2022.10.24

Databases available for pharmacoepidemiology researches in Japan (information obtained from survey answers as of August 2022)

Hospital-based

	NHO NCDA/MIA	4DIN	HCEI/RWD	LDI	MID-NET	Tokushukai	MDV	JMDC	NCD
Database organizer	National Hospital Organization	4DIN	Real World Data Co., Ltd.	Life Data Initiative	Pharmaceuticals and Medical Devices Agency	Tokushukai Information System Incorporated	Medical Data Vision Co., Ltd.	JMDC.Inc	NCD
Database name	National Hospital Organization clinical Data. Archives: NCDA/ Medical Information Analytics	4DIN Research Network	RWD database	Millennium Medical Record	Medical Information Database Network (MID-NET)	Tokushukai Medical Database	EBM Provider®	Hospital DB	National Clinical Database
Contact information	700-dbproject@mail.hosp.go.jp	info@4din.com	solution@rwdata.co.jp	contact@ldi.or.jp	wakaru-midnet@pmda.go.jp		ebm_sales@mdv.co.jp	mdbhelp@jmdc.co.jp	office@ncd-core.jp
Web site URL	https://nho.hosp.go.jp/cnt1-1_000070.html	https://4din.com/	https://rwdata.co.jp/	http://www.ldi.or.jp	https://www.pmda.go.jp/safety/mid-net/0001.html	https://www.tokushukai-is.com/	https://www.mdv.co.jp/	https://www.jmdc.co.jp/	https://www.ncd.or.jp/
DOI of articles about the database	DOI: 10.2147/CLEP.S359072		None	https://www.jstage.jst.go.jp/article/jipe/27/1/27_27.3/_pdf/-char/ja?fbclid=IwAR2I9bTi_RIvnzAEhC8xwWIYomBymuDPzy1OQskIroQl4kfyFdmpPFR0uHc	10.1002/pds.4777、10.1002/pds.4879				DOI: 10.1007/s00595-013-0802-3 DOI: 10.5090/kjtcs.2014.47.537
Database Overview									
General description of the database	Clinical database based on 67 NHO hospital information systems and 140 DPC/receipt data	Network to collect, deidentify and summarize various data from medical institutions	The RWD database contains the records of ~20 million patients from ~160 medical institutions across Japan as of 2020. The stored information includes demographic data, diagnoses, prescriptions, procedures, and laboratory results from both outpatient and inpatient services.	Database consists of DPC,claims and electric medical records from university hospitals, cancer hospitals	The medical information Database network system for utilizing in safety assessment managed by PMDA under the Act on the Pharmaceuticals and Medical Devices Agency	Tokushukai group is comprised of over 70 hospitals and 340 medical care facilities et al. in Japan, and the group manages the medical database with 13 million patients. Tokushukai works on researches and AI development by using medical, management, and clinical data of the hospitals.	Administrative database for inpatient and outpatient consists of 469 acute (mainly considered as "advanced treatment hospitals") hospitals in Japan	A case database sourced from receipts, electronic medical records (clinical laboratory values), and DPC survey data collected from more than 550 DPC/non-DPC hospitals nationwide. Includes abundant information on elderly and hospitalized patients.	Multidisciplinary registry platform initially developed by surgery related professional societies in Japan. Currently managing nationwide registries for various surgeries, interventions, pathology, as well as cancer registries. Also collects hospital based DPC / claims data which can be used together with the registry data for research.
