

2025 제22차 국제연수과정 NHIS UHC GLOBAL ACADEMY

National Health Screening and Health Promotion Programs in Korea

Chang oh BYUN, Deputy Director
Health Insurance Research Institute, NHIS



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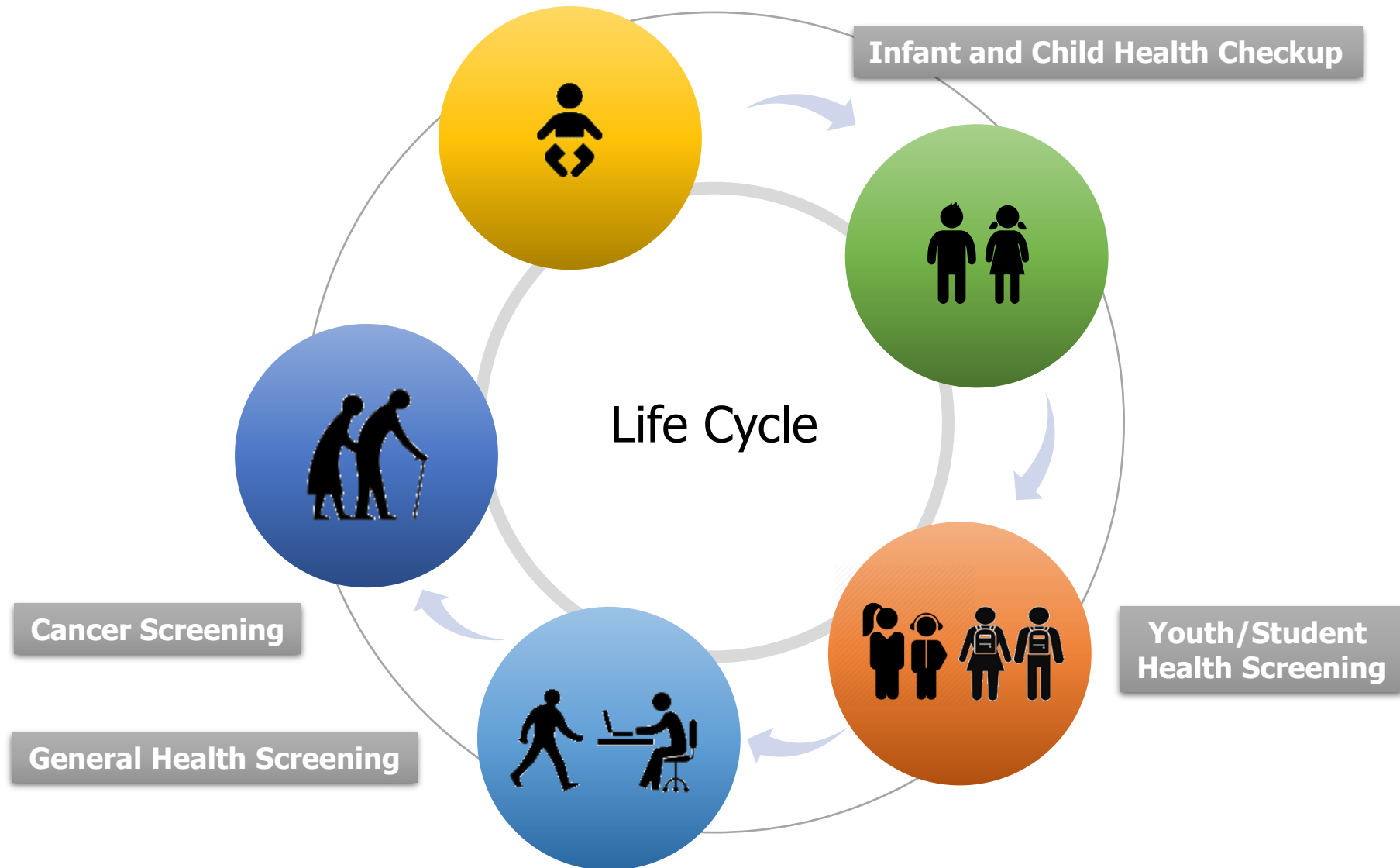


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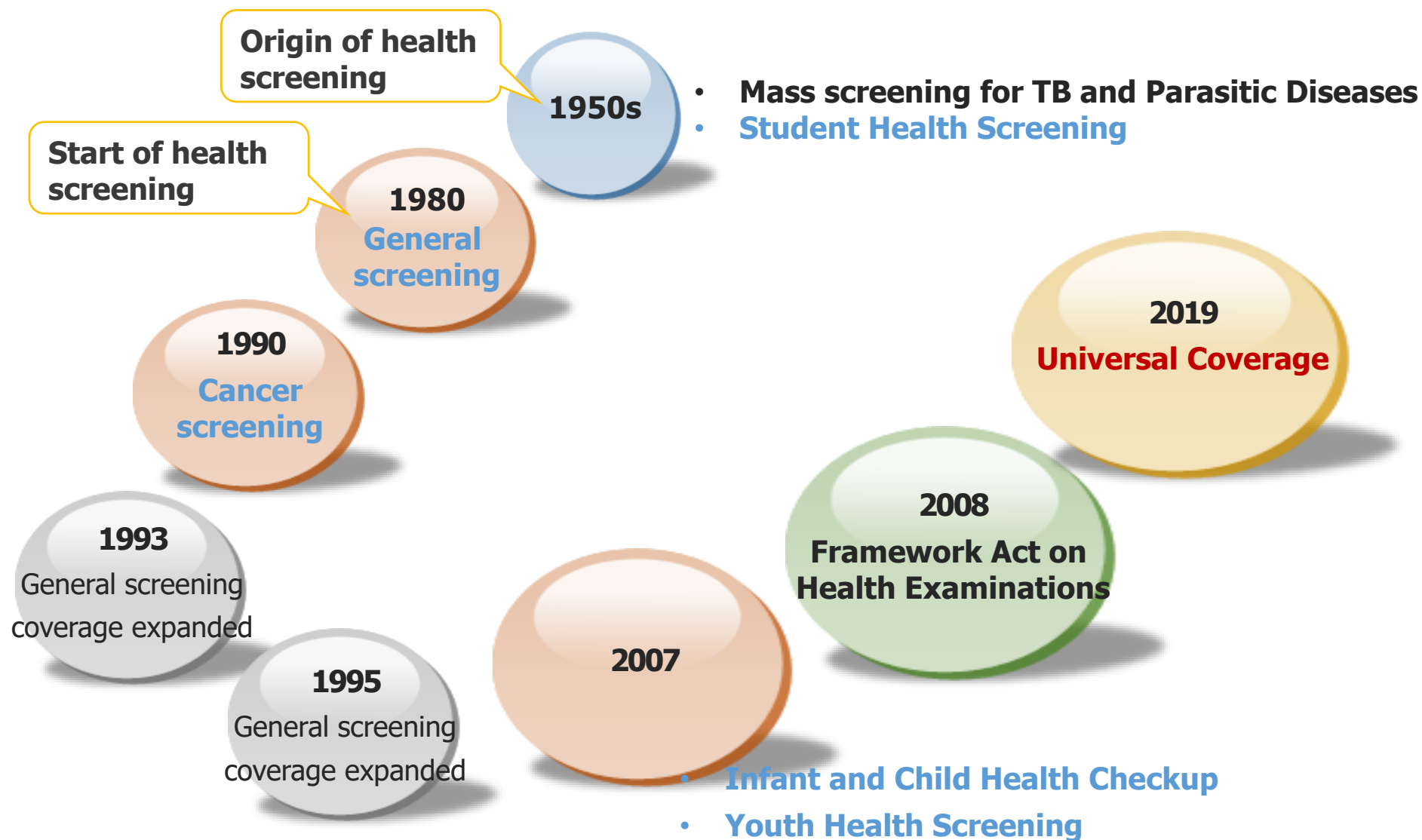
National Health Screening Overview



