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# Standardized Data Item Sets for Self-management of Chronic Diseases, Determined by 5 Clinical Associations in Japan

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by

**Japan Association for Medical Informatics**

**Japan Diabetes Society**

**Japanese Society of Hypertension**

**Japan Atherosclerosis Society**

**Japanese Society of Nephrology**

# The List of the Minimum Data Item Set (MDIS), and the Standard Data Item set for Self-Management (SDISM) for 4 Chronic Diseases

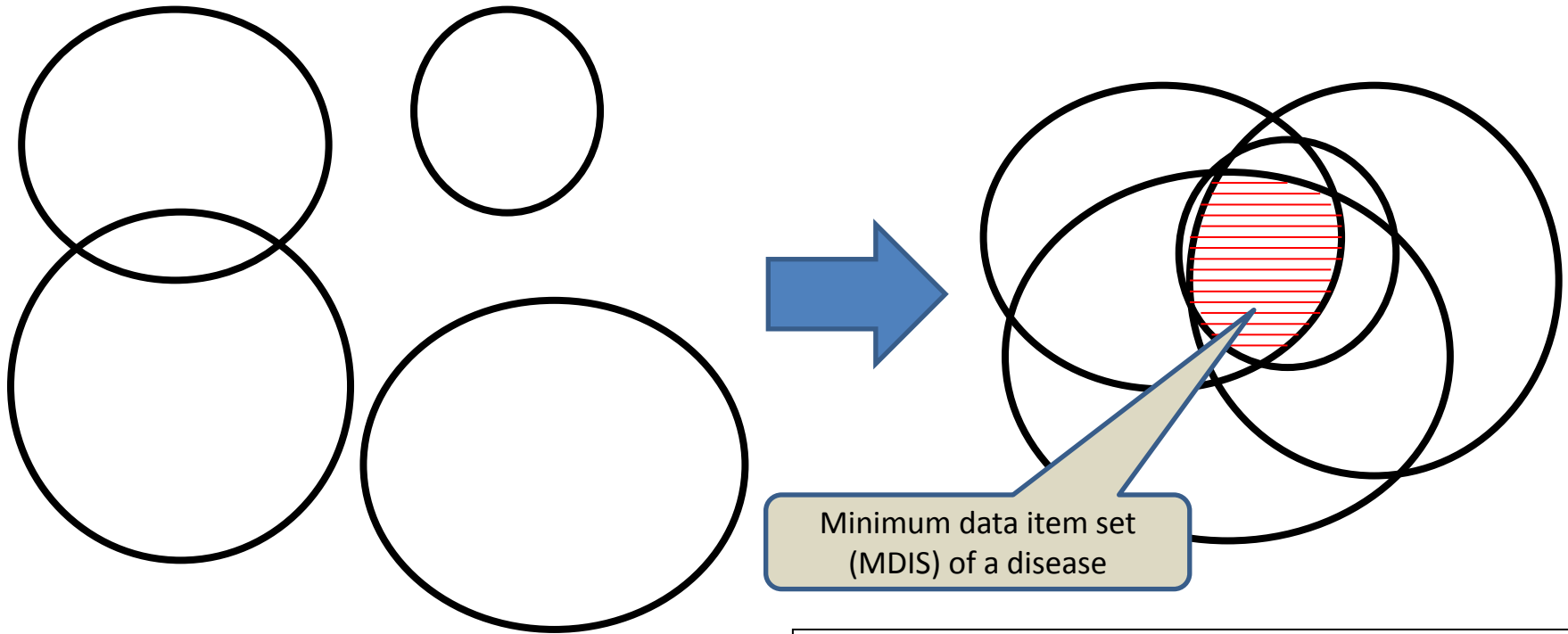
ID	Item	Unit, expression	SDISM for Diabetes Mellitus			SDISM for Hypertension			SDISM for Dyslipidemia			SDISM for CKD		
			from Medcial	from health chekcup	from home	from Medcial	from health chekcup	from home	from Medcial	from health chekcup	from home	from Medcial	from health chekcup	from home
1	Hight	cm	○	○		○	○		○	○		○	○	
2	Weight	kg	○	○		○	○		○	○		○	○	
3	Systolic Blood Pressure	mmHg	○	○		○	○		○	○		○	○	
4	Diastolic Blood Pressure	mmHg	○	○		○	○		○	○		○	○	
5	Total Cholesterol	mg/dL	○			○			○			○		
6	HDL Cholesterol	mg/dL	○	○		○	○		○	○		○	○	
7	Smoking	Yes, No, Yes in the past	○	○		○	○		○	○		○	○	
8	Serum Creatinin	mg/dL	○			○			○			○		
9	Urine Protein	-, ±, +, 2+, 3+ or over	○	○		○	○		○	○		○	○	
10	Blood Glucose	mg/dL	○	○		○	○		○	○				
11	Age diagnosed as Diabetes Mellitus	less than 10y.o, 10's, 20's, , , 70's, 80 y.o or over, Unknown	○											
12	HbA1c (NGSP)	%	○	○								○	○	
13	ALT	IU/L	○	○					○	○				
14	Diabetic Retinopathy	Yes, No, Unknow	○											
15	Urine Albumin/Creatinin	mg/gCr	○											
16	AST	IU/L	○	○										
17	Trigriceride	mg/dL	○	○		○	○		○	○		○	○	
18	Waist	cm		○			○			○				
19	Urine Glucose	-, ±, +, 2+ or over	○	○										
20	γ GTP	IU/L	○	○										
21	Diabeteic neuropathy	Yes, No, Unknow	○											
22	Regular visit at Dental Clinic (*1)	Yes, No, Unknow	○											
23	Age diagnosed as Hypertension	less than 10y.o, 10's, 20's, , , 70's, 80 y.o or over, Unknown				○								
24	Serum Potacium	mEq/L				○						○		
25	Abnormality on ECG	Yes, No, Unknow				○								
26	Uric Acid	mg/dL				○						○	○	
27	Systolic Blood Pressure at home	mmHg						○						
28	Diastolic Blood Pressure at home	mmHg						○						
29	Age diagnosed as Dyslipidemia	less than 10y.o, 10's, 20's, , , 70's, 80 y.o or over, Unknown							○					
30	Past History of Coronary Diseases	Yes (by contrast study) , Yes (by another study) , No, Unknown							○					
31	Age diagnosed as CKD	less than 10y.o, 10's, 20's, , , 70's, 80 y.o or over, Unknown										○		
32	Serum Albumin	g/dL										○	○	
33	Hematuria	-, ±, +, 2+, 3+ or over (Micro hematuria) , Macrohematuria										○	○	
34	Family History of Renal Failure (:*2)	Yes, No, Unknow										○		
35	Urine Protein /Creatinin	g/gCr										○	○	
36	Urine Protein / Day	g/day										○	○	
37	Serum Total Protein	g/dL										○	○	
38	BUN	mg/dL										○		
39	Hebmoglobin	g/dL										○	○	
40	Cystatin C	mg/L										○		

