

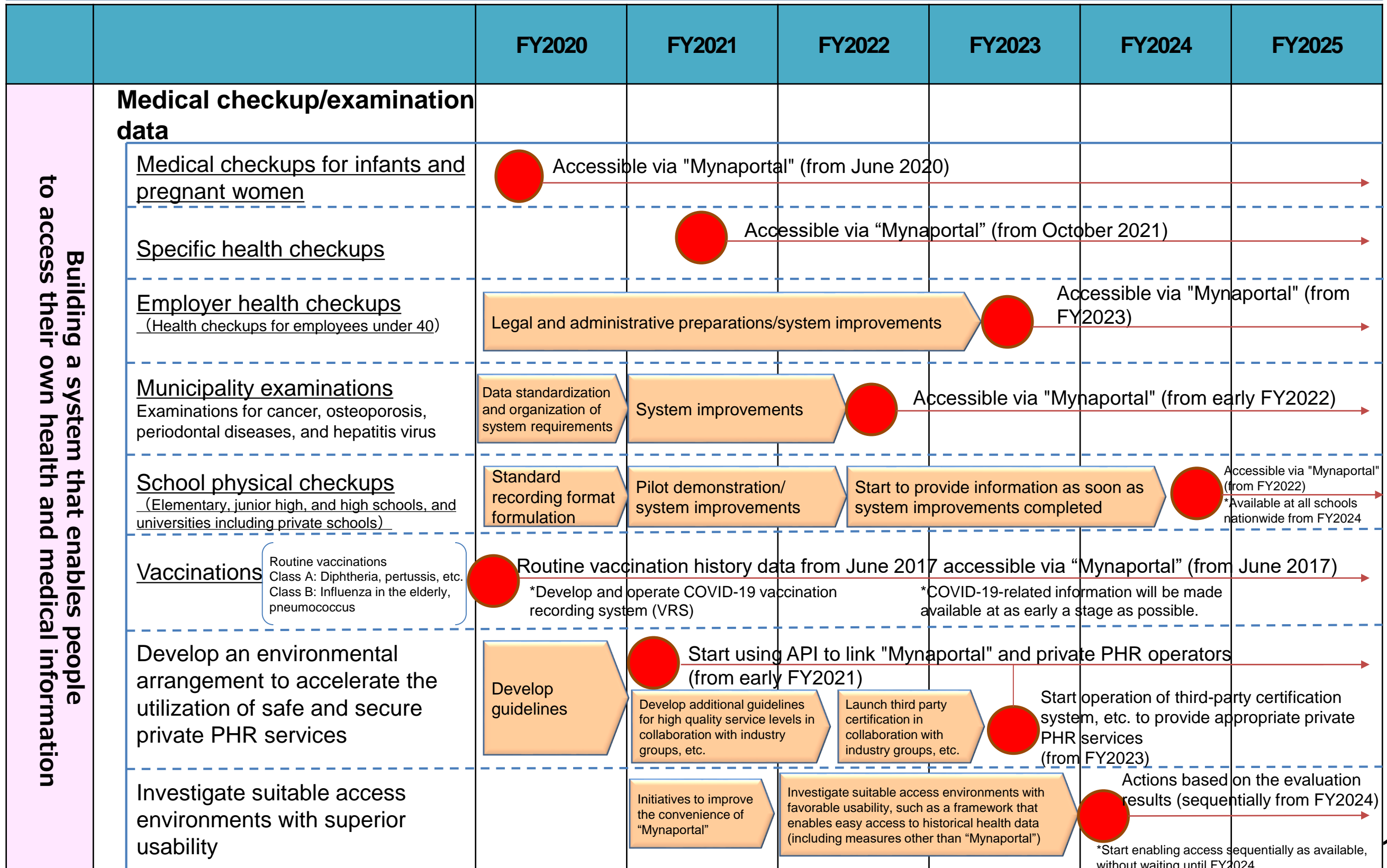
Data-based Health Management Initiatives Roadmap

Ministry of Health, Labour and Welfare

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- Enable accessing one's health and medical information via the portal site called "Mynaportal," etc., and build a system with a convenient user interface (UI). In addition, by developing the framework, information which can be accessed by the patients themselves (medical examination data, claims/prescription data, electronic medical record data, long-term care data etc.) can be also accessed by medical institutions and long-term care institutions.
 - This will enable people to access their health and medical data throughout their lives, as well as enabling medical institutions and long-term care institutions to provide optimal medical and long-term care services based on the needs of patients and users.



		FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Building a system that enables people to access their own health and medical information	Claims/prescription data						
	<u>Pharmaceutical data</u> <small>(Past prescription/dispensing information based on claims)</small>	System improvements				Accessible via "Mynaportal" (from October 2021)	
	<u>Electronic prescription data</u> <small>(Real-time prescription/dispensing information)</small>	Organize system requirements	System improvements			Accessible via "Mynaportal" (from summer 2022)	
	<u>Health data:</u> • <u>Medical institution names, etc.</u> • <u>Surgery and dialysis data, etc.</u> • <u>Medical management data, etc.</u>	Organize system requirements	System improvements			Accessible via "Mynaportal" (from summer 2022)	
	Medical information for children who require medical care		Starting full-scale operation of system called "MEIS" (From July 2020)			Evaluate and address system needs, including improvements needed based on the operational status, such as use during emergency transportation, while taking into account, e.g., the trend toward standardization of electronic medical record information (sequential)	
	Electronic medical records, long-term care data, etc.						
	<u>Test result/allergy data</u>	Consider the priority of accessible data based on technical and practical issues, etc.		Organize system requirements, conduct system improvements, etc.			Accessible via "Mynaportal", etc. (from FY2024)
	<u>Notified diagnosis data</u>	Consider the method of enabling the confirmation of notified diagnosis data based on technical and practical issues, etc.		Consider a specific framework for providing notified diagnosis data, organize system requirements, conduct system improvements etc.			Accessible via "Mynaportal", etc. (from FY2024)
	<u>Imaging data</u>		Consider the range of imaging data, such as key images, and an exchange framework to achieve usefulness for one's own health management based on technical and practical issues, etc.		Organize system requirements, conduct system improvements, etc.		Accessible via "Mynaportal", etc. (from FY2024)
	<u>Long-term care data</u>	Develop feedback function for database called "CHASE"		Feedback of analysis results of CHASE, etc. in units of users, etc. (From FY 2021)			Further feedback based on data from start of operation of next system, etc. (from FY2024)
			Verify the effect of independence support using "CHASE," etc.				
			Consider, based on technical and practical issues, etc., the range of information essential for users and long-term care sites, and a framework that enables access to nationwide long-term care data		Organize system requirements, conduct system improvements, etc.	Accessible via "Mynaportal," etc. (sequentially from FY2024)	
<u>Other data</u>						Consider the priority of accessible data based on technical and practical issues, organize system requirements, conduct system improvements, etc. Accessible via "Mynaportal," etc. (sequentially from FY2025)	

		FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Promoting utilization of medical records in medical and long-term care	<u>Framework that enables access to patient data by medical institutions, etc.</u>	Build a framework that enables medical institutions and long-term care institutions to access the same data patients have access to with the consent of patients (medical examination data, claims/prescription data, electronic medical record data, long-term care data, etc.) (sequentially from FY2020)						
	<u>Standardize data to be included in electronic medical records, etc. to enable data sharing between medical institutions</u>	Regarding other data (municipality examinations, vaccination histories, school physical checkups, etc.), reach a consensus on specific actions without putting an additional burden on people and the implementation schedule by the end of FY2021 in consultation with the IT Office (Digital Agency).	Institutions which are already exchanging data (image data, inspection data, etc.) will start sharing information regardless of the following	Build into medical institution network	Share data sequentially, starting from supporting medical institutions (sequentially from FY2022)	Start the operation of the system (sequentially from FY2024)		
	<u>Standardize long-term care data to enable data sharing between long-term care institutions, and between long-term care institutions and medical institutions</u>		Survey regarding the sharing and standardization of long-term care data	With the IT Office (Digital Agency), consider the ideal foundation to make long-term care data available nationwide, including data stored in long-term care record support systems, and reach a conclusion.		Organize issues based on items described on the left, and conduct development		
	<u>Promote evidence-based long-term care that supports independence and prevents functional decline, etc.</u>		Promote evidence-based long-term care based on analysis and feedback from long-term care institutions and users (from FY2021)	Verify the effect of independence support using "CHASE," etc.	Organize additional data items for a new data collection system	Develop the next system	Realize advanced evidence-based long-term care based on data by operating next system (from FY2024)	
		<p>*Build a system in which data can be accessed by identity verification in case of disaster and emergency.</p> <p>Electronic prescription data (real-time prescription/dispensing data); can be accessed from summer 2022</p> <p>Specific medical examination data/pharmaceutical data (past prescription/dispensing data based on claims) can be accessed from October 2021.</p> <p>With the IT Office (Digital Agency), consider the ideal foundation (*) to make electronic medical record data accessible nationwide and reach a conclusion. *Subject, cost, relation with the Online Confirmation System for Health Insurance Qualification and common government infrastructure, operation starting period, the ideal legal system related to protection and utilization of medical data</p> <p>Consider and determine data items and technical standards to share (exchange) between data medical institutions</p> <p>Develop framework supporting technical standards which enable exchanging data with different electronic medical record systems and PHR.</p> <p>Consider data (image data, etc.) which will be shared with PHR, etc.</p> <p>Organize system requirements, conduct system improvements, etc.</p> <p>Organize issues based on items described on the left, and conduct development</p> <p>Organize issues based on items described on the left, and conduct development</p>						
		<p>*From 2021, the following unified name will be used from the viewpoint of understanding and achieving the permeation of evidence-based long-term care when operating "CHASE" and "VISIT" integrally. (LIFE: Long-term care Information system For Evidence)</p>						

		FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Promoting utilization of medical records in medical and long-term care	<u>Build effective collaboration structure between public health centers and regional medicine</u>		<p>● Consideration including legal amendments if necessary</p> <p>Build a framework to share essential medical information between relevant parties (health centers, medical institutions, etc.) to ensure the provision of home visits and online medical care to those recovering from COVID-19 at home (from FY2021).</p>	<p>Consider and build a similar framework for infectious diseases other than COVID-19</p>		<p>● Execute effective collaboration between health centers and medical institutions assuming an emergency for all infectious diseases (from FY2024)</p>	
	<u>Other</u>		<p>In addition, with regard to, for example, the further enhancement of the emergency medical system and the efficient confirmation of decision of intent to donate organs, sequentially consider how to support the efforts of local governments and technical/practical issues, etc. to contribute to the provision of optimal medical and long-term care services through the sharing and utilization of information among the people involved.</p>				
Promoting of genomic medicine	<u>"Action Plan for Whole-Genome Analysis"</u>		<p>● Improve organizational structures in order to steadily promote the "Action Plan for Whole-Genome Analysis," and return the results of whole-genome analysis, etc. to patients, as well as to promote utilization for research and drug discovery, and deliver new personalized medicine, etc. to patients (from 2020).</p>	<p>Utilize the results of whole-genome analysis, etc. for medical treatment to new patients and patients whose samples are stored in biobanks or analysis centers, for whom the results of whole-genome analysis, etc. can be returned (from FY2021).</p>	<p>● Increase the number of medical institutions that utilize the results of whole-genome analysis, etc. for medical treatment for relevant patients (from FY2022).</p>		
Developing the foundation	<u>Initiative on health insurance claims review & reimbursement services</u> (Health Insurance Claims Review & Reimbursement Services and National Health Insurance Organizations)		<p>● Operations related to Data-based Health Management will be expanded accordingly by Health Insurance Claims Review & Reimbursement Services and the National Health Insurance Organizations. Firstly, operations will be launched for a system that allows the My Number Card to be used as a health insurance card (Online Confirmation System for Health Insurance Qualification operations) (sequential expansion).</p>				
			<p>● Launch new system for review & reimbursement for Health Insurance Claims Review & Reimbursement Services (from Sept. 2021)</p>		<p>● 90% of reviews completed by computer checking (within 2 years after the start of the new system)</p>		
				<p>● Publish computer checking rules in a file format that can be easily incorporated into systems of medical institutions, etc. (from FY2022)</p>			
			<p>Unify computer checking rules of both institutions nationwide. Go through the examinations of review standards for national unification for each institution (the period required to complete the unification will be confirmed by Oct. 2022).</p>				
			<p>System upgrade to enable implementation of cloud computing and joint use by Health Insurance Claims Review & Reimbursement Services and National Health Insurance Organizations (comprehensive National Health Insurance system).</p>			<p>● Launch renewed comprehensive National Health Insurance system (from Apr. 2024)</p>	
			<p>Joint development to realize shared use of both institutions in claims review & reimbursement area (cooperate with Digital Agency). *Immediately conduct verifications including cost effectiveness and draw conclusions with regard to the shared use of the reimbursement area, etc., apart from review area. *Consider the possibility of utilizing Gov-Cloud (tentative name) as the infrastructure of the review & reimbursement system.</p>				
			<p>● With regard to Health Insurance Claims Review & Reimbursement Services, verify the quality of home-based reviews, etc. in FY2021-22 and consolidate the review office functions by the end of FY2022, then expand sequentially.</p>				
			<p>● Consolidate the review office functions into 14 locations nationwide (from Oct. 2022). Consider prompt abolition of the 4 branch offices which will be established in next 10 years, based on further progress of digitization and work style reform.</p>				
		<p>● Related to the leveling of review & reimbursement operations, continuously consider the respond to the urgent cash needs of medical institutions, etc. in the event of a pandemic or natural disaster, considering the COVID-19 situation.</p>					

