

THE 5th WELL AGING SOCIETY SUMMIT ASIA-JAPAN Report

Date: Tuesday, November 22, 2022 10:00-18:15

Venue: Iino Hall & Conference Center (2-1-1 Uchisaiwai-cho, Chiyoda-ku, Tokyo)



OPENING REMARKS FROM THE ORGANIZER

< Speaker >

MAKOTO NAGAMINE

(Parliamentary Vice-Minister of Economy, Trade and Industry)



Responding to the problems that are emerging due to the aging of society is one of the common issues around the world, and utilization of medical data, medical tourism and health and productivity management are particularly important themes. The COVID-19 pandemic has heightened global interest in health and medical care, and it will be essential for the international community in the future to learn the initiatives of each country and utilize them in the design of systems. I hope that this event will serve as a base for collaboration and provide an opportunity to generate solutions to the issues that an aging society faces.

KEYNOTE SPEECH: 1

「INTRODUCTION OF HEALTH INITIATIVES OVERSEAS : THE EXAMPLE OF FRANCE」

< Speaker >

FRANÇOIS BRAUN (French Minister for Health and Prevention)

The elderly are an asset to our society and their specific needs need to be taken into account from the design stage of our public policies. The European Commission launched an initiative in 2021 to promote access to affordable, high-quality long-term care for the elderly, and since December 2015, France has taken strong measures aiming at adapting society to ageing.

This prioritizes care at home and strengthening social support to guarantee it. Its implementation requires the competent and well-trained staff and the creation of an environment where they can work under attractive working conditions. We proceeded with the design of the system, and at the beginning of 2022, we created a national digital health database to which every citizen, regardless of age, can have access and share their health data with trusted professionals and medical institutions in their individual "My Health Space."

The deployment of digital health tools need to be based on trust. Ethics, co-construction, and transparency are essential to us in order to move forward collectively with the trust of citizens and health professionals. Aging is a global challenge, and the international community must have the determination to move forward together on this path by exchanging the best practices validated by evidence and having a confrontation of points of view.



KEYNOTE SPEECH: 2

「INTRODUCTION OF INITIATIVES IN THE MEDICAL COMMUNITY TOWARDS THE FUTURE HEALTHCARE」

< Speaker >

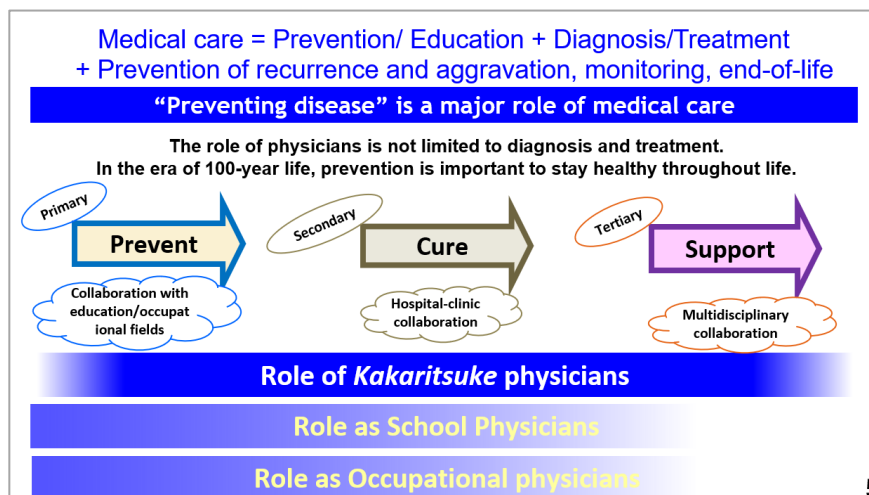
KICHIRO MATSUMOTO (President, Japan Medical Association)

Medical care must be provided in an integrated manner that includes prevention and education; in conjunction with diagnosis, treatment, prevention of recurrence or aggravation, monitoring, and end-of-life care. To live a healthy life in the “100-year life era,” it is necessary to think in terms of “prevention, cure, and support.” This is also the role of the *kakaritsuke* physicians - with data showing that people who have aforesaid physicians are more likely to receive cancer screenings.

In addition to providing medical care in their own medical institutions, *kakaritsuke* physicians provide out of hours service; including nighttime, weekends and public holidays. They collaborate in both community and public health activities to protect the health of local residents by supporting their respective communities as a whole. These activities are managed with the deep involvement of the local medical associations.

Various health services (medical checkups) are being carried out from infancy to old age, but the data is fragmented. The Japan Medical Association (JMA) believes that, as an ideal form of health promotion for the nation, it is necessary to put in place a system whereby the data is appropriately reflected in the health management of the people throughout their lives.

In the future, the JMA will provide support so that the public can use the free-access "Medical Function Information Provision System" and select appropriate medical institutions on their own. In addition, the advancement of DX and ICT in healthcare including standardization of electronic medical records has been an urgent issue. The JMA is committed to working with related parties to ensure that a solid medical and long-term care delivery system is established.



PANEL SESSION: 1 - PERSONAL HEALTH RECORD (PHR)

「EFFORTS TO PROMOTE THE UTILIZATION OF PHRs」



< Panelists >

KIMIYUKI NAGASHIMA (Executive Board Member, Japan Medical Association)

KAZUO NAKAMURA (Chairman and CEO, CMIC HOLDINGS CO., Ltd.)

TAKERU HIKI (CEO, Welby Inc.)

SHINICHI OGAWA (Assistant Counsellor for Information Technology Promotion, Office of Counsellor for Assistance for Development of Specified Drugs and Medical Information Management, Health Policy Bureau, Ministry of Health Labour and Welfare)

< Moderator >

KAZUSHIGE TANAKA

(Ministry of Economy, Trade and Industry Commerce and Service Industry Policy Group Deputy Director-General)

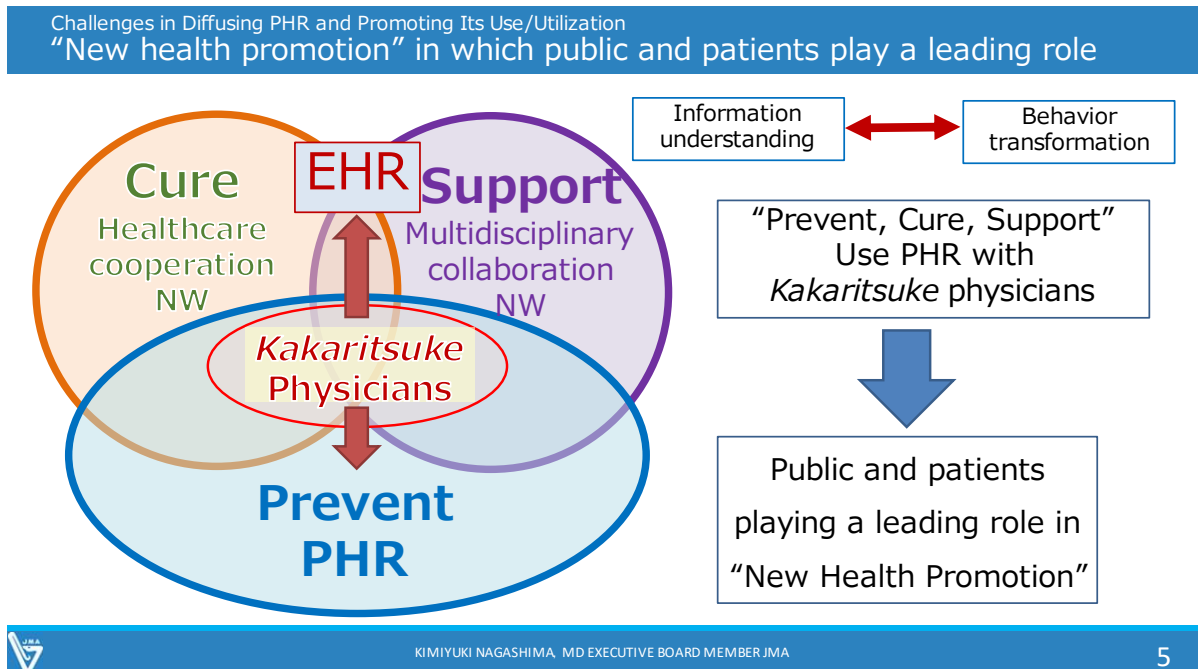
- At the beginning of the session, Mr. Tanaka, the moderator, emphasized the need for the power of digital and data as a future vision for personal health records (PHRs). Following his words, the four panelists gave presentations from their respective positions and perspectives.

