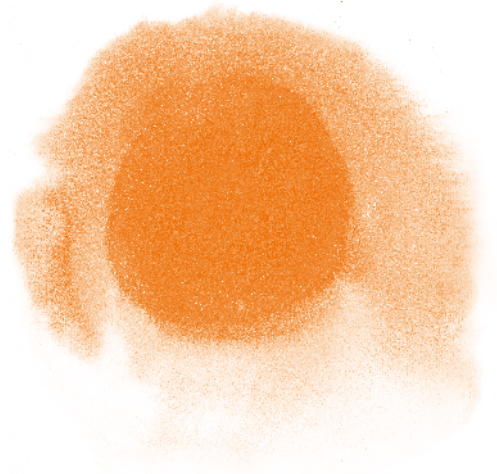


NECA

2009 / AUGUST / VOL. 01



**EVIDENCE &
VALUE**



Contents

N E C A 2 0 0 9 A U G U S T

Messages from the President

- 03 ▶ Dae-Seog Heo MD PhD President of National Evidence-based Healthcare Collaborating Agency, Seoul, Republic of Korea (South Korea)

Congratulations

on the inaugural Publication

- 04 ▶ Jae-Hee Jeon Minister for Health, Welfare and Family Affairs
- 05 ▶ Jae-Chul Shim A member of the National Assembly, Welfare and Family Affairs Committee
- 06 ▶ Sook-Mee Son Member of National Assembly Member of the Health, Welfare and Family Affairs Committee
- 07 ▶ Hyun-Hee Jeon Member of the National Assembly, Welfare and Family Affairs Committee
- 08 ▶ Jai-Seong Song President of the Health Insurance Review & Assessment Service
- 09 ▶ Seong-Deok Kim President of the Korean Academy of Medical Sciences
- 10 ▶ Jean Slutsky Director, Center for Outcomes and Evidence AHRQ(Agency for Healthcare Research and Quality)
- 11 ▶ Jill M. Sanders President & CEO, CADTH(Canadian Agency for Drugs and Technologies in Health)
- 12 ▶ Andrew Dillon CBE, Chief Executive NICE(National Institute for Health and Clinical Excellence), UK
- 13 ▶ Organization and major research interests of NECA
- 17 ▶ The 1st research topics solicitation
- 21 ▶ Societal consensus formation on stopping meaningless life-sustaining treatments
- 23 ▶ Comparative Effectiveness Research and Evidence-based Healthcare Policy
- 24 ▶ NECA Opening Ceremony and etc.
- 25 ▶ ❶ International Evidence-based Healthcare Workshop
- 26 ▶ ❷ Indirect and Mixed Treatment Comparison Methods for Economic Decision Modeling

Introducing NECA

Research Activities

Court of the Eastern Palace

Overseas Trend

NECA News

Workshop Information

Publishing Company National Evidence-based Healthcare Collaborating Agency [Changgyeong Building 8th and 9th and 11th floors, 28-7 Wonnam-dong, Jongno-gu, Seoul / 82-2-2174-2700] **Publisher & Editor-in-Chief** Dae-Seok Heo **Publication Date** August 20, 2009 (Vol. 1) **Edit Planning** National Evidence-based Healthcare Collaborating Agency **Executive Editor** Sang-Moo Lee, Soo-Young Kim, Seung-Soo Sheen, Byung-Joo Park, Sang-Il Lee **Staff** Ha-Young Choi, Mi-Hee Nam, Seok-Won Hong, Ji-Ae Park **Design** NeoMedia (82-2-512-1666) **Printing Company** AnyPrinting All contents including texts and pictures that are in this book are copyrighted.

It is an honor and privilege for me to welcome all of you to the <Evidence and Value> newsletter. In satisfying the desire of contemporary human beings to live longer and healthier, new information for the healthcare pours through media continuously. But, all information is not reliable or helpful for the public health.

As if water go through a purifying process to be drinking water, an accurate information with the evidence should be delivered to the practitioners and the people after a medical knowledge and health information are verified objectively. In this way, unnecessary waste of resources of the society and nation as well as individuals can be reduced and an efficient healthcare system can be established.