Brief Overview



History of National Health Screening Program



History of National Health Screening Program

■ Coverage Expanded Year

	Public officials & teacher	Dependents of public officials & teacher	Employees	Dependents of employees	Self-employed	Household members of self-employed	Medical Aid
General screening	1980	1993	1988(1995)	1988	1995	2019	2012
Cancer screening	1990	2001	1996	2001	2000	2001	1999
Infant & Child health checkup		Nov. 2007		Nov. 2007		Nov. 2007	Nov. 2007
Student screening		1951		1951		1951	1951
Youth screening		2007		2007		2007	2007

■ Overall

- 2004. Health screening bus covered more areas(general screening: all areas, cancer screening: county, town areas)
- 2008. Enacted “Framework Act on Health Examination” to integrate separated health screening programs
- 2010. Implemented quality control of health screening centers through designation and evaluation policy
- 2012. Increased fee for holiday screenings
- 2016. NHIS started to manage Youth Health Screening commissioned by MOGEF
- 2018. Introduced health screening fee for the disabled people
- 2020. Extended screening period due to COVID-19 situation
- 2023. Launched a task force to discuss transferring Student Health Screening from MOE to MOHW

■ General Health Screening

- 2007. Added screening items for life transition period at the age of 40 and 66
- 2018. Adapted screening items for age and gender specific diseases and expanded test institutions to all general clinic and hospitals for follow-up test of suspected hypertension and diabetes
- 2019. Achieved universal coverage by expanding the target population to household members and dependents of self-employed aged 20s and 30s and expanded target age for mental health screening to 20 and 30 years old
- 2021. Introduced follow-up test for the suspected TB and expanded the screening cycle of mental health for once in 10 years

■ Cancer Screening

- 2002. Expanded to low income population with insurance premium level in bottom 20%
- 2003. Expanded to low income population with insurance premium level in bottom 30%
- 2005. Expanded to low income population with insurance premium level in bottom 50%
- 2006. Lowered the co-payment rate for certain cancer screening to 20%
- 2010. Reduced the co-payment rate for cancer screening from 20% to 10%
 - Adjusted the screening cycle of gastric, breast and cervical cancer to 2 years
- 2012. Reduced the screening cycle of colorectal cancer from 2 years to 1 year
- 2016. Lowered the starting age of cervical cancer screening from 30 to 20 years old
 - Reduced the screening cycle of liver cancer from 1 year to 6 months
- 2018. Abolished the co-payment of 10% for colorectal cancer screening
 - Introduced waiver policy for existing colorectal cancer patients
- 2019. Introduced Lung Cancer Screening Expanded the waiver policy for existing other types of cancer patients

■ Infant and Child Health Checkup

- 2007. Introduced Infant and Child Health Checkup aged under 6 for 5 times in total
- 2010. Target age expanded to 4-year old(42 months)
- 2011. Reimburse policy for follow-up test for detailed developmental evaluation was expanded to near poverty family
- 2012. Target age expanded to 66 months
- 2013. Reimburse policy for follow-up test for detailed developmental evaluation was expanded to low income family with insurance premium level in bottom 30%
- 2014. Developmental Screening Test was changed into K-DST
- 2021. Target age expanded to the newborns of 14 to 35 days old(8 times in total)
- 2022. Added dental screening for 30~41 months(4 times in total)

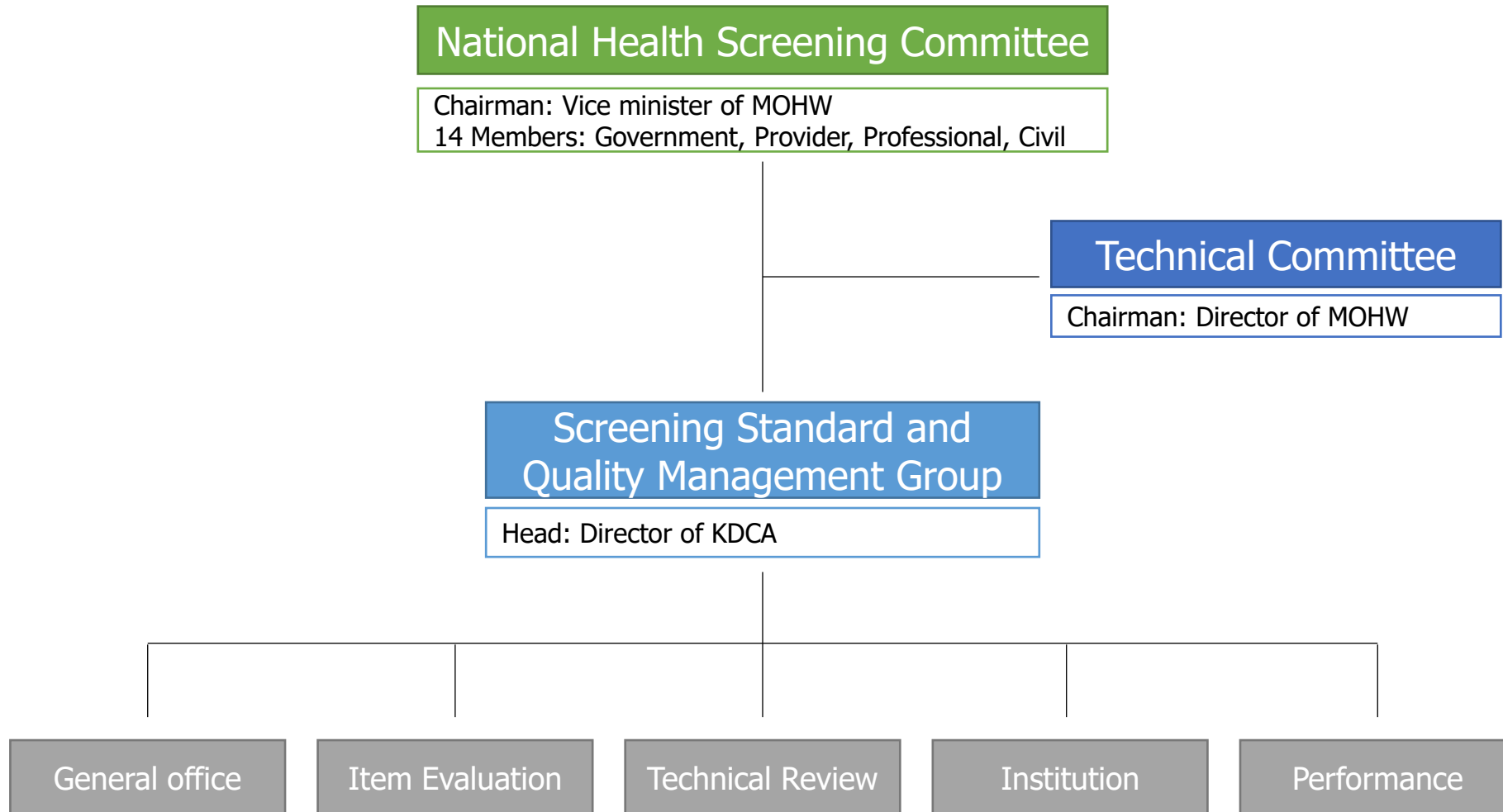
Detailed history

■ Student Health Screening

- 1951. Student Health Screening implemented, under the MOE's jurisdiction
- 2023. Launched a task force to discuss transferring Student Health Screening from MOE to MOHW