Common items in 4 minimum data item sets (MDISs)
  minimum data item set (MDIS) for Diabetes Mellitus
  minimum data item set (MDIS) for Hypertension
  minimum data item set (MDIS) for Dyslipidemia
  minimum data item set (MDIS) for CKD

(\*1) Regular visit at Dental Clinic; one or more /year  
 (\*2) Family History of Renal Failure (Hemodialysis, Renal Transplantation, Renal failure within the 2nd degree of relationship)

There have been many databases for a chronic disease with variety purposes for medical care, researches, education, so on

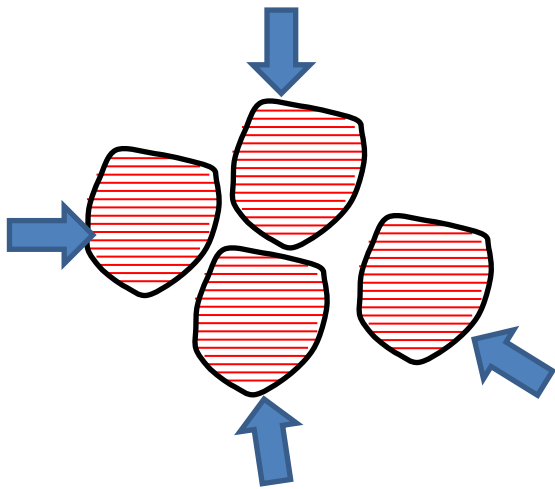
- ✿ We cannot make items uniform if the purposes are different
  - ✓ To increase common use among projects about a disease, instead of uniformity.



