

J-DOME

- JMA's Registry for primary care physicians -

Japan Medical Association
Japan Medical Association Research Institute
(JMARI)

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1. Why J-DOME

J-DOME: <u>Japan medical association</u> <u>Database</u> <u>Of clinical</u> <u>ME</u>dicine

Healthcare Environment in Japan

- Urgent need to prevent lifestyle-related diseases including diabetes and hypertension.
- Role of primary care getting more important
 - 65% of diabetes patients go to clinics (, not hospitals)

But • • •

Primary care <u>clinical information</u> is insufficient[※]

So • • •



JMA started primary care registry

- to understand Japanese PCP's diabetes and hypertension practice with real data
- to give feedback to the participants
- to provide a tool for reviewing own practice

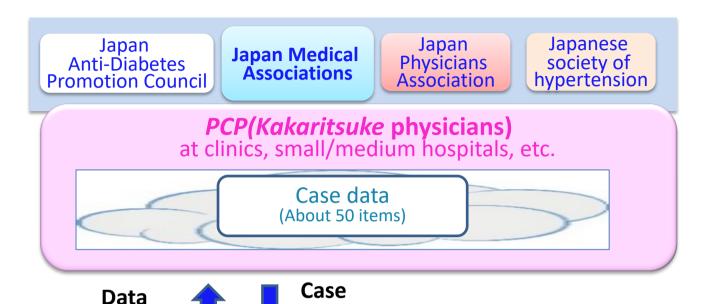


Strengthen PCPs' practice for diabetic and hypertension patients

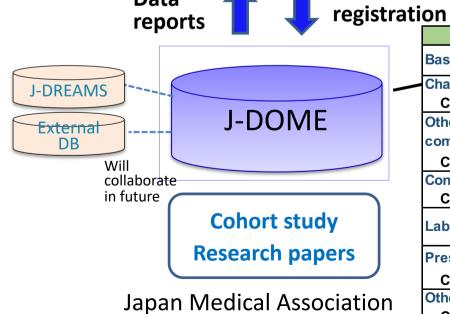


J-DOME Overview









Category	Items
Basic information	Age, gender, height, weight, outpatient history, etc.
Characteristics Check ☑	Date of diagnosis, family history, smoking history, alcoholdrinking frequency, lifestyle guidance, etc.
Other departments visits & complication from diabetes Check ☑	Regular dental/ophthalmic visits, retinopathy, nephropathy, neuropathy, foot lesions
Concurrent disease Check ☑	Dementia, stroke, cancer, coronary artery disease
Lab data	BP, blood sugar level, HbA1c, HDL, triglyceride, ALT, serum creatine, urine protein, etc.
Prescription drugs Check ☑	Diabetes drugs (DPP-4 inhibitors, biguanides, etc.), antihypertensive drugs, dyslipidemia drugs
Others Check ☑	Nursing care level, incidence of hypoglycemia, etc.

Participants and Case Registration



Participating institutions and physicians

Specialists	General Practitioners
Clinics	Clinics
Small/medium hospitals	Small/medium hospitals
Large hospitals	Large hospitals

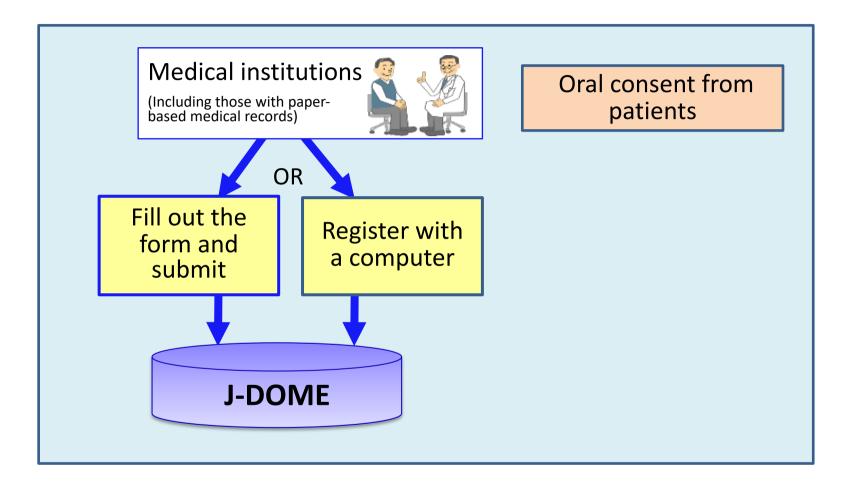
Registration methods

- Target: type 2 diabetes and hypertension patients
- Up to 50 patients, possibly 100
- On specific days, or during a specific period