Kazushige Tanaka: Maintaining and improving the health of the entire population, including the elderly, and pursuing individual happiness will revitalize the economy and society as a whole. PHRs are necessary for this and the utilization of data is the key to their realization and dissemination. To achieve this goal, medical, industrial, and government sectors are required to unite to take up the challenge, while at the same time, difficulties in terms of the protection of personal information and security stand in the way. How can we provide convenient services to the public and ensure their proper utilization? We should deepen the discussion on the significance and challenges of PHRs.

PANEL SESSION: 1 - PERSONAL HEALTH RECORD (PHR)

「EFFORTS TO PROMOTE THE UTILIZATION OF PHRs」

Kimiyuki Nagashima: The super-aging society requires three types of precautionary measures. Primary prevention is "prevention: health promotion and disease prevention;" secondary prevention is "cure: early treatment and prevention of aggravation and recurrence;" and tertiary prevention is "support: functional recovery and return to society." PHR makes a particularly large contribution to primary prevention. In the future, it is expected to be utilized in secondary and tertiary prevention as well. In order to link and integrate PHRs and electronic medical records with electronic health records (EHRs), the interoperability and standardization of systems and data should be promoted. Utilizing the data by community medical and long-term care teams centered on *Kakaritsuke* physicians can lead to "new health promotion." When advancing medical DX, it is the most important thing to ensure "leave no one and no patient behind". While making IT as easy to use as possible, it is also necessary to provide solid support in the field. PHRs are also expected to be used as big data and real-world data. Ensuring their effectiveness and safety, they should be convenient and efficient for all people and patients.



PANEL SESSION: 1 - PERSONAL HEALTH RECORD (PHR)

「EFFORTS TO PROMOTE THE UTILIZATION OF PHRs」

Kazuo Nakamura: The secret of healthy longevity is said to be "IKIGAI," a term originating from Japan. This consists of "to be socially involved, to do what you love, and to be praised and recognized". Overseas data have also reported that those with IKIGAI have a healthier and longer life expectancy. Our company has been working to create an efficient system for vaccination, based on a sense of crisis about healthy longevity due to the restricted human contact caused by COVID-19. PHRs are highly beneficial, but it is necessary to take measures to make them more familiar to the elderly. We have proposed an electronic medicine notebook in the form of a good-luck charm and verified it in collaboration with Kiyomizudera Temple in Kyoto, Japan. Digitalization and data utilization are important, but measures must also be taken from the viewpoint of software, that is, how people can be involved in looking after the elderly.

Using harmo Vaccine Care for COVID-19 vaccination

Prevent vaccination accidents by reading barcodes at reception

Prevention of vaccination accidents

Number of potential accidents detected
40 Cases

The number of detected cases that are considered to have the potential to become an accident

Number of registrants
Cumulative total **1.05** Million individuals

Delivery record
21 Local governments
200 Vaccination sites

As of 2022.8.24

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harmo Medication Record

Cherished over 11 years by 400,000 users

System installed
801 stores
100 Medical institutions

Number of prescriptions
Cumulative total Over **5** Million pieces

Number of stores using "harmo"
Over **17,000** stores

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PANEL SESSION: 1 - PERSONAL HEALTH RECORD (PHR)

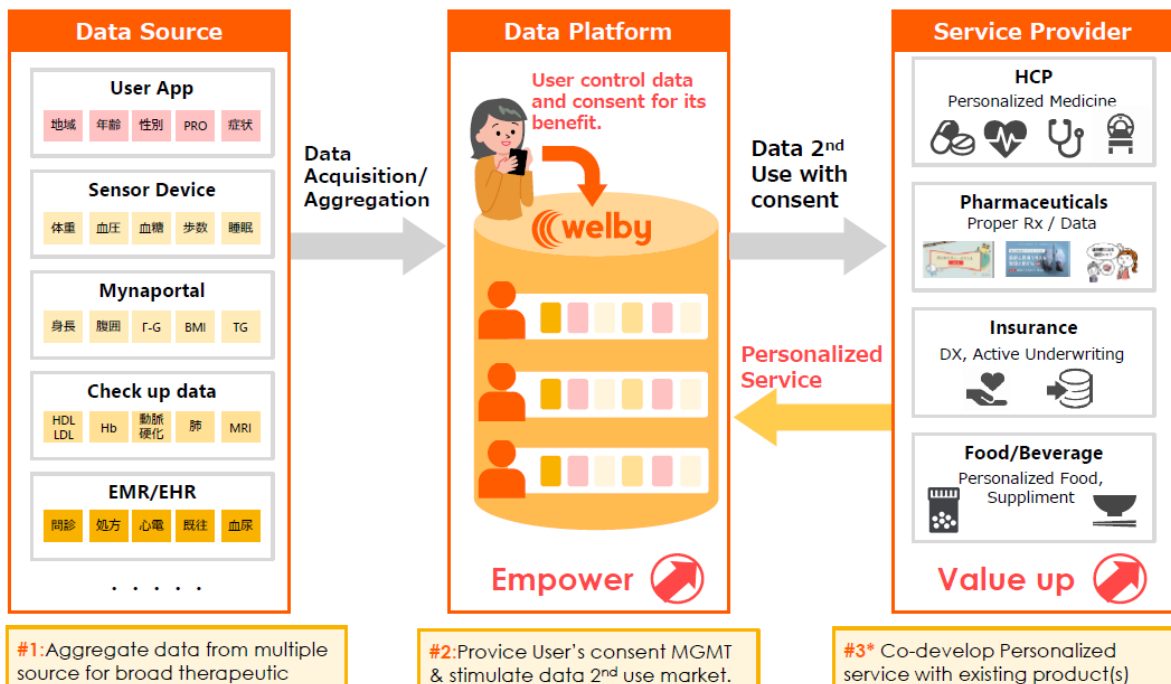
「EFFORTS TO PROMOTE THE UTILIZATION OF PHRs」

Takeru Hiki: Our company has been in the PHR business for 11 years since its inception. We have doctors introduce our PHR to their patients as a disease management tool, not a health management tool. Our PHR is managed via a smartphone app, so the smartphone becomes a measurement device, and data such as step counts can be aggregated and managed. The major values of using PHRs include data management by the users themselves and collaboration with their family doctors and other healthcare providers. When a patient using the PHR visits multiple medical institutions, the linkage between multiple hospitals, clinics, pharmacies, etc., can be established, which enables advantageous data sharing among them. We have promoted the creation of common rules among PHR providers, established a PHR providers' organization, and proceeded with various initiatives. Through discussions with the government, medical professionals, etc., in addition to the results of these initiatives, we intend to realize more efficient operation of PHR.

Data Portability based on User's consent



PHR will provide Data management based on user's consent, and enable user(s) to choose the 2nd use player(s) & institution(s) to use data for their service.



PANEL SESSION: 1 - PERSONAL HEALTH RECORD (PHR)

「EFFORTS TO PROMOTE THE UTILIZATION OF PHRs」

Shinichi Ogawa: Looking ahead to the year 2040, we have three political measures: securing employment opportunities up to age 70, extending healthy life expectancy, and data health reform. Amidst the demand for measures to be formulated from the people's perspective and for the public and private sectors to work together, we are stepping up our initiatives by establishing cross-departmental working groups instead of the traditional sectional use of ICT. The direction of the medical DX is to extend healthy life expectancy by enabling citizens themselves to easily access their healthcare information, and to promote improvement of the quality of medical care and optimization of treatment by providing healthcare efficiently and effectively. The three main frameworks are the construction of a nationwide medical information platform, standardization of electronic medical record information, and DX for revision of medical fees. It is expected that the centralized management of healthcare data since birth will also improve the efficiency of on-site operations and the effective use of human resources.