Data source									
DPC (Fomat 1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DPC (EF file)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical claim	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	No
Dental claim	No	Limited	No	No	No		No	No	No
Pharmacy claim	No	Limited	No	No	No	No	No	Yes	No
Electronic medical chart	Yes	Limited	Yes	Yes	Yes	Yes	No	Yes	No
Lab test results	Yes	Limited	Yes	Yes	Yes	Yes	Limited	Yes	No
Ordering		Limited	Yes	Yes	Yes	Yes	No	No	No
Health checkup	Yes	No	Limited	No	No	Yes	No	No	No
Registry	No	Limited	No	No	No	No	No	No	Yes
Others	No	No	No	Yes	No	No	Yes	Yes	No
Others, notes				-			DPC (Dfile) /DPC claims/blood test data *Blood test data is limited to some hospitals	H-file	
Data collected from	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution
Others, notes				—				hospitals	
Number of organizations	140		229	60	23	68	469	550	5500
Data period									
Starting year	2016		Before 2000	2015	2009	2010	2008	2014	2011
Latest year	2022	2022	2022	2022	2022	2022	2022	2022	2021
Notes	Starting year MIA：2011	By participating hospitals	Depends on the timing of introduction of electronic medical records at medical institutions	Limited to patients consent to policy about opting out after July 2020. Data back periods for up to 7 years. Some hospitals are now planed to provide data since 2005 retroactively.		The starting time period depends on the hospitals.	*Mainly from April 2010		
Handling Anonymously Processed Information	No	Yes	Yes	Yes	No		Yes	Yes	No
Following the regulations on Anonymously Processed Information		Yes	Yes	Yes			Yes	Yes	
Size									
Number of unique identifiers [approx., 10K people]	500	500	2440	163	570	1360	4042	1700	2000
Notes				The number of unique identifiers covers facilities that have become available for use from among the 60 contracted hospitals.	As of December,2021				
Annual number of unique identifiers (latest) [approx., 10K people]	200	20	168			130	1167	610	200
The latest year	2021	2021	2021			2021	2021	2021	2021
Notes							April 2021 - March 2022	June 2021 - May 2022	
% coverage of population	NCDA: 2.1% of Japanese population, MIA: approx. 17% of Japanese population	About 3.8% of Japanese population	1.3% (annual registrations/total Japanese population)	４.２％　*It covers 32 out of 763 hospitals with over 400 beds in Japan.			・About 9.3% of Japanese population ・About 26.6% of total number for acute hospitals	6% of DPC and non-DPC hospitals (based on number of hospitals)	More than 95% of the surgeries performed in Japan
Annual N of outpatients (latest) [approx., 10K people]	200	19	164			130	1123	580	
Annual N of inpatients (latest) [approx., 10K people]	63	4	25			20	220	100	
Annual N of medicated diabetes patients (latest) [approx., 10K people]		3	10			6	77	97	
Definition		The number of patients with the disease of ICD10 E10-E14 (Exclude suspected cases). The number of patients that a diabetes medicine was prescribed.	Number of patients assigned ICD-10:E10-E14 disease (excluding suspected) and prescribed WHO-ATC:A10 drugs			The number of patients who are prescribed antidiabetic medications.	・Target disease: ICD10: E10-E14 (exclude suspected cases) ・Target medication: ATC (EphMRA): A10 ・Condition for target patients: Target medication was prescribed in the same month as the diagnosis of the target disease.	CD10：E10-E14	
Annual N of influenza diagnosed patients (latest) [approx., 10K people]		0.2	0.03			0.02	0.3	0.13	
Definition		The number of patients with the disease of ICD10 J10,J11(Exclude suspected cases). The number of patients that a Influenza medicine was prescribed.	Number of patients assigned ICD-10:J09-J11 disease			ICD10 code：J09~J11	ICD10：J10, J11	ICD10:J09,J10,J11	
Number of patients followed									
≥1 year [approx., 10K people]			533			56	1684		
≥3 year [approx., 10K people]			392				1033		
≥5 year [approx., 10K people]			299				594		
Median [approx., year]			2.4				1.9		
Notes							Average		The follow-up period varies by registry (30-day, in-hospital, 90-day, 1-15 year)
Age Distribution									
0 - 14 years old [approx., %]	7	8.9	9	13		9	14.2	8	
15 - 64 years old [approx., %]	38	52.6	47.4	43		49	50.7	41	
65 - 74 years old [approx., %]	25	20.9	17.4	20		17	16.3	21	
75 years old or older [approx., %]	30	17.6	26.2	24		25	18.8	30	
Age distribution: notes			Age distribution of patients in the latest year			We used the data in 2020 (Jan~Dec).			
