



**PERTINENCE ET QUALITÉ EN SANTÉ**  
RELEVANCE AND QUALITY IN HEALTHCARE

# SUMMARIES

September 28<sup>th</sup> – 29<sup>th</sup>, 2023

Chamonix-Mont-Blanc

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## TO REFUND THE SYSTEM

### Full introduction

**Speaker: Guy VALLANCIEN**, President of CHAM | France

Relevance and quality in healthcare.

I asked CHAT GPT to provide us with its perspective on the topic, and here is its response:

"Relevance in healthcare refers to the appropriateness of medical interventions in meeting the actual needs of patients. This means that healthcare should be based on strong scientific evidence and tailored to the individual characteristics of each patient. Relevance in healthcare aims at avoiding unnecessary, ineffective, or potentially dangerous care while ensuring that patients receive appropriate and beneficial treatments."

"On the other hand, quality in healthcare refers to the extent to which healthcare meets established standards. This includes patient safety, treatment effectiveness, service accessibility, care coordination, communication between healthcare professionals and patients, as well as patient satisfaction. Healthcare quality is evaluated using specific criteria and indicators, such as complication rates, readmission rates, waiting times, etc."

In 2023, how can we still pay for healthcare services without assessing their relevance or outcomes? The overprescribing of unnecessary or even dangerous treatments, as well as the lack of quality in medical procedures, are never questioned because the "obligation of means" principle, which could be understood when medicine was powerless. However, as of today, we must defend the obligation of statistically reliable results due to the precision of diagnoses and the therapeutic effectiveness.

While no one can predict the outcome of care for a given patient or injured person, for a thousand patients, averages and standard deviations can be used to assess the quality of a given healthcare facility, service or professional. The OECD estimates that 20% of diagnostic prescriptions and treatments are unnecessary. This means that billions of euros are wasted needlessly or dangerously in France every year.

Furthermore, as opposed to what local elected representatives try to make us believe, proximity and quality of care do not always go hand in hand. In the field of oncological surgery, the death rates, the rates of complications and the rates of stays in intensive care units can double, triple or even quadruple in over a hundred healthcare facilities with very low surgical volumes that do not comply with the decree on the minimum threshold of 20 to 30 surgeries per year. The elderly, who may have difficulty travelling, and the less privileged who may not be well-informed, are the victims of such unacceptable laxity.

It is therefore an absolute priority to assess and restructure the healthcare system by implementing a graded approach to patient care, even if it means travelling long distances to receive high-quality care.

The same principle should apply to hospital administrative services, as well as those supervising ministries, agencies, and other central and local administrations. They should all undergo regular analysis of their usefulness, efficiency, and management.

From an industrial standpoint, the regulation of access to healthcare products for patients needs to be profoundly rethought, as suggested in a report commissioned by the Prime Minister. The introduction of healthcare products, the time taken to build production facilities, all actions delayed by endless and redundant procedures, should be carried out much more rapidly in a more European framework based on genuinely relevant criteria established by highly qualified organisations.

In France, evaluation is too often seen as a punitive mechanism. On the contrary, it should be used to promote the improvement of healthcare services offered to patients. A cultural shift towards efficiency should be developed everywhere, leveraging artificial intelligence and the wealth of data that fuel it processes to understand in real-time who does what, how, and at what cost.

Without the aid of an objective analysis of prevention processes and access to the right care, by the right professional, at the right time, with the right products in the right facility, we will continue to dig an unsustainable financial deficit over time, while seeing a decline in the quality of patient care.

To all public and private healthcare stakeholders present here, there is no time to waste. Is it crucial to embark without hesitation on a comprehensive real-time evaluation of our professional practices, both with our healthcare facilities and in our healthcare companies, in the industrial sector, and within our regulatory bodies. The future of our healthcare system, serving the population, depends on it.

## HEALTH: HOW AND HOW MUCH ARE WE WASTING?

**Speakers:** **Anne-Marie ARMANTERAS**, President of the National agency for performance endorsement - ANAP | France, **Thomas FATOME**, Director of the National Health Insurance Fund - CNAM | France, **Étienne MINVIELLE**, Director of the Management research center – CRG of École Polytechnique | France, **Stefano SCARPETTA**, Director for Employment, Labour and Social Affairs at OECD, **Franck VON LENNEP**, Director of the Sécurité Sociale | France

Debate led by **Gaétan CASANOVA**, Public health physician at the National Federation of Hospitalisation at Home - FNEHAD | France

### **Aiming for appropriateness and quality of care to reduce waste in financial, human, and material resources**

Recent health-related events have highlighted areas of waste in our healthcare system, emphasizing the need to invest in a more resilient healthcare system. A key factor contributing to this waste is the complex organization of the healthcare system. Inadequate collaboration and communication between parties result in redundancies, misdirections, and, consequently, the inefficient allocation of financial, human, and material resources. To address this issue, it is essential to implement efficient organizational strategies that foster collaboration among all parties involved in the health sector. The impacts would be visible at both the macroeconomic and micro levels, directly affecting the daily routines of healthcare professionals. The latter dedicate between 25 and 30% of their time rectifying inefficiencies stemming from a lack of organizational relevance. The existing situation presents a noteworthy obstacle in terms of attracting and retaining healthcare professionals.

When focusing on healthcare quality, health authorities should adopt a holistic approach, rather than a segmented one. This means assessing quality comprehensively to identify specific issues, to establish clear objectives, and to execute tailored strategies. To drive this enhancement, various measures can be deployed, such as effective communication, transparent quality benchmarks, financial incentives for both patients and healthcare providers, and the implementation of suitable regulations.

### **Reducing healthcare waste: emphasizing sobriety and smart data utilization**

In the current context characterized by efforts to minimize the environmental footprint of human activities, reducing resource waste in the healthcare sector is a clear imperative. The healthcare system significantly contributes to greenhouse gas emissions, accounting for 8% of such emissions in our country. Embracing sober, environmentally friendly practices is an inevitable choice if we are to work towards decarbonizing this sector.

Simultaneously, the process of digital transformation presents a valuable opportunity for reallocating resources more effectively, thereby reducing waste. Data and information systems are central to this transformation. The smart utilization of data, for instance, has the potential to diminish unnecessary prescriptions by analyzing patients' biological data. It can also provide crucial information during surgical procedures or customize prevention efforts by focusing on at-risk populations.

### **Giving precedence to prevention over treatment to achieve cost savings and to promote a healthier population**

Emerging healthcare challenges, including chronic diseases and an aging population, call for a fundamental shift from a primarily curative approach to a proactive and preventive approach. This shift aims at mitigating the substantial costs linked to preventable illnesses and postpone their adverse consequences. For instance, in France, the extension of the national tobacco control program through 2050 would result in substantial healthcare cost reductions and an improved quality of life for the population. Furthermore, maintaining and intensifying vaccination programs is an effective means to prevent a wide range of diseases.

### **Engaging all stakeholders in defining action blueprints and fostering interest in taking proactive measures**

In the battle against healthcare waste, the commitment of every stakeholder is essential. This requires cultivating a widespread interest in the quality and relevance of care. The French National Health Insurance Fund (CNAM) is implementing initiatives to ignite interest, primarily through awareness campaigns designed to advocate for the proper use of the healthcare system. Another significant aspect relates to hospital prescribers, who account for half of the medication prescriptions in urban areas. However, their engagement in resource-efficient management remains limited. Future reforms in hospital funding must decisively tackle this issue. Linking funding to the quality of care could offer a potential solution.

Acknowledging and appreciating the expertise of healthcare professionals throughout their careers is crucial for enhancing their impact. Ongoing recertification of individual skills promotes continuous improvement, resulting in improved job quality and the overall appeal of the healthcare field. A more robust recognition of skills acquired, both during initial training and throughout one's career, is imperative for effectively responding to the evolving requirements of the healthcare field.