Concentrated Reform Plan of the Data-based Health Management Initiatives which adapted to new normal

Basic idea for the Concentrated Reform Plan of the Data-based Health Management Initiatives

○ The following three schemes will enable us to **make maximum use of the existing infrastructure such as the Online Confirmation System for Health Insurance Qualification and the My Number System** while **implementing the required legal measures for 2021**, as we seek to begin operations during FY 2022 by advancing **data health reform** both efficiently and quickly, in order to build a resilient social security system that is digitized to accommodate our new daily needs.

▶ Focus on implementing the following 3 actions in the next 2 years

ACTION 1: Expand the scheme for checking medical information nationwide

With regards to the **scheme that enables medical information to be confirmed by the patients and medical institutions nationwide**, expand the available information (in addition to drug details, the information on surgery, transplants, dialysis, etc.), **and begin operations by summer 2022**


ACTION 2: Build a scheme for electronic prescriptions

With regards to the **scheme for electronic prescriptions** which would also help prevent double prescriptions, begin by sorting out the operation requirements that would serve as the foundation for the online eligibility verification system and coordinate with related persons, followed by making the necessary legal responses in accordance with the sorted results while also making system upgrades to the medical institutions, with the aim of **beginning operations by summer 2022**

ACTION 3: Expand the scheme that enables utilizing one's own healthcare information

With regards to the **scheme that allows citizens and patients to view and utilize their own healthcare information** via PCs or smartphones, implement measures swiftly to standardize health & medical exam data, while also implementing required legal measures for 2021 in order to further expand the health-related information that can be accessed, **gradually expanding its operations from early FY 2022**

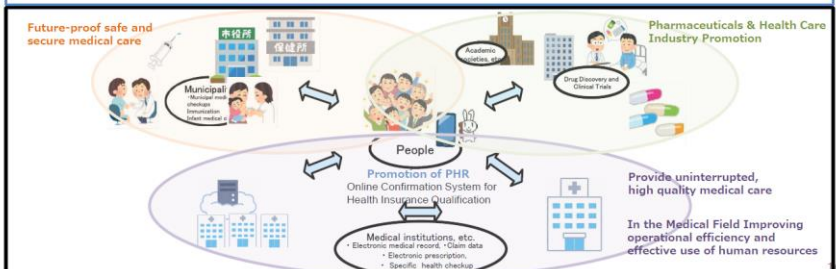
◆ In addition to the above, the initiatives will be steadily implemented to serve as a foundation for the data health reform, such as the standardization of the medical information system and the development of an environment for API utilization.
Also the study will be continued for the inclusion of medical information other than those mentioned above, such as electronic medical records.



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A Society Realized by Digital Transformation for healthcare

- ▶ Contributing to the improvement of individual health by making it possible for individuals to centrally understand their own lifelong health care data from birth to the present [Further promotion of PHR].
- ▶ With the consent of the patient, medical institutions nationwide can share necessary medical information to ensure seamless, high-quality medical care [expansion of Online Confirmation System for Health Insurance Qualification, standardization of electronic medical record information, etc., and utilization of Claim data].
- ▶ Improvement of operational efficiency and effective use of human resources in the medical field through digitalization [e.g., promotion of DX initiatives related to revision of reimbursement for medical services].
- ▶ Promote pharmaceutical and healthcare industries such as drug discovery and clinical trials through secondary use of healthcare data [Improvement of environment for utilization of medical information].



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PANEL SESSION: 1 - PERSONAL HEALTH RECORD (PHR)

「EFFORTS TO PROMOTE THE UTILIZATION OF PHRs」

- The health management and medical care of the population have changed and prevention in daily life has become extremely important, especially in a super-aging society. Against this background, PHR has been utilized. Also, the need for data and wearable devices has again been highlighted.
- In order to integrate dispersed insurance and health data, a certain level of standardization and common rules are required. Further collaboration among the government, medical community, and providers is needed.
- Secondary use of PHRs needs to be discussed from two perspectives: first, what is the purpose of using the information; second, the cost of information management should be considered in parallel with the benefits of the utilization. Careful explanation to the public will also be essential.

PANEL SESSION: 2 - MEDICAL TOURISM

「REINFORCEMENT OF SYSTEMS FOR ACCEPTING FOREIGN VISITORS TO JAPAN, SUCH AS INDUSTRY CERTIFICATION, AND STRENGTHENING INTERNATIONAL TRANSMISSIONS」

< Panelists >

TAKAAKI KAMEDA (Chairman of the Board, Kameda Medical Center)

NORIKO YAMADA (Representative Director, International Medical Coordination Companies Association Japan)

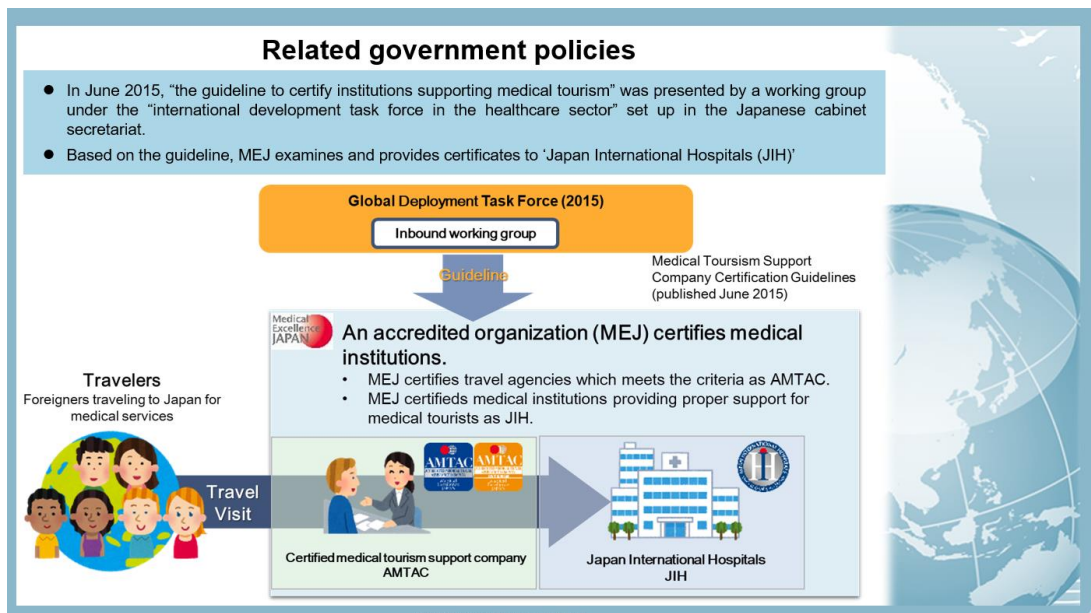
YANG YANG (Representative Director, Doctor Care Co., Ltd)

< Moderator >

CHIAKI MIYOSHI (Executive Director, Medical Excellence JAPAN)

- What should Japan's inbound patient care services be like in the era of super-aging and the new normal? After moderator Mr. Miyoshi presented its positioning in the national growth strategy and the issues, the three panelists gave their presentations.

Chiaki Miyoshi: The Japanese government has set a policy of international expansion of health and medical care service as one of its national growth strategies. A system to recommend medical institutions that accept inbound medical tourists, Japan International Hospitals (JIH), has been established. In this era of the new normal, its demand is expected to increase, and support for businesses needs to be strengthened based on guidelines such as certification for medical travel support. One possibility for the future is to certify overseas medical institutions for collaboration with JIH.



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Takaaki Kameda: Our hospital has been actively accepting medical tourists, but in order to develop the inbound patient care to a major business in the future, not only the efforts of individual medical institutions, but also public support will be required. Japanese medical care, with its high quality and reasonable medical costs, is highly competitive internationally. Japan's inbound patient care services are primarily for visitors from China and Southeast Asia, rather than English-speaking countries. We should create a flow in which the provision of advanced medical care will be provided back to the people of Japan. What will be needed to achieve this is the development of infrastructure to closely share information prior to the arrival of medical visitors to Japan. Rather than issuing medical visas, we need to promote simplifying the payment of medical expenses. It is also necessary to clarify what can be tackled by the private sector and what needs to be solved by the national government, and to create a mindset in which Japan as a whole shares the inbound patient care services as a growth strategy.

