				b430	haematological system functions	貧血
D75	MALIGNANT NEOPLASM COLON/RECTUM		C18, C19, C20, C21	s540	structure of intestine	
				b455	exercise tolerance functions	全身倦怠
				b530	weight maintenance functions	
				b289	sensation of pain, other specified and	腹痛
				b430	haematological system functions	貧血
				b525	defecation functions	下痢・便秘
D76	MALIGNANT NEOPLASM PANCREAS	carcinoma pancreas	C25	s550	structure of pancreas	膵がん
				b455	exercise tolerance functions	全身倦怠
				b530	weight maintenance functions	
				b289	sensation of pain, other specified and	腹痛
				b430	haematological system functions	貧血
				b525	defecation functions	下痢
D77	MALIGNANT DIGESTIVE NEOPLASM OTHER/NOS	all other primary malignancies of digestive system, gallbladder cancer, liver cancer	C00, C01, C02, C03, C04, C05, C06, C07, C08, C14.8, C15, C17, C22, C23, C24, C26, C45.1, C46.2,	s520	structure of oesophagus	食道がん
				s560	structure of liver	肝がん
				s570	structure of gall bladder and ducts	胆嚢がん
				s320	structure of mouth	口腔のがん
				s330	structure of pharynx	咽頭のがん
				b455	exercise tolerance functions	全身倦怠
				b530	weight maintenance functions	
				b289	sensation of pain, other specified and	腹痛
				b430	haematological system functions	貧血
				b525	defecation functions	下痢
D78	NEOPLASM DIGESTIVE SYSTEM BENIGN/UNSPECIFIED	benign digestive neoplasm, digestive neoplasm not specified as benign or malignant/when histology is not available, polyp of stomach, duodenum, colon, rectum	D00, D01, D10, D11, D12, D13, D20, D37, D48.3, D48.4, K62.0, K62.1			
				b455	exercise tolerance functions	全身倦怠
				b530	weight maintenance functions	
				b289	sensation of pain, other specified and	腹痛
				b430	haematological system functions	貧血
				b525	defecation functions	下痢
D79	FOREIGN BODY DIGESTIVE SYSTEM	foreign body swallowed/in digestive tract, including mouth, oesophagus, rectum	T18			
				b289	sensation of pain, other specified and	腹痛
				b430	haematological system functions	貧血

				b525	defecation functions	下痢・便秘
D80	INJURY DIGESTIVE SYSTEM OTHER	injury to abdominal organ, teeth, tongue	S00.5, S01.5, S02.5, S03.2, S36.1, S36.2, S36.3, S36.4, S36.5, S36.6, T28.0, T28.1, T28.2, T28.5, T28.6, T28.7	s320	structure of mouth	
				s330	structure of pharynx	
				b289	sensation of pain, other specified and	口腔の痛み
D81	CONGENITAL ANOMALY DIGESTIVE SYSTEM	biliary anomaly, cleft lip/palate, Meckel's diverticulum, megacolon, Hirschprung's disease, oesophageal atresia, pyloric stenosis, tongue-tie	Q18, Q35, Q36, Q37, Q38, Q39, Q40, Q41, Q42, Q43, Q44, Q45	s520	structure of oesophagus	
				s530	structure of stomach	
				s540	structure of intestine	
				s550	structure of pancreas	
				s560	structure of liver	
				s570	structure of gall bladder and ducts	
				b455	exercise tolerance functions	全身倦怠
				b530	weight maintenance functions	
				b289	sensation of pain, other specified and	腹痛
				b430	haematological system functions	貧血
				b525	defecation functions	下痢・便秘
D82	TEETH/GUM DISEASE	caries, dental abscess, gingivitis, malocclusion, temporomandibular joint disorder	K00.0, K00.1, K00.2, K00.3, K00.4, K00.5, K00.6, K00.8, K00.9, K01, K02, K03, K04, K05, K06, K07, K08, K09, K10	s320	structure of mouth	
				b289	sensation of pain, other specified and	歯痛
				b510	ingestion functions	
				b320	articulation functions	
D83	MOUTH/TONGUE/LIP DISEASE	aphthous ulcer, cheilosis, glossitis, mucocoele, oral thrush, parotitis, salivary calculus, stomatitis, Vincent's angina	A69.0, A69.1, B00.2, B37.0, K11, K12, K13, K14	s320	structure of mouth	
				s330	structure of pharynx	
				b250	taste function	
				b289	sensation of pain, other specified and	口腔の痛み
				b510	ingestion functions	
				b320	articulation functions	
D84	OESOPHAGUS DISEASE	achalasia, oesophagial diverticulum, Mallory-Weiss syndrome, oesophagitis, oesophagus ulceration, reflux	K20, K21, K22, K23	b510	ingestion functions	