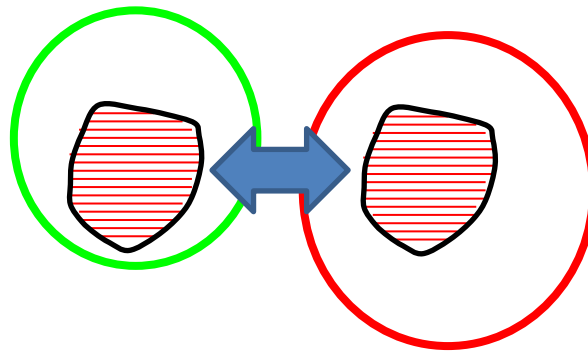
If all items are independent each other, it is impossible to contribute each other by secondary use of data.

If we can use standardized items, the items can be useful for each project, and do not need double registrations. item, unit, granularity were determined.

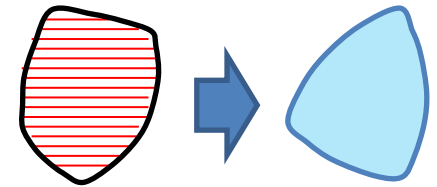
Now we can use accumulating data efficiently



Data addition from  
different projects



Data comparison  
among different projects

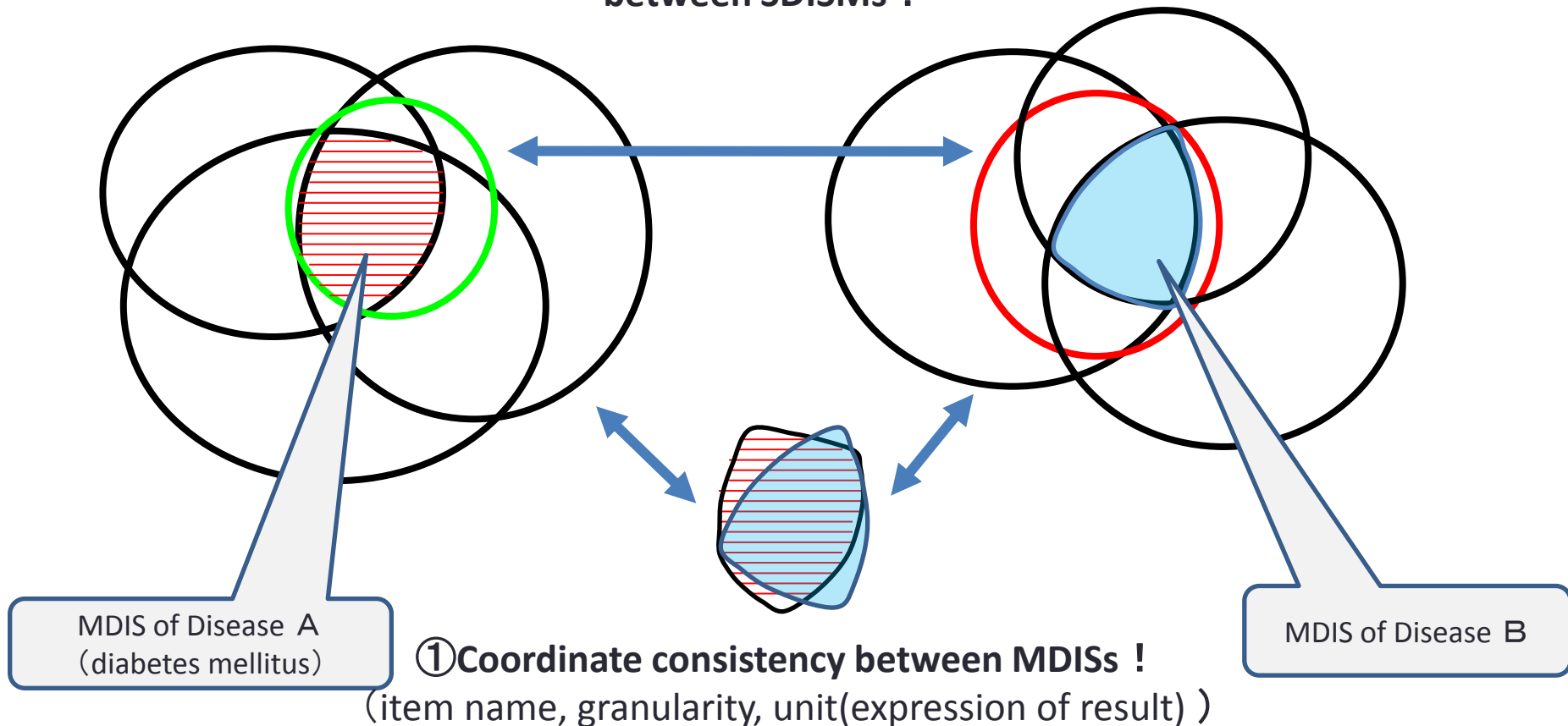


(Common) data transfer  
to different project