医療法人鉄蕉会の長期ビジョン

- ・ **アジアのハブ病院**を目指す。
 - ・ 年間手術件数**3万件**ができる病院にする。
 - ・ 地域医療とグローバル医療の両方とも強化する。
- Local & Global 二兎を追わなければ一兎をも得ず**

必要な施策

- ・ 診療圏の拡大(首都圏、東アジアのマーケティング強化)
- ・ 高度な医療を提供するための人材育成
- ・ 臨床とともに研究開発体制を強化
- ・ 将来にわたり持続可能な運営をマネジメントする医療経営専門家の育成
- ・ 住みやすく、働きやすい環境の整備
- ・ 楽しみのある街作り

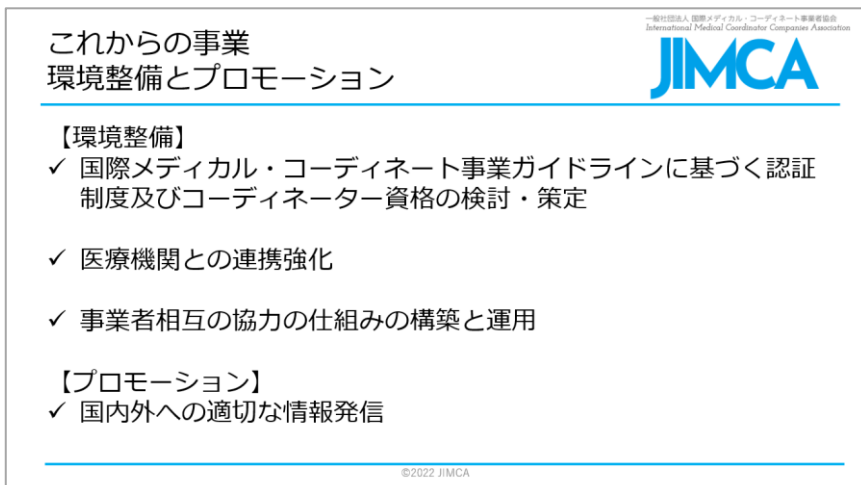
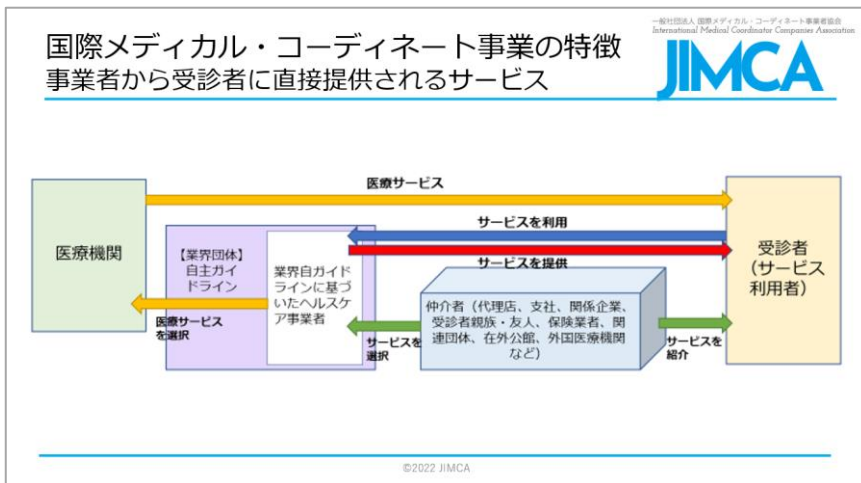
医療インバウンドへの提言

1. “日本医療”のイメージ作り
日本政府が主導する日本医療の紹介を積極的に行うべきである。“日本の医療を知る”、“日本に来て健康になる”、“健康になって日本を好きになる”というような強力且つ有効なプロモーション活動を行う。
2. 真の国際医療交流として取り込む
一方的に日本国内に患者（健診受診者を含む）を呼び込むのではなく、如何に相手国の医療機関などと友好交流を通じて、信頼できる互恵関係を作ることが大切である。
3. 日本国内の関連法律の整備
医療滞在ビザ制度の改善（ビザ審査のスピード、審査条件の緩和）、医療訴訟に関する法律、保険などの整備は急務である。
4. 医療インバウンド（健診目的）のターゲットは中国、東南アジアである
健診を受けるニーズは中国（グレイターチャイナ）にあり、それに加えて、東南アジア（特にベトナム、マレーシア、インドネシア、フィリピン）に日本医療の良さを発信すべきである。
5. メディカルツーリズムの受け皿としての日本国内の信頼できる医療機関の選別
医療機関の選別作業は始まっているが、特に、選別条件として、診療内容だけでなく、海外患者受け入れシステムの有無を重要な判断基準にすべきである。
6. 日本国民は最終的な受益者である
医療インバウンドは、受け入れ医療施設周辺の地域住民、そして、日本国民全体に利益をもたらすと確信している。医療の国際化（医療産業化を含む）は日本が国際社会へのアピール効果を期待できる分野である。

PANEL SESSION: 2 - MEDICAL TOURISM

「REINFORCEMENT OF SYSTEMS FOR ACCEPTING FOREIGN VISITORS TO JAPAN, SUCH AS INDUSTRY CERTIFICATION, AND STRENGTHENING INTERNATIONAL TRANSMISSIONS」

Noriko Yamada: The International Medical Coordination Companies Association Japan (JIMCA) is an organization established to assist patients who come to Japan to receive medical care, and has compiled a set of industry guidelines on what business operators involved in such services should be aware of. We intend to organize a certification system and individual qualifications such as coordinators according to this guideline. In addition, a cooperative relationship with medical institutions is indispensable for providing services to medical examinees, and strengthening the cooperation is necessary. We recognize that there are many issues that JIMCA should play a central role in addressing, such as the creation of a system for information exchange among business operators and promotion both domestically and internationally. The quality of Japanese medical services is very high, and a variety of information and knowledge, including case studies of patients who have used the services, have been gathered. I hope that those involved will make use of this information.



PANEL SESSION: 2 - MEDICAL TOURISM

「REINFORCEMENT OF SYSTEMS FOR ACCEPTING FOREIGN VISITORS TO JAPAN, SUCH AS INDUSTRY CERTIFICATION, AND STRENGTHENING INTERNATIONAL TRANSMISSIONS」

Yang Yang: Inbound patient care services are beneficial to both patients who visit Japan to receive medical examinations and the medical institutions that accept them, but it is also true that there are some concerns and frustrations. To resolve them, a coordinating business operator that stands between the two will play a major role. One clue to this is the "medical advance coordination model." This model is based on the referral system commonly seen in Japan, in which information is provided in advance, and the coordinator serves as a home doctor for the patient and as a safety net for the medical institution. The coordinator also provides post-treatment follow-up for acute patients. By strengthening the network with medical institutions, the readiness to accept patients, and human resource development, a win-win medical examination model can be established for both the patient and medical institution sides. In the future, we plan to strengthen partnerships with local companies and insurance companies in China.

