h·well NHIS National Health Insurance Service

2025 제22차 국제연수과정
NHIS UHC GLOBAL ACADEMY

Support for Rational Healthcare Utilization

Contents

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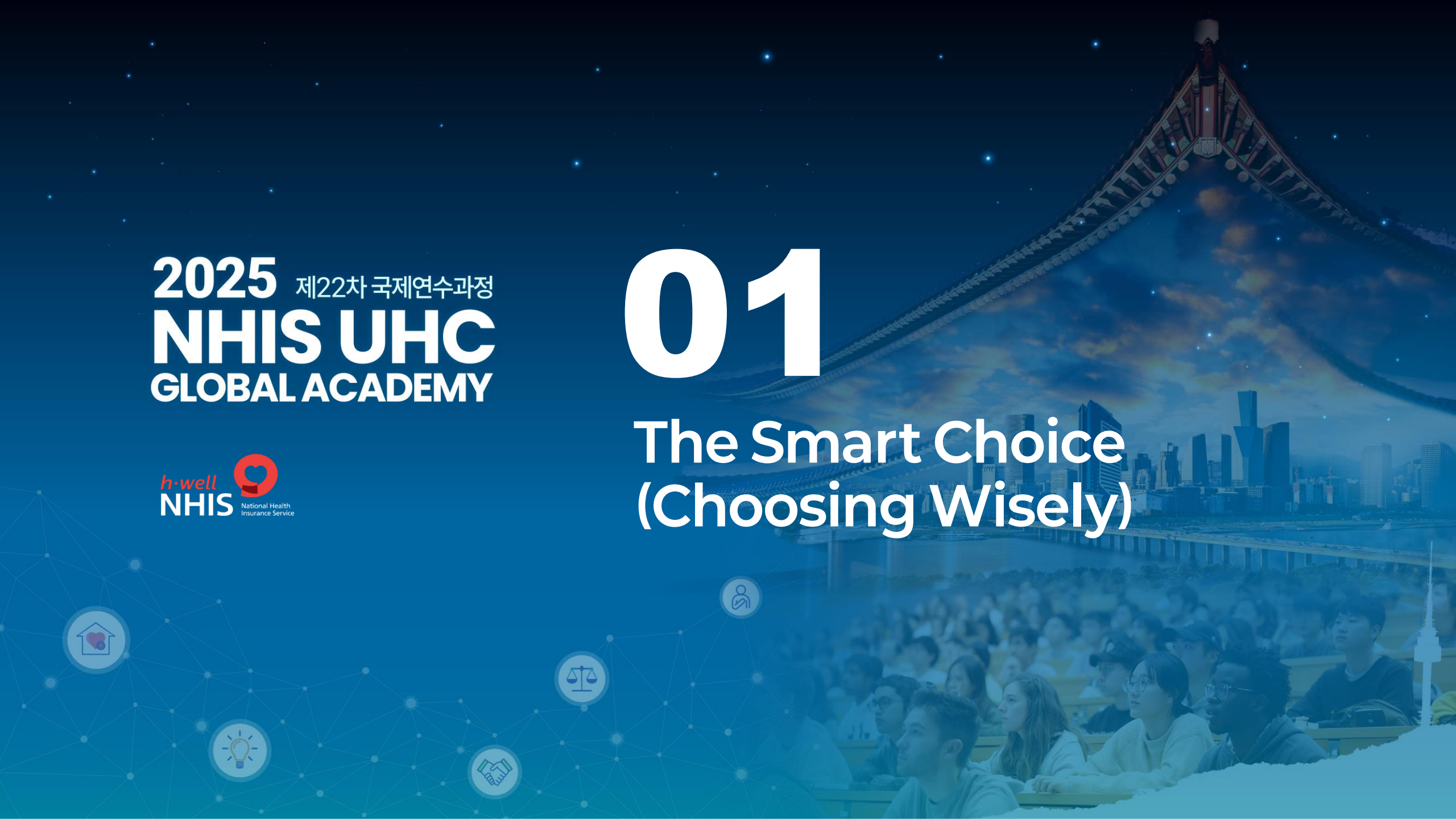
The Smart Choice (Choosing Wisely)



‘The Smart Choice(Choosing Wisely)’ Campaign

Goals of the "Choosing Wisely" Campaign

①Through the voluntary participation of doctors and patients
② By eliminating unnecessary diagnoses or treatments
③ To reduce waste of medical resources and improve the quality of healthcare

Background of Introduction

- In countries like the U.S. and the U.K., medical professionals primarily create lists of appropriate treatments and practices to improve the quality of healthcare services, and the Choosing Wisely campaign is actively progressing.

  - Various countries have academic societies leading the campaign.
  - In the U.S., it is centered around the American Board of Internal Medicine Foundation, with universities like the University of Toronto in Canada and professionals in Australia leading similar efforts.

- In Korea, there is a need to introduce the Choosing Wisely campaign to strengthen the public's right to knowledge and to support rational decision-making in healthcare.

‘The Smart Choice(Choosing Wisely)’ Campaign

Progress of the "Choosing Wisely" Campaign

- (International) In April 2012, the American Board of Internal Medicine Foundation and Consumer Reports, along with 9 professional medical societies, initiated the Choosing Wisely campaign. As of 2020, more than 80 professional societies in the U.S. have participated, and the campaign has spread to over 25 countries, including Canada, Australia, the U.K., and more.

- (Korea) In 2016, the Korean Academy of Medical Sciences adopted the "Choosing Wisely" campaign, and in 2020, the campaign was further developed through research projects on efficient healthcare utilization supported by the NHIS. By 2023, 35 professional societies in Korea had participated, developing a total of 152 "Choosing Wisely" lists.

  - (2020) 5 professional societies participated, developing 28 "Choosing Wisely" lists.
  - (2021) 12 professional societies participated, developing 56 "Choosing Wisely" lists.
  - (2022) 10 professional societies participated, developing 39 "Choosing Wisely" lists.
  - (2023) 6 professional societies participated, developing 29 "Choosing Wisely" lists.
  - (2024) 1 professional societies participated, developing 17 "Choosing Wisely" lists.

‘The Smart Choice(Choosing Wisely)’ Campaign

Principles of Smart Choose Campaigns

① "Choosing Wisely" encourages doctors and patients to engage in constructive dialogue, respecting each other’s knowledge about healthcare services. Academic recommendations are not absolute; rather, they serve as a foundation for patients and doctors to discuss necessary tests and treatments.

② It raises awareness among patients and doctors about the waste that unnecessary treatments can cause, including the waste of time and money, and the potential dangers associated with overuse. By eliminating such waste, the quality of healthcare can be improved.

③ Professional values and responsibilities should expand beyond improving the quality of healthcare services to also consider the efficient use of medical resources.

④ The involvement of medical societies in providing guidance, along with active participation by physician and consumer groups, is essential to ensure the credibility and value of the campaign.

⑤ Providing a basis for appropriate treatment lists should be the starting point for discussions, and these lists should guide healthcare providers in effectively communicating about services that may not be necessary.

‘The Smart Choice(Choosing Wisely)’ Campaign

Content of the "Choosing Wisely" Campaign

- This campaign encourages medical professional societies to create lists, based on evidence, of tests and treatments that should be questioned at the clinical level. Using these lists as a foundation, the goal is to foster dialogue between doctors and patients to ensure that necessary healthcare services are chosen, improving the quality of healthcare.
  - Five Questions for Choosing Wisely in Healthcare Services:
    ① Is this test or treatment really necessary?
    ② What are the risks (side effects)?
    ③ Are there simpler or safer options?
    ④ What happens if I do nothing?
    ⑤ How much will this cost?

- Development of a list outlining items that doctors and patients should review before treatment to voluntarily reduce unnecessary tests and procedures

‘The Smart Choice(Choosing Wisely)’ Campaign

Development Process of the Choosing Wisely Lists (by Professional Societies)

① Planning and Formation of Development Committees

- Formulation of a development plan by each academic society, targeting medical treatments for list application, and formation of development committees.

② List Development

- Reference to the existing Choosing Wisely lists from the U.S., Canada, Australia, and others, collection of additional opinions, and holding of list development workshops in Korea.

③ Member Survey

- After the establishment of the advisory committee, a survey is conducted among members to determine feasibility, appropriateness, fairness, balance between benefits and harms, etc., for selecting appropriate lists (via email survey).

④ Evidence Gathering for the Lists

- Literature search → Critical appraisal of the literature → Evidence synthesis → Drafting of recommendations.

⑤ External Review and Second Round of Opinions

- Holding public hearings with experts from private and medical societies.

⑥ Revision and Announcement

- The final Choosing Wisely lists are presented and announced through academic society symposia.

‘The Smart Choice(Choosing Wisely)’ Campaign

Current Status of the Choosing Wisely Lists

- (2020-2024) Participation of 34 medical societies, with the development and announcement of 169 lists.