				b5105	Swallowing	
				b51052	Oesophageal swallowing	
				b28010	Pain in head and neck	
				b28011	Pain in chest	
				b5350	Sensation of nausea	
				b1302	Appetite	
D85	DUODENAL ULCER	bleeding/obstructing/perforated ulcer	K26	b28012	Pain in stomach or abdomen	
				b28010	Pain in head and neck	
				b28011	Pain in chest	
				b5350	Sensation of nausea	
				b1302	Appetite	
				b5351	Feeling bloated	
				b5352	Sensation of abdominal cramps	
				b110	Consciousness functions	
				b130	Energy and drive functions	
				b430	Haematological system functions	
D86	PEPTIC ULCER OTHER	gastric/gastrojejunal/marginal ulcer, acute erosion	K25, K27, K28	b28012	Pain in stomach or abdomen	
				b28010	Pain in head and neck	
				b28011	Pain in chest	
				b5350	Sensation of nausea	
				b1302	Appetite	
				b5351	Feeling bloated	
				b5352	Sensation of abdominal cramps	
				b110	Consciousness functions	
				b130	Energy and drive functions	
				b430	Haematological system functions	
D87	STOMACH FUNCTION DISORDER	acute dilatation stomach, duodenitis, gastritis	K29	b28012	Pain in stomach or abdomen	
				b28010	Pain in head and neck	
				b28011	Pain in chest	
				b5350	Sensation of nausea	
				b1302	Appetite	
				b5351	Feeling bloated	
				b5352	Sensation of abdominal cramps	
D88	APPENDICITIS	appendix abscess/perforation	K35, K36, K37	b28012	Pain in stomach or abdomen	
				b28010	Pain in head and neck	
				b28011	Pain in chest	
				b5350	Sensation of nausea	
				b1302	Appetite	
				b5351	Feeling bloated	
				b5352	Sensation of abdominal cramps	
				b5500	Body temperature	
D89	INGUINAL HERNIA		K40	b28012	Pain in stomach or abdomen	
D89	鼠径ヘルニア		K40			
D90	HIATUS HERNIA	diaphragmatic hernia	K44	b5350	Sensation of nausea	
				b1302	Appetite	