訪日診療実績（2019年～2022年 4年間）

データに人間ドック/健診は含めていません

訪日患者さんの状況	2019年-2020年	2021年-現在	診療内容	割合
悪性腫瘍の割合	70%	84%	検査のみ	11%
非悪性腫瘍の割合	30%	16%	治療方針確認	15%
転移あり	37%	70%	検査及び治療方針確認	28%
転移なし	63%	30%	化学療法のみ	20%
男女の割合	男性：39% 女性：61%	男性：33% 女性：67%	化学療法+手術+放射線療法	10%
平均年齢	47歳	50歳	手術のみ	8%
			放射線療法のみ	8%

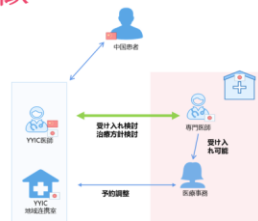
- 悪性腫瘍の割合が高く、COVID-19 発生後はさらに悪性腫瘍の割合が増加。
- 転移腫瘍の割合も増加
- 女性が優位で、より良い医療を求めている印象があります

- 46%の方が日本治療を受けています
- 悪性、転移性腫瘍が多いため、長期受診が多く、一人あたりの消費は健康診断よりはるかに高い

医療先行コーディネートの特徴

①紹介受診制度の応用

- D C + YYICモデルで、まずはYYICの医師が直接受け入れ病院の医師とやり取りし、患者の医療情報の正確性を確保できる。



②国際医療連携ネットワーク

- 臨床実践に基づいた日本と中国の医師をつなぐプラットフォームを作り
- 急性期治療後のフォローアップ
- 中国帰国後のフォローアップ病院を紹介
- オンライン/オフライン診療を組み合わせることで国境国籍人種問わずトータルライフな健康管理サービス

PANEL SESSION: 2 - MEDICAL TOURISM

「REINFORCEMENT OF SYSTEMS FOR ACCEPTING FOREIGN VISITORS TO JAPAN, SUCH AS INDUSTRY CERTIFICATION, AND STRENGTHENING INTERNATIONAL TRANSMISSIONS」

- Medical institutions were sometimes forced to guarantee the identity for medical visas in the past, but it is important in the future to strengthen the system where medical institutions concentrate on medical services and the business operators support the other aspects.
- Utilizing social media is effective for information dissemination to China and seeking optimal ways for each of the other foreign countries and regions is required.
- The future of inbound patient care services must be considered in terms of access, quality, and cost. For that purpose, there are challenges such as certification, coordination, and currency barriers, and the government, medical community, and business operators need to discuss and improve quality from their perspectives.

PANEL SESSION: 3 - HEALTH PROMOTION THROUGH WORK

「INTERNATIONAL PROMOTION OF HEALTH AND PRODUCTIVITY MANAGEMENT BASED ON HUMAN CAPITAL FORMATION」



< Panelists >

MARK PEARSON(Deputy Director, OECD Directorate for Employment, Labour and Social Affairs)

SEIJI INAGAKI(Representative Director, President (Chief Executive Officer), Dai-ichi Life Holdings, Inc.)

LAURENT SCHEER(Vice-Chair, Health Committee, Business at OECD (BIAC), Vice-President, Global Public Affairs & Alcohol in Society, Pernod Ricard SA)

MARI KOGISO(Co-CEO, SDG Impact Japan)

< Moderator >

KAORI TAKAHASHI(Senior Staff Writer, Nikkei Inc. News Manager, Nikkei CNBC)

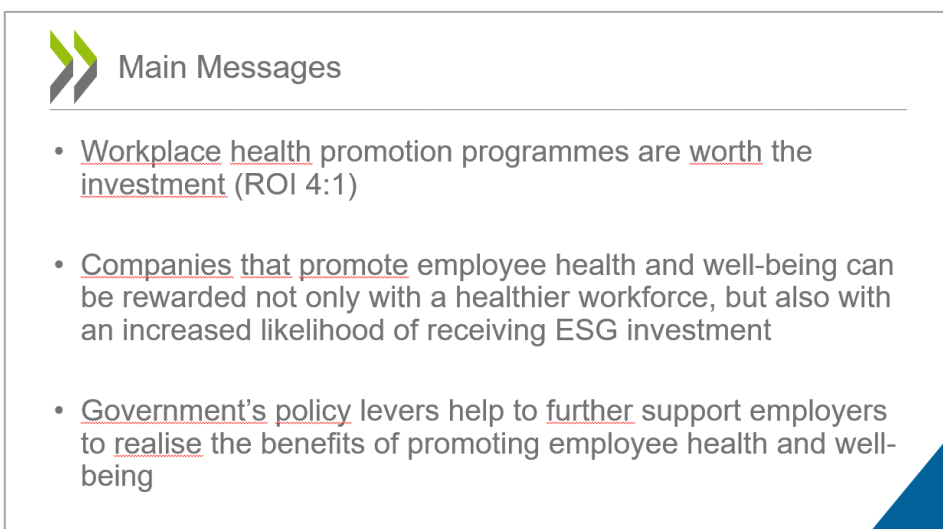
- The COVID-19 pandemic has brought mental health issues to light, and health and productivity management initiatives are attracting attention. The session began with the moderator Mis. Takahashi's explanation for the report by OECD Directorate for Employment, Labour and Social Affairs.

Kaori Takahashi: The COVID-19 pandemic included not only the spread of the infection but also mental health issues. As an increasing number of companies are promoting employee health and wellbeing initiatives from the management aspect, the improvement of employee health has become an important issue of corporate human capital formation. Investors are also demanding disclosure of information on health and productivity management. The OECD has conducted a survey on workplace wellbeing, the results of which may provide various insights.

PANEL SESSION: 3 - HEALTH PROMOTION THROUGH WORK

「INTERNATIONAL PROMOTION OF HEALTH AND PRODUCTIVITY MANAGEMENT BASED ON HUMAN CAPITAL FORMATION」

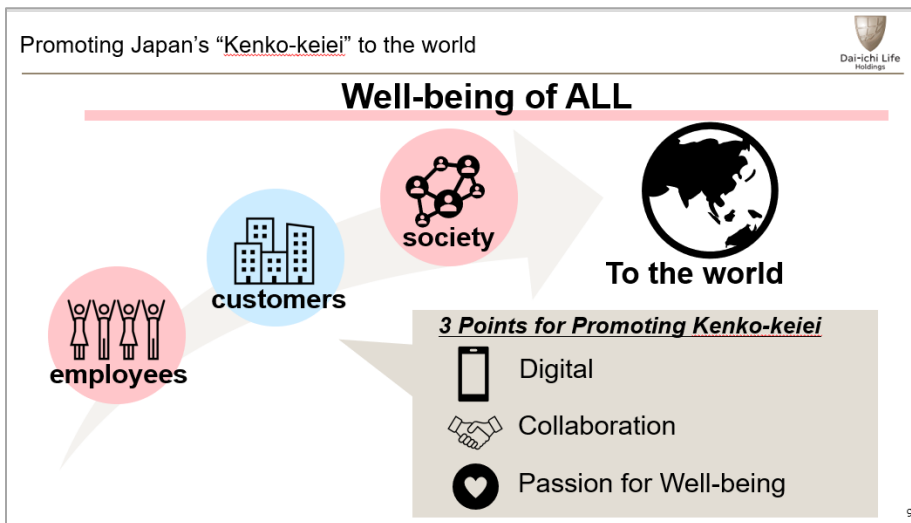
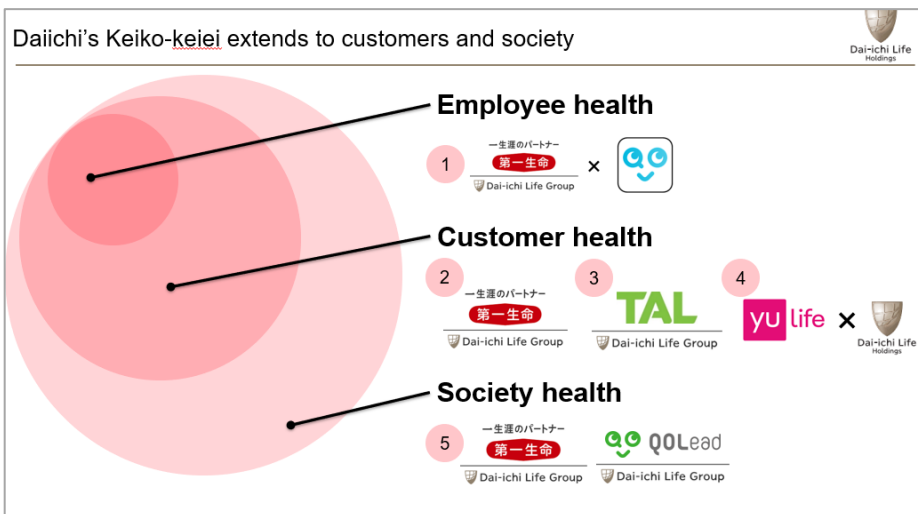
Mark Pearson: It has been reported that mental distress, smoking, and obesity increase employee absenteeism. An OECD study called the "Workforce Disclosure Initiative" shows that many major companies are working to improve health and wellbeing in the workplace. This is due to the fact that such an improvement has the direct effect of increasing labor productivity, as well as indirect effects such as those related to insurance. The return on investment in health and productivity management is said to be "\$4 return for every \$1 investment". It is expected that this investment will not only improve the health of employees but will also be subject to ESG investment and enhance the performance of the stock. There should be much for the government to do to disseminate information and support companies that engage in health and productivity management, as this will help revitalize the entire industrial sector in Japan.