## HEALTH DATA: RELEASE TO INFORM

**Speakers:** **Jean-Carles GRELIER**, Member of the French National Assembly | France, **Clarisse LHOSTE**, President of MSD France | France, **Antoine MALONE**, Head of the Europe and International Prospective Department at the French Hospital Federation - FHF | France, **Bernard NORDLINGER**, President of the Ethics & Scientific Committee for Health Research, Studies & Evaluations - CESREES | France

Debate led by **Vincent OLIVIER**, President of Recto Verso | France

### **Data access conditioned by an undefined ‘public interest’**

Releasing healthcare data entails risks related to national sovereignty. In this respect, its access is regulated. Any individual or organization, whether public or private, may access data of the French National Health Data System (SNDS) with authorization from the French data protection authority (CNIL) to carry out data processing in the public interest. The CNIL may request the opinion of the Ethics & Scientific Committee for Health Research, Studies & Evaluations (CESREES) to decide on the public interest of a research project. In case of a negative opinion, the applicant can appeal to the French Council of State for a final decision. The difficulty lies in the fact that neither law nor jurisprudence from the Council of State or the Constitutional Council defines what ‘public interest in health’ means. The definition of such a crucial issue should not be left to a public interest group like the Health Data Hub, or an independent administrative authority such as the CNIL. It is therefore necessary for the law to take a position on this definition. The use of personal healthcare data for purposes of public interest would mean improving knowledge of health and the overall healthcare system. Moreover, pursuing public interest does not mean excluding the private sector, although cautiousness is required, as this data is particularly personal and sensitive.

### **The importance of health data in population-based responsibility**

Population-based responsibility, as experimented in certain areas under Article 51, entails that all healthcare stakeholders share responsibility for meeting expressed and unexpressed healthcare needs in a given area. To identify healthcare needs, it is essential to leverage national databases and create clinical and health-economic stratifications of populations. These stratifications help categorize patients, providing a detailed summary of healthcare needs, to adapt care pathways, healthcare programs, and to evaluate the implemented measures. This stratification, which can be easily applied by healthcare professionals, helps reducing the reliance on emergency service and long-term hospital stays, ensuring better population monitoring. Several countries and regions (the Netherlands, Catalonia, Italian regions, Belgium, Switzerland, United Kingdom) also operate on a territorial basis.

### **The timeframe for accessing health data is a hindrance to research competitiveness.**

The CESREES has one month to give its opinion to the CNIL, which then has two renewable months. Some organizations may have direct access to data without going through the CNIL and CESREES, provided they can directly inform patients. The issue lies in the provision of data after authorization. The Health Data Hub, a national platform for health data and a single gateway to facilitate access to requests, was initially intended to play this major role in making data available. However, for sovereignty reasons, the French National Health Insurance Fund (CNAM) has taken over this role. If the CNAM encounter difficulties resulting in delays in data provision, it is because it is not its primary role. Faced with these challenges, prioritizing requests in terms of relevance becomes necessary. Delays impede competitiveness, whereas in Spain and the United Kingdom, data can be accessed and regularly updated in 1 to 3 months. The UK is also working on simplifying the General Data Protection Regulation (GDPR) system. No country has a national healthcare database of the quality seen in France. Yet it is still poorly exploited. The challenge for industry is to remain competitive compared to other countries. If manufacturers can access this data in any country, they might as well do it in France. Shared ambition is what can make France an area of research into high-quality healthcare data.

### **The need to educate about the reluctance of health data holders**

In France, people have a “proprietary instinct” towards their data and mistrust industries in the use they make of it. However, since it is health insurance data and data platforms are publicly funded, it could be argued that this data belongs to everyone. Patients need to be educated on the matter. On the one hand, it is important to explain that manufacturers do not own the data, that it is anonymized and processed by a third party. On the other hand, it is necessary to explain that the benefits of freeing up data are first and foremost beneficial to the patient. For instance, it enables the use of a treatment to be extended to a certain population. In fact, laboratories may lack information on certain populations, such as pregnant women. Access to cohorts of data, supplemented by certain pharmacological studies, enables the French National Agency for Medicines and Health Products Safety (ANSM) to obtain an extension of the marketing authorization for the use of a treatment for the population in question. At the same time, data holders sometimes make inappropriate use of their own data on social networks. In this respect, citizens need to be made more responsible.

### **The need for access to health data to evaluate public policy**

Health data is essential and political in that it enables those who vote on and implement health policies to evaluate them. Although the French Directorate for Research, Studies, Assessment and Statistics (DREES), the Court of Auditors and the Mission for the Evaluation and Control of Social Security Funding Laws (MECSS) provide relevant reports and data, the fact remains that they are often obsolete and do not allow health policies to be adapted.



## WHO SHOULD ASSESS THE RELEVANCE OF PROCEDURES AND HOW?

**Speakers:** **Paul FRAPPÉ**, President of the College of general practice - CMG | France, **Patrick GASSER**, President of the Union of medical specialists - Avenir Spé | France, **Elisabeth HUBERT**, Former Minister ; President of the National Federation of Hospitalisation at Home - FNEHAD | France, **Alexandre de la TAILLE**, President of the French association of urology - AFU | France, **Stefanie THOMAS**, Head of Quality Assurance Unit at the Institute for Quality and Efficiency in Health Care - QWiG | Germany

Debate led by **Philippe DENORMANDIE**, Medical Advisor at the MNH | France

### A holistic approach to relevance that puts the patient the centre of its assessment

The relevance of medical procedures should be assessed in the context of the patient's overall healthcare pathway. This holistic approach is essential to ensure personalized and patient-centred care. Thus, since patients are better equipped to express their needs and expectations, it is essential to place them at the core of the assessment process of procedures' relevance. The patient's community, societal and local background and collaboration are essential for assessing the relevance of healthcare procedures. For instance, a scientific outcome can be interpreted differently depending on the patient, the geographic region, and the specific circumstances involved. Over time, science has evolved from a dictatorial approach to one based on inquiry and enlightenment.

### Ensuring the quality of medical procedures by monitoring their relevance

The quality of medical procedures is contingent on the ability to perform them in the best possible way for patients. On the other hand, the necessity of a procedure for a specific patient depends on its relevance, and therefore, a high-quality procedure may not be deemed appropriate for that patient. Incorporating a multidisciplinary approach and considering the diverse opinions of healthcare professionals can broaden perspectives on the relevance of some medical procedures. Furthermore, measuring the significance of medical procedures carried out by some healthcare practitioners can serve as a viable alternative to the more complex implementing process of monitoring the quality of their work. This is the case in Germany, where the assessment of medical procedures' quality determines their reimbursement. However, quality indicators are difficult to implement in Germany due to resistance coming from some health professionals.

Implementing a regional approach to assess the relevance of medical procedures would empower patients and health professionals and make them collaborate to define appropriate medical procedures. This must be supported through the development of a methodology adjustable to the local context and the individual. Annual surveys among health professionals specialized in urology are a compelling example of such an approach. These surveys follow the implementation of practice guidelines by the French association of urology (AFU) to ensure the relevance of medical procedures.

### **Collecting data allows for the development of computer tools that track medical procedures' relevance**

Information technology tools can simplify data collection and analysis, thus contribute to improving the assessment process of medical procedures' relevance. For instance, electronic medical records can be used to track patients' healthcare pathways and to identify non relevant medical procedures. The concrete measure of the relevance of medical procedures could be achieved through the implementation of pertinent tools, that give health professionals adapted guidelines for their daily practices. Moreover, using data from online appointment-booking platforms and from patients' medical records could help prioritize patients' referrals.

### **Today's relevance might be challenged by that of tomorrows**

The utilitarian aspect of assessing the relevance of medical procedures takes precedence over their financial aspect. The relevance of medical procedures must be continually challenged. Humanity and humility must play a prevailing role in discerning and evaluating the relevance of medical procedures.

## HOW TO MEASURE THE QUALITY OF CARE?

**Speakers:** **Françoise ALLIOT-LAUNOIS**, Presidente of the French association of anti-Rheumatic diseases - AFLAR | France, **Fabienne BARTOLI**, General Director of the French National Authority for Health - HAS | France, **Marie DAUDÉ**, General Manager of the Directorate General for Care Provision - DGOS | France, **Catherine GRENIER**, Director of Policyholders at the National Health Insurance Fund - CNAM | France, **Daniel GUILLERM**, President of the National Federation of Nurses - FNI | France, **Frédéric PICARD**, Orthopaedic surgeon at the Golden Jubilee National Hospital | United Kingdom

Debate led by **Olivier MARIOTTE**, President of Nile | France

### **The quality of care: a comprehensive concept encompassing satisfaction, effectiveness, and safety**

Quality of care aims at achieving the best possible outcome for the patient and is a fundamental objective of the healthcare system. It is underpinned by three dimensions. Firstly, patient satisfaction. Secondly, effectiveness, which is measured by generic tools developed for specific pathologies. And finally, safety, which involves not harming the patient and making the correct diagnosis. Quality of care is assessed from a holistic perspective that includes patients and users of healthcare and social welfare facilities, as well as healthcare professionals and entire healthcare teams. It also implies ending the segmentation between hospitals, outpatient care, and community-based care, and aiming for continuous patients' care pathways. Quality of care cannot be discussed without considering the stakeholders and organizations in charge of measuring it and the appropriate level of evaluation. Thus, it must be evaluated at the local level involving all relevant stakeholders.