^{*}diabetes specialists are those who are accredited by the Japan Diabetes Society. Hypertension specialists are those who are accredited by the Japanese Society of Hypertension.



Case registration methods

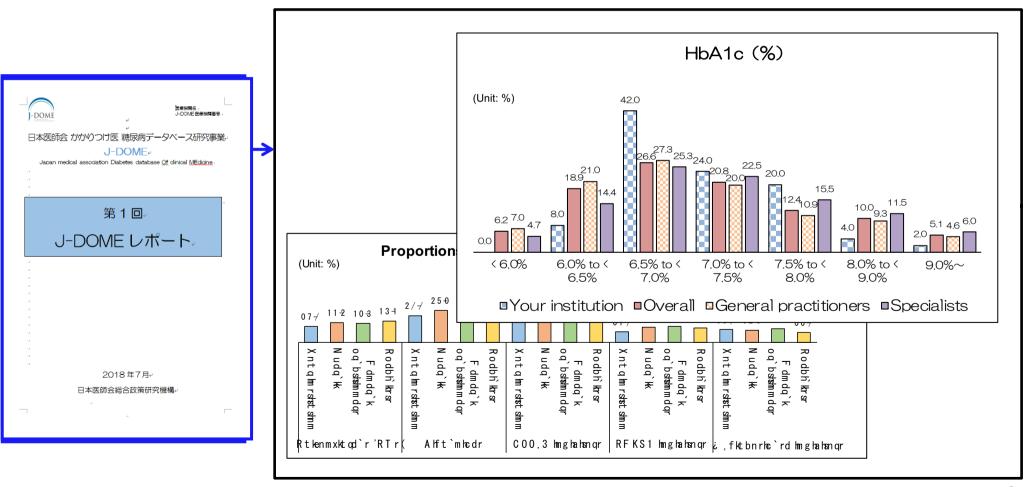


J-DOME 1st Report



(published Aug. 2018) (Diabetes cases only)

- Case analyses for each medical institution
- Can compare own practice with other GPs and specialists



2. Cases of participating PCPs (diabetes)

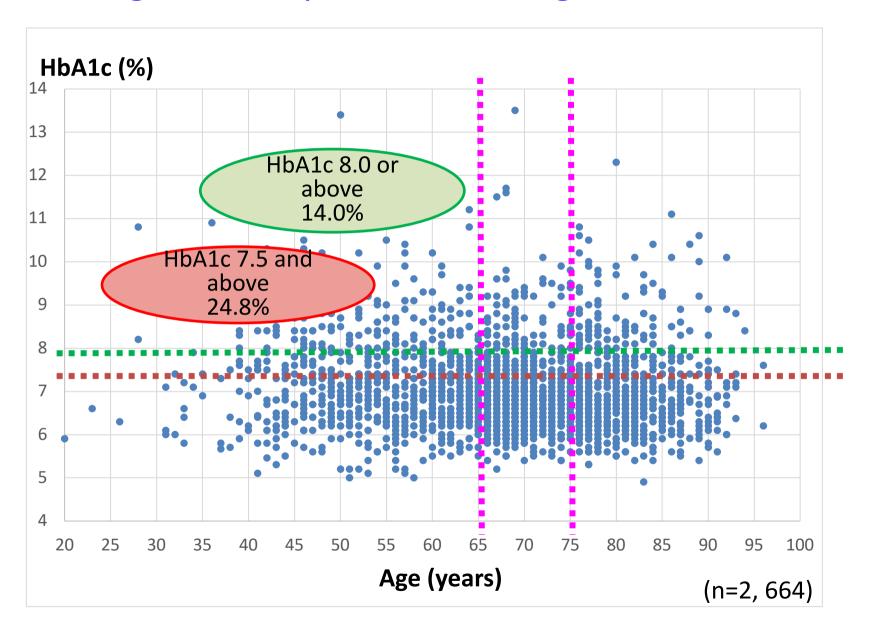


Baseline (general practitioners(GP) and specialists)

