coordinated care pathways, caregiver support, and preventive strategies embedded into routine care. Flexible, context-sensitive, and multi-disciplinary models were presented as essential for meeting complex and evolving healthcare needs.

Take-home messages

- Person-centred and integrated care models are most effective when they systematically incorporate the perspectives of patients, caregivers, and professionals through participatory and co-designed approaches.
- Care models must be context-sensitive and adaptable, as differences in organisational structure, governance, and local realities significantly influence implementation and outcomes.
- Informal caregivers are central actors in care delivery, and sustainable systems must provide them with evolving professional, practical, and emotional support throughout the care pathway.

Scientific dialogue – Digital transformation in healthcare

Speakers: **Ms Marie Cahill**, Royal College of Surgeons in Ireland, Ireland; **Ms Nóra Fazekas**, National Directorate General for Hospitals, Hungary; **Dr Elina Laukka**, University of Helsinki & Oulu University of Applied Sciences, Finland; **Dr Anna Gawrońska**, Warsaw School of Economics, Poland; **Dr Erica Albizzati**, Centro Ortopedico di Quadrante, Italy; **Dr Antonella Cavalieri**, University of Milan, Italy

Facilitator: **Mr Michele Calabró**, Director, EUREGHA, Belgium

Session summary

The digital transformation of healthcare is reshaping care delivery, patient engagement, and system management, with Electronic Health Records (EHRs) at the centre of both opportunity and challenge. This session highlighted how usability and medication safety influence the quality and safety of care. It provided a comprehensive overview of digital technologies, emphasising the technical, human, and systemic factors critical to their sustainable and equitable adoption.

Ms Marie Cahill presented *'The influence of Electronic Health Record design on usability and medication safety: systematic review'*. Ms Cahill identified seven key themes: searchability, automation, customisation, data entry, workflow, user guidance, and interoperability. EHRs emphasising these features were associated with greater clinician efficiency, higher satisfaction, and fewer medication errors, while poorly implemented elements increased frustration and safety risks. Attending physicians generally rated EHR design more positively than other professionals, and greater experience with EHRs, particularly smartphone-based systems, was linked to higher usability ratings.

Ms Temitope Bello presented *'Assessing the impact of AI and technological applications on medical professionals and students: a case study of NSIA-LUTH Cancer Centre (NLCC), Lagos, Nigeria'*. Ms Bello examined how AI and digital tools influence clinical training, workflow efficiency, and decision-making in an oncology setting. Findings highlighted improved diagnostic support and data management, alongside challenges related to digital literacy, infrastructure constraints, and adaptation to new technologies. The study underscored the need for structured training and institutional readiness to maximise the benefits of AI-driven tools.

Ms Nóra Fazekas presented *'Enhancing digital competence and collaboration in health systems: the H-PASS project'*. Ms Fazekas introduced the EU-funded H-PASS project, supporting six Member States in strengthening workforce resilience and digital competences. The programme equips health professionals with transversal and digital skills through four modules covering digital technology, change management, soft skills, and data usage, delivered via blended learning. Participants described the programme as practical, forward-looking, and empowering.

Dr Elina Laukka presented *'Value co-creation and co-destruction in the digital health ecosystem'*. Grounded in service-dominant logic, the project examines how patients and professionals jointly create or diminish value in digital services. A systematic review informed the development of a framework now being refined through interviews. Preliminary findings show that digital services can enhance access, continuity, and disease management, while poor skills or unsuitable tools may lead to value co-destruction. Inclusive design was emphasised to prevent digital exclusion.

Dr Anna Gawrońska presented *'Automatic data capture techniques and electronic transaction documents enhancing the implementation of the European Medical Device Regulation in a university teaching hospital. A case study from Poland'*. Dr Gawrońska analysed the implementation of the MDR in a Polish university hospital, focusing on automatic data capture and electronic documentation to strengthen compliance. The study assessed GS1 barcode scanning, system integration, and digital records such as e-invoices and e-delivery notes. Key limitations included delayed real-time inventory access, continued reliance on paper documentation, limited

IT functionalities, and insufficient supplier adoption of standardised electronic documents. The findings highlight the need for stronger digital infrastructure and automation.