Category	Participating Societies	Number of Societies	Lists
system		**34**	**169**
24	Korean Academy of Rehabilitation Medicine	1	17
’23	The Korean Geriatrics Society, The Korean Society for Radiation Oncology, The Korean Society for the Study of Obesity, Korean Society of Plastic and Reconstructive Surgeons, The Korean Society of Nuclear Medicine, The Korean Cancer Association	6	29
’22	The Korean Society of Emergency Medicine, The Korean Neurological Association, The Korean Association for the Study of the Liver, The Korean Society of Hypertension, The Korean Society of Critical Care Medicine, The Korean Pain Society, The Korean Society for Vascular Surgery, The Korean Stroke Society, The Korean Association of Hepato-Biliary-Pancreatic Surgery, The Korean Association of Endocrine Surgeons	11	39
’21	The Korean Academy of Family Medicine, The Korean Pediatric Society, The Korean Society of Coloproctology, The Korean Society of Gastroenterology, The Korean Neuropsychiatric Association, The Korean Society of Infectious Diseases, The Korean Neurosurgical Society, The Korean Society of Obstetrics and Gynecology, The Korean Society of Otorhinolaryngology-Head and Neck Surgery, The Korean College of Rheumatology, The Korean Association for Clinical Oncology, The Korean Orthopaedic Association	12	56
’20	The Korean Society of Radiology, The Korean Urological Association, The Korean Society of Internal Medicine, The Korean Society for Thoracic and Cardiovascular Surgery, The Korean Society for Laboratory Medicine	5	28

‘The Smart Choice(Choosing Wisely)’ Campaign

Examples of Smart Choice lists

- (The Korean Academy of Family Medicine) participated in 2021 and developed 7 Choosing Wisely recommendations
  ① Do not routinely prescribe antibiotics for viral infections like colds.
  ② Do not recommend health supplements that lack clear clinical evidence.
  ③ Do not recommend PET/CT scans for cancer screening purposes.
  ④ Do not recommend brain MRI for the screening of cerebrovascular diseases, strokes, or dementia.
  ⑤ Do not recommend carotid ultrasound for cancer screening purposes.
  ⑥ Do not administer IV fluids containing glucose, amino acids, and vitamins in non-indicated situations.
  ⑦ When diagnosing conditions like hypertension, abnormal blood sugar, or diabetes for the first time during an outpatient visit, prioritize lifestyle modifications for six months unless immediate drug therapy is required (e.g., for severe cases).

‘The Smart Choice(Choosing Wisely)’ Campaign

Dissemination of the Choosing Wisely Campaign (Lists)

- Publishing and Distributing Pamphlets to Healthcare Institutions
  - Pamphlet for Medical Professionals: Designed to help healthcare professionals clearly understand the evidence behind the Choosing Wisely lists.

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5. 암 선별검사 목적으로 갑상선 초음파 검사를 권하지 않는다.

- 2019년 우리나라 국가암등록통계에 따르면 남녀를 합해 가장 많이 발생한 암은 갑상선암이었다. 2010년부터 발생자 수 1위를 지키다 2015년 이후 감소 추세였지만, 2019년에 다시 1위가 되었다. 이는 최근 20년간 갑상선 초음파를 통한 검진을 통해 갑상선암을 많이 발견한 것이 가장 주된 이유다.
- 2015년 국립암센터가 주관해 갑상선관련 학회가 공동으로 제정한 갑상선암 검진권고안에 따르면 무증상 성인에서 초음파를 이용한 갑상선암 검진은 권고하거나 반대할 만한 의과학적 근거가 불충분하므로 일상적 선별검사로는 권고하지 않는다.
- 미국질병예방서비스특별위원회(USPSTF), 영국갑상선협회를 비롯한 국외 관련 학회 및 전문가 단체에서도 무증상 성인에서 갑상선암 선별검사를 권장하지 않고 있다.
- 갑상선 초음파를 통한 선별검사는 과진단의 가능성이 있고, 갑상선암으로 수술하게 되는 경우 드물지만 목소리 변화를 겪을 수 있으며, 부갑상선 기능저하로 인한 지속적인 칼슘제 복용이 필요한 경우도 있고, 갑상선호르몬을 영구적으로 복용해야 하는 등의 부작용 및 합병증의 가능성 있어 일반인구집단을 대상으로 암 선별검사 목적으로 갑상선초음파 검사를 권하지 않는다.

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6. 적응증이 아닌 경우 포도당, 생리식염수, 아미노산 및 비타민 등을 함유한 수액제제를 주사하지 않는다.

- 우리나라에서는 특히 1960년대 이후 한국의 시대적 상황과 맞물려 기운이 없을 때 ‘링겔’을 맞으면 좋다는 인식이 확산되면서 개원가 등을 중심으로 피로감 등 비특이적인 증상을 해결할 목적으로 특정 영양성분을 함유한 수액제제 주사가 빈번히 행해지고 있다.
- 경구섭취 어려움으로 인해 탈수 및 영양부족 환자에서 포도당, 생리식염수, 아미노산 및 비타민 등을 함유한 수액제제를 주사해 상태를 개선할 수 있지만, 이러한 각종 영양 수액제제가 만성피로 등 각종 질병 예방이나 치료에 도움이 된다는 임상적 근거는 부족하기 때문에 주사를 권장하지 않는다.

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‘The Smart Choice(Choosing Wisely)’ Campaign

Dissemination of the Choosing Wisely Campaign (Lists)

- Publishing and Distributing Pamphlets to Healthcare Institutions
  - Patient-Doctor Dialogue Pamphlet: Created in a way that the general public can easily understand.

의료전문가가 주도하는
현명한 선택 7개 리스트 제안

대한가정의학회의 현명한 선택

대한가정의학회는 환자와 가족 중심의 전인적 진료, 지역사회 건강을 책임지는 일차의료의 리더, 양질의 진료역량과 전문직업성의 함양을 비전으로 국민보건의 향상에 기여를 도모함을 목적으로 설립된 가정의학 전문의들의 학술단체입니다. 가정의학 전문의는 가족 및 지역사회에서 흔히 발생하는 대부분의 질환을 치료하고, 질병의 예방과 조기검진을 통해 건강증진을 위해 노력하는 가족 주치의를 담당하고 있습니다.

‘현명한 선택’ 참여 학회

대한내과학회 | 대한심장혈관흉부외과학회 | 대한영상의학회 | 대한진단검사의학회 | 대한비뇨의학회 | 대한가정의학회 | 대한소아청소년과학회 | 대한산부인과학회 | 대한정형외과학회 | 대한대장항문학회 | 대한소화기학회 | 대한신경외과학회 | 대한종양내과학회 | 대한신경정신의학회 | 대한감염학회 | 대한응급의학회 | 대한신경과학회 | 대한간학회 | 대한중환자의학회 | 한국유방암학회 | 대한내분비외과학회 | 대한혈관외과학회 | 대한고혈압학회 | 대한뇌졸중학회 | 한국간담췌외과학회 | 대한통증학회 | 대한류마티스학회 | 대한이비인후과학회

01 감기와 같은 바이러스성 감염에 항생제를 일상적으로 쓰지 않는다.

감기와 같은 급성 상기도 감염은 바이러스가 원인이므로 세균을 죽이는 항생제는 효과가 없습니다. 그럼에도 불구하고 감기의 치료목적으로 불필요한 항생제 사용을 하게되면, 항생제 내성균의 전파 증가 및 약물 부작용의 위험이 있으며, 의료 비용 또한 증가하게 됩니다.

02 임상적 근거가 확실하지 않은 건강기능식품을 권하지 않는다.

최근 수십년간 전 세계적으로 사람을 대상으로 한 임상시험들과 이를 종합한 체계적 문헌고찰과 메타분석 연구결과에 따르면 홍삼, 비타민, 유산균(프로바이오틱스), 오메가 3 지방산, 칼슘제 등 대표적으로 많이 소비되고 있는 대부분의 건강기능식품의 효능과 안전성은 임상적으로 근거가 없거나 부족해 건강을 목적으로 건강기능식품을 먹는 것은 권하지 않습니다.

03 암 선별검사 목적으로 양전자방출단층촬영/전산화단층촬영(PET/CT)을 권하지 않는다.

PET/CT는 암환자가 아닌 일반인을 대상으로 암을 조기에 발견할 가능성이 낮고, 진단 정확도가 낮습니다. 또한 검사 중 노출되는 높은 방사선량 등을 고려하였을 때, 검사를 통한 이득보다 해로움이 더 클 수 있어, 무증상 성인에서 암 선별검사 목적으로 PET/CT 검사를 권하지 않습니다.

04 뇌동맥류, 뇌종양, 치매 등의 선별검사 목적으로 뇌 MRI 검사를 권하지 않는다.

뇌 MRI 검사는 뇌동맥류, 뇌종양, 치매 등 신경계 질환이 의심될 때 시행할 수 있으나, 증상이 없는 성인이 선별검사 목적으로 시행했을 때는 이득보다 해로움이 클 수 있습니다. 그렇기 때문에 무증상 성인에게 신경계 질환의 선별검사 목적으로 뇌 MRI 검사를 권하지 않습니다.

05 암 선별검사 목적으로 갑상선 초음파 검사를 권하지 않는다.

암 선별검사 목적으로 갑상선 초음파 검사를 흔히 시행해 왔고, 그 결과 갑상선 암 유병률이 급격히 높아졌지만, 갑상선 초음파를 이용한 검진이 갑상선암으로 인한 사망의 위험을 줄일 수 있다는 근거는 불충분합니다.

06 적응증이 아닌 경우 포도당, 생리식염수, 아미노산 및 비타민 등을 함유한 수액제제를 주사하지 않는다.