■ Youth Health Screening

- 2007. Youth Health Screening implemented, under the MOHW's jurisdiction
- 2016. MOGEF commissioned the program to NHIS



Master Plan on National Health Screening

■ The 3rd(2021-2025) Master Plan

Vision

Guide to the public health for the life time healthiness

Goals

Improving reliability of national health screening and promoting usage of the screening results

Strategy

Accessibility

- Prioritize the examinees' needs
- Reinforce social function

Reliability

- Evidence based program
- Quality improvement

Usage

- Promote usage of the screening data
- Promote healthy life style

Systemize

- Governance

Principle of Health Screening

1. Important health issues

2. Diseases that can be detected early and treated

- 2-1. Accurate screening method and cycle for early diagnosis of the diseases
- 2-2. Evidence-based treatment and management for diseases detected early

3. Acceptance of screening method

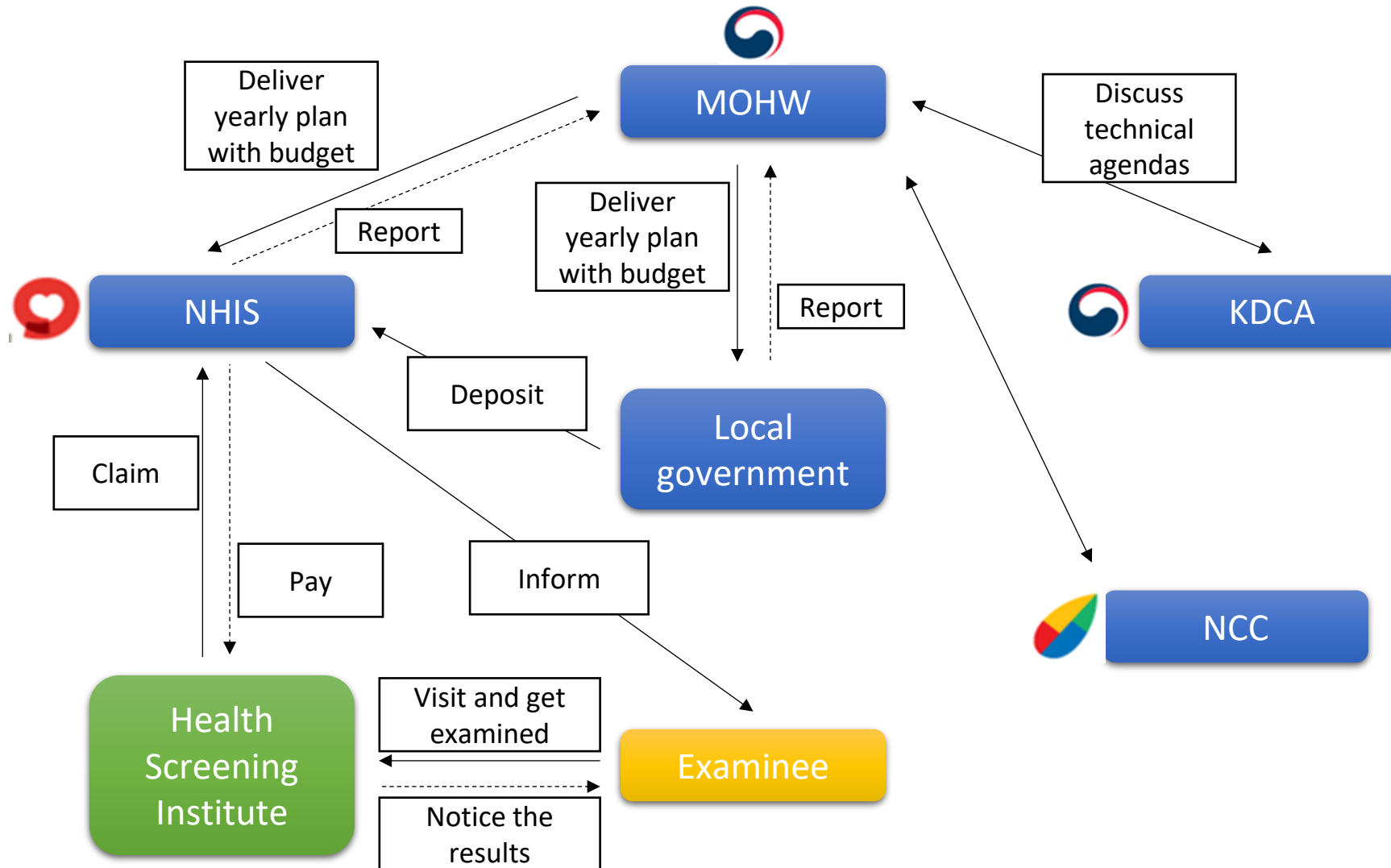
- 3-1. Easily accepted by the general public
- 3-2. Established infrastructure(institutions, facilities, equipment, professionals, etc.)

4. Benefits of screening should outweigh the harm

5. Cost effective

Operating System

(General Health Screening)



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National Health Screening Based on Life Cycle



Health Screening Program in Detail

■ Infant and Child Health Checkup

Insurance Type	Health Insurance	Medical Aid
Law	National Health Insurance Act Art.52	Medical Care Assistance Act Art.14
Target	All infants and children aged 0 to 5 years old	
Cycle	At 14 days, 4mo, 9mo, 18mo, 30mo, 42mo, 54mo, 66mo (total 8 times)	
Responsible organization	NHIS	Local government
OOP	Free	Free
Funding	NHIS	Government budget(state, local)

Health Screening Program in Detail

■ Student/Youth Health Screening

Screening	Student	Youth(Out of school)
Law	School Health Act Art.7	Youth Welfare Support Act Art.16
Target	All students aged 6 to 18 years old	All youth out of school aged 9 to 18 years old
Cycle	1 st , 4 th grade at elementary 1 st grade at middle school 1 st grade at high school	Every 3 years
Responsible organization	School principal	NHIS commissioned by MOGEF
OOP	Free	Free
Funding	Government budget	Government budget

Health Screening Program in Detail

■ General Health Screening(Adult and Senior)

Insurance Type	Health Insurance	Medical Aid
Law	National Health Insurance Act Art.52, Occupational Safety and Health Act Art.129	Medical Care Assistance Act Art.14
Target	Employees, Self-employed, and their family members aged 20 years old and over	Medical Aid Beneficiaries aged 19 years old and over
Cycle	Every 2 years, Every year for non-office workers	Every 2 years
Responsible organization	NHIS	NHIS commissioned by local government
OOP	Free	Free
Funding	NHIS	Government budget(state, local)

Health Screening Program in Detail

■ Cancer Screening(Adult and Senior)

Insurance Type	Health Insurance	Medical Aid
Law	National Health Insurance Act Art.52, Occupational Safety and Health Act Art.129	Medical Care Assistance Act Art.14, Cancer Control Act Art.11
Target age	Different by cancer type	
Cycle	Different by cancer type	
Responsible organization	NHIS	NHIS commissioned by local government
OOP	Insurance premium at bottom 50%: Free Insurance premium at top 50%: 10%(* Cervical, Colon Cancer Free)	Free
Funding	NHIS 90%, Government budget 10%	Government budget(state, local)