Dr Erica Albizzati presented '*Mymobility Smartphone-Based Care Management Platform's application upon knee replacement rehabilitative pathway*'. The platform supports patient education, monitoring, and routine management, improving motivation and reducing anxiety. Providers benefit from real-time data and improved efficiency. High engagement was reported, with 79% active patients, 93% ROSA cases managed, and all exceptions addressed. Patient satisfaction was very positive, and care teams reported enhanced connection and efficiency.

Dr Erica Albizzati also presented '*AI & identikit of infectious risk: a powerful alliance for the hospital management of at-risk patients*'. The project integrated AI and Machine Learning into hospital data processing to prevent surgical site infections by identifying high-risk patients during pre-admission. Using diverse datasets, algorithms supported tailored care pathways. Results showed reduced complications, shorter hospital stays, and more appropriate treatment protocols, generating clinical and economic benefits.

Dr Antonella Cavalieri presented '*Digitalisation for co-production in healthcare: a systematic literature review*'. Using the Health Co-creation Framework, the study analysed case studies to identify determinants, outcomes, and barriers of digital co-production. Findings suggest that digital tools enhance communication and shared decision-making, while successful implementation depends on digital literacy, infrastructure, workflow integration, and stakeholder engagement. The review highlights challenges for equitable adoption and calls for further research on long-term and organisational impacts.

Take-home messages

- Well-designed Electronic Health Records directly improve clinician usability, workflow efficiency, and medication safety, reducing the risk of preventable errors.
- Building digital competence through structured, practice-oriented training is essential for resilient and future-ready health workforces.
- Digital health initiatives must actively manage value co-creation and prevent value co-destruction to ensure inclusive, patient-centred adoption.
- Effective compliance with digital regulation, including the Medical Device Regulation, requires strong infrastructure, automation, and standardised electronic documentation.
- Artificial Intelligence can enhance risk prediction, efficiency, and patient outcomes, but its implementation must remain transparent, interpretable, and aligned with clinical realities.

Scientific dialogue – Workforce wellbeing and organisational performance

Speakers: **Dr Alexandra Erling**, Stockholm School of Economics, Sweden; **Ms Eva Krenyacz**, Corvinus University of Budapest, Hungary; **Mohammad Qoimam Bilqisthi Zulfikar, MD**, École des Hautes Études en Santé Publique (EHESP), France; **Ms Emilie Chen**, École des Hautes Études en Santé Publique (EHESP), France; **Dr Francesca Dal Mas**, Venice School of Management, Ca' Foscari University, Italy & Collegium Medicum, SAN University, Poland; **Dr Maarten Janssen**, Erasmus University – Center for Healthcare Management, The Netherlands; **Prof Tania Gaspar**, Universidade Lusofona/SPIC, Lisbon, Portugal; CHRC/Lisbon NOVA University, Lisbon, Portugal

Facilitator: **Dr Monica Georgiana Brînzac**, Babeş-Bolyai University & European Public Health Association (EUPHA), Romania

Session summary

This session explored how leadership, communication, work design, and organisational policies intersect with healthcare workforce well-being, satisfaction, and performance across diverse contexts. It emphasised personalised approaches, including job crafting and tailored interventions, to strengthen resilience and retention.

Ms Eva Krenyacz's presentation, *'Higher satisfaction, better performance? A healthcare organisational comparative study'*, examined the relationship between healthcare workers' job satisfaction and organisational performance across three teaching hospitals in Jordan. Using SPSS analysis of 2023 data, the study assessed demographics, 20 Minnesota Satisfaction Questionnaire items, and hospital performance indicators, considering COVID-19 workload. Hospitals A and C showed similar satisfaction, with only one significant difference in task variety. Hospital C reported the highest satisfaction, linked to a less concentrated workload and more positive performance perceptions. Differences were mainly associated with communication, coordination, reward systems, and recognition. Hospital B reported lower satisfaction and underestimated its performance while rating work quality higher than the others, indicating self-assessment challenges. Leadership and organisational policies emerged as key influences on both satisfaction and performance.