경구섭취가 어려운 탈수 및 영양부족 환자에게는 포도당, 생리식염수, 아미노산 및 비타민 등을 함유한 수액제제를 주사해 상태를 개선할 수 있습니다. 하지만 이러한 영양 수액제제가 만성피로 등 각종 질병 예방이나 치료에 도움이 된다는 임상적 근거는 부족하기 때문에 주사를 권장하지 않습니다.

07 외래에서 고혈압, 이상지질혈증, 당뇨 등의 생활습관병을 처음 진단했을 때 (약물 처방이 즉시 필요한 경우를 제외하고), 우선적으로 수주내지 수개월 동안 생활습관 개선을 시행한다.

고혈압, 이상지질혈증, 당뇨를 처음 진단했을 때, 약물 처방이 즉시 필요한 특별한 경우를 제외하고, 수주내지 수개월 동안 생활습관 개선을 시행해야 합니다. 충분한 생활습관개선을 시행했음에도 불구하고 혈압, 혈중 콜레스테롤, 혈당이 조절되지 않는 경우에 약물요법을 시작하는 것을 권장합니다.

‘The Smart Choice(Choosing Wisely)’ Campaign

Dissemination of the Choosing Wisely Campaign (5 Key Questions)

- Produced promotional posters and distributed them to consumer organizations' newsletters and other public channels to inform the public.

‘The Smart Choice(Choosing Wisely)’ Campaign

Results of the Application of the Choosing Wisely Campaign in Medical Practice

- Ongoing Implementation of the Choosing Wisely Lists at National Health Insurance Service (NHIS) Ilsan Hospital
  - Since 2022, 105 Choosing Wisely lists have been applied (as of 2024).

❶ Reduction in the number of abdominal-pelvic CT scans with high radiation exposure (Applied in 2022, monthly average reduced from 63 cases to 19 cases, a 69.8% reduction)

(Korean Society of Radiology)

④ For abdominal CT scans, pre-contrast and delayed phase scans are not included in the protocol unless there is a specific purpose.

⑤ For follow-up abdominal CT scans after tumor treatment, other time-point scans besides single-phase portal venous scans are not included in the protocol unless there is a specific purpose.

❷ Reduction in overlapping prescriptions of ESR and CRP tests for suspected acute inflammation (Applied in 2022, monthly average reduced from 51.3% to 34.2%, a 34.0% reduction)

(Korean Society of Laboratory Medicine)

① Simultaneous prescriptions of erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) tests are not recommended for suspected acute inflammation.

❸ Reduction in routine PET/CT scans for staging of colorectal cancer (Applied in 2023, monthly average reduced from 12.5 cases to 3.73 cases, an 70.2% reduction)

(Korean Society of Coloproctology)

③ Routine PET/CT scans are not performed for staging of colorectal cancer if there is no evidence of metastasis to other organs in previous imaging tests.

2025 제22차 국제연수과정
NHIS UHC GLOBAL ACADEMY

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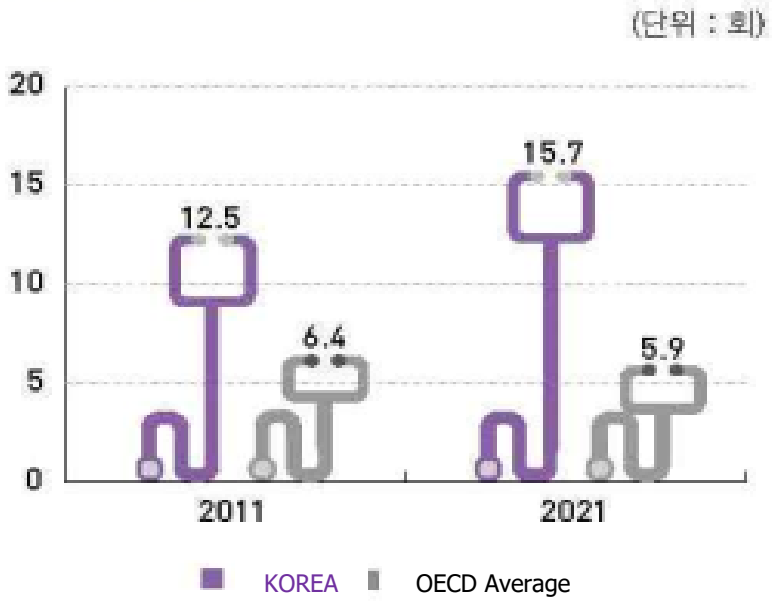
Healthcare Utilization Management

Healthcare Utilization Management

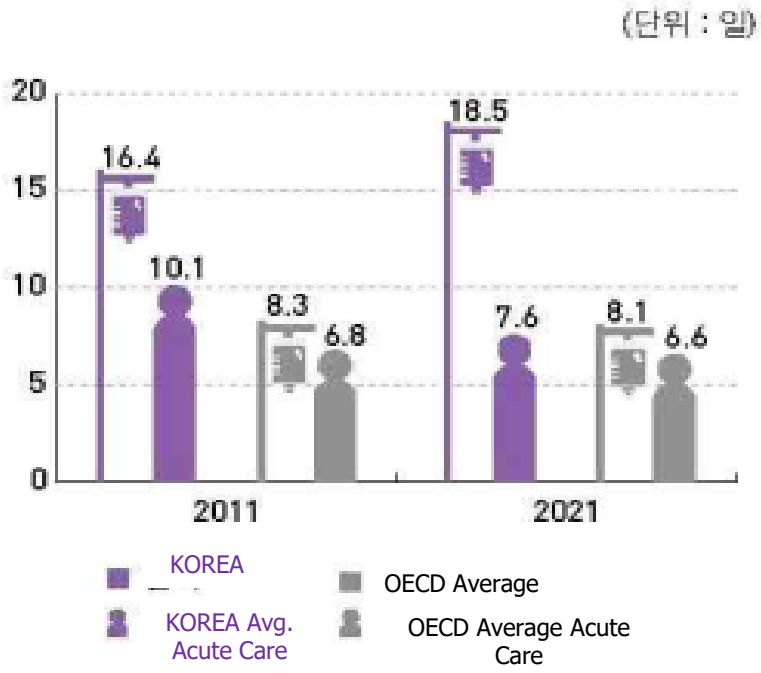
Healthcare Utilization Level

- Koreans have an average of 15.7 outpatient visits per year, which is 2.7 times higher than the OECD average of 5.9 visits.

Outpatient Care



Average Length of Hospital Stay



source: OECD Health Statistics (Health Statistics) 2023

Healthcare Utilization Management

Necessity

- Due to the increase in excessive healthcare utilization, there is a need for management by insurers to address the risks to public health and the rising medical costs

Purpose

- By establishing a comprehensive healthcare utilization management system, unnecessary healthcare utilization is curbed, rational healthcare utilization is encouraged, and the health rights of subscribers are strengthened, leading to a reduction in medical costs.

<Healthcare Utilization Promotion System>

Purpose	**Protection of subscribers' health and rationalization of health insurance expenditures**		
Type	Overuse		Patients with minor illness (senior) General Hospital Manage your use
	Management of the number of medical visits (Frequent Users)	Management of multiple medical institution usage (Use of Multiple Institutions)	
Target	- Number of outpatient visits More than 70 times a year	- Same condition - Use of more than 4 institutions of the same type within 5 days"	- Minor conditions - Use of (upper-level) General Hospitals more than 5 times a year

Healthcare Utilization Management

Progress

(July 2002~): Introduced the "Guidance Project for Excessive Users" targeting four types of users: frequent users, users of multiple medical institutions, intensive management for excessive healthcare users, and post-management for drug abuse.
(January 2010~): Reduced the target types from four to two categories: intensive management group and general management group.
(March 2012~): Shifted to focusing on sending information letters; counseling was provided only for in-bound and walk-in visitors.
(September 2021~): Launched the pilot project for healthcare utilization support case management in Chuncheon, Hwaseong, and Wonju... later renamed to the "Integrated Health Management Pilot Project" in 2022.
(January 2022~): Guided improvements in healthcare utilization behavior by providing necessary information and counseling, centered on consumer needs.
(2023~): Expanded the Integrated Health Management Pilot Project to all six regional headquarters.
(January 2023~): Established customized interventions reflecting the disease characteristics of excessive healthcare users.
(Since July 2024) Differentiated Co-Pay for Outpatient Care has been implemented. The system applies a 90% copayment rate at hospitals and clinics for patients who exceed 365 outpatient visits within a single year.

Healthcare Utilization Management

- **(Frequent Healthcare Utilization Management)**: Managing healthcare users with more than 70 visits annually by stratifying management methods based on age.
- **(Management of Users of Major General Hospitals)**: Managing patients with chronic conditions who use major or general hospitals more than five times a year, regardless of age group.