Moreover, as information for healthcare applies differently based on social factors like cultural and economical background of individuals, the choice of medical resources differ by individual's value although an opportunity to use the same medical resources is given. And, when evaluating safety and efficacy of new drugs or medical technology, the social value including quality of life or economic assessment also becomes an important standard for judgment.

Major part of methods for medical reform of the Obama's government in the U.S. is also grounded on this evidence-based healthcare policy. The U.S. government invests a budget of \$1.1 billion into the Comparative Effectiveness Research, to solve confusion of the medical intervention use and to prevent the waste of expenses due to the lack of evidence for the best intervention where there is variety of interventions for each disease.

The National Evidence-based Healthcare Collaborating Agency, keeping up with such a global trend, intend to provide much better medical service to the people by intensifying the quality of medicine through transforming an administration-centered healthcare system into the evidence-based healthcare system in Korea.

To construct a national healthcare system which the medical professionals, the people, and the government grow together, it is essential to continuously maintain a partnership with medical professional through joint research.

I hope that <Evidence and Value> will play a role to bridge between the National Evidence-based Healthcare Collaborating Agency and the parties concerned for healthcare.



August 2009 Dae-Seog Heo

Congratulating Messages for the first publication

Congratulation



Although we currently live in the flood for every kind of medical information, it is hard for us to provide an optimal medical service to the people as we do not have enough materials to judge the variety of medical information objectively . Also we go through troubles from the lack of social agreement between the medical publicity and the industrial value of the medical service. At the end of March this year, in the place to notify the new start of the NECA (National Evidence-based Healthcare Collaborating Agency), I told my wish as the Minister for Health, Welfare and Family Affairs to NECA to develop an evidence-based healthcare in Korea and to become an agency which the world would like to benchmark. To improve the quality and build the credibility for the medical service, the NECA needs to put effort to provide a scientific and objective evidence through a collaboration with other institutes related with healthcare filed to eradicate inefficient factors for wasting medical resources.

I expect NECA to provide people with information for the medical goods and technology with obvious evidence and guarantee medical option of the people. Also I expect NECA to provide rational criteria for judgment to the medical professionals, which may help them provide better medical treatment to the people.

Moreover, I expect NECA to provide evidence of the cost-effectiveness analysis to enable the decision making in insurance payment based on scientific evidence. In this way, NECA is expected to contribute to the improvement in a financial soundness for health insurance.

The Minister for Health, Welfare and Family Affairs will go along with the way to upscale people's quality of life based on the evidence-based medicine. I wish that endeavors of the NECA to communicate with the people will be delivered to many persons and I deeply thank personnel concerned to make efforts to publish <Evidence and Value>.



Jae-Hee Jeon
Minister for Health, Welfare and Family Affairs



Hello !

This is a member of the National Assembly, Jae-Cheol Shim, the chairperson of the Special Committee on Budget & Accounts.

First of all, sincerely congratulating on publishing the <Evidence and Value>newsletter, I give a greeting message to appreciatedthe Chief, Dae-Seok Heo and all the other persons concerned of the NECA (National Evidence-based Healthcare Collaborating Agency).

The medical industry is a field which the added value is enormous and keeps the public health, and at the same time is the new growth engine to make a motive power for our economy. I am very glad to see this kind of newsletter in an appropriate moment which will be a place for sharing information to provide diverse information and contents in the healthcare world, which is very meaningful. I think that our nation will be able to leap into the advanced country in the healthcare field through the <Evidence and Value> newsletter.

I also do my best to positively reflect valuable voices from every field through <Evidence and Value> into relating policies as a member of Health, Welfare and Family Affairs Committee.

I wish that, the NECA, through this publication for <Evidence and Value>, becomes a basis for making rapid progress in the Korean healthcare field. To all reader and all staffs of the NECA, I extend my very best wishes.



Jae-Chul Shim

A member of the National Assembly,
Welfare and Family Affairs Committee



I would like to express my sincere congratulations on the launch of NECA's newsletter, <Evidence and Value>. Korean medical industry equips global competitiveness and took a first step forward into the world market last May. Soon, more foreigners will visit Korea with an aim for the medical service.