Prescriptions (data availability)									
Dispensing (in-hospital)	Yes	Yes	No	Yes		Yes	Yes	Yes	Yes
Dispensing (out-of-hospital)	Yes	No	No	Limited		Yes	Yes	Limited	No
Date of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Date of dispending	Yes	Limited	No	Limited	No		Yes	Limited	Yes
Dosage of prescription	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Days of supply	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Administration	Yes	Limited	Limited	Yes	Yes	Yes	No	Yes	No
Injection	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vaccine	Limited	No	Limited	Yes	Limited	Yes	No	Limited	No
Drug master									
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
ATC (EphMRA)	No	Limited	Yes	No	No	No	Yes	Yes	
ATC (WHO)	No	Limited	Yes	Yes	Yes	No	Yes	Yes	
YJ code	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
NHI drug price list code	No	No	Yes	Yes		Yes	Yes	Yes	
HOT code	Yes	Yes	No	No	Yes	Yes	No	No	
Reimbursement code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Hospital-original code	Yes	Yes	Yes	No	Yes	Yes	No	No	
Others	No	No	No	No			Yes	No	
Others, notes				-			Titer		
Procedures (data availability)									
Procedure name	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of procedure	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Procedure master									
Any available master	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Reimbursement category,	Yes	Yes	Yes	Yes	Yes		Yes	Yes	No
Reimbursement code	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Others	No	No	No	No			No	No	No
Hospitalization (data availability)									
Date of hospital admission	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of hospital discharge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medication while hospitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diagnosis (data availability)									
Diagnosis name	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Suspicions diagnosis or not	Yes	Yes	Yes	Yes		Yes	Yes	Yes	No
Diagnosis master									
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standard diagnosis code (Reimbursement code)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
ICD10 code (2013)	Limited	Yes	Yes	Yes		Yes	Yes	Yes	Yes
ICD10 code (other than 2013)	Yes	No	No	No	Yes		Yes	Yes	No
Others		No	No	No			No	No	No
Laboratory test (data availability)									
Lab test (ordering)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Lab test results									
Any available test results	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Labo test for sample (e.g., blood, urine, microbe	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Physiological test (e.g., respiratory function, braib waves, supersonic waves)	No	Limited	Limited	Limited	No		No	No	Yes
Results of diagnostic imaging (e.g., report of imaging interpretation)	No	Limited	No	Limited	No		No	Limited	Limited
Genetic test (pathological tissue)	No	Limited	Limited	Limited	No		No	No	Yes
Others	No	No					No	No	
Lab test master									
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Loinc code	No	No	No	No	No		No	No	No
JLAC code	Yes	No	Limited	No	Yes	Yes	Yes	Yes	No
Reimbursement code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hospital-original code	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
Others	No	No	Yes	No			No	No	No
Others, notes			Based on JLAC10　RWD original created based on JLAC10 Master						
Demographic, Vital (data availability)									
Birth year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth month	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes
Birth date	Yes	Yes	No	No	Yes	Yes	No	No	Yes
Age	Yes	s	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Height	Yes	Yes	Yes	Yes	Yes	Limited	Limited	Limited	Yes
Weight	Yes	Yes	Yes	Yes	Yes	Limited	Limited	Limited	Yes
Blood pressure	Yes	Limited	Limited	Yes	No	Limited	Limited	No	No
Insurers for patients									
National health insurance	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Japan health insurance association	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Health insurance society	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Mutual society of health insurance	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Late-stage medical care system for the elderly	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Data Access, Others									
Access to raw data via web	No	Yes	Yes	No	No	No	Limited	Yes	No
Access to original source data such as medical charts (e.g., outcome validation, additional data collection)	Yes	Limited	Limited	Limited	No	Yes	Limited	No	No
Timing of data update	Daily	Monthly		Monthly	Every week (shortest)	Daily	Monthly	Monthly	Annually
Others, notes			3 months		Every week at the earliest				
Latest data	Previous day	1 month ago	1 month ago	2 months ago	No lag time	No lag time	2 months ago	2 months ago	4
Common Data Model									
OMOP	No plan	No plan	Considering				Available	No plan	No plan
SS-MIX2	Available	Available	No plan				Considering	No plan	No plan
Sentinel	No plan	No plan	No plan				Considering	No plan	No plan
Publication									
Presentation					Japanese Society for Pharmacoepidemiology, Japan Society of Clinical Trials and Research, etc.		Many	7	Many
Publication to peer review journal	12						341 *Total number of publications including peer review	7	Many

Insurance-based

	NDB	JMDC	Cross Fact	JammNet	MDV	DeSC	IQVIA Claims data
Database organizer	Ministry of Health, Labour and Welfare	JMDC.Inc	INTAGE Real World Inc.	JammNet	Medical Data Vision Co., Ltd.	DeSC Healthcare, Inc.	IQVIA Solutions Japan K.K.