General Health Screening

■ Target diseases

- Hypertension, DM, hyperlipidemia, obesity, liver, kidney, TB, anemia, and other age & gender specific diseases

■ Target population

Insurance type		Category	Cycle
Health insurance holder	Employee	• All non-office workers • Office workers	• 1 year • 2 years
	Dependent	Dependents aged 20 years old and over	2 years
	Self-employed	• Head of household • Household members aged 20 years old and over	2 years
Medical aid beneficiary		Medical aid beneficiaries aged 20 years old and over	2 years

General Health Screening

■ Screening items

● Common items

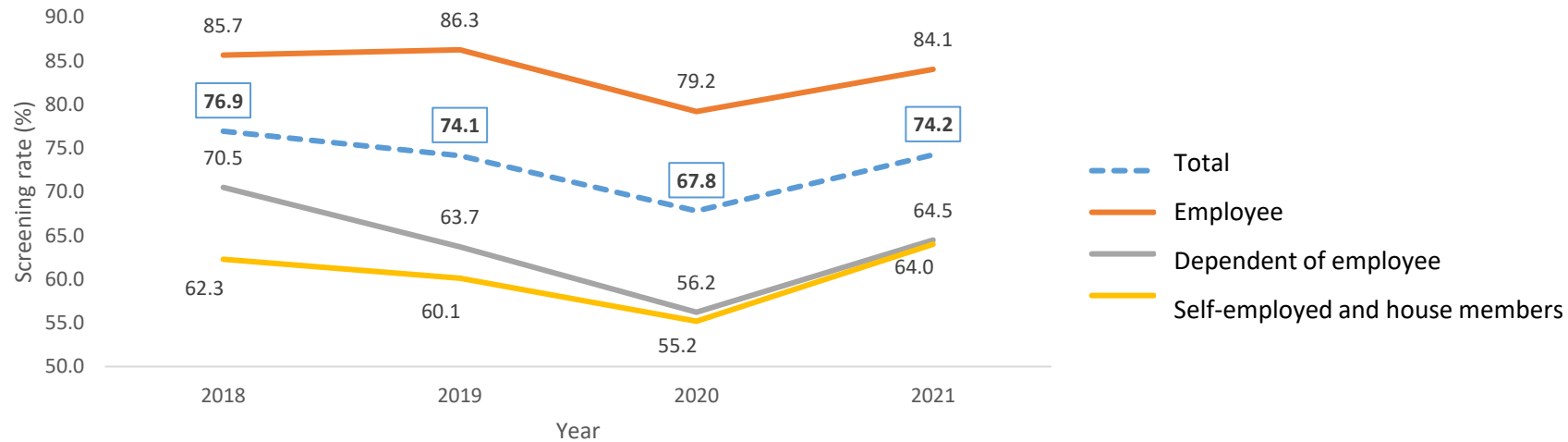
- Medical examination and consultation, physical measurement (height, weight, waist circumference), vision and hearing test, blood pressure measurement, chest X-ray, blood test (hemoglobin, fasting glucose, AST, ALT, γ-GTP, serum creatinine, e-GFR), urinalysis, oral examination

● Age and gender specific items

Items	Target age	Screening method
Total cholesterol, HDL, TG, LDL	Male: 24 and over(every 4 years) Female: 40 and over(every 4 years)	Blood test
Hepatitis B	40(except for carriers and immunized persons)	Hepatitis B surface antigen/antibody test
Bone density	Female 54, 60('25~), 66	DEXA, pDEXA, QCT, pQCT, QUS
Cognitive dysfunction	66 and over	Evaluation tool(KDSQ-C)
Mental health (depression)	20, 30, 40, 50, 60, 70(once in 10 years)	Evaluation tool(PHQ-9)
Lifestyle evaluation	40, 50, 60, 70	Smoking, drinking, exercise, nutrition, obesity assessment tool
Elderly physical function	66, 70, 80	Timed up and go test(lower limb function, balance)
Dental plaque test	40	Dental screening

General Health Screening

Screening rate



Screening results

Year	No. of examinees	Normal A		Normal B		Suspected disease total		Suspected general disease		Suspected HT/DM		Diagnosed with diseases	
		No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio
2021	16,953,007	1,878,445	11.1	5,166,022	30.5	5,634,510	33.2	5,055,463	29.8	1,563,977	9.2	4,274,030	25.2
2020	14,544,980	1,657,746	11.4	4,482,193	30.8	4,821,777	33.2	4,320,990	29.7	1,329,603	9.1	3,583,264	24.6
2019	16,098,417	1,988,824	12.4	5,105,558	31.7	5,178,156	32.2	4,618,472	28.7	1,420,114	8.8	3,825,879	23.8
2018	15,076,899	1,894,966	12.6	5,050,957	33.5	4,584,731	30.4	3,987,020	26.4	1,347,170	8.9	3,546,245	23.5

* Ref. NHIS. National Health Screening Statistical Yearbook(each year)

Cancer Screening

■ Target

Cancer type	Target people	Cycle
Stomach cancer	Individuals aged 40 and over	2 years
Colorectal cancer	Individuals aged 50 and over	1 year
Liver cancer	High risk people aged 40 and over	6 months
Lung cancer	High risk people aged 54 to 74 years old	2 years
Breast Cancer	Females aged 40 and over	2 years
Cervical Cancer	Females aged 20 and over	2 years

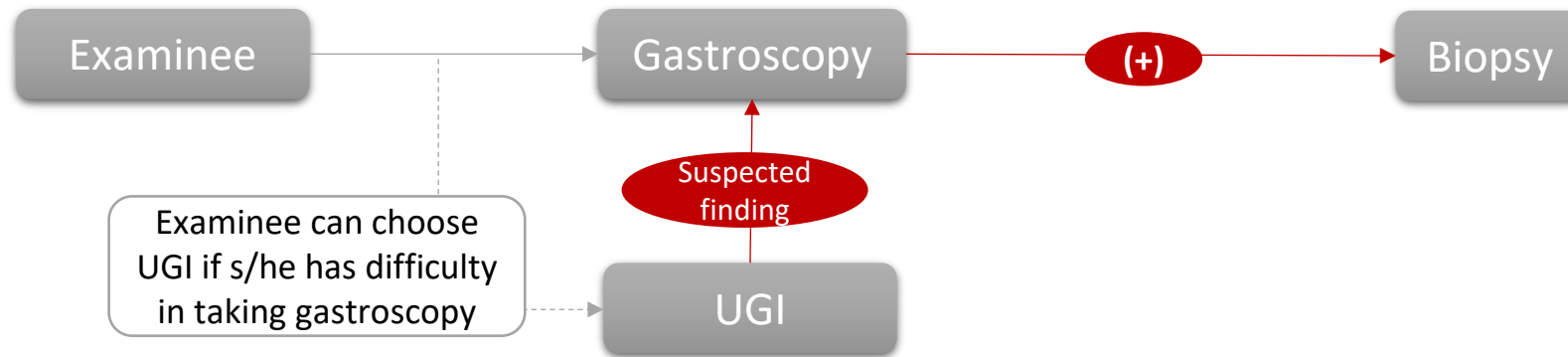
※ The waiver policy

- Cancer patients with benefit coverage are exempted from the same cancer screening during the valid period
- Individuals who took colonoscopy of national health screening are exempted from the colorectal cancer screening for 5 years