(Note 1) While ensuring consistency with system optimization in the national government, incorporated administrative agencies, local public organizations, and quasi-public fields, take steps in advance accordingly to support services that can be brought in ahead of schedule.
 (Note 2) Optimize the schedule as needed according to the progress of each project.

< Glossary >

Data-based Health Management Initiatives : Government policy for further lengthening the healthy lifespan of citizens and providing effective and efficient health, medical care, and long-term care services, by remaking ICT infrastructure, and promoting organic linkage of data in pertinent fields as well as use of ICT and other technological innovations, so that the focus in ICT utilization in the fields of health, medical care, and long-term care is shifted from suppliers to patients, citizens, and users.

Mynaportal : Website operated by the government at which every citizen is assigned their own web page where they can view their own data, search for various administrative procedures, and file online applications in a one-stop fashion.

medical examination data : Data on medical examinations carried out to assess overall health status, or data on the results of health checkups.

claims data : Data on health insurance claims made by medical institutions to insurers for insured medical care received by patients.
prescription data : Data indicating that a physician, etc. has determined medication to be necessary for a patient's illness, selected the necessary pharmaceuticals, and specified the amount, dosage and administration, period of use, etc.

electronic medical record data : Medical care data produced, recorded, and accessed at a medical site where it was entered into an electronic medical record. This data includes: patient attributes, insurance data, main complaint, clinical history, test results, injury/disease name, and treatment plan/progress.

long-term care data : Data produced, recorded, and accessed at long-term care sites.

medical checkups for infants : Medical examinations to check the health of infants, mandated for implementation by municipalities based on the Maternal and Child Health Act.

medical checkups for pregnant women : Medical examinations to periodically check the health status of pregnant women and their unborn children, mandated for implementation by municipalities based on the Maternal and Child Health Act.

specific health checkups : Medical examinations focusing on metabolic syndrome for people 40 to 74 years old, to prevent lifestyle-related diseases. These checkups are mandated for implementation by medical insurers based on the Act on Assurance of Medical Care for Elderly People.

employer health checkups(health checkups for employees under 40) : Health examinations of workers conducted by physicians and mandated for implementation by business operators based on the Industrial Safety and Health Act.

municipality examinations : Examinations for cancer, osteoporosis, periodontal diseases, and hepatitis virus, etc. conducted by municipalities for residents based on the Health Promotion Act.

examination for cancer : Clinical testing to detect cancer, conducted by municipalities for residents based on the Health Promotion Act.

examination for osteoporosis : Clinical testing to detect osteoporosis, conducted by municipalities for residents based on the Health Promotion Act.

examination for periodontal diseases : Clinical testing to detect periodontal diseases, conducted by municipalities for residents based on the Health Promotion Act.

hepatitis virus examination : Clinical testing to detect hepatitis virus, conducted by municipalities for residents based on the Health Promotion Act.

school physical checkups : Medical examinations conducted by physicians for schoolchildren, mandated for implementation by schools based on the School Health and Safety Act.

VRS : System operated by the government for recording the vaccination status of individuals, including vaccinated person data and vaccine record data, for vaccination against COVID-19.