- > Average age of 68.7 for GP and 65.8 for specialists
- HbA1c is 7.04 for GP and 7.22 for specialists

	Ove (n=4,		Gen practitione (n=2,	ers' cases	Specialis (n=1,		
	Mean	SD	Mean 🔪	SD	Mean - SD		
Age	67. 7	11. 89	<u>68</u> . 7	11. 77	6 5. <u>8</u>	11. 91	P<0.01
Body weight	65. 3	14. 30	64. 9	13. 97	65. 9	14. 90	
BMI	25. 1	4. 37	25. 1	4. 28	25. 0	4. 53	
Systolic BP	130. 3	15. 15	131. 0	14. 87	128. 7	15. 58	
Diastolic BP	73. 1	11. 16	73.3	10. 51	72. 7	12. 34	
HbA1c (NGSP score)	7. 10	0. 98	7. 04	0. 97	7. 22	1. 00	P<0.01
Serum creatinine	0.8	0. 46	0.8	0. 41	0. 9	0. 54	
eGFR	70. 5	21. 75	70. 3	22. 37	70. 8	20. 58	
Blood sugar (fasting)	130. 1	35. 11	130. 2	33. 85	129. 7	39. 26	
Blood sugar (at any time)	157. 6	54. 59	157. 5	54. 95	157. 6	54. 07	
HDL cholesterol	56. 5	16. 08	56. 5	16. 22	56. 6	15. 83	
LDL cholesterol	106. 7	28. 92	107. 4	28. 96	105. 5	28. 83	

High HbA1c patients among GPs' cases



^{*} One of the criteria for referring a case to a diabetes specialist is "(1) when the blood sugar control target of a patient could not be met for over 3 months." Source: Essence of Diabetes Treatment (Japan Anti-Diabetes Promotion Council), and Referral Criteria From a Kakaritsuke Physician to a Diabetes Specialist or Specialized Institution (Japan Diabetes Society). Different standards are also set for blood sugar control for diabetes of the elderly.





Nephropathy stages	General Practitioners' cases	Specialists' cases
Stage 1	61.5%	66.1%
Stage 2	31.2%	27.7%
Stage 3	5.4%	4.4%
Stages 4 & 5	1.8%	1.7%

n=1,035	n=697
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[Based on eGFR \times (urinary albumin/creatinine ratio)]

- 20.7% of the GPs' cases are subject to referral*
- Low testing of urinary albumin/creatinine ratio
 - →Only 40.1% GPs' cases and 52.9% specialists' cases
 - Referral criteria of Japan Society of Nephrology