In spite of our advanced healthcare technology, evaluation of the healthcare technology and related evidence development are insufficient. It is urgent to provide global standards for healthcare resources. Therefore, it is an important mission of NECA to analyze economic efficiency of the healthcare resources and present scientific evidence of healthcare technology for the promotion of healthcare and public health.

From this point of view, I think the launch of <Evidence and Value> is worth very enormous meaning and welcoming. Even for a newsletter to take a first step forward now, I wish it will carry all footprints of NECA and sometimes tell hard truths that only old friends can. Also, I pray it will become a space to provide information for public need and communicate with the people nearer than now.

I congratulate the launch of <Evidence and Value> once again, and I wish that it will go along with NECA continuously from today. Also, I wish full of smile and happiness to your family. Thank you very much.



Sook-Mee Son

Member of National Assembly Member of the Health,
Welfare and Family Affairs Committee

Congratulation



I would like to express my sincere congratulations on the launch of the newsletter, <Evidence and Value> of NECA that contributes to the quality improvement of public health. Also, I want to express my gratitude for the pains of those who are concerned including Dr. Heo Dae Seog, the CEO & president of NECA.

The NECA, since it was founded last March, has worked hard for the development of healthcare industry. Especially, it made active efforts through continual research to verify effectiveness of controversial healthcare technologies such as the placenta injection and glucosamine, and successive forums to induce a social agreement for the ‘withdrawal of life-sustaining treatment.’

It is said that an average increasing rate of ‘the ratio of medical expense per person to GDP’ in Korea was twice as higher as that of the OECD for 8 years from 1999 in Korea. But, owing to lack of objective evaluating materials, people have gone through inconvenience for receiving good medical service. I wish NECA will contribute to this matter.

I expect, through <Evidence and Value>, the results of previous research and coming useful information will be delivered to public on time. Then, more people could get optimal medical services efficiently. Once again, I give congratulations and appreciation for the launch of <Evidence and Value>. Also, I wish that, through the achievement and realization of 2013 vision, NECA will present an international standard in the healthcare sector and it will continue its bigger success and prosperity to be reborn as a ‘global institute for evaluating health technology’.

Thank you.



Hyun-Hee Jeon
Member of the National Assembly,
Welfare and Family Affairs Committee



Congratulation on the launch of the newsletter, <Evidence and Value> of the NECA.

I earnestly wish this newsletter to grow as a communicating place where social agenda in healthcare sector and its direction can be set.

At present, the current healthcare status shows a positive change in the life expectancy of people, thanks to the advances in contemporary medicine, and rapidly increasing demand for medicine due to the growing number of chronic disease. As the society flourishes, people's expectation level on the medicine grows higher; more accurate diagnosis and safe, efficient and cheap medical treatment are demanded.

To meet the social demand on improved quality of healthcare, recently new diagnostic methods and treatments are actively developed, and applications for the National Health Insurance coverage increase rapidly. Also, the necessity for health technology assessment, which evaluates scientific evidences of commonly used technologies is growing and the need to establish a medical decision making system which bases on objective and scientific evidences in healthcare sector gets higher.

I expect the NECA will play a splendid role in making Korean healthcare policy and implementing in the future by creating optimal evidences for a rational decision making to promote the public health and to present new direction for development of healthcare.



Jai-Seong Song
President of the Health Insurance Review & Assessment Service

Congratulation



I sincerely congratulate the first issue of the NECA's newsletter <Evidence and Value>

The NECA(National Evidence-based Healthcare Collaborating Agency), which was founded to secure scientific evidences for an efficient use of healthcare resources, is starting active research from initiation.

The issue of finding evidences for medical activities was an old task of the Korean medical society. Now a big step forward for the Korea medical system is made since NECA will deal with the aforementioned issue.

I believe this newsletter will settle as a valuable Public Relations media to disseminate activities and research of the NECA in detail. The future activities of the NECA will be an opportunity to provide valuable information not only the government and medical professionals but also to the general public, who are the consumers of healthcare and need to make right decisions.

I expect the medical experts from the KAMS(Korean Academy of Medical Sciences) and its member academics will interchange the up-to-date information and new knowledge through the newsletter of the NECA and keep a tighter relationship with the medical society, and the <Evidence and Value> will be utilized as communicating place to deliberate and debate together in making Korean healthcare system moving forward.