### **The French healthcare system still poorly accounts for the issue of quality of care**

The patient care pathway in France remains sub-optimal and there is a lack of coordination among healthcare professionals. Patient follow-up is poorly developed: only 2% of patients are contacted following an intervention. The lack of empathy towards pain is noteworthy: out of 20 million patients suffering from chronic pain in France, 70% believe their pain is not adequately relieved, thus indicating that quality of care is still insufficiently accounted for.

### **French decision-makers can be inspired from certain practices abroad**

Quality of care is systematically measured in the United Kingdom, particularly in Scotland, combining evaluation, training, and progression towards improvement of the overall system. It is already measured at the level of patients, who receive satisfaction surveys. The level of coordination is high: before a surgical operation, patients are also seen by all practitioners at the same time. The quality of care is also assessed at practitioner and medical team level, hence the introduction of continuous training for practitioners, their annual independent assessment, and the revalidation of their medical licence every five years by the General Medical Council.

The medical teams are also continually audited, especially regarding coordination. Lastly, the National Health Service (NHS) keeps a record of all procedures performed, making it possible to compare data between hospitals and practitioners, and to identify areas for improvement.

**Tools for measuring the quality of healthcare already exist, their usage needs to be systematized**

Quality of care is mainly measured by quality and safety indicators designed by the French National Authority for Health (HAS). There are also pathway indicators, developed by the HAS and the National Health Insurance Fund (CNAM), to assess pathways followed by patients suffering from chronic diseases. Likewise, vigilance indicators aim at alerting the Regional Health Agency (ARS) when they exceed a certain threshold. The financial incentive for quality improvement (IFAQ) is paid to hospitals when they meet quality and safety indicators.

Other tools also exist. The HAS certifies healthcare institutions by involving patients in the process and bringing field experts. They make use of digital tools, using data from the French National Health Data System, which enables the listing of reimbursement information, thereby facilitating the calculation of quality indicators. The HAS uses the “e-Satis” indicator, which measures the satisfaction of hospitalized patients by sending them a survey by e-mail.

**These instruments can be improved and must have direct impacts on real life.**

In general, the appropriateness of care and procedures, coordination between outpatient and hospital care, and the safety of procedures are not fully accounted for and are not interconnected. The existence of indicators and tools should not prevent action in real life through concrete initiatives. For example, over a thousand nursing practices have integrated a quality improvement approach, aiming at creating a supportive environment for the concept of healthcare quality. However, these local initiatives must gain overall visibility.

The French government acts on several levers to give substance to these indicators. First, through healthcare professionals, who must be involved by receiving accreditation and undergoing continuous training through the periodic certification process. Financial leverage is also effective, but needs to be reformed, as the IFAQ is perceived as lacking in transparency and comprehensibility. Finally, the emphasis should be on enhancing patient engagement, both in terms of satisfaction and effectiveness of the care provided. Appropriateness of care must also be worked on, a procedure should be performed when it is beneficial for the patient. Finally, digital tools, such as “*Mon Espace Santé*” (My Health Space) enable patient targeting by sending follow-up messages.

**Speaker: Isabelle LACAZE**, Head of DragonFly Demonstrator at Airbus | France

With **Fabien GUEZ**, Cardiologist and Consultant at BFM Business Check Up Santé | France

### **Artificial Intelligence (AI) can enhance the safety of the aerospace sector**

Over the past several years, Airbus has been actively delving into the realm of AI. Although aviation is considered the safest mode of transportation in the world, with less than one accident occurring per 33 million flights, safety remains a crucial area in which Airbus invests heavily. Despite the promising outcomes achieved in various piloting assistance technologies, the broad adoption of these systems will require several more years. This is because AI-based functions, such as image processing, voice recognition, and decision-making, are not yet developed, and the aerospace sector's regulations are notably stringent. While other manufacturers are making progress in the field of AI, DragonFly stands out as the first demonstrator to have evaluated automatic diversion to landing.

### **DragonFly, an autonomous pilot support system designed to prevent emergency situations**

Autonomy in this context does not mean replacing the pilots. Rather, it is a decision-supporting tool that improves collaboration between the pilots and the on-board system, as well as with external players such as air traffic controllers, airlines, and other aircrafts. Pilots retain the decision-making responsibility, but the system assists them by alerting them to collision risks through piloting aids provided to the crew.

DragonFly focuses on two areas of improvement:

- Diversions: these decisions can be prompted by a pilot's or passenger's illness, equipment malfunction, or adverse weather conditions. This situation can be particularly stressful for the crew. Under such circumstances, AI addresses various technological challenges through an assistance function, aiding the pilots in making the right decisions: where to divert, how to plan the trajectory while avoiding natural impediments on the landscape, and how to account for the weather. The system can also switch the aircraft to autopilot mode if necessary.
- Taxi phase: in airports with heavy traffic like Paris, New York, or Los Angeles, the taxi phase represents a significant mental load for the crew. During this phase, the aircraft must quickly vacate the runway to allow others to land and navigate to the gate while listening to air traffic control instructions. DragonFly functions as a similar assistance system to what is currently found in the automotive sector. It provides route guidance and translates air traffic control instructions through voice recognition. Additionally, visual recognition allows the aircraft to maintain the runway alignment, detect obstacles, and warn of collision risks.

## QUALITY AND PROXIMITY: TRUE OR FALSE FRIENDS?

**Speakers:** **Alain BERNARD**, Professor of Thoracic and Cardiovascular surgery at the CHU Dijon Bourgogne | France, **Frédéric CHÉREAU**, Mayor of the city of Douai, Co-President of the health committee of the Association of the mayors of France - AMF | France, **Danielle FREGOSI**, Board Member of the Nationale Conference of Directors of Hospitals - CNDCH | France, **Lamine GHARBI**, President of the French Federation of private hospitalization - FHP | France, **Magalie RASCLE**, Deputy Director for social policies at the Central Agricultural Social Insurance - CCMSA | France, **Guy VALLANCIEN**, President of CHAM | France

Debate led by **Nancy CATTAN**, Journalist at Nice Matin | France

### **Complex surgeries performed locally don't always rhyme with quality of care**

Data analyses show that complex surgeries performed at a local level do not guarantee a sufficient level of quality. The low number of procedures performed, and consequently the surgeons' lack of practice, could explain higher rates of surgical revisions due to complications, of admissions in intensive care units, or even of deaths. For some surgical procedures to be performed, institutions need authorizations from their local health agency, that are based on thresholds set by institution and not by individual surgeon. As a result, some surgeons find themselves performing surgeries on an irregular basis in an institution who has been granted authorization for that specific surgery. Furthermore, the quality assessment system is compartmentalized and is conducted by healthcare institutions rather than by patient care teams or medical specialties. The link between certification, quality and funding is unclear. The implementation of good practice guidelines alone is insufficient to compensate for the lack of surgeons' practice.

### **A need for more clarity between the different levels of care and transparency for patients**

If some patients desire complex surgical services close to home, being transparent about the incompatibility between complex surgeries in proximity and quality is essential. On the other hand, some patients incorrectly consider community-based care as dangerous and travel great distances for care that could have been provided nearby. It is therefore necessary to educate patients on the different existing levels of care so that they are respected and used appropriately and so that hospitals' overcrowdings are avoided.

### **Accessibility to care, a holistic approach promoting equity rather than equality**

Reaching high-quality of any type of local healthcare service, anywhere in the country and for everyone is neither sustainable from medico-economic and human resources perspective, nor it is efficient. This proximity must be understood, not only in a geographical sense, but also in terms of accessibility. This means enabling everyone to have access to care, from prevention to treatment, according to their situation. Therefore, with the help of data, it is necessary to precisely target populations, their environment, and their health determinants, to offer a healthcare supply that is adapted to the local context.

This accessibility can be viewed from various perspectives: temporal accessibility (waiting times), financial accessibility (third-party payment), transport accessibility, social accessibility (people outside the healthcare system and outreach mechanisms). The aim is rather to reach equity of access to care than equality.

### **Paying health professionals: an incentive for community-based care and quality of care**

The French healthcare system is primarily built on curative care and the current funding system in hospitals and private medicine practices promote the quantity of procedures performed rather than quality. It should evolve to give more incentives encouraging community-based care and quality of care, while enabling a shift towards a more efficient and prevention-based system. In this regard, innovative funding suggestions have been put forward: payment by results, funding according to the health status of a specific population area, funding promoting coordination between care teams and prevention, flat rate capitation for a specific medical condition or healthcare pathway, etc.