PANEL SESSION: 3 - HEALTH PROMOTION THROUGH WORK

「INTERNATIONAL PROMOTION OF HEALTH AND PRODUCTIVITY MANAGEMENT BASED ON HUMAN CAPITAL FORMATION」


Seiji Inagaki: As human capital management is gaining attention, "Kenko-keiei (health and productivity management)" is an important part of its concept. Dai-ichi Life has been committed to health promotion as a business operator, and has also made ESG investments as an institutional investor. Our pillars are employees, customers, and society. For employees, we provide support through the development of health promotion apps. For customers, we are not only looking at Japan but also overseas, and in Australia and the U.K. we have achieved results in reducing the frequency of insurance claims by offering programs and apps. For society, we offer Healstep services that promote health and productivity management and optimize costs for corporate health insurance management associations. We will continue to strengthen our initiatives with the keywords of digitalization, collaboration, and passion.




PANEL SESSION: 3 - HEALTH PROMOTION THROUGH WORK

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Mari Kogiso: We are developing our business with a focus on sustainable funds, and one of our objectives is to pursue ESG impact. When we analyze ESG scores, one of the elements is healthiness. Recently, health and productivity management has come to be discussed in the logic of human capital management, and investors are paying attention to it as an easy-to-understand perspective. Although many investors are not analyzing health and productivity management in depth at present, it is clear that health data can have an impact on corporate value, corporate performance, and business results, and this should be better understood in the future. The situation differs from industry to industry and from company to company, so it is natural that operations in the highly labor-intensive construction and agriculture industries will differ from those in the IT industry. The IT industry should conduct more detailed evidence-based analysis in the future, including the increasing importance of mental health-related aspects.

NextGen ESG Japan: ESG Objectives 	
Environment	Improve portfolio companies' climate trajectory path (business model) towards 1.5 degrees Celsius on absolute company level over investment horizon of 3-5 years
Social	Improve portfolio companies' absolute performance on human capital management and disclosure of relevant social indicators over investment horizon of 3-5 years
Governance	Improve portfolio companies' quality and disclosure on governance for each company over investment horizon 3-5 years
Gender	Improve portfolio companies' gender balance of management position and gender pay gap over investment horizon 3-5 years

Utilizing Health Data for Investment Analysis and Engagement 	
	<ul style="list-style-type: none"> • How the health of employees will impact the revenue of companies? • Are there any direct link between health data and corporate value? • How health status of employees will related other human capital KPIs (employee engagement, job turn over, work efficiency, etc.) • How health data will affect different industry differently. Are there some industries that are affected more than others and why? And in what situations? • How long does it take for those health and safety performance are reflected with company performance? What are long-term and short-term effects? <p>The data and analysis of the above questions may enhance the use of health data by ESG analysts.</p>

PANEL SESSION: 3 - HEALTH PROMOTION THROUGH WORK

INTERNATIONAL PROMOTION OF HEALTH AND PRODUCTIVITY MANAGEMENT BASED ON HUMAN CAPITAL FORMATION


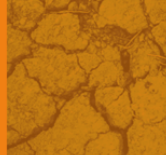
Laurent Scheer: Since the COVID-19 pandemic, public-private partnerships for health promotion programs have been attracting attention. The OECD has positioned health as an important factor for economic prosperity. The French company Pernod Ricard has mandated e-learning for all employees on the dangers of alcohol abuse, as excessive drinking has a negative impact on work productivity. The company also considers the impact of its employees' lives on children and, at the same time, considers it important to reach out to consumers, and has even developed a campaign to prevent alcohol abuse. The results show that awareness of the dangers of excessive drinking has increased considerably among young adults. We plan to launch health awareness promotions not only in France, but also in other European countries and Japan.

ENSURE SUSTAINABILITY THROUGH VALUE-BASED AND PERSON-CENTERED HEALTH APPROACHES 02

How OECD and governments can make a difference:

FOR OECD:
Following its benchmark report on mental health, expand the data collection and sharing of best practices among governments and stakeholders to encourage more investments, tackling stigma associated with mental disorders, and horizontal action going forward.

FOR ECONOMY, EMPLOYMENT, RESEARCH, AND HEALTH MINISTRIES:
Promote well-being programs in workplace settings to motivate, protect, and empower companies' workforce. We will foster inter-agency government dialogue at our upcoming Annual Forum on Health where we will point how OECD can identify what constitutes best practice and how governments can scale up effective initiatives.

OECD should:

“Collect evidence, share best practices, and encourage Governments - to invest more, address critical challenges, and take horizontal approaches“

Ministries of Economy, Employment, Research, and Health should:

“Promote well-being programs in workplaces to motivate, protect, and empower employees“

Pernod Ricard’s initiatives to promote safer choices around alcohol among employees

"Learn about Alcohol and Responsible Drinking“ online course

- Compulsory for employees worldwide
- Translated into 21 languages
- 94% of permanent employees trained

Training of sales staff on the prevention of alcohol-related risks

- Targeted at sales staff and brand ambassadors who are at the frontline of our business



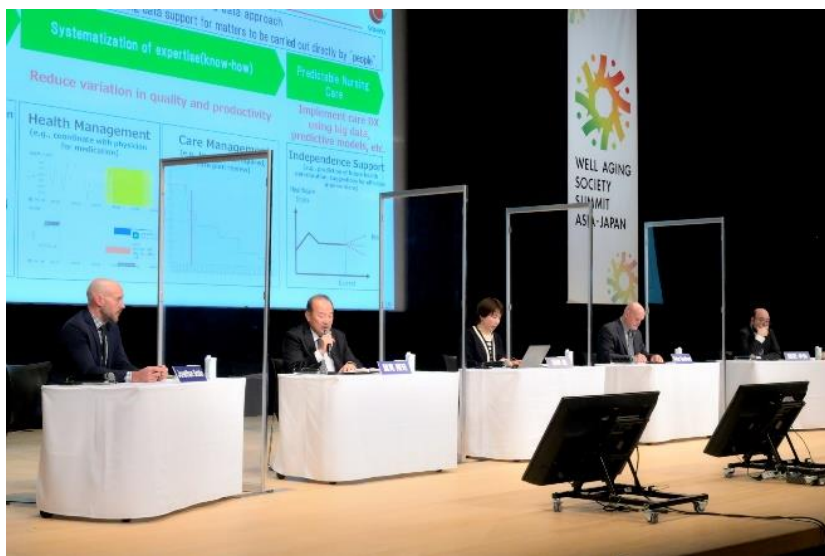

PANEL SESSION: 3 - HEALTH PROMOTION THROUGH WORK

**「INTERNATIONAL PROMOTION OF HEALTH AND PRODUCTIVITY
MANAGEMENT BASED ON HUMAN CAPITAL FORMATION」**

- The discussion proceeded in such a way that questions were posed from one panelist to another.
- Asked about best practices in the OECD study, Mr. Pearson said, "One clear thing is that programs are more likely to work well when employees are involved in the design of the system rather than formulated in a top-down manner.
- In response to the question, "What is necessary for attracting more investor attention to health?", Ms. Kogiso answered, "The results of initiatives that can be felt at the corporate level."
- In response to the question, "How should Japan's initiatives be spread around the world?", the respondent answered, "There are many things to learn from the Kenko-Keiei (health and productivity management) of Japanese companies, and though it cannot be applied as it is because of Japan's unique lifetime employment system, companies in other countries can also use it as a reference. I hope the information will be actively disseminated."

PANEL SESSION: 4

「DIGITALIZATION OF GLOBAL MEDICAL AND NURSING CARE IN THE WEB3 ERA」



< Panelists >

TAKAMITSU WASHIMI (Director, Representative Chief Operating Officer, Sampo Care Inc.)