Seong-Deok Kim
President of the Korean Academy of Medical Sciences



Managing uncertainty about the effectiveness of different clinical interventions and their application in different settings and patients has driven the interest in making evidence generation and evidence-based medicine an important part of vital health care systems. Developing evidence for better informing medical decision making is becoming an important aspect of clinical care throughout the world.

Our investments in biomedical research have resulted in many new diagnostic and therapeutic options. Along with realizing new potentials and opportunities, we've learned that new options bring new challenges both in how we assess the safety and effectiveness of different therapeutic choices and who would benefit most from their use. One of the first of these challenges is how to evaluate these innovations and determine which represent added value, which offer minimal enhancements to current choices, which fail to reach their potential, and which work for some patients and not for others. The need to develop better evidence about the benefits and risks of alternative choices is imperative.

Understanding what works best in what circumstance and for which patient requires an investment in understanding not only the context in which care is delivered but the evidence that supports the different approaches. It is necessary to understand the information needs of clinicians and what concerns and questions patients may have about their treatment choices. Not an easy process but a very important one. Five years ago, the U.S. Agency for Healthcare Quality and Research (AHRQ) established the Effective Health Care Program (EHC). The Effective Health Care program is supported by systematic reviews of different treatment interventions, new research studies that answer gaps in the research, and a program that translates findings for use by clinicians, patients, and policy makers.

While still a new program, the interest in the findings has been enormous both in the U.S. and beyond. There is no doubt that we are entering an era where we have the opportunity to know much more about different treatment options, benefits and harms, and how to reduce variability than the generation before us. This is rapidly becoming a worldwide phenomenon and I wish you well as you embark on this important journey.



Jean Slutsky
Director, Center for Outcomes and Evidence
AHRQ (Agency for Healthcare Research and Quality)

Congratulation



I am writing to offer my congratulations to everyone at the new National Evidence-based Healthcare Collaborating Agency(NECA). I have absolutely no doubt that your agency will quickly establish itself as a valued contributor to Korea's health care system because your work, which links evidence to policy, is essential to effective Health System Management.

Increasing complexity, costs and rate of technological change are fuelling demand for improved Health System Management. New technologies(such as drugs, devices, and surgical techniques) provide major opportunities to improve health services and outcomes. However, the steady stream of new diagnostic and treatment options also increases the challenge of identifying and strategically investing in the technologies that will deliver the best patient outcomes and value for money.

Decision makers rely on organizations like NECA to provide impartial evidence-based information which synthesizes relevant literature and makes complex research accessible. Your work, like the work of similar agencies around the world, provides a basis for informed decisions about the purchase and use of health technologies.

In Canada, our stakeholders have told us that without the evidence-based information provided by the Canadian Agency for Drugs and Technologies in Health(CADTH), costs would be higher and benefits to patients reduced because either no decision or uninformed decisions on health technologies would result.

As you frow, I would encourage you to be responsive to the changing needs of decision makers. Our experience has taught us that as the demand for evidence-based advice grows, decision makers need and expect more that scientific conclusions. They need policy analysis, advice, recommendations and tools and supports to support evidence use.

And they will turn to NECA to address these needs.

I know you are up to the challenge.



CADTH Jill M. Sanders
President & CEO,
CADTH(Canadian Agency for Drugs and Technologies in Health)

Congratulation



Health care systems across the world share the problem of inappropriate variation in the quality of care. The problem stems from the combination of an explosion in medical knowledge and a mismatch between demands and resources for health care. The goal, however, is much the same wherever evidence is used to inform clinical practice decisions: finding the optimal use of health technologies and other forms of practice with the aim of delivering good quality care equitably.

Since 1999, the National Institute for Health and Clinical Excellence has been helping the National Health Service achieve this aim by providing independent and objective advice to patients and health professionals. NICE has three clinical programmes (appraisal of individual health technologies; development of disease and condition based clinical guidelines and the assessment of the safety and efficacy of interventional procedures) and a public health programme, providing advice on disease prevention and the promotion of good health. We also produce clinical standards for the NHS, largely derived from our clinical guidelines.