Ms Krenyacz's second presentation, *'Employee silence about healthcare job satisfaction: interpreting the gap between top and middle managers'*, examined communication challenges at St John Hospital in Budapest in 2022. Narrative interviews with top and middle managers explored why employee feedback often fails to reach senior leadership. Findings identified a gap driven by hierarchy, distance, and a culture of distrust, where employees felt speaking up was ineffective. Middle managers focused on daily operations, acting as gatekeepers with limited autonomy, while physicians held greater informal authority. The divide was reinforced by weak upward communication and limited follow-up on suggestions. The study highlighted the need to strengthen formal and informal channels, introduce structured meetings, and foster cultural change that empowers middle managers and builds trust.

Dr Alexandra Erling presented *'Understanding nurse job crafting through work orientations'*. She explored how nurses' work orientations shape their responses to workplace pressures and job crafting strategies. Although nurses face similar challenges, such as workload and leadership issues, their responses vary according to what they value most. Using mixed qualitative methods with 23 registered nurses in Sweden, three orientations were identified: Patient-Oriented, Integrated Team-Self, and Self-Oriented. Each group experienced frustrations differently and adjusted roles by prioritising patient contact, addressing team issues, or maintaining schedule control. The study highlighted that structural improvements are most effective when aligned with nurses' values, and that tailored role crafting supports well-being and retention.

Dr Mohammad Qoimam Bilqisthi Zulfikar presented *'Improving the health and well-being of healthcare workers: a scoping review of non-pharmaceutical interventions'*. The study examined mental and physical health challenges among healthcare professionals, including burnout and musculoskeletal disorders, particularly after

COVID. Following JBI and PRISMA-ScR guidelines, 103 studies from over 6,000 articles across OECD countries were analysed, mainly in hospital settings. Findings showed varied intervention mechanisms but identified gaps in non-hospital contexts. The next phase includes qualitative interviews in France to assess acceptability and factors supporting sustained engagement.

Ms Emilie Chen's presentation, *'The cost of hospital healthcare workers' poor health in France: insights from a manager survey'*, examined the financial impact of healthcare workers' health on hospital productivity and patient care. The study quantified direct and indirect costs from the employer's perspective amid strain on the French healthcare system. A survey assessed how staff health issues affect team dynamics and workflow. Findings showed that the absence of a single nurse results in the loss of 8.7 patient stays, each valued at €2,666, creating a substantial financial burden. Physician absences generated even greater losses due to replacement difficulties, underscoring the economic impact of workforce health on hospital operations.

Dr Francesca Dal Mas presented *'Well-being: a systematic review of the international institutional literature and a novel framework proposal'*. Despite recognition of the need to move beyond GDP, consensus on definitions, indicators, and policy integration remains limited. A health promotion-centred framework was proposed to consolidate overlapping indicators and support harmonised measurement across domains such as social life, health, economy, environment, and personal life. The framework aims to enable data-driven policy, benchmarking, and more efficient implementation. Future directions include integrating equity-based welfare design, universal health coverage, sustainable economies, and inclusive digital systems.

Dr Maarten Janssen presented *'Learning under pressure: how healthcare professionals in youth care learn to deal with the tension between system pressure and professional autonomy'*. He explored how Dutch youth care professionals navigate systemic pressures, including staffing shortages and administrative burdens, while maintaining autonomy and care quality. Four organisations formed Communities of Practice. Through six facilitated sessions per group, participants examined tensions such as responding to feedback and balancing innovation with standardisation. Findings indicate that these tensions are systemic and persistent, requiring management rather than elimination. The project emphasised a 'nothing about us without us' approach, centring patient care while supporting professional well-being and learning.

Prof Tania Gaspar's presentation, *'Are healthcare organisations healthy work ecosystems? Health and wellbeing of health professionals'*, introduced an expanded model of healthy work environments that incorporates remote work. The model emphasises ethical values, leadership, and professional involvement across four organisational environments, supported by a cycle of diagnosis, prioritisation, planning, implementation, and re-evaluation. The study found that most workplace issues stem from leadership challenges and limited autonomy. Mental health risks were highest among doctors, nurses, Generation Z professionals, individuals with higher education, and those with chronic illnesses or experiences of workplace harassment.