< Detailed Management System by Type of Healthcare Utilization >

<table>
<tr><th></th><th colspan="2">Frequent (Excessive) Healthcare Users</th><th>Integrated Health Management Pilot Project</th><th>Chronic Condition Major Hospital Users</th></tr>
<tr><td>Category</td><td>70~149 visits</td><td>150~365 visits</td><td>366+ visits</td><td rowspan="5">Users who visit upper-level (general) hospitals more than 5 times a year for minor conditions
Information letter sent + counseling (in-bound)</td></tr>
<tr><td>18~39 Years</td><td colspan="2"></td><td rowspan="4">Integrated health management - Information letters + preferential counseling + home visits</td></tr>
<tr><td>40~64 Years</td><td colspan="2">Information letters sent (under 50 physical treatments)
Strengthened counseling (50+ physical treatments) - Information letters + health management reports + preferential counseling (in/out-bound</td></tr>
<tr><td>65~79 Years</td><td></td><td>Strengthened counseling - Information letters + health management reports + preferential counseling (in/out-bound)</td></tr>
<tr><td>80+ years</td><td></td><td></td></tr>
</table>

Healthcare Utilization Management

Management of Excessive (Frequent, Multiple Institutions) Healthcare Users

- (Target) Annual frequent outpatient users, users of multiple medical institutions

❶ (Frequent users) Healthcare users with more than 70 outpatient visits per year, ranking in the top 3% of utilization. Different management methods are applied based on age group

category	70~149 times	150~365 times
40~64 Years	Information letter recipient group (fewer than 50 physical therapy sessions)	
	Strengthened counseling group (more than 50 physical therapy sessions)	
65~79 Years	-	Strengthened counseling group

❷ (Multiple institution users) Patients who visit 4 or more different institutions of the same grade within 5 days for the same condition.

- (Service details) Sending healthcare utilization status information letters/pamphlets and providing counseling (phone, in-person), etc.

Category	Method
Frequent healthcare users (information letter recipients)	Sending information letters/pamphlets, preferential counseling (in-bound)
Users of multiple medical institutions	Sending information letters/pamphlets, preferential counseling (in-bound)
Frequent healthcare users (strengthened counseling group)	Sending information letters/pamphlets/health reports, preferential counseling (in-bound, out-bound)

Healthcare Utilization Management

Management Process for Excessive Healthcare Utilization (Frequent, Multiple Institution)

- **(Workflow)**: The headquarters issues target lists and sends information letters, and branch offices handle counseling for identified targets..

Issuing Target Lists (Headquarters)

- Based on the level of healthcare utilization, the target lists are issued (four times a year, approval granted for each regional headquarters).

Sending Information Letters (Headquarters))

- Information letters and pamphlets are sent to identified targets (health management reports are sent together for the strengthened counseling group).

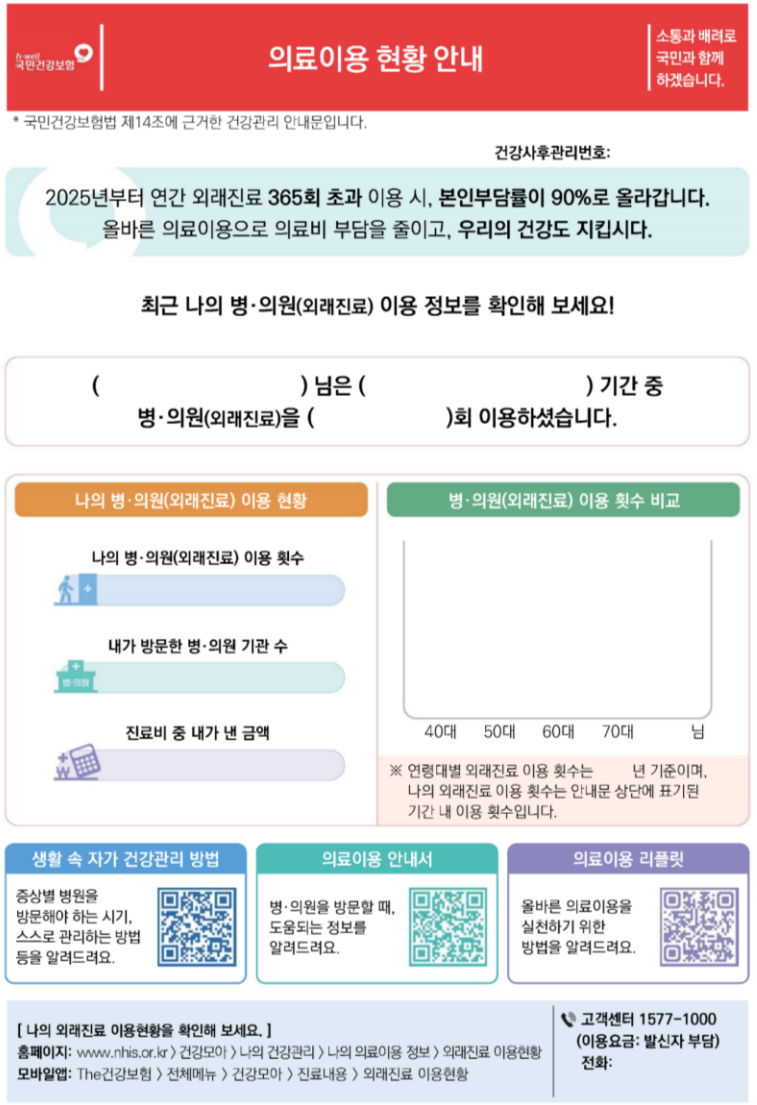
Counseling for Targeted Individuals (Regional Branch)

- Identifies the healthcare utilization patterns of the targeted individuals.
- Provides information for the appropriate use of healthcare services.
- Offers guidance on health insurance policies and the NHIS's programs.
- Recommendation to use a regular doctor and a regular pharmacy.
- If necessary, conducts home visits with integrated health management linkage.

Healthcare Utilization Management

Management Process for Excessive Healthcare Utilization (Frequent, Multiple Institution)

- Frequent Healthcare Utilization Information Letter
  - My healthcare utilization status (number of hospital and clinic visits over the past year, number of different hospitals and clinics visited, and total out-of-pocket expenses paid)
  - A comparison of visit frequency with others in the same age group
  - Guidance on self-health management practices for daily life and healthcare utilization guide
  - Healthcare utilization leaflet (link)



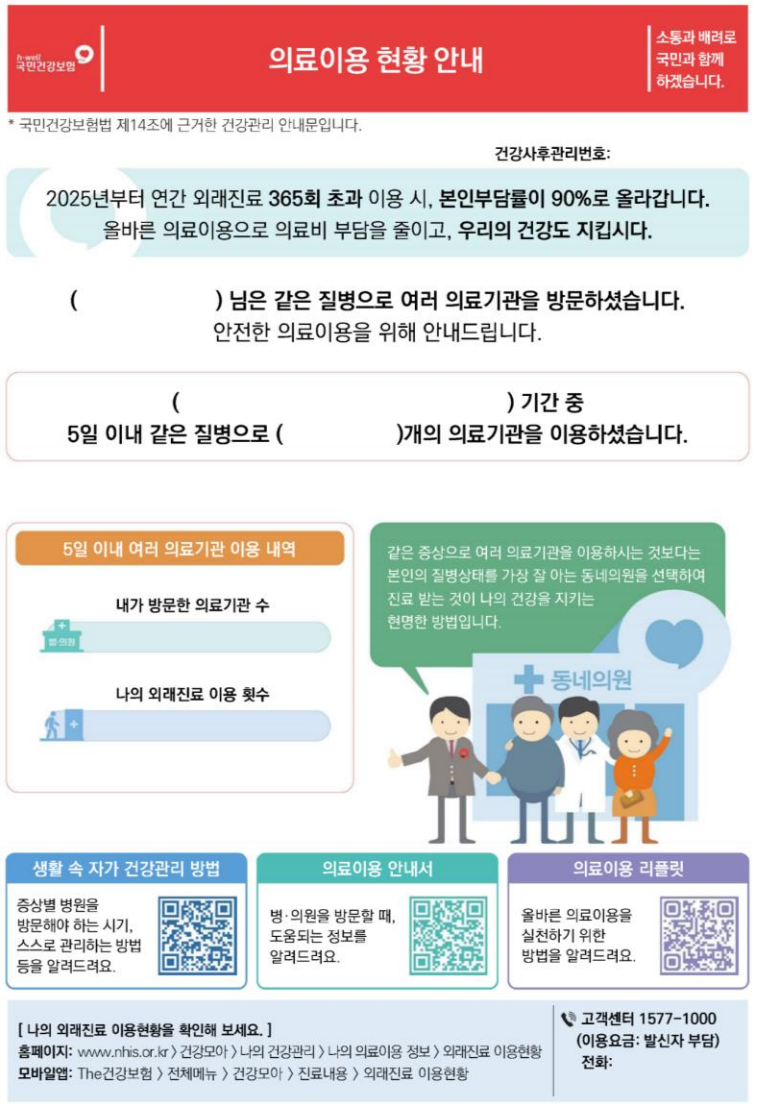
Healthcare Utilization Management

Management Process for Excessive Healthcare Utilization (Frequent, Multiple Institution)

- Multiple Medical Institution Utilization Information Letter

  Number of medical institutions visited and total number of visits (for the same medical condition)

  - Guidance on medical institution use (encourages patients to select a single local clinic that is familiar with their condition rather than visiting multiple institutions)
  - Self-health management tips for daily life, a medical utilization guide, a medical utilization leaflet



Healthcare Utilization Management

Integrated Health Management Pilot Project
(Multi-frequency Medical Utilization Management, 2021~)

- **(Objective)**:Encourage appropriate healthcare utilization through tailored health counseling and connection to internal and external services for "excessive healthcare users" who show little improvement in healthcare utilization behavior.

- **(Target)**:Adults aged 18 and older who use outpatient services more than 365 times per year, information letter recipients, strengthened counseling group, and pre-management group members who need integrated health management.