Getting value for money is a challenge for health services, regardless of how they are funded and it needs to be addressed honestly and explicitly. Of course, taking account of the cost effectiveness of treatments is sometimes controversial because it touches on that very human contradiction between the desire we all have to get what we need from our health provider and the equally powerful expectation that our insurer uses our money as effectively as possible.

Assessments of clinical and cost effectiveness necessarily involves making value judgements, which are both scientific (is the data robust and generalisable) and social (how important is this benefit to patients). The Institute's guidance is not an instruction to practice and therefore its success depends heavily on the cooperation of individuals and organisations, inside and beyond the NHS.



Andrew Dillon

CBE, Chief Executive NICE (National Institute for Health and Clinical Excellence), UK

The global think tank institute in the Healthcare

National Evidence-based Healthcare Collaborating Agency **NECA**

The NECA is an abbreviated name of the National Evidence-based Healthcare Collaborating Agency, and has been established on Dec 23, 2008 to analyze clinical effect and economical efficiency of the medical drugs, medical equipments and medical technologies and provide people with their scientific evidence, and in the end contribute to the improvement for the quality of the public health. The NECA made an opening ceremony on Mar 25, 2009.

Seok-Won Hong Principle Researcher, Research Planning Team

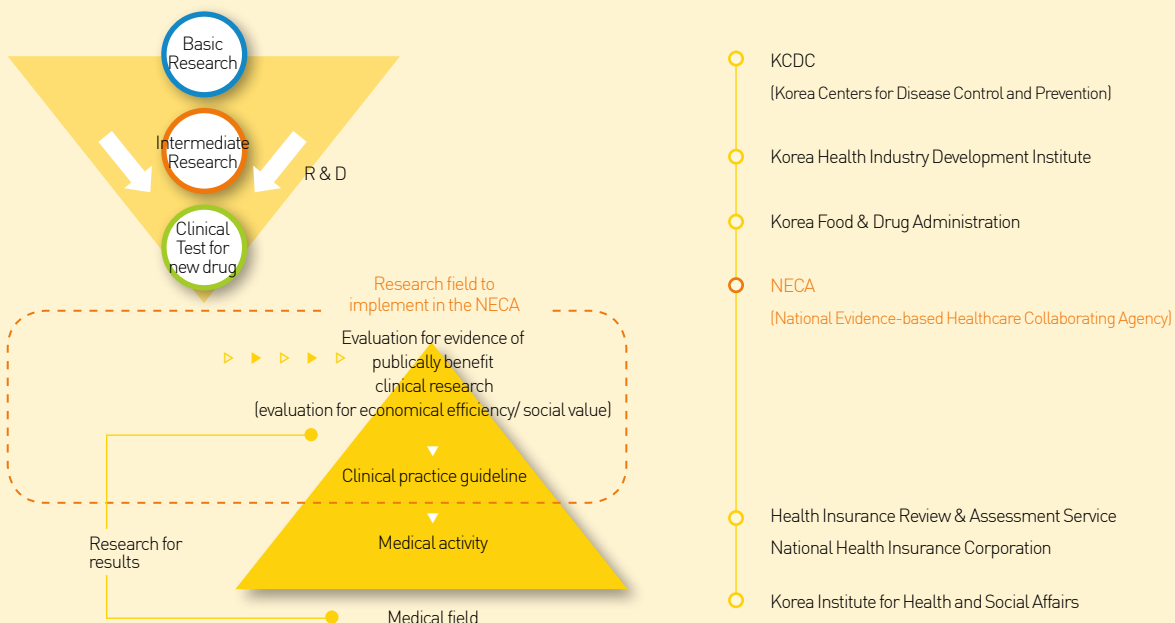
◎ The NECA declares its vision to be an 'institute to create global healthcare evidence' which we systematically analyze the healthcare technology which is a base of medical activity, create evidence demanded from the nation, and present the healthcare evidence-based global standard. In addition, the NECA has enthusiastically conducted research under the mission 'to present an evidence for reasonable decision making in the healthcare' with an aim to construct a system to present a direction for sustainable healthcare development, present an optimal evidence through comparative evaluation for the medical technology and evaluate an international-class medical technology. In Feb 2009, through the first demand investigation for research subjects, the NECA was suggested them in diverse paths and induce the social agenda in the healthcare openly and clearly. In selecting the subjects for research, an inducement of priority is a necessary process in a level such as reasonable use for limited resources of research, implementation for research required for the society, expansion for influence of research result and security for transparency. We excavate troubles in the field which the people, medical