Take-home messages

- Workplace well-being and communication emerged as critical determinants of healthcare worker satisfaction, with gaps between management levels, inadequate recognition, and leadership challenges contributing to dissatisfaction, silence, and misalignment across organizational hierarchies.
- Job crafting and work orientation play a significant role in how healthcare professionals experience and respond to systemic pressures, suggesting that personalized strategies aligned with individual values are vital for improving job satisfaction and retention.
- Health promotion and prevention efforts, particularly non-pharmaceutical interventions, are gaining traction as essential, upstream responses to rising burnout and health issues among healthcare workers, though gaps persist in non-hospital settings.
- The economic and systemic cost of poor healthcare worker health is substantial, affecting hospital productivity and patient care outcomes, highlighting the need for integrated well-being frameworks and continuous learning environments to support both staff and system resilience.

Scientific dialogue – Innovations in health governance and policy

Speakers: **Ms Claudia Almeida**, NOVA National School of Public Health; Comprehensive Health Research Centre, Portugal; **Ms Anastasia Erin Verheyen**, Queen Mary University of London, United Kingdom; **Ms Julidè Mayer**, University of Michigan, USA; **Prof Todorka Kostadinova & Prof Gergana Boncheva Nenova**, Medical University – Varna, Bulgaria; **Ms Hélène Croguennec–Le Saout & Ms Gaëlle Chesnais**, Ecoles des Hautes Etudes en Santé Publique (EHESP), France; **Mr Luc Chatty**, Fyrstain, France; **Mr Guillaume Eckerlein**, Paris Saclay AP–HP, France; Ms Ines Kuniko Mogami, NIVEL, Netherlands

Facilitator: **Prof Monika Urbaniak**, Professor, University of Kalisz, Poland

Session summary

As health systems across Europe grapple with mounting complexity, from digital transformation and workforce shortages to sustainability imperatives, demographic shifts, and cross-border health threats, there is an urgent need to rethink governance and policy frameworks. This session brought together speakers exploring how to improve European health policy and governance through innovation, cooperation, and interdisciplinary tools. Topics ranged from EU policy frameworks to practical instruments for knowledge-sharing and collaboration.

Ms Julidè Mayer presented *'Mapping EU health policy relations: a framework for a sustainable and harmonised collaboration with neighbouring countries'*. The scoping review aimed to map the EU's evolving relationships with third countries in health-related areas. Recognising fragmentation and complexity in the EU's external engagements, the research reviewed legal agreements and applied the six WHO health system building blocks across four analytical axes. Four patterns emerged: highly formalised cooperation with EFTA countries; technical-political continuity with the UK drawing on the Barnier Package; technical cross-border collaboration with Switzerland; and politically engaged technical cooperation with Accession States. Since the COVID-19 pandemic, a shift from trade-based to security- and access-focused cooperation has become evident. The presentation prompted questions about how these frameworks could inform future negotiations or institutional design, particularly in the context of current geopolitical tensions.

Prof Todorka Kostadinova and **Prof Gergana Boncheva Nenova** presented *'The Holistic Approach in health and care as an innovation for health-promoting policy'*. The project explores holistic health as a vehicle for innovation in patient recovery. Over the past decade, centres in Bulgaria have integrated traditional practices, particularly Chinese medicine, into outpatient and post-hospital care. Registered practitioners have obtained training in techniques such as traditional Chinese medicine. These therapies are offered in addition to standard care, although they are not yet financed through the national health system. The study aims to generate evidence of their value in supporting patient recovery. The audience raised questions regarding financing mechanisms, evidence generation, and professional recognition.

Ms Hélène Croguennec–Le Saout and **Ms Gaëlle Chesnais** presented *'The serious game: a tool for transforming tacit knowledge in the social and medico-social sector? Insights from action research on the "Tous Accompagnés!" game'*. Their presentation showcased the development and impact of Tous Accompagnés!, a serious card game developed at EHESP to strengthen a competency-based approach in training programmes. The game aims to increase engagement in completing complex and demanding tasks. It enables learners to simulate real-world decisions regarding institutional care pathways. Feedback from 91% of participants indicated that the game strengthened their knowledge and its practical application. While classroom settings posed logistical constraints, the team is exploring commercial distribution to broaden access. The project prompted discussion on pedagogical innovation and the need for adaptable learning environments.