Database name	National Database of Health Insurance Claims and Specific Health Checkups of Japan	Payer DB	Cross Fact	JammNet database	EBM Provider®	DeSC database	IQVIA Claims data
Contact information	suisin@mhlw.go.jp	mdbhelp@jmdc.co.jp	irw-info@intage.com	support@jamm-net.co.jp	ebm_sales@mdv.co.jp	rwe-psales@desc-hc.co.jp	
Web site URL	https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/iryouhoken/reseputo/index.html	https://www.jmdc.co.jp/	https://www.intage-realworld.co.jp/	http://www.jamm-net.co.jp/	https://www.mdv.co.jp/	https://desc-hc.co.jp/archives/publication	www.iqvia.co.jp
DOI of articles about the database			None			10.31662/jmaj.2021-0189	
Database Overview							
General description of the database	Database of health insurance claims and specific health checkups for preparation, implementation and evaluation of medical cost optimization plan	Japan's largest epidemiological database consisting of receipts, health checkup results, and subscriber registers from insurers nationwide. The database has excellent patient traceability (up to 15 years), and its population includes healthy people, making it possible to examine the prevalence and incidence of diseases. It is also linked to the PRO Panel, which enables direct approaches to patients through questionnaires and article distribution.	Database based on health insurance, include of all rezept(include dental rezept),except of Organ transplant patient and comment field for all patients.	Claims database using insurance programs	Health claims database from inpatient, outpatient, and pharmacy claims consists of 149 health insurance societies in Japan	A database of anonymized processed information based on receipt data, annual medical checkup data, and enrollment information collected from multiple Employee Health Insurance, National Health Insurance, and Latter-Stage Elderly Healthcare System. PRO data and life log data can be provided as options.	Claims database from 216 health insurance societies in Japan.
Data source							
DPC (Fomat 1)	No	No	No	No	No	No	No
DPC (EF file)	No	No	Yes	No	No	No	No
Medical claim	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dental claim	Yes	Yes	Yes	Limited	No	Yes	Yes
Pharmacy claim	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Electronic medical chart	No	No	No	No	No	No	No
Lab test results	No	No	No	No	No	No	No
Ordering	No	No	No	No	No	No	No
Health checkup	Yes	Yes	Limited	No	Limited	Limited	Limited
Registry	No	No	No	No	No	No	No
Others	No	Yes	Yes	Yes	Yes	Yes	Yes
Others, notes		Subscriber ledger data linked to receipts, patient panel	DPC Receipt	DPC Receipt	DPC claims and partially available ledger information	HL, QOL, QPAI, PAQI, number of steps, blood glucose level, blood pressure, and body weight data can be used in Employee Health Insurance (EHI) and National Health Insurance(NHI).	DPC claims, partially subscriber ledger information
Data collected from	Others	Health insurance association	Health insurance association	Health insurance association	Health insurance association	Health insurance association	Health insurance association
Others, notes	Insurance claims and special health checkups and specific health guidance data from all health insurance associations		Health insurance association			We deliver receipt data which includes Employee Health Insurance (EHI), National Health Insurance(NHI) and Latter-Stage Elderly Healthcare System (LSEHS).	
Number of organizations		267	101		149	231	216
Data period							
Starting year	2008	2005	2010	2008	2012	2012	2012
Latest year	2022	2022	2022	2022	2022	2021	2022
Notes						The maximum data period is 9 years, and its minimum is 1 year.	