MEGUMU YOKONO (Associate Professor, School of Social Sciences, Waseda University)

PETER GOODHAND (Chief Executive Officer, Global Alliance for Genomics and Health President, GA4GH Inc.)

TAKANORI FUJITA (Project Lead for Healthcare Data Policy, World Economic Forum Centre for the Fourth Industrial Revolution Japan)

< Moderator >

JONATHAN SOBLE (Editorial and Communication Lead, World Economic Forum Centre for the Fourth Industrial Revolution Japan)

- Web 3.0 is the form of the next-generation internet, in which decentralized web services will become the mainstream. In what direction will the digitalization of medical and nursing care go as the shift from centralization to the individual? The panelists were asked to make proposals from their own perspectives.

Jonathan Soble: This session will discuss how data will be utilized in the medical and nursing care fields in the Web 3.0 world, which is proposed as a decentralized internet based on blockchain, and how this will change the way medical and nursing care services are provided and the benefits that users receive. We will start the discussion with a presentation on "Healthcare Data Governance in the Web 3.0 Era" by Mr. Takanori Fujita, who is also the planner of this session.

PANEL SESSION: 4

DIGITALIZATION OF GLOBAL MEDICAL AND NURSING CARE IN THE WEB3 ERA

Takanori Fujita: Since the COVID-19 pandemic, different countries have developed different approaches to the handling of personal data. It is necessary to establish a mechanism to use individual data for the benefit of humanity while protecting individual rights. In the Web 3.0 world, as rights shift from the center to the individual, the balance in handling data becomes more important. There should be a forum for international discussions on the handling of PHRs, lifelogs, and other data. In addition, in order to promote the digitization of medical and nursing care with Web 3.0, private companies, global consortiums, and the national government need to contribute from their respective standpoints. Discussions are underway in Japan toward a metaverse hospital, and health data governance needs to be established as soon as possible in order to make it a reality.

C4IR Japan : Healthcare Data Policy Project
Social Implementation of Data Governance

WORLD ECONOMIC FORUM

- Cross-referencing best practices and real-world agendas to promote social implementation of the framework
- Setting up communities nationally and internationally to collect and discuss best practices and agendas

1 2 3 Framework

Increase feasibility of social implementation

4 Best practice /Agenda

Communities

Global Decade of healthy ageing

Japan C4IRJ HDP Lab

Scale

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C4IR Japan : Healthcare Data Policy Project
Metaverse/Web3 x Healthcare Data

WORLD ECONOMIC FORUM

Virtual consultation

Virtual technique training

Remote surgery

Hologuide

Trusted decentralized data

Key Agendas

- (1) Provision of optimal services tailored to individual needs.
- (2) Improved efficiency and quality of work through data/information sharing among professionals and stakeholders.
- (3) Formation of sustainable public-private models (especially secondary use).
- (4) Human resource development, social consensus and rule formation to support the above.

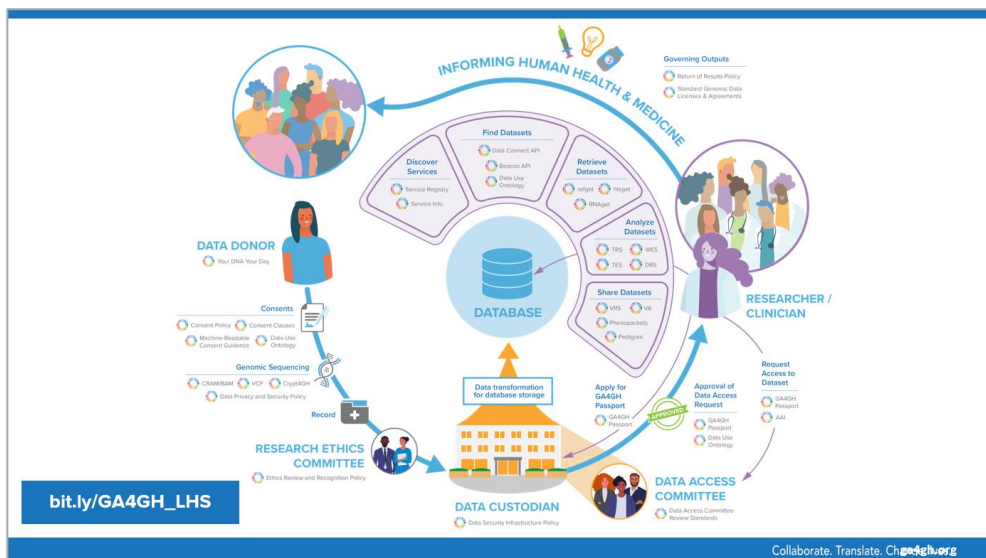
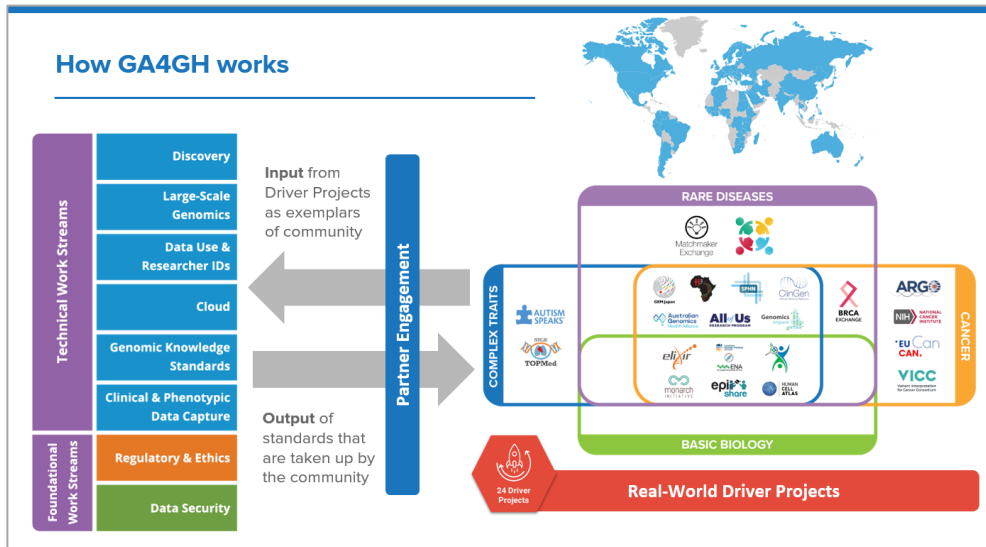
Briefing Paper on the future and challenges of Healthcare Data Usage