Mr Luc Chatty presented *'Enhancing health system performance through interoperability, data standardisation, and workforce training'*. He introduced the XiA (Xpanding Innovative Alliance) project, which addresses the urgent

need to train healthcare professionals in interoperability and data standardisation across Europe. With the European Health Data Space set for implementation by 2028–2029, XiA equips professionals to adopt standards such as the European Electronic Health Record Exchange Format, ensuring data quality and patient trust. The programme uses personalised training pathways, micro-credentialing, and blended learning, including online modules, real case studies, and workshops. A cloud-based open library supports content sharing, while Chief Medical Information Officers act as local champions. In the context of expanding data-sharing possibilities, trust remains central. XiA fosters strong knowledge-sharing networks and empowers both IT and medical professionals to apply EHDS standards in their settings. Its educational impact is evident in increased professional engagement with digital transformation.

Mr Guillaume Eckerlein presented *'The role of Fablabs in managing sustainability challenges in hospitals – The case of the French Fablab Héphaïstos AP-HP, Paris'*. The Fablab offers a hands-on educational space to share ideas on sustainability, innovation, and empowerment in hospital settings. In response to financial and environmental challenges, including the fact that hospitals account for 4% of CO₂ emissions in Europe, the initiative promotes user-driven innovation. The Fablab enables healthcare professionals to identify challenges, co-design solutions, and prototype innovations to reduce waste, address climate demands, and extend equipment life. Staff submit ideas that are assessed through in-unit visits by the Fablab team. If viable, rapid prototyping follows, often using one of 15 in-house 3D printers. Successful tools or devices can then be scaled across other hospitals in the AP-HP network. The project has contributed to reduced carbon footprints, cost savings, and improved staff morale. In the long term, it aims to formalise and measure these impacts through research. The Fablab exemplifies how embedding innovation labs within hospitals can create sustainable, bottom-up learning environments and empower healthcare staff as agents of change.

Ms Ines Kuniko Mogami presented *'Connecting people, ideas, and solutions through creative visual tools: collaboration across EU countries for health workforce planning'*. She introduced the HEROES project, which demonstrates how visual storytelling can serve as an effective educational tool in EU-wide health workforce planning. The project uses collaborative drawing sessions to foster cross-border understanding and strategic thinking. Participants from each country met to co-create a single drawing, relying on shared symbols and visual metaphors rather than words. This approach helps overcome language barriers and simplifies complex policy issues, while encouraging reflection on workforce challenges and enhancing cross-cultural problem-solving. Although initially criticised as simplistic, the method proved highly effective, with over 90% of participants agreeing that it enhanced collaboration and communication. HEROES highlights the value of simple visual tools in fostering shared understanding and strengthening cross-country policy cooperation.

Take-home messages

- Innovation in healthcare governance requires strong foundations, including robust evidence, integration into existing systems, and systematic evaluation to ensure sustainable long-term impact.
- Sustainable progress in health systems depends on actively empowering professionals and communities to participate in the design, implementation, and continuous improvement of solutions.
- Effective digital transformation in healthcare relies on trust, high data quality, interoperability standards, comprehensive training, and the ethical use of information.
- Cross-border, cross-sector, and interdisciplinary collaboration strengthens health policy by combining diverse expertise and perspectives to build resilient and inclusive systems.