• Mid and long term strategy of the NECA

	Vision					
	Institute to create global healthcare evidence					
	Mission					
	We present an evidence for reasonable decision-making in the healthcare					
Strategic Aim →	Inducement for social agenda in the healthcare and presentation of its policy	Inducement for optimal medical technology by main disease	Diffusion for result of research to meet diverse demands	Globalization for evaluating medical technology	Construction for advanced administrative system	Support for evidence-based national healthcare business policy
Core Tasks →	<ol style="list-style-type: none"> 1. Inducement for research subject according to social demand 2. Presentation of customizing policy direction through grasping real condition of the healthcare 3. Analysis for social influence of result for research and feedback 	<ol style="list-style-type: none"> 1. Systematic consideration for documents and analysis for economical efficiency for evaluating medical technology 2. Practical clinic trial for comparing effects of medical technologies 3. Analysis on the effect of practical medical technology on the field 4. Providing the evidence for the rational acceptance of a new medical technology 	<ol style="list-style-type: none"> 1. Provision for evidence-based customizing healthcare information 2. Development for clinical treatment guideline by social agreement 	<ol style="list-style-type: none"> 1. Construction of system for evaluating international-level Korean medical technology 2. Unified control for evident materials of healthcare 3. Activation for international joint research 	<ol style="list-style-type: none"> 1. Establishment for stable operating system 2. Construction for efficient research-supporting system 	<ol style="list-style-type: none"> 1. Analysis for evidence-based result of national healthcare business 2. Creation of evidence for decision-making of national healthcare business 3. Presentation for direction of evidence-based national healthcare business

provider and policy-maker of healthcare really go through, induce research subjects of high priority through open and clear deliberation and implement the tasks for research. Through this process for collecting subjects publicly, at present on August 2009, total 27 tasks for research have been progressed in order to implement a basic research to achieve an inborn aim of the NECA and a collaborating research with other institutes. Main field for researches of the NECA includes evidence-based evaluation of clinical research through systematic reviews and economic assessment, outcomes research, the development of clinical practice guideline, and pragmatic clinical trials.

• Range for research and Role of the NECA



Range for research and Role of the NECA

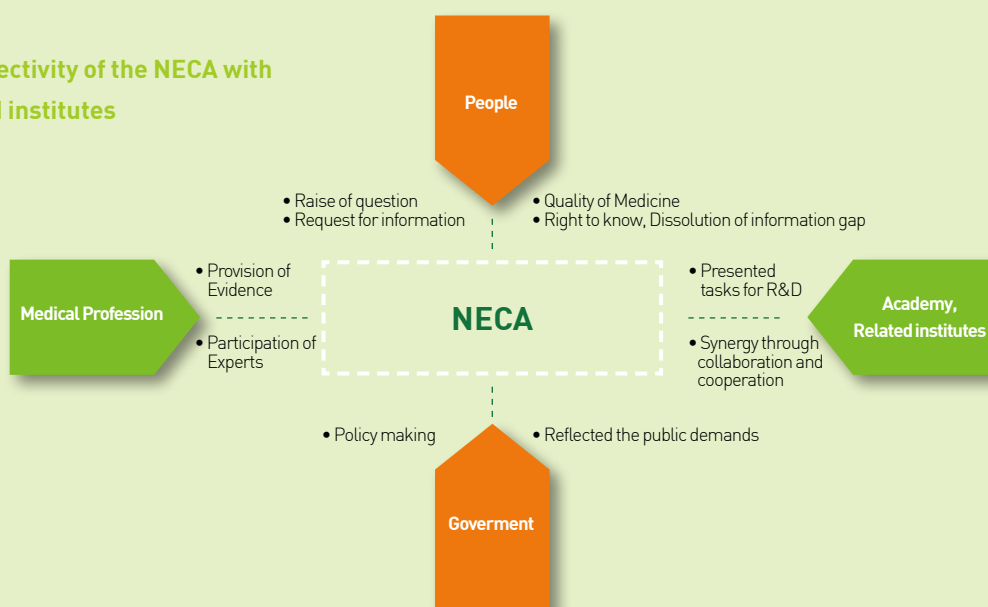
The NECA is now composed of excellent experts over the doctoral level in the healthcare with President, Dae Seok Heo first in order and other technical experts made of good professional manpower to play a leader in each field of the healthcare. This is composed of excellent talented persons to compare favorably with relating institutes of many advanced countries all over the world and in the future it is expected that they will play a role for the think tank to make a motive power in the healthcare in Korea and in the world. The structure of research largely consists of two offices for the healthcare analysis office and the clinical results analysis office. The healthcare analysis office is divided into three teams of an economical efficiency team, a medical technology analysis team and an expansion for research results team. The economical efficiency analysis team implements collection and analysis of basic materials for economical efficiency analysis to the medical drugs, medical equipments and medical technologies and cost-effectiveness analysis, the medical technology analysis team evaluates and analyzes safety and clinical effect of the medical drugs, medical equipments and medical technologies and collects systematic evidences and the expansion for research results team carries out researches associated with an expansion of research results through processing, providing and training of information by each object considering the social value, matters regarding clinical results analysis and expansion