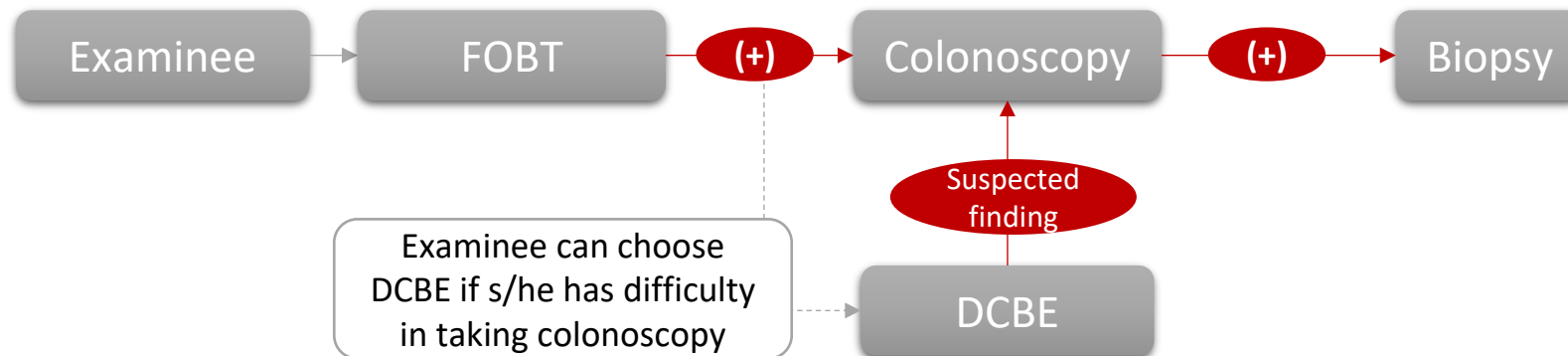
Cancer Screening

■ Screening items and procedures

● Stomach cancer



● Colorectal cancer



Cancer Screening

■ Screening items and procedures

● Liver cancer



● Lung cancer



● Breast cancer



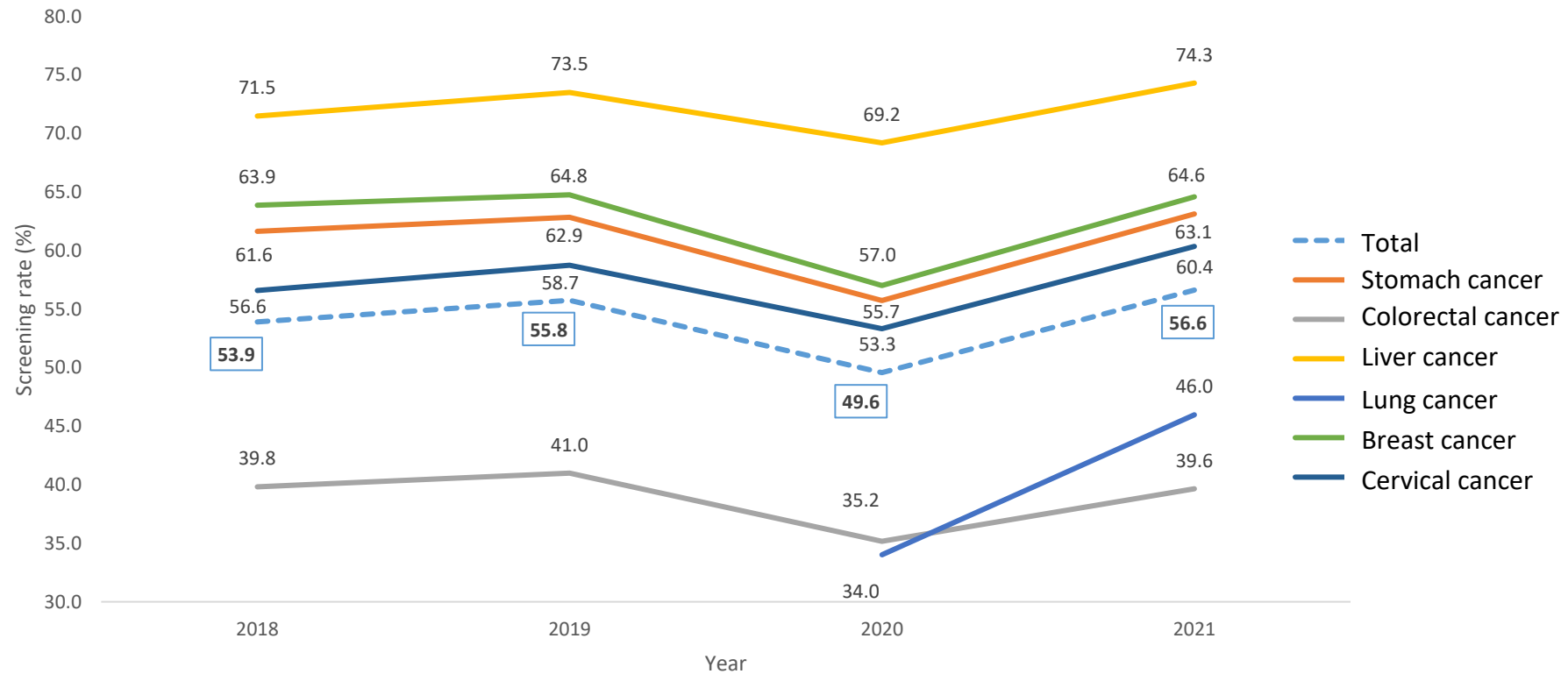
● Cervical cancer



Cancer Screening

■ Screening rate

● Liver cancer



Cancer Screening

■ Stomach and Colorectal Cancer Screening Results

Year	Cancer type	No. of examinees	Normal		Benign disease		Suspected of cancer		Cancer		Others		Existing cancer patients
			No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people
2021	Stomach	8,462,570	3,260,975	38.5	4,101,313	48.5	7,311	0.1	9,317	0.1	1,083,654	12.8	18,989
	Colorectal	6,503,563	6,245,342	-	82,803	-	1,455	-	3,489	0.1	25,400	-	4,929
2020	Stomach	6,916,632	2,678,989	38.7	3,374,449	48.8	6,654	0.1	8,548	0.1	847,992	12.3	16,519
	Colorectal	5,623,887	5,382,965	-	71,334	-	1,116	-	3,209	0.1	23,492	-	4,381
2019	Stomach	7,956,780	3,122,326	39.2	3,908,803	49.1	8,795	0.1	9,809	0.1	907,047	11.4	18,283
	Colorectal	6,504,392	6,231,443	-	73,502	-	1,184	-	3,650	0.1	26,320	-	4,777
2018	Stomach	7,570,928	2,882,396	38.1	3,868,974	51.1	9,035	0.1	9,884	0.1	800,639	10.6	19,472
	Colorectal	6,078,568	5,806,054	-	70,328	-	1,128	-	3,501	0.1	26,162	-	4,288

* Note: For colorectal cancer, it is impossible to calculate the ratio because the parameter values do not match.