PHR : Abbreviation of "Personal Health Record." Generally speaking, this is personal health and medical data spanning a person's life (e.g., medical checkup (examination) data, vaccination history, pharmaceutical data, medical care related data such as test results, and daily vital signs measured by the person).

historical health data : Data on an individual's health, spanning their entire life.

pharmaceutical data : Past pharmaceutical prescription and dispensing data based on claims.

electronic prescription data : Data with the digital signature of a physician, saved electronically in a specific file format, indicating items included in prescriptions, as specified in the Ordinance for Enforcement of the Medical Practitioners' Act.

medical management data : Data relating to medical care remuneration items, etc. for evaluating patient guidance by physicians and medical management itself

children who require medical care : Children who continue to use a respirator, gastric fistula, or the like after long-term admission in an NICU, etc., or who require routine medical care such as suction of phlegm.

MEIS : System operated by the government enabling rapid sharing of necessary patient data by physicians and medical institutions nationwide (particularly emergency care physicians) when a child with disabilities requiring medical care or a similar person faces an emergency or an unexpected disaster or accident.

notified diagnosis data : Injury/disease name in claim already notified to the necessary patient as a precondition for providing data to a medical institution, etc., when developing a system enabling checking of claims data at medical institutions, etc. nationwide.

imaging data : Imaging data accessed by physicians, etc. when diagnosing the disease condition, etc. of a patient. This includes images representing the anatomical form and physiological/biochemical function of bones and organs, captured using X-rays and nuclear magnetic resonance, etc.

key image : Image data that was decisive for patient diagnosis.

CHASE : Database system operated by the government for gathering and accumulating, in a complementary fashion, data not collected in the long-term care DB system and VISIT, from long-term care institutions nationwide, in order to realize long-term care where the effectiveness of self-reliance support, etc. is backed up by scientific evidence.

Online Confirmation System for Health Insurance Qualification : System operated by Health Insurance Claims Review & Reimbursement Services, etc. whose core consists of a function for confirming insurance qualifications using a My Number Card and health insurance card, and a function for assigning claims to the correct insurer based on confirmation of the patient's insurance qualification information. The system also incorporates a specific health checkup data management system with the function of enabling the person concerned to confirm specific health checkup records by using services such as data linkage between insurers of specific health checkup data and Mynaportal, and a medical fee and pharmaceutical data management system with the function of providing information to the person concerned, etc. via Mynaportal, etc.. This system has a role as infrastructure for realizing data-based health management initiatives.

common government infrastructure : Infrastructure operated by the government, centered on common ministry and agency systems and small/medium-scale information systems, for sharing and providing IT resources needed for operation of systems maintained and operated by each ministry or agency.

long-term care record support system : "System with functions such as management of records relating to vital signs, and rehabilitation, care plans, and care records focusing on the three main elements of long-term care (bathing, excretion, and eating), used by long-term care providers."

IT Office (Digital Agency) : "Government organization (existing until Aug. 31, 2021) which played the role of secretariat for the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society (IT Strategic Headquarters), and carried out tasks such as general coordination relating to improving citizen convenience and administrative operations through the use of IT.The Digital Agency is a collaborative public-private organization established on Sept. 1, 2021, taking the IT Office as its parent body. It is a government organization which promotes digital transformation of the entire society, especially through efforts such as unified management of the government's information systems, etc. and budget implementation."

evidence-based long-term care : Long-term care for the elderly based on scientific evidence for supporting independence and preventing functional decline.

NDB : Anonymized database operated by the government, collecting and recording claims data, specific health checkup data, and specialized health guidance data.

long-term care DB : Database operated by the government for collecting and managing digital data such as certification of needed long-term care, and long-term care payment statements.

VISIT : System operated by the government, developed to further improve the quality of rehabilitation by collecting data such as plans relating to rehabilitation management of outpatient and home-visit rehabilitation facilities nationwide, analyzing that data as a whole, and providing feedback on the results to the facilities.

Long-term care Information system For Evidence : Due to the start of integrated operation of VISIT and CHASE operated by the government, this is the name given to the unified system to improve understanding and dissemination of evidence-based long-term care.

health center : Public institutions, established by prefectures, cities designated by government ordinance, core cities, and other cities or special wards established by government ordinance, which carry out various types of work relating to community health.

Action Plan for whole-genome analysis : Plan for conducting whole-genome analysis, and thereby dramatically improving the precision of treatment for individuals, and promoting better medical care for patients with cancer and intractable diseases, etc. through approaches such as development of medical care for cancer and intractable diseases, etc. by providing new treatments for patients in cases where there are no treatments, and promoting personalized medicine. The first version of this plan was formulated by the Ministry of Health, Labour and Welfare on Dec. 20, 2019.