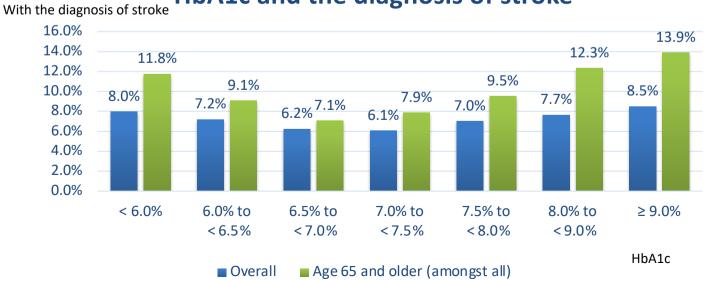


Family history, Complications and Comorbidity

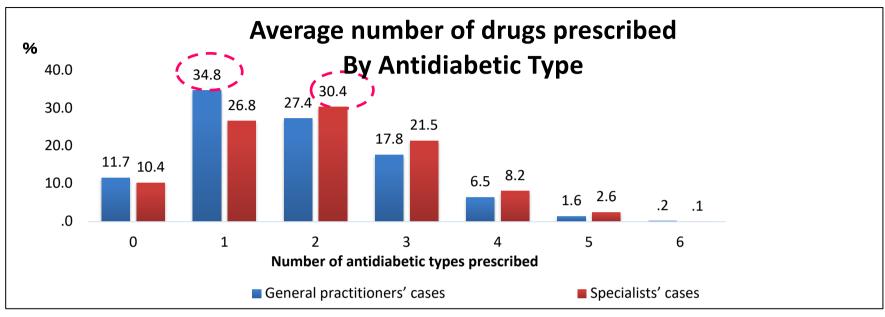
	Family history of diabetes		Diabetic retinopathy		Neuropathy			Periodontal disease			Dementia (Age 75 and older)				
	Present	Absent	n/a	Present	Absent	n/a	Present	Absent	n/a	Present	Absent	n/a	Present	Absent	n/a
General practitioners' cases	39.2%	38.7%	22.1%	8.6%	58.8%	32.5%	10.1%	80.3%	9.6%	12.6%	41.6%	45.8%	10.4%	83.3%	6.3%
Specialists' cases	47.6%	41.7%	10.7%	19.4%	62.4%	18.2%	17.6%	74.0%	8.4%	16.8%	34.0%	49.2%	10.2%	88.3%	1.5%

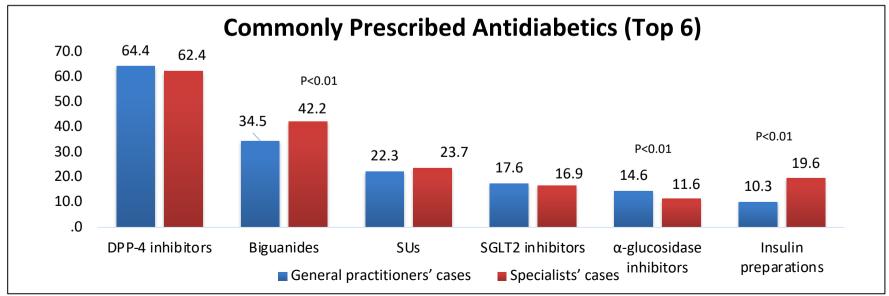
Relationship between HbA1c and the diagnosis of stroke