Scientific dialogue – Equity and access: addressing challenges across population

Speakers: **Ms Vera Benedetto**, Sant’Anna School of Advanced Studies, Italy; **Rui Cortes**, Lean Health Portugal, Portugal; **Dr Olena Chernenko**, Medcapitalgroup, Ukraine; **Dr Erica Albizzati**, Centro Ortopedico di Quadrante, Italy; **Dr Florian Manneville**, Université de Lorraine, France; **Bianca Cucos, MD**, Centre for Innovation in Medicine, Romania; **Prof Immanuel Azaad Moonesar**, Mohammed Bin Rashid School of Government, United Arab Emirates; **Ms Esther Oluwatosin Akinbobola**, University of Messina, Italy; University of Malta, Malta

Facilitator: **Prof Federica Morandi**, Director of Academic Programmes, ALTEMS – Università Cattolica del Sacro Cuore, Italy

Session summary

Ensuring equitable access to healthcare remains a critical challenge. This session highlighted innovative, data-informed approaches to address disparities affecting vulnerable populations across geographic, social, and cultural contexts. It demonstrated that promoting access and equity requires not only better data and governance, but also empathy, personalisation, and systems designed around lived experience.

Ms Vera Benedetto presented *‘Introducing proximity care in healthcare equity and sustainability: insights from the unfair distance index’*. The ongoing study introduces health service proximity as a dimension for assessing equity and environmental sustainability. Using 2023 dermatology outpatient data from Tuscany, patients were classified by urban and rural residence, and travel times, utilisation rates, waiting times, and environmental impacts were analysed. Patient travel generated an estimated 1.8 tonnes of CO₂ emissions, and lower on-time service delivery was observed in rural areas. No consistent trend emerged across quality, equity, and sustainability, suggesting fragmented efforts. The study proposes proximity care as a fourth dimension in evaluating universal healthcare systems.

Ms Carolina Ferraz presented *‘Advancing equity in hereditary Transthyretin Amyloidosis management: insights from the CARDINAL study using sociodemographic and geospatial data’*. Portugal has one of the highest global burdens of ATTRv amyloidosis. Using data from 2011 to 2023, the study geo-referenced patients followed in two Centres of Excellence and cross-referenced locations with purchasing power, education, and unemployment. As patients are now dispersed nationwide, access challenges have increased. The project aims to identify underserved areas, reduce unnecessary hospital visits, and develop dashboards to support clinical management. Integrating clinical and sociodemographic data enables more equitable and sustainable disease management.

Dr Olena Chernenko presented *‘Ukrainian refugees and the phenomenon of ‘Homebound Medical Tourism’: structural insights into healthcare resilience, consumer behaviour, and patient mobility in crisis contexts’*. The study explored why displaced Ukrainians travel back home for care. Based on questionnaires and interviews with 50 patients across six host countries and 20 Ukrainian physicians, findings showed that patients prioritised speed, predictability, and continuity, often using private providers despite legal access abroad. Barriers in host systems included long waiting times, limited interoperability, and misaligned expectations. The phenomenon illustrates how patients combine home and host services, highlighting structural gaps and the need for coordinated cross-border responses.

Dr Erica Albizzati presented *‘The vaccination issue in health workers: nudging as a strategy to manage hesitancy and reflections on decision-making autonomy’*. The study examined cognitive biases influencing vaccine hesitancy among healthcare workers and evaluated strategies such as information campaigns, mandates, incentives, and nudging. Nudging interventions, including visual reminders and peer programmes, increased

uptake while maintaining acceptance. Ethical analysis framed nudging as a form of liberal paternalism that preserves autonomy when applied transparently.

Dr Florian Manneville presented *'Promoting farmers' capacity to improve their mental health: The CAGRIMENT project'*. The two-year study addresses mental health challenges among farmers facing economic, climatic, and social pressures. Questionnaires administered over one year and collaborative action development revealed high levels of anxiety and depression. The project analyses determinants, including locus of control, and will deliver co-developed interventions aimed at empowering farmers to strengthen their mental wellbeing.

Bianca Cucos presented *'Advancing FH paediatric screening with tailored communication: A citizen-centred approach in Romania and Cyprus'*. Familial hypercholesterolaemia affects 1 in 300 people, yet 90% remain undiagnosed. The PERFECTO consortium promotes early detection through awareness, screening pathways, and policy support. Surveys and consultations revealed low awareness but strong prevention interest. A personalised communication model using behavioural segmentation and digital tools was developed to increase paediatric screening uptake, aligning evidence-based strategies with empathetic, people-centred messaging.