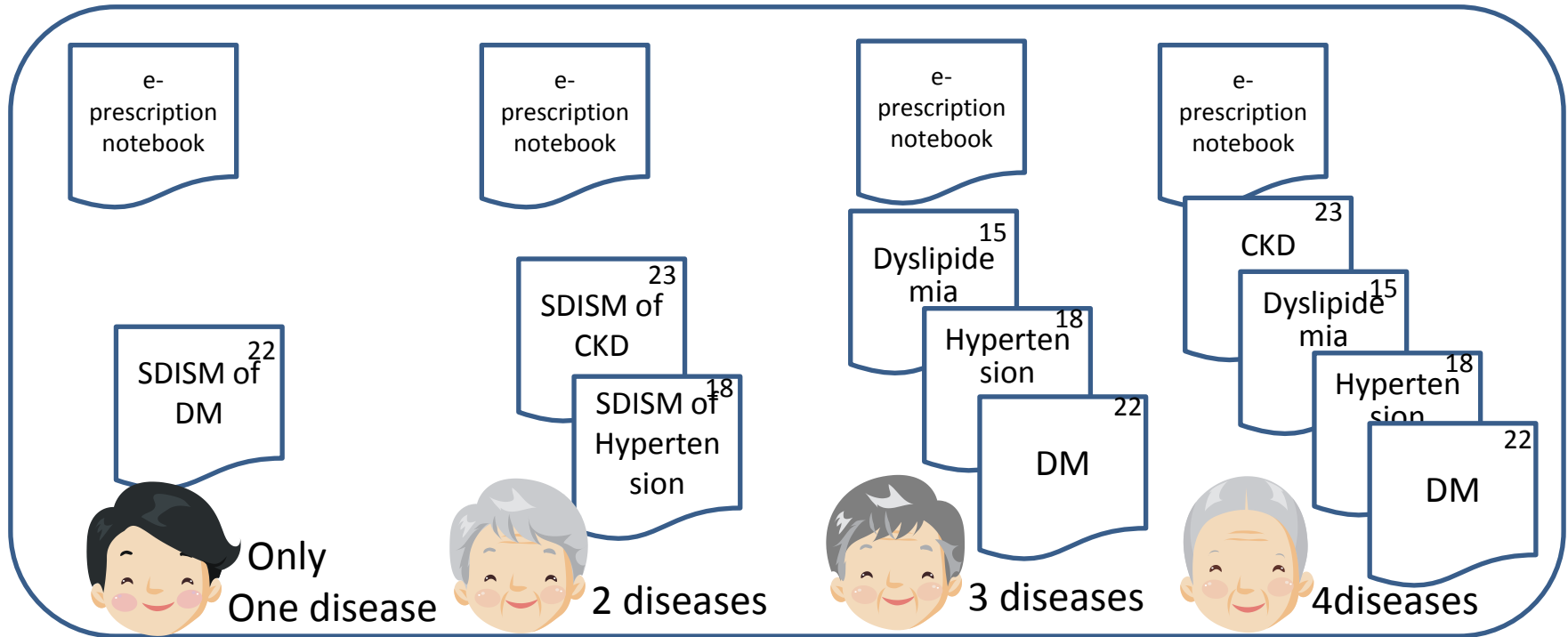
## Consistency among 4 chronic diseases in MDIS and in SDISM is also important

- There should be many common items in MDISs in lifestyle related-diseases.
- Patients of lifestyle related-diseases often have plural diseases.

### ② Coordinate consistency between SDISMs !



# How many items does a patient have plural diseases



Except for e-prescription notebook

Simple addition = 22                      = 41                      = 57                      = 78

Remove overlaps

= 22                      = 29                      = 30                      = 40