* Ref. NHIS. National Health Screening Statistical Yearbook(each year)

Cancer Screening

■ Liver and Lung Cancer Screening Results

Year	Cancer type	No. of examinees	Normal		Benign disease		Suspected of cancer		Others		Existing cancer patients
			No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people
2021	Liver(1H)	430,637	167,310	38.9	40,555	9.4	3,219	0.7	219,553	51.0	1,767
	Liver(2H)	431,496	167,297	38.8	39,757	9.2	3,066	0.7	221,376	51.3	1,848
	Lung	116,377	67,239	57.8	44,439	38.2	4,699	4.0	59,534	51.2	64
2020	Liver(1H)	354,456	135,656	38.3	34,182	9.6	2,706	0.8	181,912	51.3	1,411
	Liver(2H)	405,895	155,562	38.3	37,641	9.3	3,021	0.7	209,671	51.7	1,692
	Lung	90,104	56,096	62.3	30,309	33.6	3,699	4.1	35,472	39.4	110
2019	Liver(1H)	385,998	157,815	40.9	38,336	9.9	3,213	0.8	186,634	48.4	1,358
	Liver(2H)	412,366	166,322	40.3	40,564	9.8	3,264	0.8	202,216	49.0	1,504
2018	Liver(1H)	350,086	143,058	40.9	39,781	11.4	3,205	0.9	164,042	46.9	1,219
	Liver(2H)	384,109	155,978	40.6	39,252	10.2	3,228	0.8	185,651	48.3	1,333

* Ref. NHIS. National Health Screening Statistical Yearbook(each year)

Cancer Screening

■ Breast and Cervical Cancer Screening Results

Year	Cancer type	No. of examinees	Normal		Benign disease		Suspected of cancer		Deferred diagnosis/Others		Existing cancer patients
			No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people
2021	Breast	4,508,864	3,252,220	72.1	763,863	16.9	7,590	0.2	485,191	10.8	21,012
	Cervical	5,735,654	2,250,855	39.2	3,461,785	60.4	392	0.0	22,622	0.4	5,993
2020	Breast	3,633,471	2,622,298	72.2	603,315	16.6	5,906	0.2	401,952	11.1	16,643
	Cervical	4,751,303	1,876,212	39.5	2,853,746	60.1	357	0.0	20,988	0.4	5,283
2019	Breast	4,276,285	3,083,857	72.1	680,539	15.9	6,473	0.2	505,416	11.8	17,270
	Cervical	5,374,219	2,250,343	41.9	3,101,657	57.7	439	0.0	21,780	0.4	4,302
2018	Breast	4,069,694	2,931,588	72.0	605,646	14.9	5,706	0.1	526,754	12.9	18,532
	Cervical	5,111,894	2,306,168	45.1	2,775,792	54.3	483	0.0	29,451	0.6	4,578

* Ref. NHIS. National Health Screening Statistical Yearbook(each year)

Infant and Child Health Checkup

■ Objective

- Infant and Child Health Checkup is provided to check if the baby is growing and developing properly and also to educate the parents
- It is different from adult health screening which goal is to detect target diseases for the on-time treatment

■ Screening Items

- Medical examination, physical measurement, and age-specific education

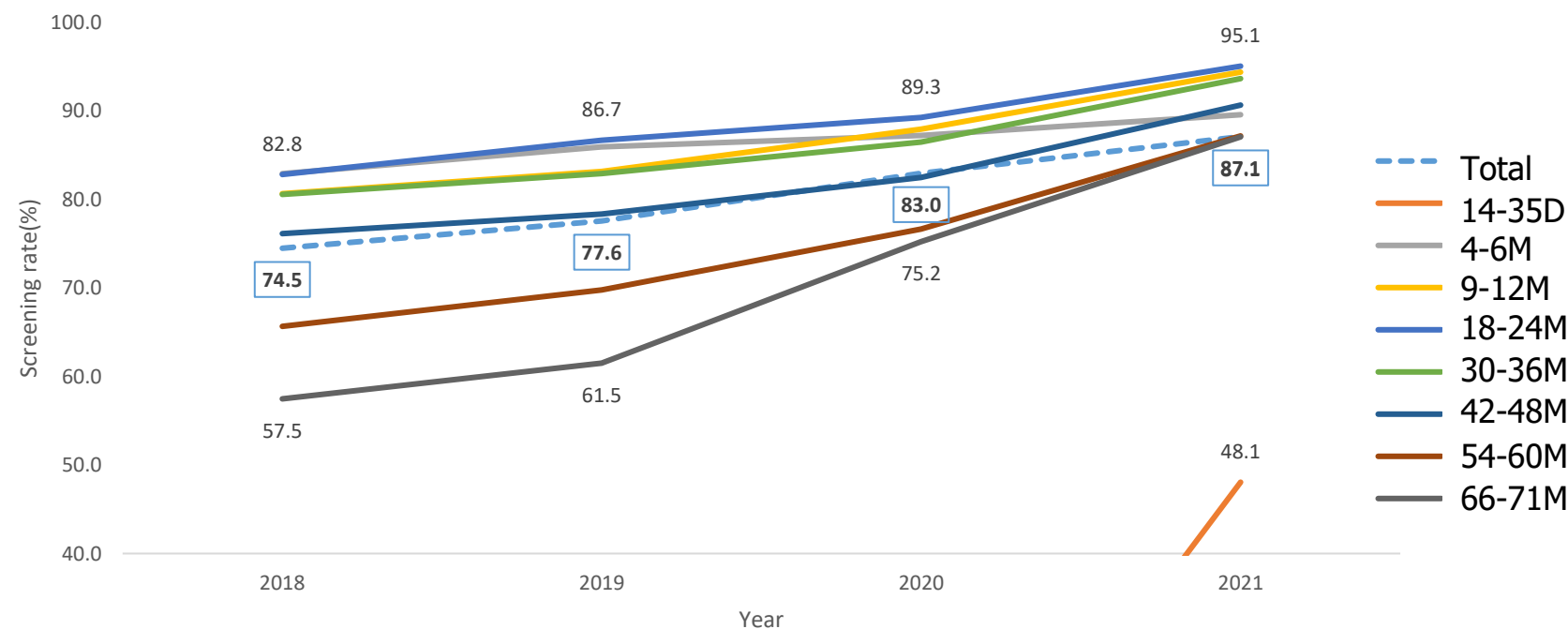
Infant and Child Health Checkup

■ Screening Ages and Age-Specific Items

	Ages	Items
1 st	14~35 days	Health education(safety, sleep, nutrition)
2 nd	4~6 months	Health education(safety, sleep, nutrition, electronic media exposure)
3 rd	9~12 months	Developmental screening test , health education(safety, nutrition, dental, emotional development, socialization)
4 th	18~24 months (Dental: 18~29 months)	Developmental screening test, health education(safety, nutrition, toilet training, electronic media exposure, personal hygiene)
5 th	30~36 months (Dental: 30~41 months)	Developmental screening test, health education(nutrition, toilet training, emotional development, preparing for school enrollment)
6 th	42~48 months (Dental: 42~53 months)	Developmental screening test, health education(safety, nutrition)
7 th	54~60 months (Dental: 54~65 months)	Developmental screening test, health education(safety, nutrition, electronic media exposure)
8 th	66~71 months	Developmental screening test, health education(safety, nutrition, preparing for school enrollment)

Infant and Child Health Checkup

Screening Rate



* Ref. NHIS. National Health Screening Statistical Yearbook(each year)