### **An evolution in task delegations to improve community-based care and quality of care**

The Covid-19 health crisis has temporarily prompted task delegation. While there is currently a shortage of healthcare workers and a lack of task shifting between physicians and nurses, paramedical and medical professions are acquiring higher qualifications, such as advanced nursing practices. This evolution allows for a refocusing of medical resources on medical procedures where they can provide added value. However, doctors' concerns about potential loss of income due to the shifting of simple procedures is an obstacle and challenge the fee-for-service financing model. Furthermore, new technologies eliminate geographical barriers and enable the seeking of expertise elsewhere, giving physicians more time to maintain a link with patients and accompany them in their care pathway.

### **Coordination is key to proximity and quality of care**

Quality and proximity of care imply that the different levels of care, to be effective, must be coordinated. The issue of proximity in rural areas has long been considered from the perspective of coordinated practice structures. Nowadays, territorial health communities (Communautés Professionnelles Territoriales de Santé – CPTS) are beginning to structure the private healthcare sector and territorial hospital groups (Groupements Hospitaliers de Territoire – GHT) facilitate coordination and resource sharing among hospital members. Faced with the closing of local healthcare institutions, a reorganization of the care pathway, in coordination with both the public and private sectors as well as hospitals and community-based care facilities, is necessary.

### **Local hospitals' evolution towards a "health city"**

Where private healthcare facilities close due to a lack of procedures or an insufficient number of doctors, there is local political pressure to maintain the local hospitals, preventing these areas from becoming medical deserts. And yet, due to a lack of quality of these local facilities, many patients from these areas seek medical care elsewhere. Alternatives must be found through a regional approach, involving various stakeholders. Instead of closing them down, the aim is to transform them into local health centers, focusing on prevention and rehabilitation (including consultations, pre and post-operative care, rehabilitation, emergency services, etc.)

## TO ASSESS THE TRAINING OF CAREGIVERS

**Speakers:** **Corinne BLACHIER-POISSON**, Vice President and General Manager of Amgen France | France, **Olivia FRAIGNEAU**, former President of the National trade union of residents - ISNI | France, **Isabelle LAFFONT**, Dean of the Faculty of Medicine of Montpellier-Nîmes | France, **Rémi SALOMON**, President of the Conference of the Presidents of the medical board of the university hospitals | France

Debate led by **Frédéric THOMAS**, Partner at Roland Berger | France

### **Shifting from assessing knowledge to evaluating skills, which also encompass behavioral components**

The assessment of healthcare education has evolved significantly, from a knowledge-centred assessment to a skills evaluation that encompasses the abilities, practical know-how, and interpersonal skills of students in the medical and paramedical fields. Ongoing education throughout the careers of healthcare professionals has become crucial considering therapeutic advancements and the diverse situations encountered by professionals. In addition, communication, management, and empathy skills must be mastered to guarantee the quality of care and collaboration within medical teams.

However, the time constraints in healthcare professional training present a challenge, requiring prioritization between acquiring new knowledge and developing human and interpersonal skills. This transformation leads to a profound shift in the way healthcare professionals receive training and evaluation, recognizing the importance of behavioral skills that were formerly regarded as secondary.

### **Evaluating training programs ensures the quality, relevance, and effectiveness of the healthcare system**

Assessing the training of healthcare professionals is essential to ensure the efficiency of the healthcare system. This process requires a comprehensive approach, encompassing the humanities, an openness to public health, and adaptation to new professional practices, including teamwork in urban settings and recognition of less linear career paths in hospital environments. Consequently, assessing training is regarded as a priority since it shapes the healthcare workforce and its adaptability to evolving population needs. However, in a context of healthcare professional shortages, the debate over increasing the “numerus clausus” occupies a prominent position in public discourse. Amid these debates, key issues are being sidelined: the current and future needs of the population, the skills to be developed and the aspirations of future healthcare professionals.



## **Adapting the training equips healthcare professionals to navigate the healthcare system's transformations**

Evaluating the training of healthcare professionals must consider the significant changes in the healthcare system, particularly the impact of technological advancements. These new technologies are not only transforming the training but also medical practices and interactions with patients. Artificial intelligence (AI) has become an essential element in some specialties, such as radiology and anatomopathology. However, it is essential to consider how to use AI in a manner that enhances the management of medical time, ultimately fostering meaningful human interactions with patients.

The interplay between patients, technologies, and healthcare professionals needs to be carefully thought out to create meaningful and effective combinations. However, it is important not to overestimate the benefits of AI and to ensure that the digital system is ready to support these new technologies. In summary, training must evolve to prepare healthcare professionals to leverage these changes, while preserving the crucial importance of the patient-physician relationship.

### **The systemic consequences of healthcare professionals' training**

The evaluation of healthcare professionals' training has significant implications for the healthcare system. It involves two important drivers for transforming the healthcare system: the decentralization of medical education and the incorporation of paramedical education into the universities' academic framework. By expanding access to clinical practice sites for medical students and promoting interprofessional collaboration, education can contribute to addressing disparities in healthcare access. The university-based approach to paramedical programs, such as the Advanced Practice Nurse (APN) diploma, ensures the alignment of training with the pressing healthcare issues. With this approach, professionals are encouraged to specialize in a chosen area of practice, defined based on healthcare system's challenges and needs. Thus, training evaluation goes beyond the development of individual competencies. It has a structural impact by promoting a territorial and interprofessional approach based on real patient needs.

## PRESCRIPTION CONTROLLED BY AI?

**Speakers:** Emmanuel BILBAULT, Cofounder and CEO of Posos | France, Laurent BORELLA, Health services Director at Malakoff Humanis | France, Marguerite CAZENEUVE, Associate Director at the National Health Insurance Fund - CNAM | France, Franck DEVULDER, President of the Confederation of French Medical Trade Unions - CSMF | France

Debate led by Jean-David ZEITOUN, Physician | France

### **Prescribing drugs has financial and quality implications for the healthcare system**

On average, a physician prescribes almost €750,000 worth of medication per year, with wide disparities between practitioners. Moreover, in France, 75% of office visits are followed by a prescription, against 50% in Germany. Providing financial incentives for prescribing with quality rather than quantity with the same level and relevance of care would allow to reduce healthcare systems' expenditures as well as reward professionals who adopt such an approach.

### **Artificial Intelligence (AI) guarantees the relevance of prescriptions and reduces errors**

Beyond over-prescribing, the issue of appropriate prescriptions arises. Prescribing physicians must ensure that drugs are compatible with each other and that their dosage and direction of use is appropriate for the patient's profile. This verification can take up to 30 minutes when a patient is being treated with a dozen drugs, and it represents a significant risk of errors. In Europe, almost 200,000 citizens die every year due to incorrect drug prescriptions, while a verification could prevent half of these cases.

In response to this challenge, Posos, which is a prescription application for doctors, can carry out this drug review in just a few seconds. Thanks to AI, it can also suggest a new and more relevant prescription. The application's integrated transcription tool also helps practitioners save time and avoid mistakes when admitting or discharging patients.

### **AI as a prescription assistant will also free up medical time**

In a context of physicians' shortage, AI could allow practitioners to focus again on their core competency by assisting them in the prescription process. AI is already widely used in the field of medical devices for patients. For example, AI-driven tools can prescribe and deliver insulin directly via blood glucose meters and insulin pumps.

AI can also assist general practitioners by advising them on suspected illnesses, such as diabetes or cardiovascular diseases through patients profiling and according to the available data (risk prevalence, health records, etc.). Redirecting patients to other specialties will also be eased.

### **AI in healthcare needs to be assessed to determine the potential reimbursement**

Although AI-driven medical devices intended for patients are correctly evaluated and reimbursed by the health insurance system, this is not the case yet for those intended for healthcare professionals or institutions. In fact, 60% of software programs purchased by healthcare professionals are not neutrally evaluated. And yet, these tools are partially reimbursed by the French National Health Insurance Fund (CNAM) through a flat rate capitation, whether they bring benefits (time, money, quality, comfort) to the healthcare professional or not.

It is therefore essential to demonstrate the relevance of these devices through a neutral evaluation. While the CNAM cannot be both the assessor and the payer, the French National Authority for Health (HAS) lacks the expertise to evaluate medical devices for professionals. A scientific community must therefore be identified for assessing the relevance of such devices.