Handling Anonymously Processed Information		Yes	Yes	No	Yes	Yes	Yes
Following the regulations on Anonymously Processed Information		Yes	Yes		Yes	Yes	Yes
Size							
Number of unique identifiers [approx., 10K people]	12000	1400	949.7	217	784	1122	1300
Notes	Almost equal to total population in Japan	Cumulative number of patients since January 2005	Health insurance membership approx. 11.2 million			Person who is enrolled at least once during the data period.	Patients count on the database
Annual number of unique identifiers (latest) [approx., 10K people]		870	441		383	790	662
The latest year		2021	2021	2021	2021	2021	2021
Notes		May 2021 - April 2021	January 2021 to December 2021		April 2021-March 2022		unique patient counts in 2021
% coverage of population		Approximately 7% of the Japanese population	Covers 7.57% of the total population in Japan(total population in 2021)	Approximately 2% of all health insurance associations	About 3.0% of Japanese population	Coverage ratio is EHI ... 2.2% NHI ... 13.0% LSEHS ... 18.2% The denominator is number of members for each insurance.	Approx. 5.4% of Japanese population
Annual N of outpatients (latest) [approx., 10K people]		680	439.1	194	382	609	658
Annual N of inpatients (latest) [approx., 10K people]		36	22.6	3	20	55	33
Annual N of medicated diabetes patients (latest) [approx., 10K people]		50	12.4	12	12	87	22
Definition		[ICD10]E10-E14	ICD-10:E10-E14 and EphmraATC：A10	ICD10：E10-E14　ATC：A10	・Target disease: ICD10: E10-E14 (exclude suspected cases) ・Target medication: ATC (EphMRA): A10 ・Condition for target patients: Target medication was prescribed in the same month as the diagnosis of the target disease.	The disease and drug are definded as below. diabetes: ICD-10 code E10-E14 antidiabetic drug: ATC code A10 Treated diabetes patient is defined as a person who is diagnosed as diabetes and prescribed antidiabetic drug in the same month during 2021 at least once.	ATC:A10
Annual N of influenza diagnosed patients (latest) [approx., 10K people]		3	0.349	0.07	0.3	0.3	0.5
Definition		[ICD10]J09,J10,J11	ICD-10:J10-11	ICD：J09,J10,J11	ICD10：J10, J11	The disease is defined as below. Influenza: ICD-10 code J09, J10, J11 Influenza patient is defined as a person who is diagnosed as Influenza during 2021 at least once.	ICD10:J09,J10,J11
Number of patients followed							
≥1 year [approx., 10K people]		1035	709.9	109	602	883	998
≥3 year [approx., 10K people]		620	442.1	81	408	580	652
≥5 year [approx., 10K people]		360	257.5	61	269	300	410
Median [approx., year]			2.67	3.8	3.8	3	3
Notes		Traceable over 8 years: 1.35 million			Average		
Age Distribution							
0 - 14 years old [approx., %]		17	19.86	19	22	5.48	16
15 - 64 years old [approx., %]		79	77.09	58	76	42.01	79
65 - 74 years old [approx., %]		4	3.01	17	2	19.37	5
75 years old or older [approx., %]		0	0.04	6	0	33.14	0
Age distribution: notes		Most recent 1 year					
Prescriptions (data availability)							
Dispensing (in-hospital)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dispensing (out-of-hospital)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of dispending	Limited	Yes	Yes	Yes	No	Yes	Yes
Dosage of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Days of supply	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Administration	No	Limited	Yes	Limited	No	Limited	Limited
Injection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vaccine	No	No	No	No	No	No	No
Drug master							
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ATC (EphMRA)	No	Yes	Yes	Yes	Yes	Yes	Yes
ATC (WHO)	No	Yes	No	No	Yes	Yes	No
YJ code	No	Yes	Yes	No	Yes	Yes	No
NHI drug price list code	No	Yes	Yes	Yes	Yes	Yes	No
HOT code	No	No	No	No	No	No	No
Reimbursement code	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hospital-original code	No	No	No	No	No	No	No
Others	No	No	No	No	Yes	Yes	No
Others, notes					Titer		
Procedures (data availability)							
Procedure name	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of procedure	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Procedure master							
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reimbursement category,	No	Yes	No	Yes	Yes	Yes	Yes
Reimbursement code	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Others	No	No	No	No	No	No	No
Hospitalization (data availability)							
Date of hospital admission	Limited	Yes	Yes	Yes	Yes	Yes	Yes
Date of hospital discharge	Limited	Limited	Yes	Yes	Yes	Limited	Yes
Medication while hospitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diagnosis (data availability)							