Prof Immanuel Azaad Moonesar presented *'Beyond borders, between species: a global analysis of Mpox response strategies in the post-pandemic era'*. The study reviewed Mpox responses across WHO regions, analysing surveillance, laboratory capacity, vaccination, case management, and risk communication. Significant disparities in testing and vaccine access were identified, echoing COVID-19 inequities. The findings call for stronger global coordination, equitable resource allocation, enhanced surveillance, and greater application of the One Health approach.

Ms Esther Oluwatosin Akinbobola presented *'The impact from integration of performance management and health technology assessment: a case study in Malta'*. The study examined how integrating performance management and health technology assessment creates a feedback loop aligning clinical outcomes with economic sustainability. In Malta's centralised system, this integration supports strategic procurement, real-time monitoring, and early identification of underperforming technologies. While barriers include data sharing and governance challenges, the proposed framework aims to improve efficiency, innovation, and alignment of resource use with system goals.

Take-home messages

- Equitable and sustainable healthcare requires robust data, innovative metrics such as healthcare service proximity, integrated system design, and person-centred strategies that reflect real-world needs and build trust among patients and professionals.
- Effective responses to global health threats such as Mpox depend on strong international coordination, equitable resource sharing, resilient surveillance systems, and the consistent application of One Health principles to manage zoonotic diseases.
- Data-driven and collaborative approaches that integrate sociodemographic analysis with personalised communication strategies can significantly improve rare disease management, mental health promotion, and the uptake of early diagnosis and screening programmes.

Scientific dialogue – Multidimensional solutions for healthcare sustainability

Speakers: **Prof Dr Nathalie Clavel, PhD**, Université de Montréal, Canada; Centre de recherche du CHUM, Canada; **Dr Raphaël Kermaïdic**, École des Hautes Études en Santé Publique (EHESP), France; **Dr Aurora Dragomiristeanu**, National Institute of Health Services Management, Romania; **Dr Maria Arlèn Larsen, MD**, The Arctic University of Norway UIT, Norway; Lifeness AS, Norway; **Dr Marine Dagorn**, École des Hautes Études en Santé Publique (EHESP), France; **Prof Nelly Agrinier**, Université de Lorraine, Inserm, INSPIRE, France; CHRU Nancy, Université de Lorraine, Inserm, CIC, Epidémiologie clinique, France

Facilitator: **Prof Nicolas Sirven**, Professor, Ecole des hautes études en santé publique (EHESP), France

Session summary

This session examined how healthcare systems can use technical, environmental, social, and financial innovations to promote sustainability and improve health outcomes. The cases showed that achieving sustainability requires multi-level, cross-sector approaches integrating clinical innovation, digital technologies, environmental policy, workforce engagement, and adaptive governance.

Prof Nathalie Clavel presented ‘*A scoping review of reusable personal protective equipment in hospitals: barriers, facilitators, and impacts on environment, care safety, costs, and supply chain resilience*’. Healthcare systems generate 5–10% of national greenhouse gas emissions, much of it supply-chain driven, while COVID-19 increased reliance on single-use PPE. The review analysed 35 studies (2009–2025) using the Arksey and O’Malley framework, focusing on gowns, respirators, face shields, and headwear. Reusable PPE reduced waste, emissions, and costs by up to 75%, with no increased infection risk, although cotton gowns increased water use. Initial clinician discomfort improved with training and infection-control support. Barriers included laundering infrastructure, unclear protocols, limited domestic production, and weak procurement policies. Hospitals with sterilisation capacity were better positioned to adopt reusables, though upfront investment remains necessary. The discussion highlighted gaps in long-term monitoring and patient perception research, stressing the need for communication strategies to support scalable adoption.

Dr Raphaël Kermaïdic presented ‘*Environmental public policies on air, noise and physical activity: which effectiveness? Evaluation and identification of synergistic evidence-based public interventions*’. The research assessed the socio-economic costs of environmental health determinants, including noise, air pollution, and nutrition/physical activity, linked to transport and climate impacts. European, national, and regional policies were evaluated using air quality, biodiversity, and health indicators, while considering equity and public acceptance. Air quality has modestly improved, yet noise remains insufficiently addressed, obesity is rising, and biodiversity is declining. Interventions such as low-emission zones, speed reductions, and active transport promotion showed health and environmental benefits but faced political resistance and equity concerns. The discussion emphasised that implementation, rather than policy design, is the primary challenge, requiring multi-sector collaboration, citizen engagement, and context-sensitive strategies.