- **(Service Details)**:Temporary nurses or other professionals conduct home visits (once) and phone counseling (twice) to understand healthcare utilization patterns and conduct needs assessments, linking them to necessary resources.
  - (Internal Resources): Polypharmacy management, chronic disease health support, smoking cessation support programs, etc.
  - (External Resources): Dementia care centers, well-being check-ins and emotional support, health exercise programs at administrative welfare centers, living expense support programs, etc.

- **(Service Areas)**:Managed by 6 regional headquarters, covering 74 branch offices.

Healthcare Utilization Management

Integrated Health Management Pilot Project
(Multi-frequency Medical Utilization Management, 2021~)

- **(Workflow)**: The headquarters issues target lists and sends information letters, while regional headquarters conduct counseling for the targeted individuals..

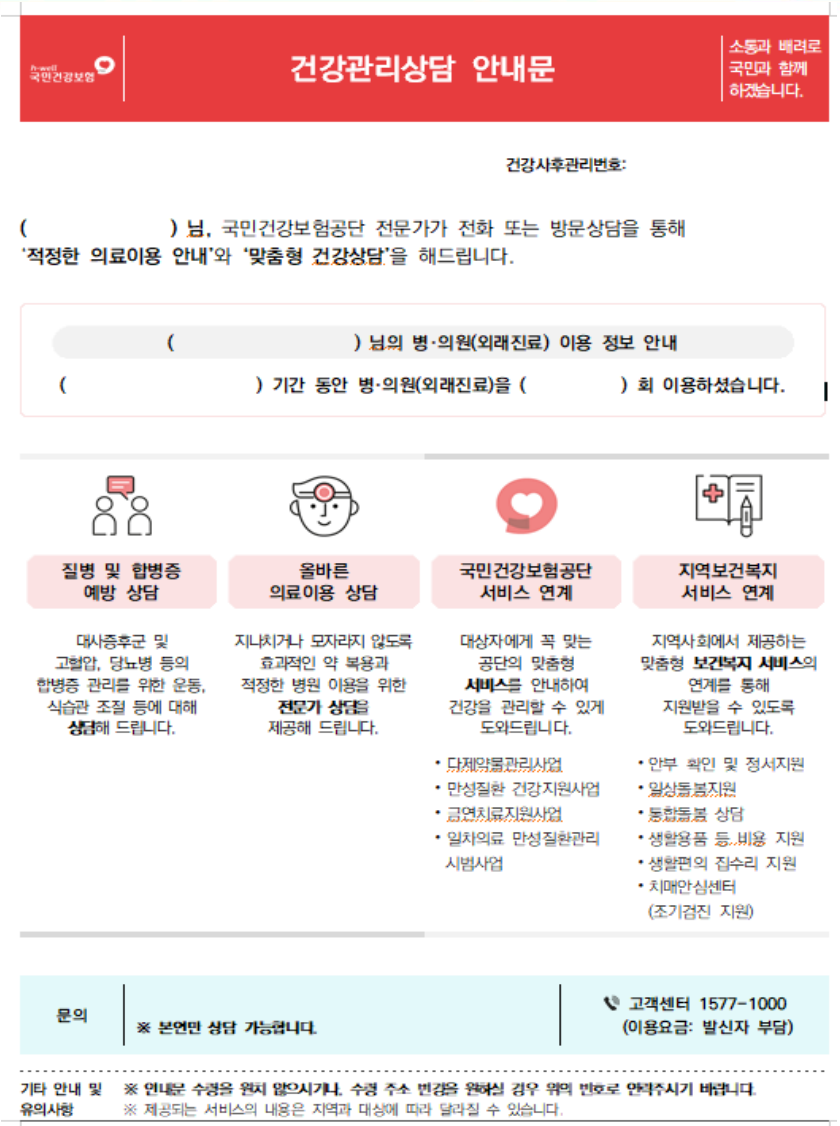
Issuing Target Lists (Headquarters)	• Selection of target individuals based on the level of healthcare utilization (four times a year, the selection details are sent to each branch and regional headquarters)
Sending Information Letters (Headquarters)	• Sending Information letters and pamphlets to all selected individuals
1st Counseling Session (Regional Headquarters, Phone Counseling)	• Conduct healthcare counseling based on healthcare utilization history • Provide information on integrated health management services
2nd Counseling Session (Regional Headquarters, Home Visits)	• Assess the health status through home visits and provide guidance on appropriate medical care. • Identify and connect with necessary local resource services based on the needs assessment of the client."
3rd Counseling Session (Regional Headquarters, Phone Counseling)	• Monitor the level of adherence to appropriate medical care, assess health status, and track connected services

Healthcare Utilization Management

Integrated Health Management Pilot Project
(Multi-frequency Medical Utilization Management, 2021~)

- Information Letter

  - Professional Guidance: Receive 'appropriate medical care guidance' and 'personalized health counseling' through phone or home visits by experts.
  - Medical Utilization Status: Information on annual medical service usage.
  - Service Details:
    * Counseling on disease and complication prevention.
    * Advice on appropriate use of medical services.
    * Connection to National Health Insurance Service.
    * Coordination with local health and welfare services.



건강관리상담 안내문

소통과 배려로 국민과 함께 하겠습니다.

건강사후관리번호:

( ) 님, 국민건강보험공단 전문가가 전화 또는 방문상담을 통해 '적정한 의료이용 안내'와 '맞춤형 건강상담'을 해드립니다.

( ) 님의 병·의원(외래진료) 이용 정보 안내

( ) 기간 동안 병·의원(외래진료)을 ( ) 회 이용하셨습니다.

질병 및 합병증 예방 상담	올바른 의료이용 상담	국민건강보험공단 서비스 연계	지역보건복지 서비스 연계
대사증후군 및 고혈압, 당뇨병 등의 합병증 관리를 위한 운동, 식습관 조절 등에 대해 상담해 드립니다.	지나치거나 모자라지 않도록 효과적인 약 복용과 적정한 병원 이용을 위한 전문가 상담을 제공해 드립니다.	대상자에게 꼭 맞는 공단의 맞춤형 서비스를 안내하여 건강을 관리할 수 있게 도와드립니다.	지역사회에서 제공하는 맞춤형 보건복지 서비스의 연계를 통해 지원받을 수 있도록 도와드립니다.
		• 다제약물관리사업 • 만성질환 건강지원사업 • 금연치료지원사업 • 일차의료 만성질환관리 시범사업	• 안부 확인 및 정서지원 • 일상돌봄지원 • 통합돌봄 상담 • 생활용품 등 비용 지원 • 생활편의 집수리 지원 • 치매안심센터 (조기검진 지원)

문의 | ※ 본연만 상담 가능합니다. | 고객센터 1577-1000 (이용요금: 발신자 부담)

기타 안내 및 유의사항 ※ 안내문 수령을 원치 않으시거나, 수령 주소 변경을 원하실 경우 위의 번호로 연락주시기 바랍니다.
※ 제공되는 서비스의 내용은 지역과 대상에 따라 달라질 수 있습니다.

Healthcare Utilization Management

Differentiated Co-Pay for Outpatient Care (starting July 2024)

- **(Purpose)**: To prevent the waste of medical resources due to excessive outpatient visits, the goal is to encourage rational use of medical services by increasing patient cost-sharing rates.
- **(Legal Basis)**: Article 19(1) [Appendix 2], Item 5-2 of the Enforcement Decree of the National Health Insurance Act (amended April 19, 2024), and Ministry of Health and Welfare Notice No. 2024-131, "Standards for Differentiated Patient Cost for Outpatient Care" (established June 28, 2024).
- **(Content)**: For individuals who exceed 365 outpatient visits annually, a patient cost-sharing rate of 90% will be applied to the excess visits.

  - **(Exemptions)**:

  ① Children

  ② Pregnant women

  ③ Registered beneficiaries with special exceptions (for severe or rare diseases) who are receiving care for those conditions

  ④ Beneficiaries with special exceptions who are also individuals with severe disabilities

Healthcare Utilization Management

Differentiated Co-Pay for Outpatient Care (starting July 2024)

- **(Workflow)**:The NHIS selects the individuals subject to differentiated cost-sharing and sends out notification letters. The identified individuals are displayed in the patient eligibility verification system.
  Medical institutions verify the eligibility of individuals and apply the 90% cost-sharing rate on-site.

NHIS	**Step 1**. Targeted Individual Selection	- Selection conducted twice a month— on the 1st and 15th of each month
	Step 2-1. Dispatch of Information Letters and Step 2-2: Counseling **Step 2-3.** Integration and Display of Patient Eligibility Information through the Patient Eligibility Verification System	- When inquiries are received after the information letter is sent, provide consultation and guidance regarding the Differentiated Co-Pay for Outpatient Care - During the eligibility review, the system will display an indicator showing whether the differentiated co-pay applies (Y/N)
Medical care institution	**Step 3**. On-Site Application and Billing	- When a patient is identified as a targeted individual on the patient eligibility verification screen, the healthcare provider applies a 90% copayment rate and bill accordingly on-site

Healthcare Utilization Management

Management of Large Hospitals for Minor Diseases

- **(Purpose)**: To guide users of tertiary general hospitals with severe diseases toward appropriate medical utilization, reducing the burden on large hospitals and promoting rational medical use.
- **(Target)**: Patients with severe diseases who have used advanced general hospitals or general hospitals five or more times.