In addition, reimbursement of devices by the CNAM should mainly come into play when the laws of the market do not apply. For example, consider a software that reduces the number of readmissions. Although this tool represents a significant gain for the healthcare system, it would not bring any direct benefit to the buyer, i.e., the healthcare institution. In such circumstances, the CNAM should decide on the reimbursement if the purchase is relevant.

### **The use of new technologies involves adaptations in the healthcare system**

AI requires to completely reconsider and rethink the way the healthcare system is currently organized. Thanks to AI, collected data can be analyzed in real time. Thus, healthcare would no longer be solely a medical issue discussed in a doctor's office or hospital, but a global subject incorporated into everyone's daily life. However, achieving this goal requires facilitating the marketing authorization and reimbursement processes for AI-based devices.

## DATA STORAGE: THE DNA REVOLUTION

**Speaker: Marc ANTONINI**, Director of research at the CNRS - I3S Laboratory at the Côte d'Azur University | France

With **Casimiro VIZZINI**, Medical Doctor and Institutional Relations Officer at the One Sustainable for All Foundation | France

### **DNA data storage harnesses the potential of nature to stock digital information**

DNA data storage is a revolutionary technology in both the fields of computer science and biology. This technology is not aimed at collecting genetic information but at leveraging the density and robustness of DNA to store digital data within it. The conversion of digital data from a binary format to a quaternary numbering system is the first step of the data encoding process. The quaternary format corresponds to the nitrogenous bases of DNA which are adenine, guanine, cytosine, and thymine. Once converted, the data is stored in DNA molecules. Those are then placed in small capsules protected from water, light, and oxygen. For the data to be retrieved, the DNA must be rehydrated, amplified with a PCR method, and sequenced. After being sequenced, the information in quaternary format is reformatted back into binary code for analysis. This technology allows biology to serve computer science and thus involves multidisciplinary interventions.

### **DNA data storage offers numerous benefits for data archiving and product traceability**

Research projects on the topic of DNA data storage are ongoing in the United States and the European Union. France could potentially establish a complete sovereign industry within the national territory. This technology can be used to store "cold" data, i.e., archival data that does not require frequent or rapid access, and which often needs to be retained for legal reasons. With specific accreditations, molecular marking can also be used for product traceability (medicines, equipment, or paints).

### **DNA data storage will surpass the limitations of digital storage methods**

This technology offers new opportunities for long-term information storage. Indeed, DNA and the digital data it contains can be stored, in a suitable environment, for hundreds or even thousands of years without being altered. In comparison, the lifespan of a hard drive is 5 to 10 years, and that of magnetic tape is 20 years. The DNA mini capsule is very compact and can store the information equivalent to at least one data centre. The entirety of the world's data could theoretically be stored in a space about the size of a shoebox. Hence, this storage method is also more environmentally friendly. Since DNA is stable and robust, there is no need to migrate data from one medium to another to avoid the risk of information loss.

## **Significant technological challenges are to be overcome to generalize the use of this technology**

The main obstacles to the widespread adoption of this tool are related to its automation and its scalability. DNA synthesis is still very costly and considerably slower than that of a data centre. Storing more digital data, especially as its volume is exponentially increasing, requires an acceleration of the synthesis process. The MoleculeArXiv research project aims at increasing the speed of synthetic DNA synthesis by a factor of 100 (equivalent to 1 megabit per second) within 3 years. Another goal is to catch up with the writing speed of hard drives by 2030. Improving data sequencing, so that information can be retrieved, integrated, and legible, is also a significant challenge. The issue of random access to any stored data must also be solved: how can one access a specific file without sequencing the entire content of the capsule?

As of today, the capsule has no access to the internet. However, in 5 to 10 years, significant security issues will need to be addressed. Indeed, automatic DNA storage systems connected to the internet will be used. Securing data will require cryptography for binary or a quaternary data signals. Internal private cloud with limited access for members of the organization that owns the data, could also be needed.

Finally, there are few ethical issues regarding this technology. Since the DNA is synthetic, only binary-encoded information can be stored in it, unlike genomic sequences or viruses.

## WHEN AI GOES WRONG

**Speakers:** **Stéphanie ALLASSONNIÈRE**, Professor and Vice President at the Université Paris Cité | France, **Jean-Emmanuel BIBAULT**, Professor of Radiation Oncology at the Georges Pompidou European Hospital - HEGP | France, **David GRUSON**, Cofounder of EthikIA and Healthcare Director of Luminess | France, **Arnaud ROSIER**, CEO and Cofounder of Implicity | France  
Debate led by **Alix PRADÈRE**, Managing Director Health France at Accenture | France

### **In the healthcare sector, Artificial Intelligence (AI) relies on two types of data**

Depending on its type, AI does not require the same amount of data. AIs that require small amounts of data rely on statistical models, whereas those that require a large amount, such as Chat GPT, perform much better thanks to deep learning (an advanced AI learning technique). In the medical field, a major challenge lies in creating frugal and high-performing AIs with reduced databases given the sheer volume of available data in the field. In medicine, it is possible to identify two sorts of data:

- Clinical data, such as genome and imaging data. These are generally of good quality, easily extractable and exploitable.
- Data created from human classifications, which are less formal and therefore less structured, such as the GCS (Glasgow Coma Scale, an indicator of the level of consciousness) or the GIR (a French indicator of the degree of dependency).

### **AI assistance delivers more effective healthcare and frees up medical time**

When AI draws on many different types of data (e.g., genetic and biological data coupled with medical imaging), it can outperform humans in identifying potential pathologies. While a doctor can recognize up to 60 rare diseases in a foetus, AI can diagnose 500 of them. AI is therefore essential in helping doctors make the right decisions and avoid errors.

AI is also crucial in rehumanizing medical practice. By relieving healthcare professionals of time-consuming technical tasks, it gives them more time to dedicate to patient care. For instance, at the Georges Pompidou European Hospital, the manual preparation and calibration of a radiotherapy session used to take two to three hours. Algorithms have reduced this time to two to three minutes.

### **AI must be controlled, but regulation should not hinder its development**

AI is the fruit of a probabilistic science based on modelling and is therefore inherently a source of error, even if it tends to get closer to reality. Furthermore, the use of data introduces new risks of errors related to the nature or quality of the collected data.

Adhering to the Human Oversight (“*Garantie Humaine*”) ensures the protection of citizens and limits AI's potential for errors. This regulatory principle helps avoiding ethical drifts by keeping humans at the centre of the decision-making process, by ensuring that the final decision is always taken by humans (i.e., doctors) and by guaranteeing that AI is supervised by representatives of healthcare professionals and patients. It has been incorporated into the 2021 French Bioethics Law and will also be included in the 2025 AI European Regulation.

However, overly restrictive regulations could impede the development of AI. While fast tracks have been implemented in the USA to validate algorithms quicker, the trend of adding regulatory constraints in Europe could limit innovation in the area.

If AI is not well-developed in Europe, two problems could arise:

- Europe would lose sovereignty and the ability to protect its data.
- AI developed outside Europe might not be designed for local populations.

The population's awareness and education on such tools need to be increased to ensure that AI is not mistrusted and that the usefulness, benefits and risks of health data are understood. While AI is a source of error, so are humans. And yet, no Human Oversight principle is applied.

### **Predictive AI is going to disrupt the field of healthcare**

AI-powered productivity tools are widely used and support doctors in performing technical tasks such as analyzing electrocardiograms or imaging data. However, the development of predictive AIs will enable to perform tasks that the practitioner is unable to do alone such as anticipating the onset of disease or the chances of recovery. As of today, predictive AI models are already capable of assessing the risk of hospitalization for patients suffering from heart failure.

The emergence of such technologies raises the question of liability. When using AI for productivity, the ultimate responsibility lies with the practitioner who verifies the results produced by the tool. The same task cannot be easily carried out when using predictive AI. As a result, liability in the event of an error will be more unclear, and the principle of Human Oversight will no longer apply. Will responsibility in the event of an error lie with the software's developer, the hospital that purchased the software, or the doctor?