Biobank : System for preserving some blood, or tissues extracted during surgery or testing after use for diagnosis, together with medical data, employing those samples for medical R&D on new methods of testing, treatment, and prevention, etc., and putting them to use for purposes such as elucidating the causes of illness and developing future medical care.

whole-genome analysis : Testing method expected to help elucidate the causes of cancer, and contribute in areas such as development of new diagnostic and treatment methods based on that, by testing the whole genome (i.e., all genes (about 25,000 in total) and all regions other than genes) and thereby exploring domains where the relationship between gene function and illness is almost completely unknown.

health insurance claims review & reimbursement services : Organizations which review whether individual treatments carried out at insured medical institutions under contract from insurers, etc. conform to insured medical care rules (Rules for Health Insurance-covered Medical Facilities and Medical Practitioners, Table of Points of Remuneration for Diagnosis and Treatment, and related notices), and then make payment. There are two of these organizations: the Health Insurance Claims Review & Reimbursement Services and the National Health Insurance Organizations.

Health Insurance Claims Review & Reimbursement services : One of the health insurance claims review and reimbursement services. After reviewing whether billing of fees for medical care by an insured medical institution (pharmacy) is correct, the organization bills the health insurance society (insurer), etc., and reimburses the insured medical institution with the medical care fees paid by the health insurance society.

National Health Insurance Organizations : One of the health insurance claims review and reimbursement services. A public corporation established jointly by the insurer members (prefectures, municipalities, national health insurance societies) to carry out work to achieve their goals. These societies have been established in each of Japan's 47 prefectures.

My Number Card : Plastic card with photo and IC chip, issued by the Japan Agency for Local Authority Information Systems, listing a person's name, address, date of birth, sex, and my number (individual number). This can be used as an ID card for confirming the person's identity, as well as for various services such as municipal services, and electronic filings using digital certificates such as e-tax.

health insurance card : Card certifying that the person is insured by (a member of) national health insurance. The holder can receive insured medical care by presenting the health insurance card at the service counter of an insured medical institution (pharmacy).

new system for review & reimbursement : System used when carrying out the tasks of receipt, review, and reimbursement of claims, carried out by Health Insurance Claims Review & Reimbursement Services. In the new system released in September 2021, cloud computing technology is incorporated, center servers are centralized, and a system has been built enabling flexible response to changes in operations (modularization). The new system implements features such as a function for simultaneously viewing claims by reviewers and staff, an AI-based function for claim sorting, and an automatic reporting function for visualizing differences in review results.

computer check : Checking work carried out by Health Insurance Claims Review & Reimbursement Services in which calculation rules and other items stipulated in the Table of Points of Remuneration for Diagnosis and Treatment, etc. are implemented in a computer, and applied to the medical care specifics of claims billed from insured medical institutions (medical, dental) and insured pharmacies.

comprehensive National Health Insurance system : Nationwide standard system operated by the All-Japan Federation of National Health Insurance Organizations and used by the National Health Insurance Organizations of the 47 prefectures of Japan. Online billing systems developed individually by the All-Japan Federation of National Health Insurance Organizations and various operations systems such as electronic claims processing systems, have been rebuilt in an integrated fashion to suit the characteristics of review and reimbursement work at the National Health Insurance Organizations, and a system has been developed enabling processing of various operations systems through data linkage.

Gov-Cloud : Environment, maintained by the government, for utilization of multiple cloud services (IaaS, PaaS, SaaS) providing shared infrastructure and functions for government information systems.

Verify the quality of home-based reviews : Home-based review by reviewers and review clerical work by staff implemented by Health Insurance Claims Review & Reimbursement Services. The purpose is to secure review time during the state of emergency which became an issue due to the COVID-19 pandemic, and to reduce the burden on staff of long commutes after centralization of review clerical work.

incorporated administrative agencies : Organizations formed by splitting off certain types of clerical work or tasks within the sectors of policy implementation from the administrative activities of each ministry or agency, and granting the organization in charge of the pertinent area qualification as an independent corporation.

quasi-public fields : Fields for which there is a high need among citizens, such as health, medicine, long-term care, education, and disaster prevention, and where the nation's budget and other resources must be used efficiently and effectively.