  - Severe diseases refer to the 105 conditions eligible for differentiated drug cost-sharing (Ministry of Health and Welfare Notice No. 2021-362).
- **(Service Details):**

  - (Information Letter): Send a medical usage status notice and leaflet.
    * Comparison of pharmacy costs paid at (tertiary) general hospitals with estimated costs at hospitals and clinics
  - (Consultation): Provide information through priority (inbound) and internal consultations.
    * Guidance on differentiated drug cost-sharing and connection with the NHIS's projects to promote rational medical use.

Healthcare Utilization Management

Management of Large Hospitals for Minor Diseases

- **(Workflow)**: The headquarters extracts the targets and sends notification letters, while the regional offices provide consultations to the targets.

Target Extraction (Headquarters):

- Extract targets based on medical use standards (twice a year, send extraction results to regional headquarters).

Information Letters Sent (Headquarters):)

- Send notification letters and leaflets to the extracted targets.

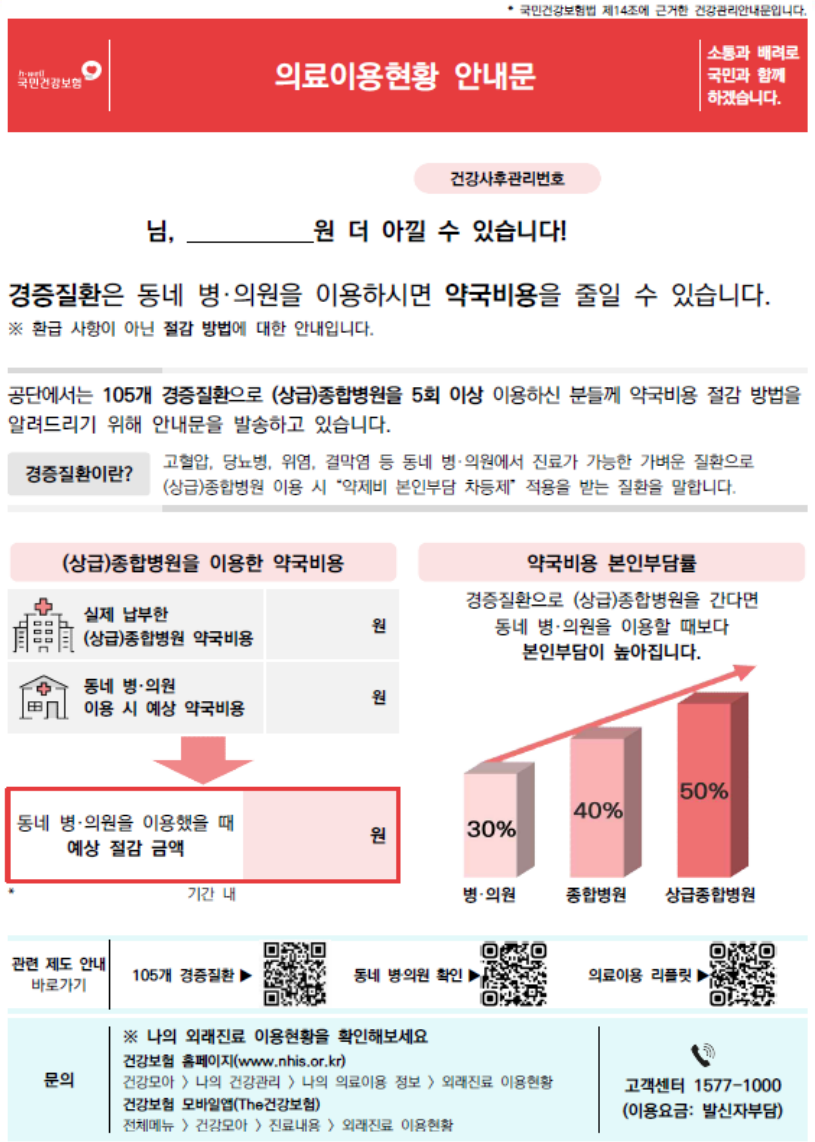
Target Consultation (Regional Headquarters):

- Assess the medical usage patterns of the targets.
- Provide information to promote appropriate medical use.
- Introduce the National Health Insurance program and other NHIS's projects.
- Recommend primary care doctors and pharmacies.
- Provide guidance on differentiated drug cost-sharing.

Healthcare Utilization Management

Management of Large Hospitals for Minor Diseases

- Information Letter
  - Pharmacy costs that can be reduced by using local clinics.
  - Information on minor illnesses.
  - Comparison of pharmacy costs when using large hospitals versus local clinics.



* 국민건강보험법 제14조에 근거한 건강관리안내문입니다.

h·well 국민건강보험

의료이용현황 안내문

소통과 배려로 국민과 함께 하겠습니다.

건강사후관리번호

님, _____원 더 아낄 수 있습니다!

경증질환은 동네 병·의원을 이용하시면 **약국비용**을 줄일 수 있습니다.

※ 환급 사항이 아닌 **절감 방법**에 대한 안내입니다.

공단에서는 **105개 경증질환**으로 **(상급)종합병원을 5회 이상** 이용하신 분들께 약국비용 절감 방법을 알려드리기 위해 안내문을 발송하고 있습니다.

경증질환이란? 고혈압, 당뇨병, 위염, 결막염 등 동네 병·의원에서 진료가 가능한 가벼운 질환으로 (상급)종합병원 이용 시 "약제비 본인부담 차등제" 적용을 받는 질환을 말합니다.

(상급)종합병원을 이용한 약국비용

실제 납부한 (상급)종합병원 약국비용	**원**
동네 병·의원 이용 시 예상 약국비용	**원**
동네 병·의원을 이용했을 때 **예상 절감 금액**	**원**

* 기간 내

약국비용 본인부담률

경증질환으로 (상급)종합병원을 간다면 동네 병·의원을 이용할 때보다 **본인부담이 높아집니다.**

관련 제도 안내 바로가기 | 105개 경증질환 ▶ | 동네 병의원 확인 ▶ | 의료이용 리플릿 ▶

문의

※ **나의 외래진료 이용현황을 확인해보세요**

건강보험 홈페이지(www.nhis.or.kr)

건강모아 〉 나의 건강관리 〉 나의 의료이용 정보 〉 외래진료 이용현황

건강보험 모바일앱(The건강보험)

전체메뉴 〉 건강모아 〉 진료내용 〉 외래진료 이용현황

고객센터 1577-1000

(이용요금: 발신자부담)

Healthcare Utilization Management

2023 Medical Utilization Management Performance

2024.6.30. Standard (unit: cases)

Number of Information Letters Sent					Number of Consultations (Phone/Visit)
Sum total	Frequent Medical Users	Multi-Institution Users	Integrated Health Management Pilot Project	Minor Illnesses Users of Large Hospitals	
406,590	206,988	4,382	194,811	409	5,796

Changes in Medical Utilization after Management

- (Frequent healthcare user) Data from 2024 service provision show that the average monthly number of medical visits decreased by 2.0 visits after one month of management and by 2.9 visits after 12 months. During the same period, the average monthly benefit cost decreased by 34,000 KRW after one month of management and by 50,000 KRW after 12 months.
- (Integrated Health Management Pilot Project) Among patients who completed in-bound counseling, the monthly average number of medical visits decreased by 4.3 visits (25.4%), while monthly average benefit costs declined by 70,000 KRW (18.0%) 9 months after the project began.

2025 제22차 국제연수과정
NHIS UHC GLOBAL ACADEMY

h·well NHIS National Health Insurance Service

03 Medication Management

Medication Management(Polypharmacy Management)

Current Status of Polypharmacy

- Polypharmacy refers to the simultaneous use of multiple drugs
  - Generally, five or more drugs are considered polypharmacy; for the polypharmacy management project, this refers to the use of 10 or more drugs.
  - In 2023, the top 4,370 individuals using the most drugs were taking an average of 8.2 prescriptions annually, amounting to 12,328 drugs in total.
- The number of polypharmacy users has been increasing annually
  - The number of patients with chronic diseases using 10 or more drugs for over 60 days:
    ('20) 910,000 → ('21) 1.08 million → ('22) 1.17 million → ('23) 1.29 million → ('24) 1.37 million
  - High polypharmacy prescription rate among OECD countries in Korea.
    (70.2% in 2019, with the OECD average being 46.7%).
    * Proportion of patients aged 75 years or older taking 5 or more medicines for more than 90 days

'16year	'17year	'18year	'19year	'20year	'21year	
					South Korea	OECD average (Number of Countries)
68.0	**68.1**	**69.8**	**70.2**	**64.9**	**64.2**	**50.1(15)**

Medication Management(Polypharmacy Management)

Increased Risk of Hospitalization and Death in the Elderly (65 and Older) Due to Polypharmacy

- Compared to the control group, the risk of hospitalization increases by 18%, and the risk of death increases by 25%, with the risk increasing as the number of medications rises

Group / Polypharmacy				By Number of Medications			
Group	Hospitalization Risk	Death Risk	Remarks	Number of Medications	Hospitalization Risk	Death Risk	Remarks
Control group(1~4drugs)	1.00	1.00	standard	1~2개	1.00	1.00	Baseline
Multi-drug group (≥5 drugs)	1.18*	1.25*		3~4개	1.05*	1.08*	
				5~6개	1.13*	1.20*	
				7~8개	1.22*	1.31*	
	-			9~10개	1.31*	1.41*	
				≥11개	1.45*	1.54*	