## HOW TO ASSESS THE QUALITY OF A HOSPITAL?

**Speakers:** **Charles GUEPRATTE**, CEO of the Federation of private non-profit institutions - FEHAP | France, **Amélie LANSIAUX**, Head of Quality and Patient Safety Improvement Department of the French National Authority for Health - HAS | France, **Jean-Yves LAURETTE**, Director of the Hotel Rotary Geneva - MGallery | Switzerland, **Philippe THEBAULT**, President of the Alliance du cœur | France, **Arnaud VANNESTE**, General Manager of the CHRU de Nancy | France  
Debate led by **Julien RUTARD**, Head of Healthcare sector at Capgemini Invent | France

### **The certification of healthcare facilities is a tool for management and change**

The certification of healthcare facilities is renewed by the French National Authority for Health (HAS) every four years. It serves both healthcare professionals and decision-makers in ensuring the quality of care provided in an institution. The certification process goes beyond auditing as it involves the feedback and collaboration of Regional Health Agencies (ARS) to assist struggling facilities. It plays a key role in change management as it facilitates the adoption of best practices and is part of a continuous quality improvement process. It also creates a sense of accomplishment and pride for professionals in certified facilities.

### **The certification process evolves in response to new challenges faced by healthcare institutions**

The certification process continuously evolves based on real-world experiences. Currently in its fifth version, the evaluation method is renewed each year with a new reference framework. In 2023, adjustments were made regarding ethical criteria, while the changes in 2024 will focus on digital requirements. Other issues are also being considered e.g., the quality of human resources, the quality of work-life, teamwork, environmental sustainability, and patient care pathways to better support patients after their discharge.

### **The quality of care is assessed by and for the patient**

The patient is at the centre of the quality assessment of hospitals. The e-satis national platform measures patient satisfaction and experience. For instance, it collects feedback from patients that have been hospitalized for more than 48 hours in an ambulatory surgery ward or a Follow-up and Rehabilitation Care (FRC). Their comments are analyzed through automated language processing. E-Statix allows to assess the smoothness of the patient pathway, the quality of human relationships, professionalism, and the quality of information provided by the staff. This analysis has highlighted the need to improve the reception and processing of patients. Patient-centred quality assessment also involves incorporating the patient's experience into governance of healthcare facilities, which requires substantial investment.



### **The hospitality model is a lever for improving the quality of patient intake in healthcare facilities**

In the hospitality industry, the provision of warm and welcoming experience is fundamental. It involves the commitment of the staff who reflect the image of their establishment and an individualized approach to customers. For patients, a hospital of high quality is one that considers their stay as important and engages them at every step of their patient journey. The quality of healthcare facilities reflects the quality of the professionals working there. By drawing inspiration from the hospitality model, healthcare institutions can rethink how they welcome their patients and preserve their dignity. This personalized approach consists in focusing on the patient, eliminating sources of complaint, introducing small gestures of kindness, and ultimately enhancing the overall patient experience. Offering additional paid services, along the lines of the services that patients pay for when they are at home, could be a way to finance these initiatives.

### **Corporate culture and continual improvement models could help addressing the complexity of indicators in healthcare facilities**

A healthcare facility encompasses many internal processes and professions. From a managerial perspective, implementing monitoring systems for these processes is complex given the number of indicators involved. Moreover, some processes like logistics and catering may not fall under typical managerial organizations. Hence, corporate culture, even if intangible, often carries more weight than indicators. It involves effective dialogue between physicians, healthcare providers, and managers, and, more broadly, a culture of medico-economic efficiency and the common good. In addition to corporate culture, continuous improvement models, which have proved their effectiveness in businesses could also benefit healthcare facilities.

These alternatives will not replace monitoring indicators or "data-driven" analysis. Indeed, indicators and corporate culture are not incompatible, as demonstrated by the integration of machine learning into operating room scheduling. Machine learning, which is a branch of Artificial Intelligence (AI), focuses on creating systems that learn or improve their performance based on the data they process. This requires having an initial review of performance to fuel the AI. This initial performance can stem from corporate culture.

## TALK WITH AURÉLIEN ROUSSEAU

Minister of Health and Prevention | France

With **Guy VALLANCIEN**, President of CHAM | France

### **The French healthcare system is both “outstanding and vulnerable”**

The current state of the French healthcare system can be described as both “outstanding and vulnerable”. Several measures and policy illustrate the quality and performance of the French healthcare system e.g., the medical regulation chain of healthcare access services (SAS), the emergency medical assistance service (SAMU), or even the psychiatric regulation telephone line. However, the French healthcare system also faces challenges such as the inability for some hospital departments to provide additional beds. Improving the healthcare system also implies to tackle issues related to working conditions e.g., exposure to occupational health risks, professional mobility, lessening of professional commitment of new generations.

### **Prevention is key to increase healthy life expectancy**

France global health strategy 2023-2033 aims at improving the healthy life expectancy of the French population and to ensure the sustainability of the healthcare system. To achieve these goals, preventive actions are essential (e.g., vaccination, promotion of precautionary measures, or disease prediction). Hence, the sustainability of the French healthcare system relies on investments in research and innovation in the field of prevention.

### **Health related interprofessional collaborations are essential to improve the quality of care**

Developing interprofessional collaboration potentially entails the reappraisal of roles and the division of tasks between physicians and other caregivers. Hence, experimentations are ongoing regarding the optimization of healthcare organization and care pathways. These experimentations also favor preventive and personalized medical approaches. Territorial Professional Health Communities (CPTS) and multi-professional health care centre (MSP) are at the forefront of technological and organizational innovations, especially those participating in experiments within the framework of the French innovation funding program "Article 51".

Smaller structures, consisting of a few physicians, should not be overlooked as they are the gatekeepers of the system and as they meet the largest volume of healthcare demand in France. Rethinking the different levels of care in hospitals is important. The latter could provide 3 different levels of care:

- A first level of proximity without surgical interventions,
- A second level incorporating surgery and maternity wards,
- A third level reserved for advanced expertise and higher education.

The development of higher education programs beyond the framework of teaching hospitals (CHU) completes this structuration.

### **The organization of emergency departments remains a significant challenge in France**

Dealing with complex decisions in the absence of simple solutions calls for a collective response, involving both local authorities and the Regional Health Agencies (ARS). The medical regulation chain of healthcare access services (SAS) is crucial in facilitating medical consultation planning. Given the predictability of most urgent cases, a possible organizational strategy could also be to assign the direct management of emergencies to each medical specialty, thereby relieving the burden on general emergency services. Moreover, digital devices could help anticipate and better manage the need for emergency beds in hospitals.

Furthermore, the policy introduced by the Prime Minister, to increase the attractiveness of night shifts through salary raises contributed to the opportunity to increase the number of inpatient beds.

### **Enhanced collaboration is required between the public and private healthcare sectors**

The interaction between the public and private sectors is essential for healthcare management in France. A principle of equity must be respected between those two sectors. It involves standardizing the remuneration policy or adopting common constraints in terms of care provision (e.g., participation in emergency care). The COVID-19 crisis has particularly intensified interactions between these two sectors: twenty percent of patients in intensive care units were treated in private healthcare institutions in Île-de-France.

### **Limiting the increase in healthcare spending is necessary**

The growth of healthcare spending must be carefully monitored. It is especially influenced by the access to innovative medicines and treatments. Hence, the Social Security Finance Law (PLFSS) will include measures to encourage the use of biosimilar products and rapid diagnostic test (RDT) for sore throats to reduce antibiotic consumption. This issue requires a collective, transparent, and perennial approach to managing and regulating expenses.

## PREVENTION, CARE, REHABILITATION: COORDINATING THE PATHWAY

**Speakers:** **Sophie BEAUPÈRE**, CEO of Unicancer | France, **Marguerite CAZENEUVE**, Associate Director at the National Health Insurance Fund - CNAM | France, **Audrey DERVELOY**, President of Sanofi France | France, **Virginie GENIEYS**, Deputy CEO of IMA Group - Inter Mutuelles Assistance | France, **Stéphane JUNIQUE**, President of Groupe VYV | France

Debate led by **Didier BAZZOCCHI**, Vice President of the Think Tank CRAPS | France

### **Harmonized care pathways enhance healthcare quality and system efficiency**

A harmonized care pathway is an integrated approach to healthcare delivery. It is designed to ensure effective and continuous coordination among various healthcare stakeholders (healthcare professionals, industry representatives, public and private players, insurers, etc.). These stakeholders revolve around the care pathway and play a crucial role within it. Collaboration between these stakeholders is essential to ensure:

- The quality of care, which is a central concept in the harmonized pathway,
- The consistency of care, without unnecessary interruptions or duplications.

The aim of this collaboration is to improve the experience and the health of the patient in the long run, as well as the efficiency of the healthcare system.