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PANEL SESSION: 4

DIGITALIZATION OF GLOBAL MEDICAL AND NURSING CARE IN THE WEB3 ERA

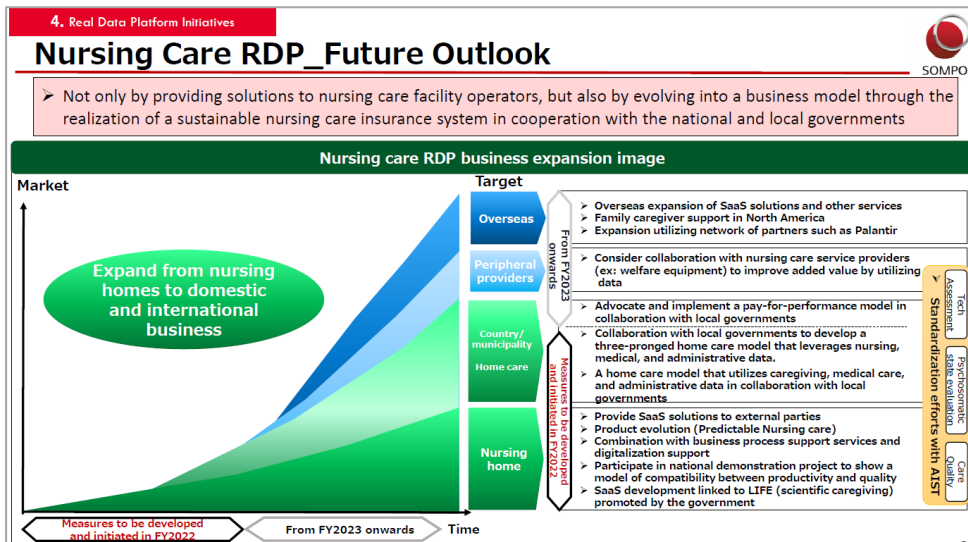
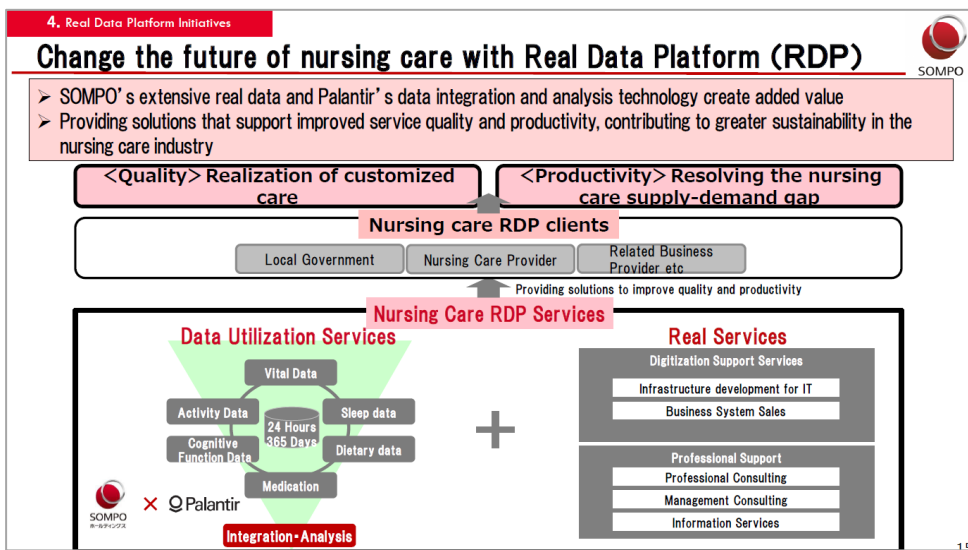
Peter Goodhand: Sharing genomic data will be a key theme in the Web 3.0 era and in the digitization of medical and nursing care. If clinical and genomic data can be interfaced, a vast virtual cohort can be created. This is the concept of circulating clinical and genomic data as a circle of knowledge, rather than the conventional model that requires a long period of time from basic research to clinical practice, i.e., from discovery to incorporation into daily medical care. The idea of "confederated data sharing", in which data is not downloaded but shared and utilized by everyone, has also been proposed. This is still in the conceptual stage, but if realized, it could become a new global standard for medical and nursing care. We intend to promote the discussion broadly and deeply, in cooperation with Japanese stakeholders.



PANEL SESSION: 4

DIGITALIZATION OF GLOBAL MEDICAL AND NURSING CARE IN THE WEB3 ERA

Takamitsu Washimi: With the aging of the population, the number of people certified as needing nursing care is increasing every year. What should the future of nursing care look like? We believe that through the use of technology and data, people should aim to create caregiving time that only people can provide, improve the quality of services, and increase productivity by reducing the burden on the caring site. One of Sampo Care's initiatives is the real data platform (RDP), which includes nursing vital data and nursing care records obtained by sensors and other means. Our goal is to visualize nursing care by integrating scattered data, to systematize the know-how to utilize the integrated data, and to realize predictive nursing care that predicts the future and proposes countermeasures based on big data. We intend to cooperate with local governments to build a model for nursing care at home that is linked to medical and administrative data.



PANEL SESSION: 4

DIGITALIZATION OF GLOBAL MEDICAL AND NURSING CARE IN THE WEB3 ERA

Megumi Yokono: Advances in genome research have led to the elucidation of the genetic factors and background of cancer, and even whole genome analysis, an attempt to create data on all genome sequences of each individual, has started in Japan. The constructed database will be planned to be returned directly to patients as well as to research and development of anticancer drugs. On the other hand, such initiatives need to be considered from the perspective of ELSI (Ethical, Legal, and Social Issues). In the U.S., where the ELSI program started in 1990, discrimination and social disadvantage due to genetic information were considered to be an issue. In Japan, the law has not yet been established, but now that the movement to use genome information for medical treatment is expanding, more active discussions are needed. We seek the opinions of many concerned parties in order to create an environment in which genetic information can be utilized while being protected.

“ELSI” in Genomics

■ In the U.S., “ELSI” refers to the field of study concerned with the ethical, legal, and social implications of genetics and genomics¹

- Even at the dawn of the genetics revolution, experts of the day advocated a prudent approach to utilize these technologies in an ethical fashion: Asilomar conference (1975)

■ U.S. ELSI program was introduced in 1990 with the funding from NIH and DOE

- In light of atrocities inspired by eugenics movements, which in America had provided the rationale for state-sponsored mass sterilization programs and in Europe had inspired the Holocaust perpetrated by Nazi Germany, it was clear that the ability to ascertain genetic information would bring with it the possibility of stigma and discrimination for carriers of genetic disorders, inhibit equitable access to U.S. health care, and even change the composition of human society, if genetic information were used to shape reproductive planning¹
- There were also cultural backgrounds of the preceding decades: the nature or nurture debates in psychology, the rise of global human rights discourses, or the evolution of medical ethics and human subjects protections¹

1. Dolan DD, Lee SS-J, Cho MK. Three decades of ethical, legal, and social implications research: Looking back to chart a path forward. *Cell Genomics*. 2022 Jul;2(7):100150.

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Joint Statement by the Japanese Association of Medical Sciences, the Japanese Medical Sciences Federation & Japan Medical Association for "the Prevention of Unfair Discrimination and Social Disadvantage based on Genetic and Genomic Information" (2022) calls on the government and related industries to develop policies and ensure transparency

1. 国は、遺伝情報・ゲノム情報による不当な差別や社会的不利益を防止するための法的整備を早急に行うこと、及び関係省庁は、保険や雇用などを含む社会・経済政策において、個人の遺伝情報・ゲノム情報の不適切な取り扱いを防止したうえで、いかに利活用するかを検討する会議を設置し、我が国の実情に沿った方策を早急に検討すること。
2. 監督官庁においては、遺伝情報・ゲノム情報を取り扱う可能性のある保険会社等の事業者および関係団体に対し、遺伝情報・ゲノム情報の取扱いに関する自主規制が早急に進むよう促すとともに、その内容が消費者にわかりやすく適正なものとなるよう、指導・監督を行う仕組みを構築すること。
3. 遺伝情報・ゲノム情報を取り扱う可能性のある保険会社等の事業者および関係団体は、遺伝情報・ゲノム情報の取扱いについて開かれた議論を行い、自主的な方策を早急に検討し公表すること。

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PANEL SESSION: 4

「DIGITALIZATION OF GLOBAL MEDICAL AND NURSING CARE IN THE WEB3 ERA」

- Web 3.0 has some difficulties even for non-elderly people. It is important to create a system where everyone can benefit from technology based on the concept of "no one is left behind".
- When asked, "What is essential for creating a system to utilize genomic data? Mr. Goodhand answered, "Trust. It should be fostered in the research environment, rather than created in a top-down manner."
- The use of government healthcare data by the private sector is increasing. "Japanese people are sensitive when it comes to handling personal information, so we need to communicate the benefits of using data in a way that is easy to understand and shows what will change and how convenient it will be," said Mr. Washimi.
- It was also pointed out that those entrusted with the data must be clear about what value the organization has and what code of conduct it has, and make the process of handling the data transparent.

CLOSING REMARKS

< Speaker >

TADASHI MOGI

(Director-General for Commerce / Service Industry Policy
Ministry of Economy, Trade and Industry of Japan)



Responding to the problems that will emerge as a result of the aging of society is a challenge common to the world. The use of PHRs in the medical field and in daily health care, the digitization of medical and nursing care from a global perspective, initiatives to address inbound medical tourists, and collaboration between identity assurance agencies and medical institutions – the discussions at this seminar were extremely thought-provoking for the future. In light of the many points raised, it is necessary to promote health and productivity management on a global scale and consider how Japan can contribute to the establishment of international rules.