* p<.001, adjusted for age, gender, residential area, and comorbidity index

Medication Management (Polypharmacy Management)

Progress

- **(2018 year)** Introduction of the 'Correct Drug Use Support Project' where pharmacists visit and support
  - 680 people served (477 in 9 locations and 203 in 2 long-term care facilities)

- **(2019 year)** Expansion of business area, introduction of clinic model service for prescription adjustment
  - Expansion of community pharmacy association-industrial complex collaboration (pharmacist model) area, expansion of nursing facility management model
  - 3,074 people served (2,342 in 64 locations, 732 in 8 long-term care facilities)
  - '19.September Clinic model introduced, linking doctors' patient registration to consultation acupuncture prescription adjustment

- **(2020 year)** Changed the name to Polypharmacy Management Program, introduced a hospital model
  - Expanded to 98 areas and served 2,235 people
  - '20.August Hospital model introduced, multidisciplinary team consisting of doctors, pharmacists, and nurses to provide medical services to strengthen effectiveness
  - Served 380 people in 7 hospitals

Medication Management (Polypharmacy Management)

Progress

- **(2021)** Introduction of the hospital model application process and selection evaluation, followed by the expansion of participating hospitals and service scope
  - Multi-drug management services provided to 4,021 people across 106 regions and 1,481 people across 35 hospitals
  - Launch of the hospital-based outpatient service model, expanding participation to 35 hospitals serving 1,481 people
- **(2022)** Integration of the regional pharmacist and clinic model into the community model
  - Services provided to 3,168 people across 92 regions and 2,998 people across 36 hospitals
  - Research conducted to develop institutionalization strategies for the Polypharmacy Management Program
- **(2023)** Expansion of participating hospitals and regions and introduction of a physician–pharmacist collaboration model
  - Services provided to 3,664 people across 107 regions and 2,365 people across 48 hospitals
  - Introduced a regional physician–pharmacist collaboration model (Dobong-gu, Seoul), enabling pharmacist consultation results to be reflected in physicians' prescriptions and treatment adjustments
- **(2024)** The number of participating hospitals increased to 60, and service coverage expanded to 132 cities, counties and gus, and broader adoption of the physician–pharmacist collaboration model
- **(2025)** The number of participating hospitals increased to 74, and service coverage expanded to 146 cities, counties and gus, and introduction of the long-term care facility model
  - 53 facilities participating and providing services to 896 people (as of August 31, 2025)

Medication Management (Polypharmacy Management)

Purpose of Polypharmacy Management

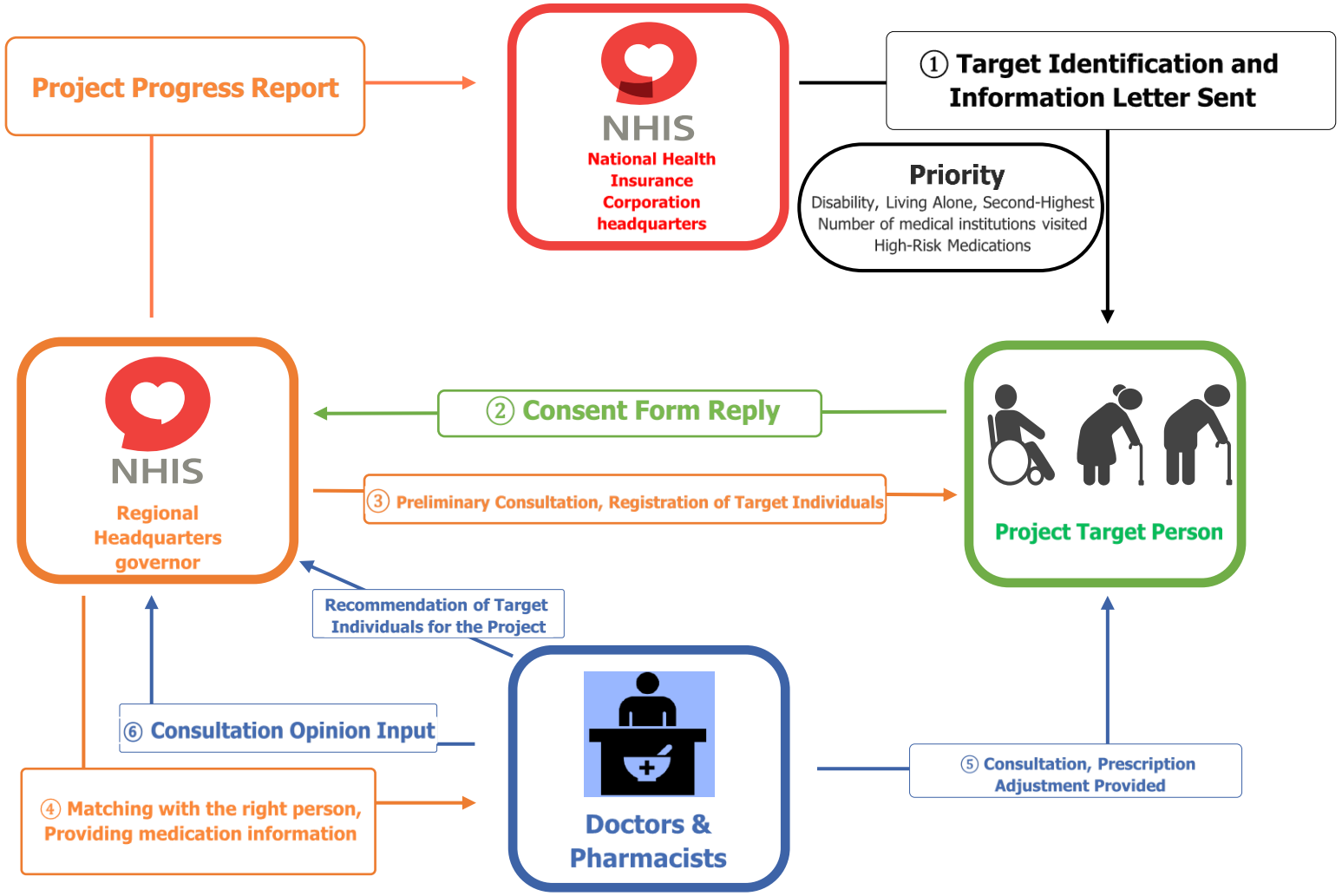
- Protect the health of polypharmacy users from drug side effects and health risks
  - Identify problems during medication use and resolve them through counseling, thereby protecting against health risks.
  - → Improve medication habits, adjust prescriptions with doctors, etc.

- Improve personal ability to manage medication
  - Increase understanding of medications and illnesses through counseling education.
  - → Promote better medication adherence and prevent overuse or misuse of drugs.

- Contribute to reducing medical expenses and social costs
  - Prevent side effects from excessive drug use and reduce the likelihood of emergency room visits and hospital admissions.
  - → Reduce medical expenses and decrease social costs.

Medication Management(Polypharmacy Management)

Local Community Model Implementation Framework



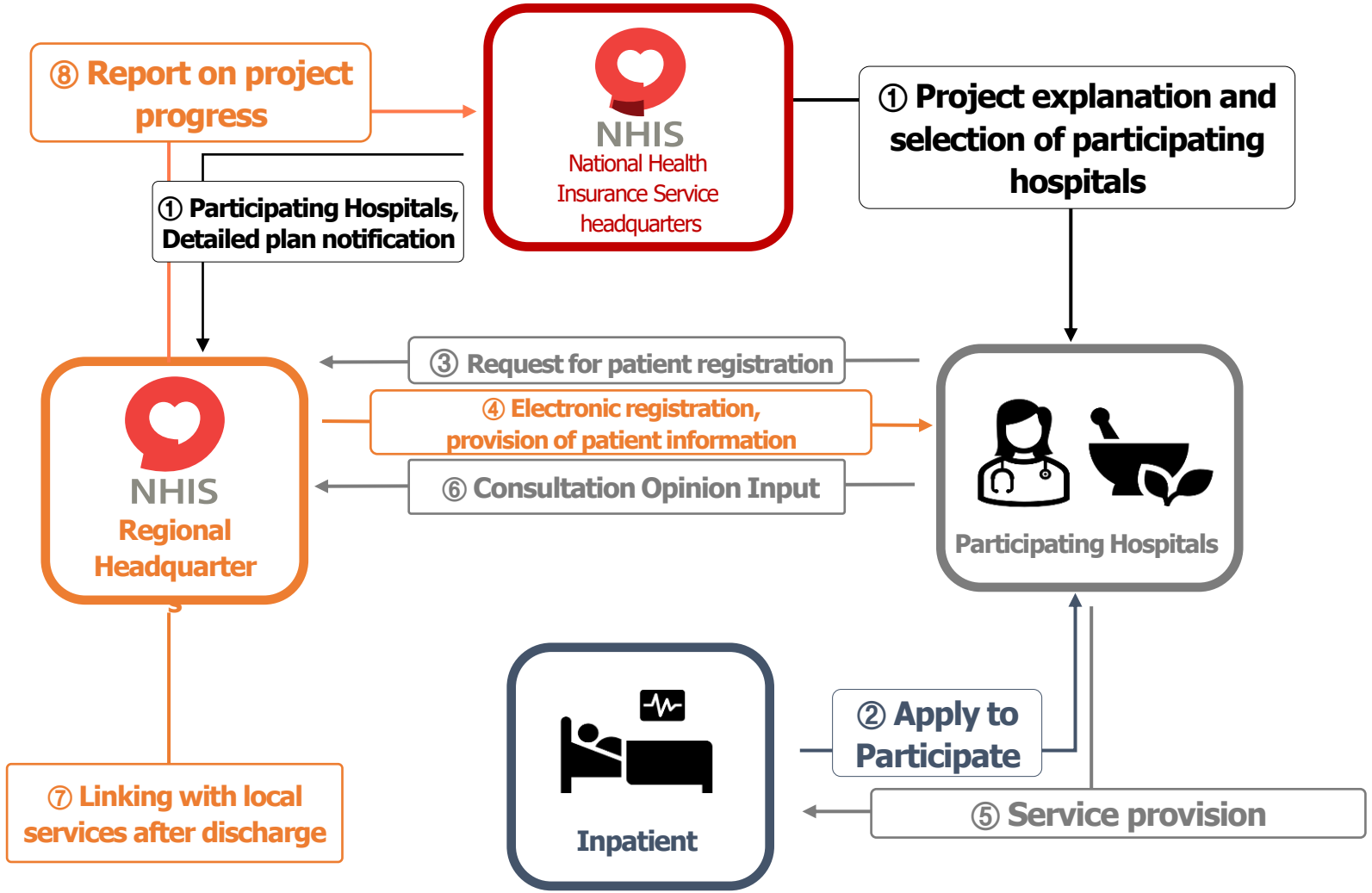
Medication Management (Polypharmacy Management)