Infant and Child Health Checkup

Developmental Screening Test Results

Year	Classification	No. of examinees	Good		Follow-up required		In-depth evaluation required		Continuous management required		Others	
			No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio	No. of people	Ratio
2021	Total	1,811,245	1,537,894	84.9	209,841	11.6	43,880	2.4	13,353	0.7	-	-
	9~12M	253,920	214,988	84.7	32,342	12.7	4,703	1.9	1,200	0.5	-	-
	18~24M	280,602	226,045	80.6	42,330	15.1	9,199	3.3	1,868	0.7	-	-
	30~36M	297,518	242,672	81.6	39,788	13.4	10,791	3.6	2,767	0.9	-	-
	42~48M	306,100	266,159	87.0	28,909	9.4	7,405	2.4	2,543	0.8	-	-
	54~60M	329,700	286,451	86.9	33,629	10.2	6,163	1.9	2,588	0.8	-	-
	66~71M	343,405	301,579	87.8	32,843	9.6	5,619	1.6	2,387	0.7	-	-
2020	Total	1,810,478	1,552,047	85.7	204,625	11.3	43,072	2.4	10,567	0.6	3	0.0
	9~12M	263,976	226,085	85.6	31,852	12.1	4,960	1.9	1,068	0.4	-	-
	18~24M	287,267	234,916	81.8	41,464	14.4	9,152	3.2	1,721	0.6	2	0.0
	30~36M	302,792	251,884	83.2	38,917	12.9	10,112	3.3	1,870	0.6	-	-
	42~48M	324,685	284,677	87.7	30,314	9.3	7,603	2.3	2,083	0.6	1	0.0
	54~60M	322,235	281,807	87.5	32,370	10.0	6,103	1.9	1,945	0.6	-	-
	66~71M	309,523	272,678	88.1	29,708	9.6	5,142	1.7	1,880	0.6	-	-

* Ref. NHIS. National Health Screening Statistical Yearbook(each year)

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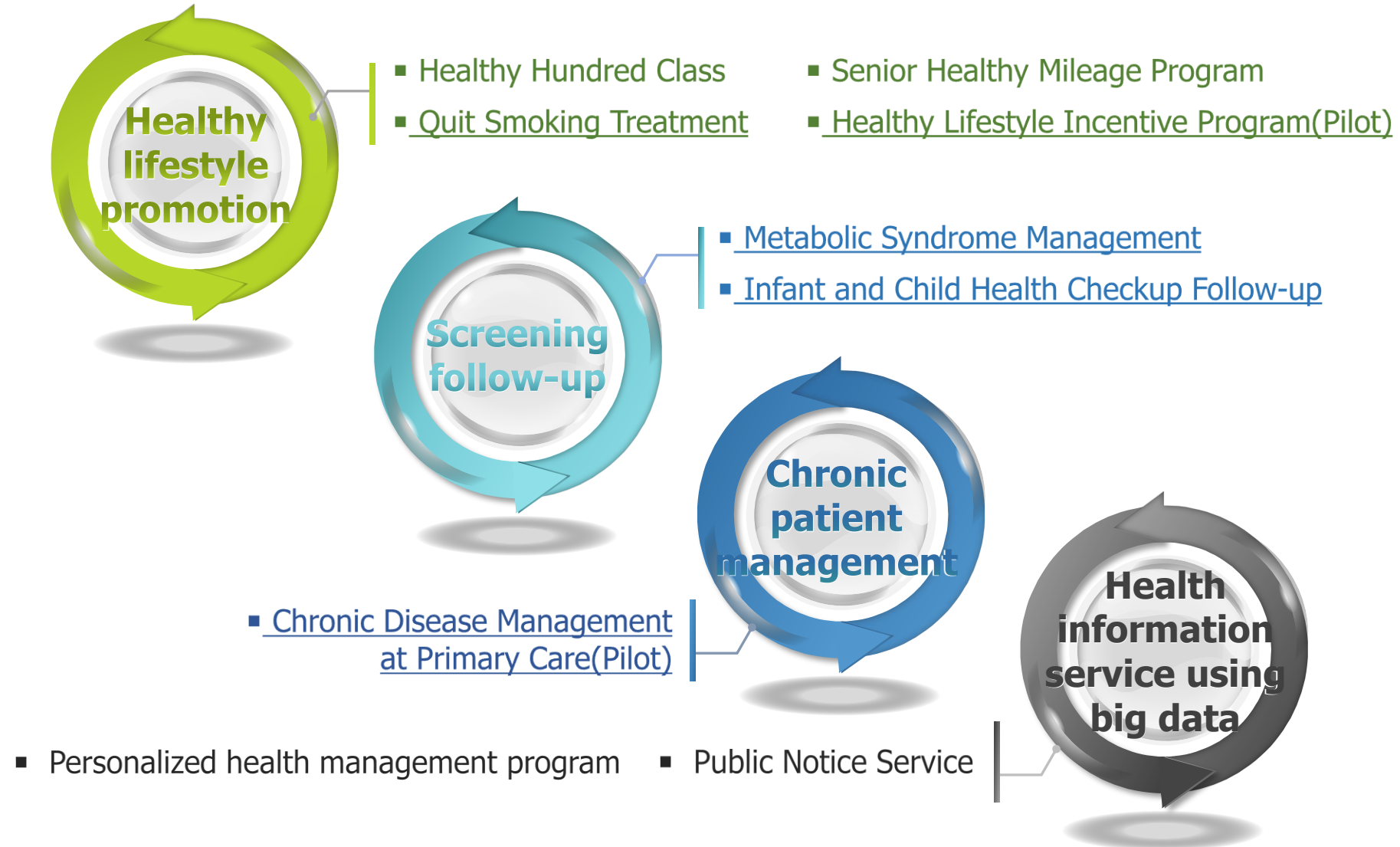


03

Health Promotion Programs



Types of Health Promotion Programs in NHIS



Healthy Lifestyle Incentive Program(Pilot)

■ Target

- High risk group: BMI ≥ 25 and either FBS ≥ 100 or BP $\geq 120/90$, aged 20-64 years old based on general health screening result
- HT, DM patients: those enrolled in chronic disease management at primary care

■ Program Design

- Currently available only in 24 districts, and pilot period is from July '21 to June '24
- Participants earn points by achieving goals and use them as payment method
 - Goals : daily step counts, self measured BP or FBS, taking health education programs, etc.

Quit Smoking Treatment

■ Target

- Any smoker who want to quit smoking in registered medical institutions

■ Service

- During 8-12 weeks, doctor consultations and quit-smoking medicines are provided
- OOP rate is 20% for the first two sessions and free afterwards until 6 times, but the first two OOPs are reimbursed later if s/he completes all the sessions

■ Performance in 2022

Enrolled	12-wk Session Completed	Successful quitter at 4-wk
155,021	53,825(34.7%)	63,261(40.8%)

* Ref. NHIS internal report(2023)

Metabolic Syndrome Management

■ Target

- High risk population for cerebrovascular disease
 - Having 3 or more risk factors among waist circumference, high blood pressure, high glucose level, high triglyceride, low HDL cholesterol
 - Based on general health screening results

■ Service

- Teleconsultation(3 times), medical devices, educational materials, and motivational LMS
- Period: 6 months

■ Performance in 2022

Invitation Letter	Enrolled	Teleconsultation			Educational materials
7,068,114	300,416	(1 st)300,416	(2 nd) 41,628	(3 rd) 1,181	286,539