### **Toward a flat-rate capitation system that values care coordination and care quality**

The healthcare financing system is increasingly shifting towards the adoption of a flat-rate capitation-based model. This evolution is based on an innovative approach aimed at enhancing the efficiency and quality of care while controlling costs. Rather than targeting fee-for-service transactions, the flat-rate capitation system encourages healthcare providers to focus more on prevention, care coordination, and chronic disease management. Hence, this model contributes to the financial sustainability of the healthcare system. But most importantly, it creates a favourable environment for the implementation of harmonized care pathways, within which care is more consistent, accessible, and of higher quality. The French innovation funding program "Article 51" allows experimentations with innovative project-based flat-rate capitation models at the local level, with the goal of improving the quality of care. If these innovative practices are proven to be effective, they can be generalized across the entire French healthcare system.

### **A clear organization is necessary to ensure coordinated care pathways**

The organizational dimension associated with the creation of coordinated care pathways is of paramount importance. The efficient organization of harmonized care pathways improves the patient's access to health care. It also prevents the duplication of tests, diagnostic delays, and medical errors. The implementation of new technologies such as telemonitoring, remote consultation, Artificial Intelligence (AI), and the interoperability of healthcare professionals' software systems are important organizational drivers. These driving forces promote the development of an efficient and coordinated care pathway.

### **The patient needs to be at the centre of the pathway to improve the quality of care.**

Positioning the patient at the centre of the care pathway is of utmost importance to focus on the individuals receiving care, their needs, preferences, and well-being. Prioritizing the patient ensures that medical decisions are in line with their health goals and personal experiences. Communication, understanding and mutual trust between the patient and healthcare providers are thereby improved. Therefore, patients are encouraged to become active partners in managing their own health and making informed decisions, leading to more treatment adherence. Positioning the patient at the centre of the care pathway contributes to improving the quality of care, to increasing patient satisfaction, and to promoting better health outcomes, which is the ultimate goal of every high-quality healthcare system.

## THE STRENGTH OF THE CREW

**Speaker: Jean-Louis VICHOT**, Vice admiral and Former Commanding Officer of nuclear submarines and of the French maritime forces in the Pacific | France

With **Julien KOUCHNER**, President of 1Health | France

### **Living conditions on a submarine**

A submarine is a combat vessel that navigates under the sea to hide and approach its targets while remaining undetected. To achieve this, the crew remains in a confined environment for several months, never exposed to daylight, while the submarine operates at a depth of several hundred meters. Blind, it navigates using unstable sound waves that change with variations in water temperature, salinity, and pressure. It is also capable of deploying personnel ashore, mainly special forces, without ever being noticed. During submarine missions, three teams alternate with each other in order to ensure the submarine is run properly constantly.

### **Intense and demanding training**

Given the challenging living conditions on board, submariners undergo intense and rigorous training. All crew members are volunteers who initially train for several months at a Naval Academy. There are around twenty different jobs and several hundred qualifications available. Following this, they train in realistic vehicles using simulators and are divided into three teams for platform operation, enemy detection, and security and propulsion.

### **Respecting other crew members is the foundation of life on board**

In training as in real conditions, the crew plays an essential role. They must get along, show cohesion and be consistent. Each team member must be aware of the strengths and weaknesses of others, and there should be no incompatible personalities. Team uniformity and distribution of skills are crucial. For life on board, respect for one another is fundamental: respect for one's body, need to rest, preferences, opinions, religion, and philosophy. Throughout the entire mission, the aim is to pay attention to one another, listen to other team members, perceive their mood changes, and prevent them from isolating themselves. In a submarine, as in the healthcare sector, a sense of teamwork and trust is fundamental.

## HOW CAN WE IMPROVE DRUG ASSESSMENT?

**Speakers:** **Lionel COLLET**, President of the French National Authority for Health - HAS | France, **Christophe DURAND**, CEO of Bristol Myers Squibb France | France, **Thierry HULOT**, President of the LEEM | France, **Christelle RATIGNIER-CARBONNEIL**, Vice Chair at the European Medicines Agency - EMA and Director General of the French National Agency for Medicines and Health Products Safety - ANSM | France

Debate led by **Antoine MIALHE**, Partner at FTI Consulting | Belgium

### **The evolution of drug assessment is necessary in the face of increasing disruptive innovations and personalized medicine**

Therapeutic innovation is booming, with a significant increase in the number of available treatments. However, introducing these innovations to the market depends on a thorough assessment that considers the level of risk for patients and financial aspects, as well as assessing the quality, effectiveness, and efficiency of the drugs. The emergence of disruptive innovations, especially personalized medicine tailored to individual patient characteristics, necessitates adapting the benefit/risk assessment based on different situations, populations, and diseases to allow the safest possible access to these treatments. In this regard, the assessment of drugs for rare diseases, with target populations of small sample sizes, has already started to evolve towards other types of studies beyond randomized trials (indirect comparisons).

### **Performance contracts: A lever to address the high costs of innovative drugs?**

One-third of products do not reach the French market even though they are available at the European level, primarily due to reimbursement pricing. However, some treatments have a beneficial impact on both society and finances that goes well beyond the cost of making the drug available. Furthermore, the lack of on the effectiveness of certain innovative drugs with marketing authorization (AMM) can be a barrier, given their high price. Performance contracts help remove these barriers and facilitate access to these treatments by implementing a pay-for-performance system. But these contracts are not unanimously accepted because it is difficult, in some cases, to evaluate a product based on a single criterion: performance.

### **Early Access Authorization (AAP): Faster access to products remains exceptional**

When the data for an innovative drug is insufficient for marketing authorization (AMM), the product can benefit from an early access authorization (AAP). In this case, a mutual agreement is reached between the manufacturer and the public authorities based on the anticipated positive effects of the drug. In line with the expectations of the industry, the 2021 Social Security Finance Law introduced clear eligibility criteria and reduced time for market access. However, the number of molecules reaching the French market through early access authorizations is far from the number of molecules validated in the official drug compendium (Pharmacopoeia). These procedures are therefore exceptional and limited to the most innovative products.

### **The improvement of medical benefit is sometimes hard to quantify for early access authorizations**

In some cases of early access authorization (AAP), the lack of data on therapeutic progress implies an assessment of the improvement of medical benefit (ASMR) at level 5, meaning the absence of therapeutic progress. While about 80% of early access results in improvements of medical benefit provided at levels 1 to 4, confirming the presumed degree of drug innovation, some labs are hesitant to market their product due to an automatic classification at level 5. A pragmatic 2024 Social Security Finance Law (PLFSS) is therefore needed to address these unquantifiable improvements of medical benefit, to allow early access authorization to continue over time, with controls being put in place.

### **Delays in access to drugs are improving**

The average time between the marketing authorization of a drug at the European level and actual access for patients in France is 500 days. The French National Authority for Health (HAS) has made significant progress in terms of delays, thanks to a major overhaul of the process. Although a drug can be marketed as soon as it receives its marketing authorization, its reimbursement depends on the publication in the French Official Journal, indicating its price and reimbursement rate, the publication delay of which can be easily reduced.

### **It is necessary to increasingly involve patients in drug assessments**

The assessment process does not give enough importance to patients. Their input should not be limited only to urgent cases of drug requests but should be included in the assessment process. Patient associations can have significant weight in the decision-making process for drug authorization as they provide a critical perspective on products.



## **SPEECH OF STANISLAS GUERINI**

Minister for Public Transformation and Civil Service | France

The Convention on Health Analysis and Management (CHAM) is actively engaged in a strategy of breaking down barriers and fostering collaboration. It combines the expertise and resources of both the public and private sectors, recognizing their vital role in tackling the challenges of ageing population, shortages of medical services, and the declining attractiveness of careers in the public hospital sector.

### **Enhancing the civil service's appeal by improving working conditions for its employees**

Restoring meaning and attractiveness to the civil service requires not only an increase in income, but also an improvement in career paths and working conditions for employees. It should begin with the adoption of a collaborative, territorial (to locally manage and oversee employment) and non-competitive approach for healthcare professions, while also promoting cross-sector mobility.

Thus, a major consultation to gather the aspirations of civil service employees was organized in the summer of 2023. More than 100,000 have already contributed. It centres around six key areas in which the government has made commitments: managerial practices, gender equality, health at work, workspaces and working tools, human resources support and housing. The results of this consultation will be disclosed by the end of 2023.