				b5351	Feeling bloated	
D91	ABDOMINAL HERNIA OTHER	femoral/umbilical/ventral hernia	K41, K42, K43, K45, K46	b5350	Sensation of nausea	
				b1302	Appetite	
				b5351	Feeling bloated	
D92	DIVERTICULAR DISEASE	diverticulitis/diverticulosis of intestine	K57	b5350	Sensation of nausea	
				b28012	Pain in stomach or abdomen	
D93	IRRITABLE BOWEL SYNDROME	mucous colitis, spastic colon	K58	b28012	Pain in stomach or abdomen	
				b525	Defecation functions	
				b535	Sensations associated with the digestive system	
D94	CHRONIC ENTERITIS/ULCERATIVE COLITIS	Crohn's disease, regional enteritis, ulcerative colitis	K50, K51, K52.0	b535	Sensations associated with the digestive system	
				b525	Defecation functions	
				b28013	Pain in back	
				b28012	Pan in stomach or abdomen	
D95	ANAL FISSURE/PERIANAL ABSCESS	anal fistula, ischiorectal abscess	K60, K61	b525	Defecation function	
				b28018	Pain in body part, other specified	
				b5358	Sensations associated with the digestive system, other specified	
D96	WORMS/OTHER PARASITES	cestodes, creeping eruption, intestinal parasites unspecified, trichiniasis, hydatid disease	B65, B66, B67, B68, B69, B70, B71, B72, B73, B74, B75, B76, B77, B78, B79, B80, B81, B82, B83	b530	Weight maintenance functions	
				b535	Sensations associated with the digestive system	
				b525	Defecation function	
D97	LIVER DISEASE NOS	alcohol hepatitis, cirrhosis, fatty liver, hepatitis NOS, liver failure, portal hypertension	B58.1, B94.2, K70, K71, K72, K73, K74, K75, K76, K77	b520	Assimilation functions	
				b530	Weight maintenance function	
				b535	Sensations associated with the digestive system	
				b540	General metabolic funtions	
				b5402	Endurance of all muscles of the body	
				b7658	Involuntary movement functins, other specified	
				b840	Sensation related to the skin	
				b849	Functins of the skin, other specified and	Jaundice
D98	CHOLECYSTITIS/CHOLELITHIASIS	biliary colic, cholangitis, gallstones	K80, K81, K82, K83, K87.0	b28012	Pain in stomach or abdomen	
				b530	Weight maintenance function	
				b840	Sensation related to the skin	
				b849	Functins of the skin, other specified and	Jaundice

Disease evaluation with ICF and ICPC-2 for disease control

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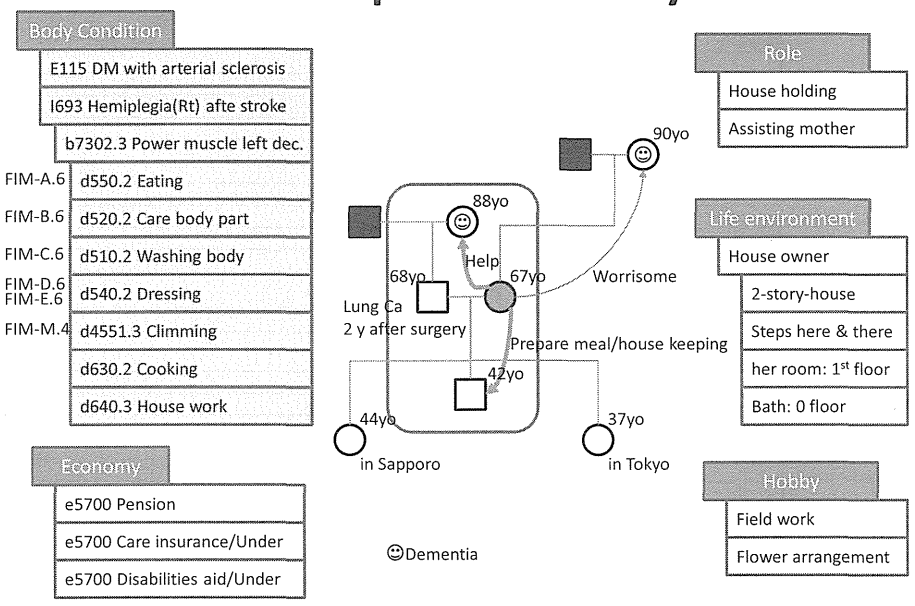
Introduction