Dr Aurora Dragomiristeanu presented ‘*Healthcare financial modelling: managing implementation of Romania’s beating cancer plan, targeted 2030*’. Although universal healthcare is constitutionally guaranteed, Romania’s tax-based insurance system excludes many citizens, limiting access. Disease-specific plans for cancer, diabetes, and cardiovascular disease were introduced, supported by a core services list. Persistent challenges include unclear cost-sharing, payer structures, and delayed access. Financial modelling identified funding gaps and proposed bundled payments, pay-for-performance, and expanded prevention and screening. Healthcare financing relies on insurance, Ministry funding, and high out-of-pocket payments. Simulations suggest limited

initial benefit for uninsured populations. A unified funding pool was created to prioritise high-value services, reflecting a pragmatic approach to balancing equity, efficiency, and sustainability.

Dr Maria Arlèn Larsen presented *'Smart nutrition, healthier communities: a digital therapeutic strategy for obesity management'*. A 12-week randomised controlled trial evaluated the Lifeness digital therapeutic across Norwegian Healthy Life Clinics. The platform integrates patient apps and clinician portals, delivering behavioural, exercise, and nutrition therapy supported by AI-driven feedback and chatbot interaction. Among 24 adults, the intervention group achieved reduced waist circumference, improved quality of life, increased self-compassion, and reduced impulsive eating. High usability and patient satisfaction suggest scalability, although larger trials are needed. The discussion highlighted the importance of addressing psychological dimensions alongside weight outcomes and monitoring potential risks.

Dr Marine Dagorn presented *'Dynamics and processes of transition(s) in health: what if the question was work?'*. The research examined ecological transition in healthcare through the "sustainable units" initiative at Bordeaux University Hospital. Based on interviews and observations, the study explored how environmentally responsible practices emerge and endure. Interventions included waste reduction, greener prescribing, eco-friendly design, and sustainable mobility. While early initiatives relied on personal motivation, long-term impact requires institutional support, cross-professional collaboration, and managerial alignment. Standardised criteria now enable replication beyond the original setting, combining bottom-up engagement with organisational frameworks.

Prof Nelly Agrinier presented *'A methodological framework for developing and evaluating programs fostering practice change tailored to their implementation context: ORANEAT antimicrobial stewardship program in French nursing homes'*. Antimicrobial resistance poses significant risks in nursing homes, yet stewardship programmes face structural barriers. The project developed a dynamic logic model focusing on contextual diagnostics, a tailored stewardship toolkit, and implementation support strategies. Evaluation includes a pilot phase followed by a randomised controlled trial. Barriers such as understaffing and limited medical leadership were identified, while embedding stewardship into existing routines was recommended to enhance uptake. The context-sensitive model offers a structured pathway for sustainable practice change in long-term care.

Take-home messages

- Reusable personal protective equipment can reduce hospital waste, greenhouse gas emissions, and costs by up to 75% without increasing infection risk, but successful implementation requires adequate sterilisation infrastructure, staff training, and supportive procurement policies.
- Environmental determinants such as air pollution, noise, and physical inactivity generate substantial socio-economic and health burdens, and although cross-sector public policies can deliver measurable benefits, their effectiveness depends on public acceptance, equity safeguards, and consistent evaluation.
- Disease-specific plans combined with unified funding mechanisms can expand access for uninsured populations, yet long-term affordability, coverage gaps, and financial sustainability remain critical challenges for health systems.
- Digital therapeutics for obesity management can improve physical health, behavioural change, and psychological well-being, demonstrating strong potential to complement traditional care models at scale.
- Antimicrobial stewardship in nursing homes requires context-sensitive strategies, as structural constraints such as limited medical leadership and understaffing make tailored tools and integration into routine practice essential for sustainable impact.