Prescription

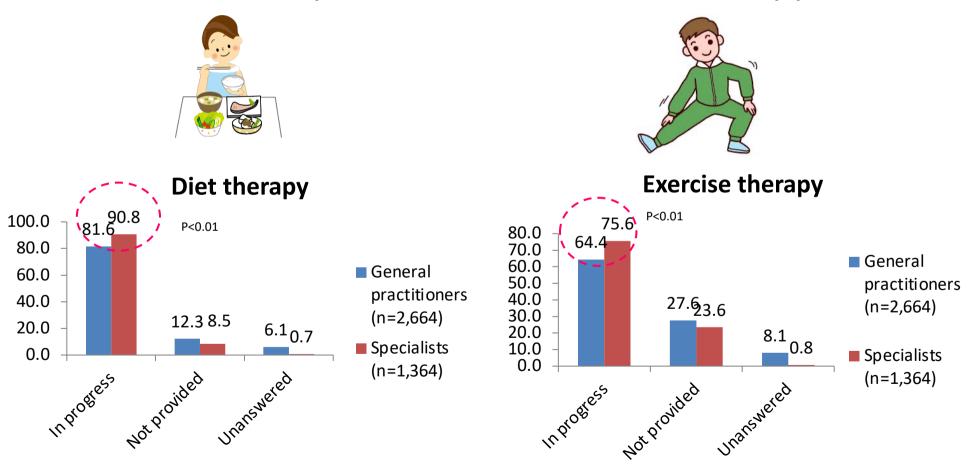






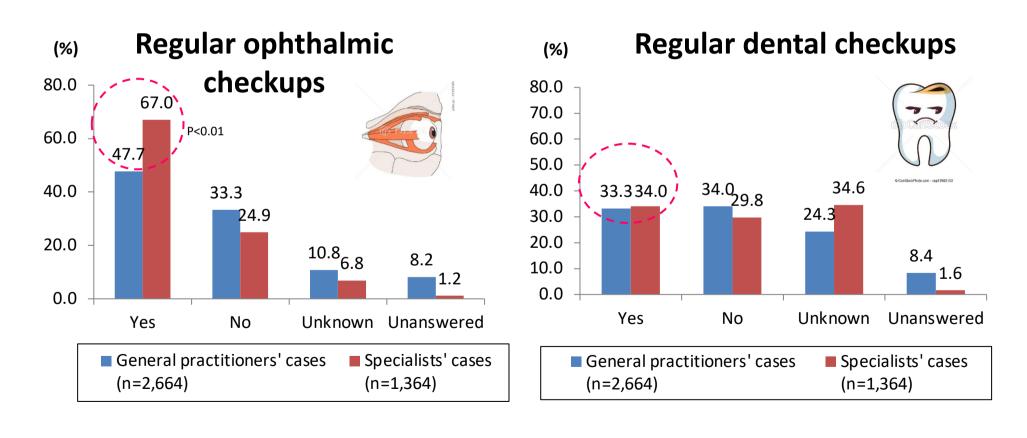
Diet and exercise therapy

- Diet therapy instructions are well provided
- GPs' cases: 64% patients receive exercise therapy



Collaboration with ophthalmologists and dentists

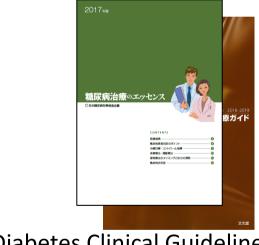
- Regular ophthalmic checkups 47.7% of GPs' cases
- Regular dental checkups 33.3% of GPs' & 34.0% of specialists'



Result



- General practitioners see many advanced diabetes
- Need to share more clinical information with PCPs



Diabetes Clinical Guidelines for PCPs



Hypertension Clinical Guideline

 Collaboration with specialists, ophthalmologists and dentists should be more promoted



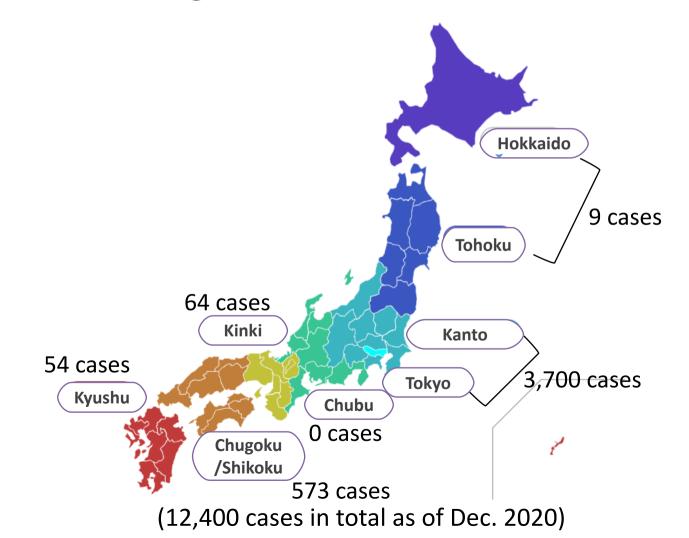
3. From Now

- 1) Registry Expansion
- 2) Collaborate with related organization and local governments
- 3) Research and feedback



1) Registry Expansion

- Expecting more participation and case registration
- Started the 3rd round registration in 2020



2) Collaboration with related Organization and Local Government



- Collaboration with the Japanese Society of Hypertension (2020)
- Collaboration Agreement for the Promotion of Diabetes Care by PCPs and Prevention with Saitama Prefecture (2018)

3) Research and Feedback



- Case research using year-by outcome data
- Continue to provide feedback to participating PCPs to promote higher-level patient care



J-DOME Project Structure



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