Diagnosis name	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Suspicions diagnosis or not	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diagnosis master							
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standard diagnosis code (Reimbursement code)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ICD10 code (2013)	No	Yes	Yes	Yes	Yes	Yes	Yes
ICD10 code (other than 2013)	No	Yes	Yes	Yes	Yes	No	Yes
Others	No	No	No	No	No	No	No
Laboratory test (data availability)							
Lab test (ordering)	Yes	No	Yes	Yes	No	No	No
Lab test results							
Any available test results	No	No	No	No	No	No	No
Labo test for sample (e.g., blood, urine, microbe		No			No		No
Physiological test (e.g., respiratory function, braib waves, supersonic waves)		No			No		No
Results of diagnostic imaging (e.g., report of imaging interpretation)		No			No		No
Genetic test (pathological tissue)		No			No		No
Others		No			No		No
Lab test master							
Any available master	Yes	Yes	Yes	Yes	No	No	No
Loinc code	No	No	No	No			
JLAC code	No	No	No	No			
Reimbursement code	Yes	Yes	Yes	Yes			
Hospital-original code	No	No	No	No			
Others	No		No	No			
Others, notes							
Demographic, Vital (data availability)							
Birth year	Limited	Yes	Yes	Yes	Yes	Yes	Yes
Birth month	Limited	Yes	Yes	Yes	Yes	Yes	No
Birth date	No	No	No	No	No	No	No
Age	Limited	Yes	Yes	Yes	Yes	Yes	Yes
Height	No	Limited	No	No	No	Limited	No
Weight	No	Limited	No	No	No	Limited	No
Blood pressure	No	No	No	No	No	Limited	No
Insurers for patients							
National health insurance	Limited	No	No	Limited	No	Yes	No
Japan health insurance association	Limited	No	No	No	No	No	No
Health insurance society	Limited	Yes	Yes	Yes	Yes	Yes	Yes
Mutual society of health insurance	Limited	No	Yes	No	Yes	No	No
Late-stage medical care system for the elderly	Limited	No	No	Limited	No	Yes	No
Data Access, Others							
Access to raw data via web	No	Yes	Yes	Limited	Limited	Yes	Yes
Access to original source data such as medical charts (e.g., outcome validation, additional data collection)	No	No	No	No	No	No	No
Timing of data update	Monthly	Monthly	Monthly	Monthly	Monthly	As needed	Monthly
Others, notes							
Latest data		2 months ago	2.5 months ago	3 months ago	3 months ago	7 months ago	3 months ago（Some are 5 months ago）
Common Data Model							
OMOP		No plan	No plan	No plan	Considering	Considering	Available
SS-MIX2		No plan	No plan	No plan	Considering	No plan	No plan
Sentinel		No plan	No plan	No plan	Considering	No plan	No plan
Publication							
Presentation			A few				
Publication to peer review journal			A few				

Pharmacy-based / Others

	Cross Fact (Pharmacy-based)	IQVIA NPA data (Pharmacy-based)	Nihon-Chouzai (Pharmacy-based)	JMDC (Pharmacy-based)	NHWS (Others)	PatientsMap (Others)
Database organizer	INTAGE Real World Inc.	IQVIA Solutions Japan K.K.	Japan Medical Research Institute CO., LTD.	JMDC.Inc	SSRI, Cerner Enviza	Social Survey Research Information Co., Ltd.
Database name	Cross Fact	IQVIA NPA data	NIHON CHOUZAI Prescription Database	Pharmacies DB	NHWS：National Health and Wellness Survey Database	PatientsMap
Contact information	irw-info@intage.com		soken-info@jpmedri.co.jp	mdbhelp@jmdc.co.jp	nhws@ssri.com	patientsmap@ssri.com
Web site URL	https://www.intage-realworld.co.jp/	www.iqvia.co.jp	https://www.jpmedri.co.jp/	https://www.jmdc.co.jp/	https://www.ssri.com/service/omnibus/nhws/	https://research.ssri.co.jp/pmap/
DOI of articles about the database	None					
Database Overview						
General description of the database	Pharmacy claims database contains extramural dispense records	Pharmacy claims database collecting dispense claims from 10,100 pharmacies nationwide. # of prescriptions: 156 million in 2021.	The database is based on outpatient prescriptions from medical institutions, various surveys of patients, DTC (direct to consumer), and other sources. NIHON CHOUZAI is Japan's second largest dispensing group, with a chain of 679 stores in Japan.	A dispensing database that uses prescriptions and receipts from dispensing pharmacies across the country as its source.	NHWS collects data from patients in 10 countries. The data includes more than 165 disease areas and provides a variety of metrics, such as prevalence, diagnosis and treatment rates and more than 10,000 other variables not mentioned here.	PatientsMap is a database co-developed by SSRI and M3, Inc. The database uncovers consultation rates and patient numbers of approximately 400 diseases, in addition to new therapeutic needs and sales rep visitation rate for over 50 pharma companies based on an online survey with 38,000+ physicians in Japan, US, UK and China.