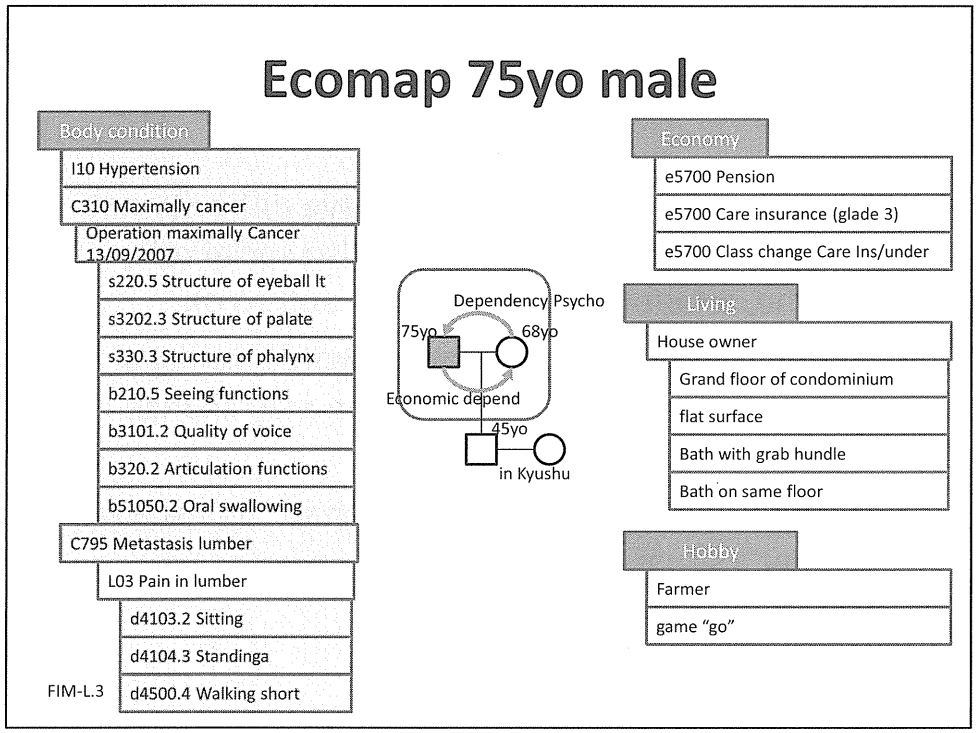
- Infection to Chronic disease
  - Until late in 20th century, **infectious disease control was the main issue** to improve public health. Most of these infectious diseases are acute prognosis and we can evaluate health improvement policy by mortality and morbidity.
- Living with chronic disease
  - To control chronic diseases, such as hypertensions, ischemic heart diseases, diabetes mellitus, is the key issue to improve public health status. **Patients have to live with "chronic diseases".** And population aging increases morbidities of these diseases in a steady stream.
- Prognosis evaluation
  - We have to deal **the prognosis of chronic diseases**.
  - **Screening** is the best way to control chronic diseases.
  - **Morbidity** shows only number of patients.
  - **Chronic diseases have multi target organs.**
  - ***Is it possible to staging chronic disease?***