Local Community Model Service Details

Stage	Medication Review and Intervention		Phone Consultation		Monitoring
Type	Home visit or Pharmacy	⇨	**If necessary** Telephone Consultation	⇨	Home visit or Pharmacy (When face-to-face consultation is difficult) Telephone Consultation
Service Content	Medication status check, Consultation		Consultation Progress Confirmation		Medication check, evaluation of counseling intervention results, etc.
Provider	Consultant Pharmacist + Accompanying Personnel (Accompanying the staff or consultant pharmacist or auxiliary personnel)		Consultant Pharmacist		Consultant Pharmacist (In the case of a home visit, you can be accompanied by a staff member or an assistant)

Medication Management (Polypharmacy Management)

Hospital Model Implementation Framework



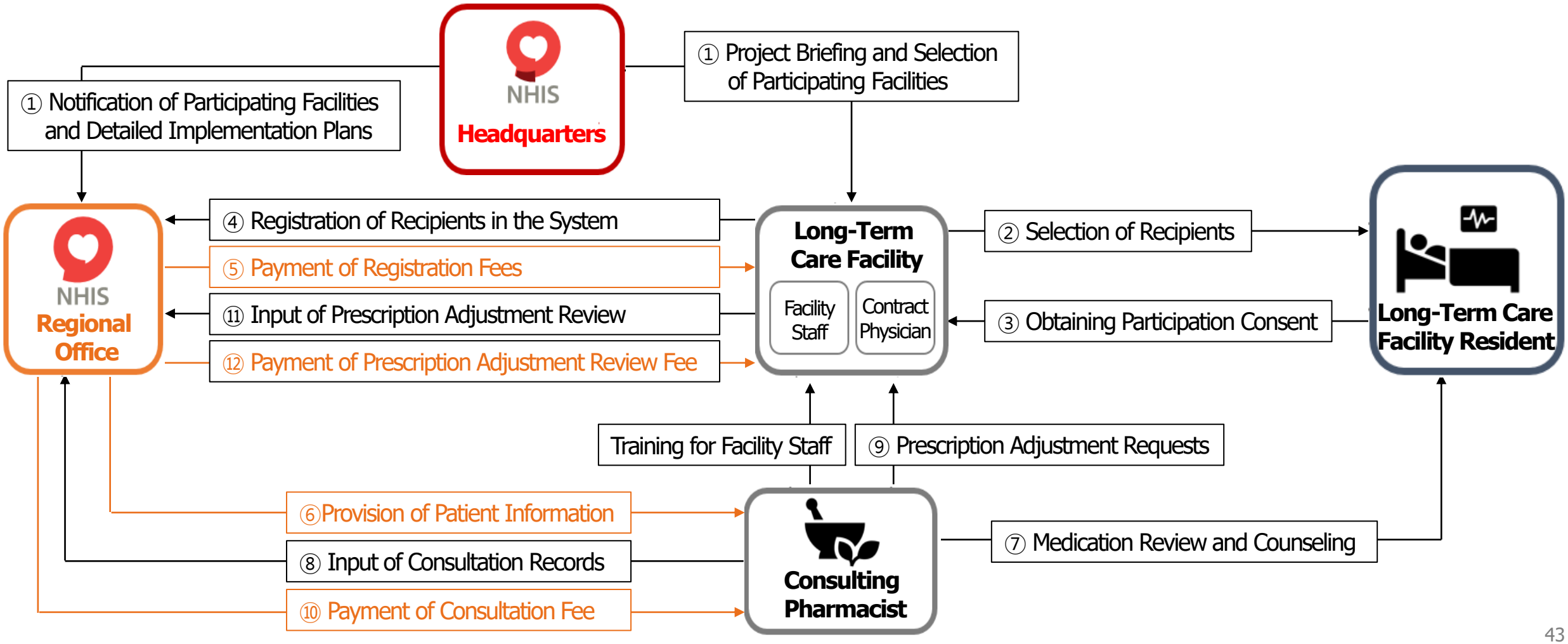
Medication Management

Hospital Model (Admission and Discharge Model) Service Details

Provision	Hospital (4 times)						
Stage	(1st Stage) Inpatient Management		(2nd Stage) Discharge Check		(3rd Stage) Telephone Consultation		(4th Stage) Outpatient Consultation
서비스	▸Patient registration ▸Drug Evaluation ▸Medication Consultation ▸Medication Adjustment ▸Patient Functional Evaluation (Doctor)	⇨ Length of Stay	▸Discharge Medication Check ▸Medication Adjustment ▸Medication Consultation	⇨	▸Monitoring	⇨	▸Monitoring ▸Medication adherence check
제공자	Doctor Pharmacist Nurse		Doctor Pharmacist Nurse		Pharmacist		Doctor pharmacist

Medication Management (Polypharmacy Management)

Long-Term Care Facility Model Implementation Framework



Medication Management (Polypharmacy Management)

■ 장기요양시설 모형 서비스 내용

	Stage 1. Participant Registration			Stage 2. Service Provision			
	Participant Selection and Consent Collection		Recipients Registration in the System	Medication Review and Counseling		Prescription Adjustment	
Service	▸Identify recipients ▸ Obtain signed consent forms		▸ After confirming recipients, upload the current medication list	▸ Preparation of medication list ▸ Comprehensive medication assessment and counseling ▸ Prescription adjustment request		▸Review of pharmacist's opinion and prescription adjustment by the physician (as needed)	▸ Multidisciplinary case conference convened (when necessary)
Provider	Facility staff: Nurses (including nursing assistants), social workers, and care workers	⇨	Nurses at the NHIS	Consulting pharmacist	⇨	Contract physician	Contract physician, contract pharmacists and facility nurses (including nursing assistants)

Medication Management (Polypharmacy Management)

Polypharmacy Management Track Record

- Provided Polypharmacy Management Service to a Total of 24,154 People

(2025.8.31. standard)

Year		Community Model	Hospital Model	Long-Term Care Facility Model
Total	**38,940 People**	**22,556 People**	**14,553 People**	**1,831 People**
2025	**7,099 People**	146 Locations, 2,670 People	74 Hospitals, 3,533 People	53 Locations, 896 People
2024	**7,687 People**	132 Locations, 3,891 People	60 Hospitals, 3,796 People	-
2023	**6,029 People**	107 Locations, 3,664 People	48 Hospitals, 2,365 People	-
2022	**6,166 People**	92 Locations, 3,168 People	36 Hospitals, 2,998 People	-
2021	**5,502 People**	106 Locations, 4,021 People	35 Hospitals, 1,481 People	-
2020	**2,615 People**	98 Locations, 2,235 People	7 Hospitals, 380 People	-
2019	**3,162 People**	64 Locations, 2,430 People	-	8 Locations, 732 People
2018	**680 People**	9 Locations, 477 People	-	2 Locations, 203 People

Medication Management(Polypharmacy Management)

Effect of Polypharmacy Management (Community Model)

- **(2020~2021)** Individuals who received medication management services had 23% fewer emergency room visits (27% reduction for those aged 65 and older) compared to those who did not receive the service.

Effect of Polypharmacy Management (Hospital Model)

- **(2020~2021) Among individuals aged 65 and over, those who received the medication management service showed a 50% reduction in emergency room visits one month after service provision and a 21% reduction in rehospitalization 3 months after service provision, compared to non-recipients**

Observation Period	whole		65 years of age or older	
	OR	p-value	OR	p-value
1 month (Emergency room visits)	**0.53**	**0.057**	**0.50**	**0.049**
3 months (Risk of rehospitalization)	**0.82**	**0.079**	**0.79**	**0.040**

* 'Research on Institutionalization Plans for the Polypharmacy Management Program'
(2022, Professor Kim Jeong-ha, Chung-Ang University)

2025 제22차 국제연수과정
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Thank You

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