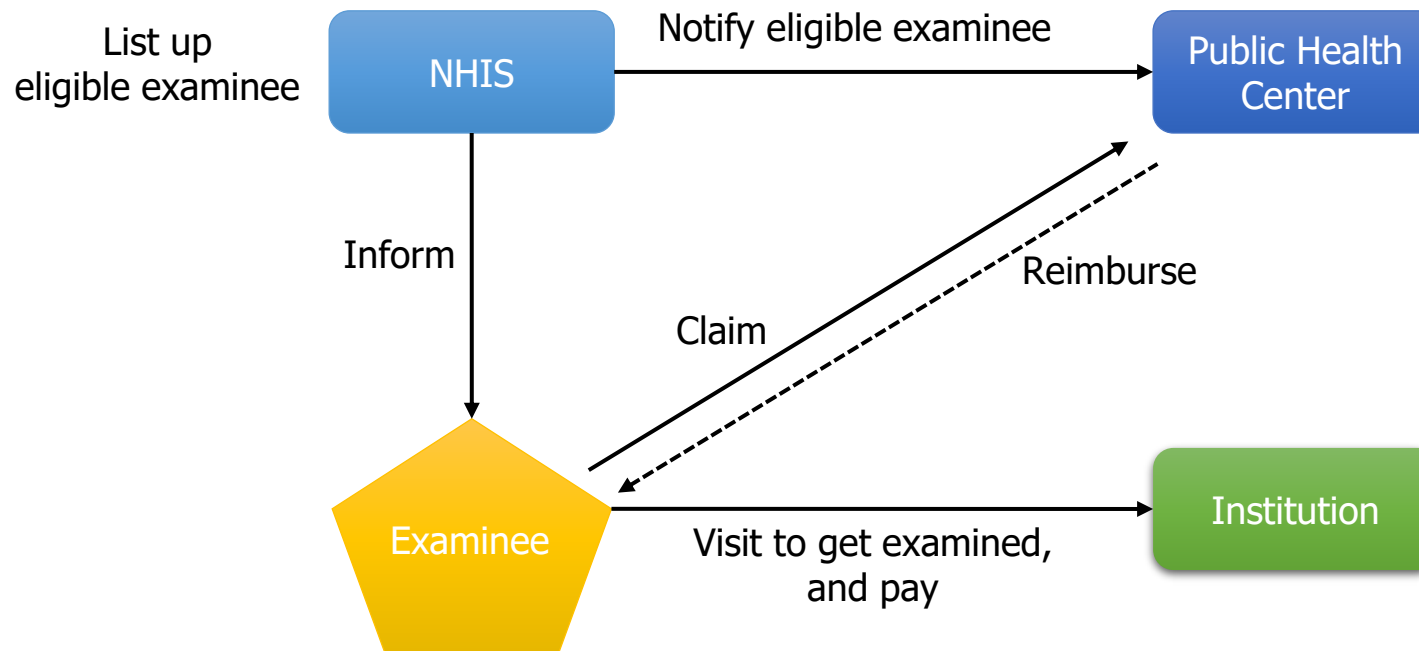
* Ref. NHIS internal report(2023)

Infant and Child Health Checkup Follow-up

■ Target

- Infants and children who need follow-up test of detailed development evaluation after regular health checkup
- Eligibility: ('23) medical aid beneficiary or insurance premium level in bottom 80% >>> ('24) Without income criteria

■ Service Flow

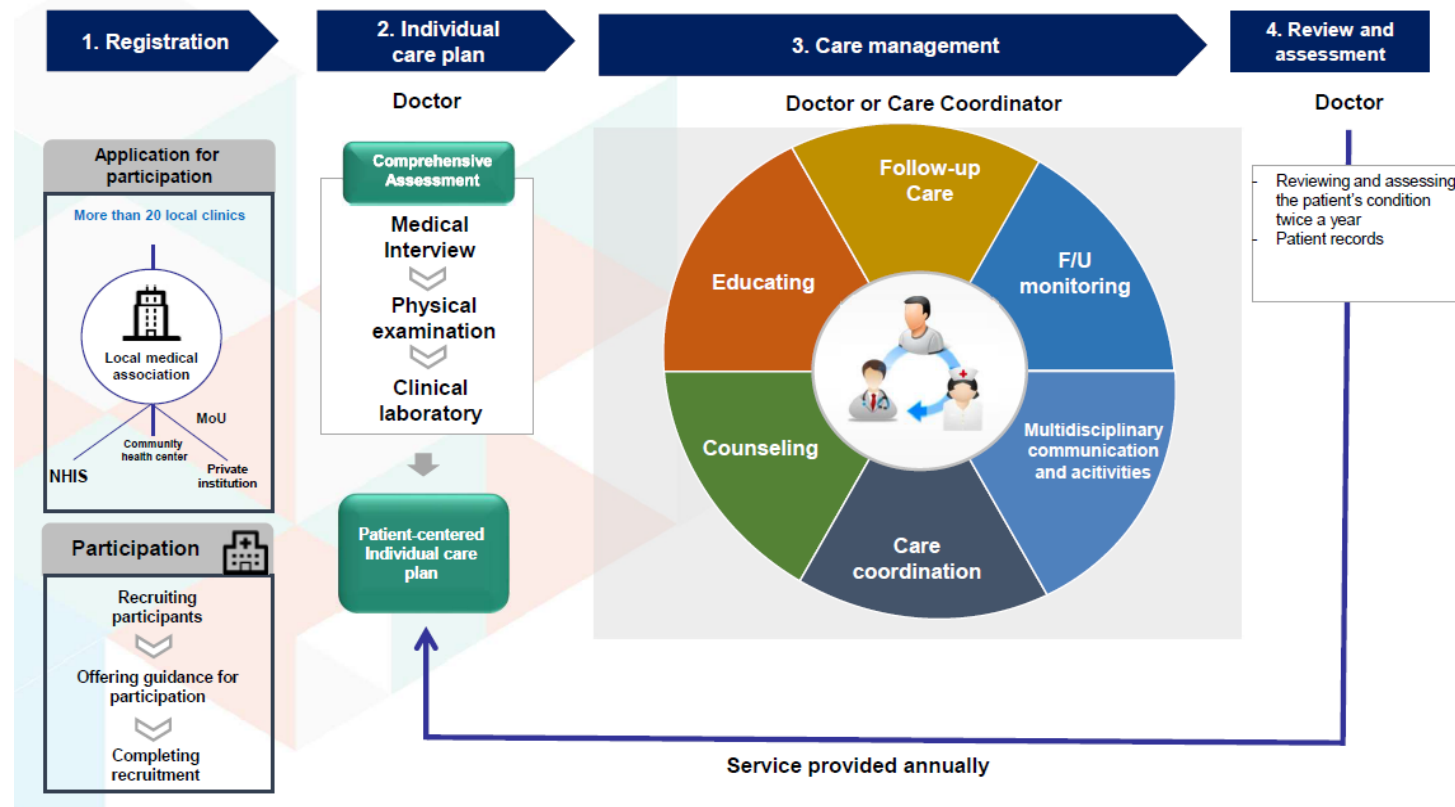


Chronic Disease Management at Primary Care(Pilot)

Target

- Patients with hypertension or diabetes who need consistent care at primary care

Service Flow



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Implications



■ Screening items and population expanded → universal coverage

- Health screening was originated from mass screening for TB and parasitic diseases
- General Health Screening was provided as welfare benefit for the employees
- It took almost 40 years to achieve universal coverage
- Now health screening budget makes up about 2% of the total NHIS budget

■ Follow-up programs after screening, not enough

- NHIS provides only a few health promoting programs related to the screening results
- Screening results are not explained by health professionals, letting some insensitive examinees ignore their condition

■ Separated management system

- The Student Screening results do not pile up in NHIS, discontinuing one's life time record of screening

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Thank You