### **Prevention and transformation of Human Resources (HR) in the civil service will be at the core of the government's roadmap**

The main area of improvement for the civil service is prevention:

- Health prevention first and foremost. In this regard, a plan was introduced in the summer of 2023 to provide assistance to individuals with chronic illnesses in the civil service. A new complementary social protection scheme will be deployed in the civil service, with the help of prevention experts such as insurance companies and private health insurers. Additionally, screening operations will be organized within the civil service. For example, on the Reunion Island, a specific diabetes prevention initiative will involve screenings, as well as training and awareness workshops for the general population.
- Secondly, prevention against violence towards public employees. Employers will now have the ability to file a complaint on behalf of the assaulted public employee. This measure is expected to apply not only to civil servants, but to all those who work for the public service, such as health insurance funds.

Furthermore, improvements need to be made in terms of simplifying HR and managerial transformation: merit and skills must be rewarded in the civil service. Employees should be assessed based on their actions, while managers should be evaluated using recognized management criteria. Both individual and collective commitment must be valued. A draft law is currently being developed in collaboration with trade unions to reform the civil service, focusing on these principles: enhancing merit-based rewards, promoting and facilitating mobility within the public sector, and reorienting career progression around skill development.

### **The civil service must adapt to the challenges of the 21st century and embark on a digital transition**

Frequently due to economic constraints, the information technology tools within the civil service are still outdated or even faulty. Civil servants should be equipped with state-of-the-art digital tools. To this end, large-scale projects have already been carried out, in collaboration with private stakeholders, with a focus on data sharing and investment. The healthcare sector can still benefit greatly from the opportunities offered by technological innovations, such as those developed by the French Care (a community of healthcare stakeholders supported by Bpifrance).

However, the digitization of public services does not contradict its humanization. For example, online registration procedures will not replace the existence of hospital reception desks. On the contrary, Artificial Intelligence (AI) could facilitate the establishment of connections between healthcare professionals and users by freeing up time for doctors. This is an experiment involving the provision of generative AI engines, that has been initiated with the participation of 1,000 willing public employees. This large-scale trial will provide a concrete assessment of the impact of AI on civil service professions.

### **Fostering environmental awareness among professionals represents a significant challenge for the civil service**

The civil service must address environmental challenges. The government's objective is to have all public-sector hospital staff trained in the issues of ecological transition by 2027. Training programs have already begun at Assistance Publique - Hôpitaux de Marseille (AP-HM). By the end of 2024, all 6,500 public sector hospital leaders will have completed their training.

## TECHNOLOGICAL INNOVATION TO THE RESCUE OF THE ORGANIZATION OF THE SYSTEM?

**Speakers:** **Lise ALTER**, Managing Director of the Health Innovation Agency - AIS | France, **Laurence COMTE-ARASSUS**, General Manager of GE Healthcare FBFA | France, **Marc GIGET**, President of the European Institute for Creative Strategies and Innovation | France, **Mark OSEWOLD**, President of Roche Diagnostics France | France, **Andrea RAPPAGLIOSI**, Senior Vice President Market Access, Public Affairs & Communication EMEA, Canada and LATAM of Edwards Lifesciences | Switzerland, **Olivier THIERRY**, CEO of Qare | France

Debate led by **Loris REPELLIN**, Chief of Staff to the Global CEO of Havas Creative & Havas Health & You | France

### 5P Medicine: Towards a holistic perspective on health

The evolution of health innovation demonstrates a fundamental shift in how medicine is advancing. Once primarily focused on curative treatments, medical innovation has broadened to encompass a more holistic view of health, centred on prevention, early diagnosis, disease prediction as well as improving the quality of life for healthcare providers. This shift towards “5P Medicine” – which stands for “predictive, preventive, participatory, personalized, and precision” – reflects the need to better anticipate the needs of the population. There is also a crucial need to reallocate budgets towards prevention. This major development aims at making innovation accessible to everyone by ensuring equitable access to medical advancements and contributing to the transformation of healthcare systems for more efficient and sustainable care.

### What are the levers to gain everyone’s trust in innovations?

Public trust in medical advancements is a critical, yet sometimes fragile, element. Concerns about job loss due to innovations, the safety of new medical technologies, or the idea of being used as an experimental subject in medical experiments can hinder the acceptance of innovation. Additionally, the speed at which new discoveries occur and are implemented can raise concerns about the safety and effectiveness of these innovations. In this regard, the role of communication and education is crucial so that innovation is understood, acknowledged, and accepted by citizens. It is important to emphasize that health innovation can also be a powerful means to address major challenges, as observed during the COVID-19 pandemic. To strengthen trust, adopting a collective approach with strong regulation is also necessary, particularly in maintaining high safety and effectiveness standards.

### **Teleconsultation: A changing tool with real advantages for patient journeys**

Teleconsultation, by enabling remote medical consultations, has opened new opportunities to improve patient journeys. It offers considerable advantages such as easy access to healthcare, the elimination of unnecessary travel, creating additional medical time through its flexibility, and a better understanding of patients' socio-economic context. Teleconsultation also plays a crucial role in addressing mental health issues particularly in psychiatry, by allowing doctors to better understand patients within their socio-economic environment. The evolution of teleconsultation towards its 2.0 version is a critical pivot for improving the quality of interactions between patients and doctors. This is achieved through certified medical devices capable of collecting patient observations (heart rate, pulse...), and through the integration of artificial intelligence for medical decision-making assistance. This breakthrough represents a key element in the transformation of the healthcare system, highlighting the need for dialogue, enhanced trust, and increased collaboration with the industry to meet the current challenges of medicine.

### **What levers for financing innovations?**

As new breakthroughs in medicine require significant investments, their economic viability is crucial for telemedicine providers who may experience financial losses due to low margins compared to investments. Financing healthcare innovation is essential to promote research, development, and the implementation of new technologies and medical practices. However, healthcare budgets are often set years in advance and must evolve to keep pace with technological and medical advances. Under the France 2030 plan, solutions to promote innovations in healthcare have been identified, such as multi-year financing levers and the establishment a regulatory and funding framework tailored to medical devices, and diagnostic and therapeutic procedures. The goal is to ensure that health innovation benefits the greatest number of people, by ensuring that funding adapts to evolving healthcare needs.

## **SPEECH OF ROLAND LESCURE**

Minister of State in charge of Industry | France

The 15<sup>th</sup> edition of the Convention on Health Analysis and Management (CHAM), which has been the subject of fruitful discussions, takes place during the drafting of the 2023 Social Security Finance Law (LFSS). The theme of relevance and quality in healthcare, addressed throughout the congress discussions, represents many challenges: ensuring access to healthcare products for all French citizens, the reindustrialization of France, while considering the constraints of public finances. These three challenges are among the priorities of the President of the French Republic, the Prime Minister, the Minister for Health and Prevention, and the Minister delegate for Public Accounts.

### **A strong policy of reshoring and increasing French production capabilities**

For the past 20 years, an increasing number of health products have been produced in Asia. Hence, since 2017, France has been actively implementing an ambitious reindustrialization policy. This reindustrialization plan was further strengthened in 2022 with the establishment of a support mechanism for industrial firms to help them bring back the production of essential medicines. All companies are encouraged to seize this opportunity. The government is also actively working on public procurement. Moreover, the government also focuses on training and skills development to enhance the competitiveness and economic growth of French companies. These policies are in line with the European Union member states.

### **Ensure supplies of “mature” products and rapid access to innovative products**

A strategy to combat supply shortages for "mature" health products is currently being developed with the French Minister of Health and Prevention. Regarding innovative products, work is being carried out with the French Health Innovation Agency (AIS), to reinforce their early access as well as their direct market access in France and to promote the continuous improvement of new procedures. Direct access, which allows coverage for certain medications as soon as they receive approval from the French National Authority for Health (HAS), made possible by the LFSS 2022, is a noteworthy example.

### **Cautious prescription and use of medications limit healthcare expenses**

Considering diagnostic and therapeutic advances, as well as the ageing population, spending on health products is likely to rise constantly and sharply in France. Historically, France has chosen to use price rather than volume as the means of controlling expenses and medication consumption. There needs to be a shift in the regulation philosophy, focusing on improving medication use and the relevance of prescriptions, based on the experience of other countries. Optimizing prescriptions and the consumption of healthcare products is not only a matter of healthcare quality and safety (fighting antibiotic resistance) but also an environmental concern (preventing product waste) and a financial sustainability issue (ensuring access to therapeutic innovations for everyone).

These discussions must be pursued with all the stakeholders of the healthcare system, from pharmacists and physicians to manufacturers, distributors, and patient representatives. Ensuring access to healthcare products for all and controlling expenses will be made possible through a widespread effort, while ensuring a fair distribution of value among all the stakeholders. The establishment of a real-time evaluation culture and the utilization of health data by artificial intelligence are among the levers to be activated in order to address this threefold challenge.