Data source						
DPC (Fomat 1)	No	No	No	No		No
DPC (EF file)	No	No	No	No		No
Medical claim	No	No	No	No		No
Dental claim	No	No	No	No		No
Pharmacy claim	Yes	Yes	No	Yes		No
Electronic medical chart	No	No	No	No		No
Lab test results	No	No	No	No		No
Ordering	No	No	No	No		No
Health checkup	No	No	No	No		No
Registry	No	No	No	No		No
Others	No	No	Yes	No	Yes	Yes
Others, notes			Patient Survey		Patient-reported information	Internet survey of physicians
Data collected from	Pharmacy	Pharmacy	Pharmacy	Pharmacy		Others
Others, notes	Pharmacy					Individual Physician
Number of organizations	2480	10100	715	4000		
Data period						
Starting year	2015	2015	2001	2019	Before 2000	2011
Latest year	2022	2022	2022	2022	2021	2022
Notes		Part of the data is available from April 2008.	Data up to the previous day can be provided	Latest is 3 days ago	Since 1998 (2008 for Japanese data). 2022 Data will be available in January, 2023.	Updated annually for Japan. Other countries are updated as needed.
Handling Anonymously Processed Information	Yes	Yes	Yes	Yes		Yes
Following the regulations on Anonymously Processed Information	Yes	Yes	Yes	Yes		Yes
Size						
Number of unique identifiers [approx., 10K people]	3241	9078	2000	1700	200	
Notes	Net number of patients since April 2015	The registrants are not fixed because patients who visit pharmacies are targeted.		Cumulative number of patients in the last 2 years	2 million	
Annual number of unique identifiers (latest) [approx., 10K people]	876	3128	190	1200	3	20000
The latest year	2021	2021	2021	2021	2021	2022
Notes	July 2021 to June 2022	approx. 31,280,000		August 2021 - July 2022	Japan Data：30,000 (The data are processed by magnification factor in accordance with the census data to make the data nationally representative.)	
% coverage of population	5% of annual prescription (Survey by Japan Pharmaceutical Association)	Approx. 20.4% of total extramural dispense claims (based on Survey by Japan Pharmaceutical Association)	Approx. 2.0% of the estimated number of out-of-hospital prescriptions by the Japan Pharmaceutical Association	Approximately 7% of all pharmacies in Japan	0.03% of the adult population	6.1% of the total number of doctors in Japan (about 327,000)
Annual N of outpatients (latest) [approx., 10K people]	876		190	1200		
Annual N of inpatients (latest) [approx., 10K people]				0		
Annual N of medicated diabetes patients (latest) [approx., 10K people]	50		22	57		
Definition	Patients prescribed diabetes treatment		Patients prescribed diabetic medications	ATC code：A10	Data is available	
Annual N of influenza diagnosed patients (latest) [approx., 10K people]	0.58		0			
Definition	Patients prescribed anti-influenza drugs		Patients prescribed anti-influenza medications		Data is available	
Number of patients followed						
≥1 year [approx., 10K people]	556		138			
≥3 year [approx., 10K people]	406		95			
≥5 year [approx., 10K people]	272		65			
Median [approx., year]	2.6		5			
Notes	Patients from July 2021 to June 2022					
Age Distribution						
0 - 14 years old [approx., %]	15	14.2	10	17	0	
15 - 64 years old [approx., %]	57	52.2	52.8	50	67	
65 - 74 years old [approx., %]	14	15.1	16.6	14	33	
75 years old or older [approx., %]	15	18.5	20.6	19		
Age distribution: notes		Net patient based			Respondents are 18 or older.	