Patient evaluation for discharge

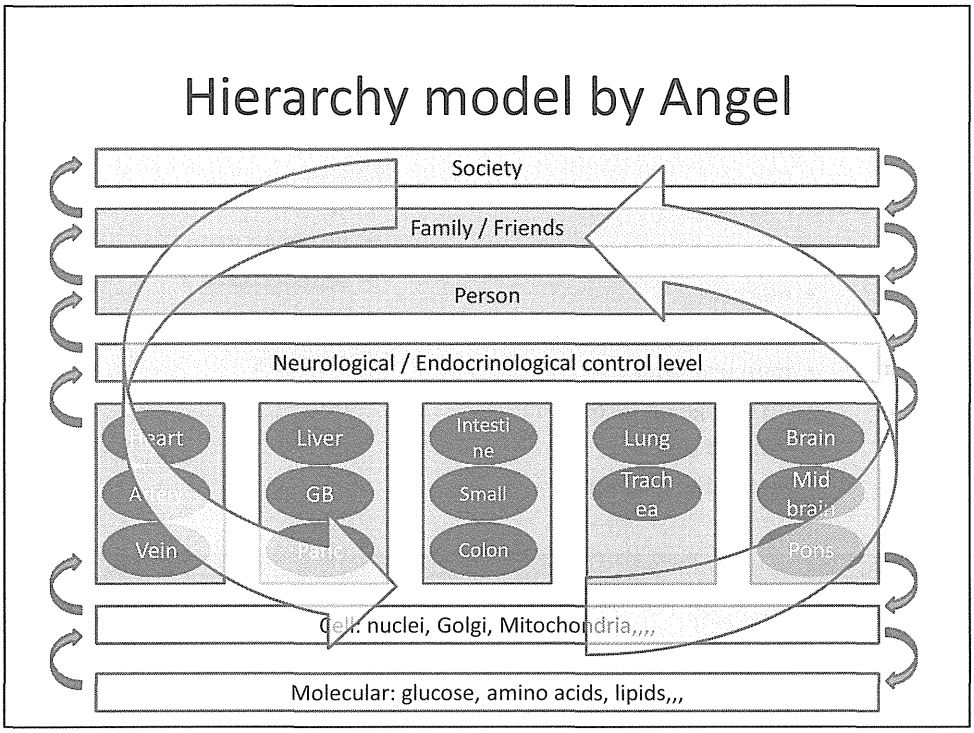
- In aged society, some patients have difficulty not only due to decreased ADL but also social role, income, relationship with others and so on.
- During hospitalization, in other words during a short break of social life, situation may change dramatically.
- Hospital social workers use "ecomap" to visualize patient's situation.
- We applied ICF on ecomap.