Prescriptions (data availability)						
Dispensing (in-hospital)	No	No	No	No	Limited	No
Dispensing (out-of-hospital)	Yes	Yes	Yes	Yes	Limited	No
Date of prescription	Yes	Yes	Yes	Yes	Limited	No
Date of dispending	Yes	Yes	Yes	Yes	Limited	No
Dosage of prescription	Yes	Yes	Yes	Yes	No	No
Days of supply	Yes	Yes	Yes	Yes	Yes	No
Administration	Yes	No	Yes	Limited	Limited	No
Injection	Limited	Limited	Yes	Limited	Yes	No
Vaccine	No	No	No	No	Yes	No
Drug master						
Any available master	Yes	Yes	Yes	Yes		No
ATC (EphMRA)	Yes	Yes	No	Yes		No
ATC (WHO)	Yes	No	No	Yes		No
YJ code	Yes	No	Yes	Yes		No
NHI drug price list code	Yes	No	No	Yes		No
HOT code	No	No	No	No		No
Reimbursement code	No	Yes	No	Yes		No
Hospital-original code	No	No	No	No		No
Others	No	No	No	No		No
Others, notes						
Procedures (data availability)						
Procedure name	No	No	No	No	Limited	No
Date of procedure	No	No	No	No	No	No
Procedure master						
Any available master	No	No	No	No		No
Reimbursement category,			No	No		No
Reimbursement code			No	No		No
Others			No	No		No
Hospitalization (data availability)						
Date of hospital admission	No	No	No	No	Limited	No
Date of hospital discharge	No	No	No	No	No	No
Medication while hospitalization	No	No	No	No	No	No
Diagnosis (data availability)						
Diagnosis name	No	No	No	No		No
Suspicions diagnosis or not	No	No	No	No		No
Diagnosis master						
Any available master	No	No	No	No		No
Standard diagnosis code (Reimbursement code)			No	No		No
ICD10 code (2013)			No	No		No
ICD10 code (other than 2013)			No	No		No
Others			No	No		No
Laboratory test (data availability)						
Lab test (ordering)	No	No	No	No		No
Lab test results						
Any available test results		No	No	No		No
Labo test for sample (e.g., blood, urine, microbe		No	No	No		No
Physiological test (e.g., respiratory function, braib waves, supersonic waves)		No	No	No		No
Results of diagnostic imaging (e.g., report of imaging interpretation)		No	No	No		No
Genetic test (pathological tissue)		No	No	No		No
Others		No	No	No		No
Lab test master						
Any available master	No	No	No	No		No
Loinc code			No	No		No
JLAC code			No	No		No
Reimbursement code			No	No		No
Hospital-original code			No	No		No
Others			No	No		No
Others, notes						
Demographic, Vital (data availability)						
Birth year	Yes	Yes	No	Yes	Yes	No
Birth month	Limited	No	No	Yes	No	No
Birth date	No	No	No	No	No	No
Age	Yes	Yes	Yes	Yes	Yes	No
Height	No	No	Limited	No	Yes	No
Weight	No	No	Limited	No	Yes	No
Blood pressure	No	No	Limited	No	Yes	No
Insurers for patients						
National health insurance	Yes	Yes	Yes	Yes	Yes	No
Japan health insurance association	Yes	Yes	Yes	Yes	Limited	No
Health insurance society	Yes	Yes	Yes	Yes	Limited	No
Mutual society of health insurance	Yes	Yes	Yes	Yes	Limited	No
Late-stage medical care system for the elderly	Yes	Yes	Yes	Yes	Limited	No
Data Access, Others						
Access to raw data via web	Yes	Limited	Yes	Yes	Limited	Yes
Access to original source data such as medical charts (e.g., outcome validation, additional data collection)	No	No	No	No	Limited	No
Timing of data update	Monthly	Monthly	Daily	Every week	Annually	Annually
Others, notes						
Latest data	1 month ago	1 month ago	Previous day	3 days ago	3 months ago	12 months ago
Common Data Model						
OMOP	No plan	Considering	No plan	No plan		No plan
SS-MIX2	No plan	No plan	No plan	No plan		No plan
Sentinel	No plan	No plan	No plan	No plan		No plan
Publication						
Presentation	Many	Many	Many		The total of posters and manuscripts is more than 1,300	
Publication to peer review journal	Many	4 (as of Aug., 2022)	Many		The total of posters and manuscripts is more than 1,300	