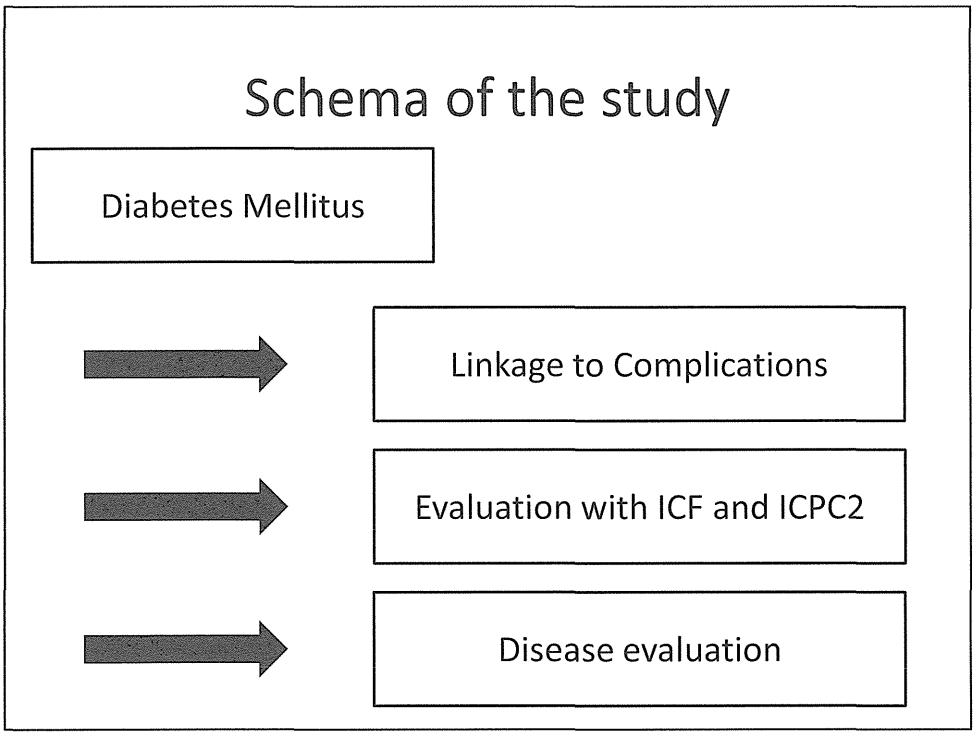
Ecomap Female 67yo





Evaluation for discharge	Activities & Participation	Applying knowledge	d163	Thinking
			d175	Solving problems
			d177	Making decisions
		general tasks & demands	d220	Undertaking multiple tasks
		Communicating	d310	Communicating with – receiving – spoken messages
		Changing	d415	Maintaining a body position
			d450	Walking
			d455	Moving around
		Self care	d510	Washing oneself
			d520	Caring for body parts
			d530	Toileting
			d540	Dressing
			d550	Eating
			d560	Drinking
		Household task	d630	Preparing meals
			d640	Doing housework
		Caring for household objects and assisting others	d650	Caring for household objects
			d660	Assisting others
		Particular interpersonal relationships	d760	Family relationships
			d770	Intimate relationships
		Economic life	d860	Basic economic transactions
			d865	Complex economic transactions
	Environmental factors	Support & relationships	e310	Immediate family
			e315	Extended family
			e320	Friends
			e325	Acquaintances, peers, colleagues, neighbours and community members
		Attitude	e410	Individual attitudes of immediate family members
			e415	Individual attitudes of extended family members
			e420	Individual attitudes of friends
			e425	Individual attitudes of acquaintances, peers, colleagues, neighbours and community members


Hierarchy model by Angel
Society
Family / Friends
Person
Neurological / Endocrinological control level
Liver
GB
Intesti ne
Small
Colon
Lung
Trach ea
Brain
Mid
Pons
Vein
Molecular: glucose, amino acids, lipids,,,

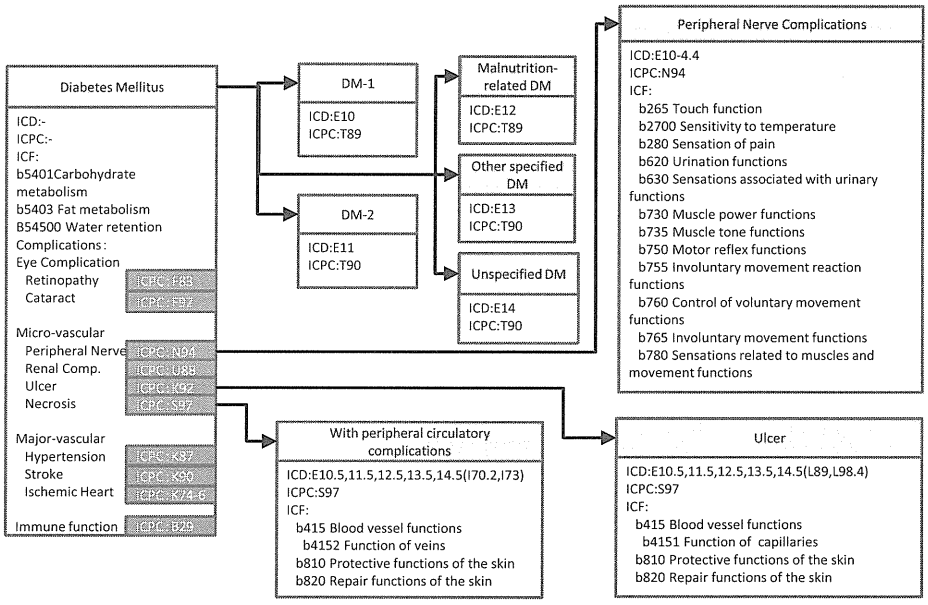

Schema of the study
Diabetes Mellitus
Linkage to Complications
Evaluation with ICF and ICPC2
Disease evaluation

Severity and Clinical phase

- Colon cancer
  - Invasion
    - mucosa
    - submucosa
    - muscular layer
    - no change on serosa
    - invaded serosa
    - invaded to next organ
  - Lymph nodes
    - no lymph meta
    - sentinel up to 3
    - sentinel more than 4
  - Metastasis
    - no
    - positive

•lymph nodes and metastasis classification are not based on ontology

Diabetes Mellitus with ICF and ICPC-2



ICF Power!

- ICF is effective to evaluate one's living.
- It is not easy task to suppose the influence of the disease on daily life.
- ICF can represent the relation between disease and its influence on daily life.
- ICF can also evaluate community health.