of research results and a development for clinical treatment guideline. The clinical results analysis office consists of two teams of a healthcare results analysis team and a practical clinical research team. The healthcare results analysis team implements a research through an improvement for healthcare quality, an analysis about result for healthcare policy, an evaluation for behavior which consumers and suppliers use medicine and demand and value, and an analysis for the pattern of medical activities and clinical results. Besides, the practical clinical research team implements a research through a planning, control and evaluation for the practical clinical research to analyze real effect of the medical drugs, medical equipments and healthcare technologies. The task force for research and planning implements an operation for deliberate council for research and planning and each task force, an investigation for research demand by each year and a matter about an analysis of each real condition, a research and planning, control and evaluation for it. It is expected that the NECA will be able to create synergy of researches through collaborating and cooperative relationship with domestic related institutes in so many parts. These will make practitioners combine the correct information based on the evidences and the experiences and judgments which individual practitioner holds and provide medical services with better quality and the patients or the people select properly by narrowing a gap of information's asymmetry with them.

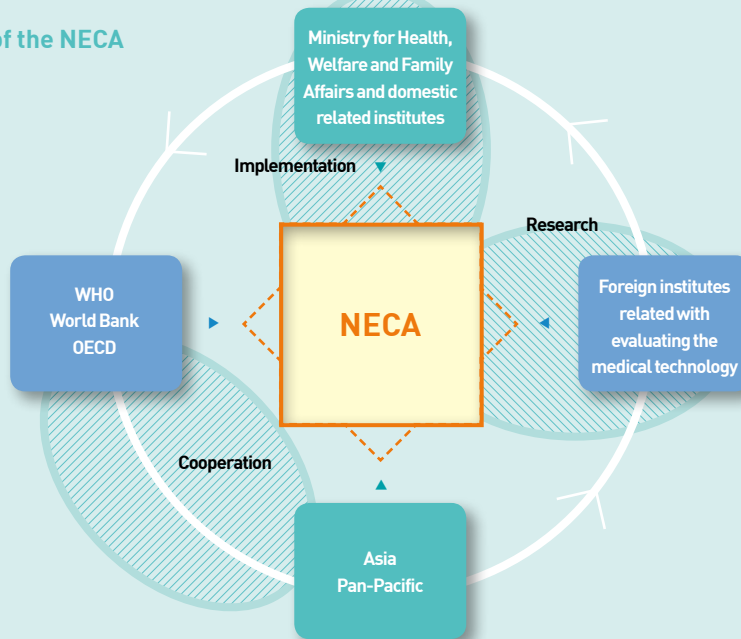
Connectivity of the NECA with related institutes

Making the practitioners provide information based on evidences, they recognize a difference for an activity of individual practitioner from it. To provide patients or people with information about medicine can dissolve an asymmetry of information to occur between practitioners and non-practitioners and through this the patient's option will be expanded. Also as the nation, through consideration, presents an evidence to prevent indiscreet misuse for the expensive medical technology or new drug and induces right selection through cost-effectiveness analysis, it is expected for the effect to reduce even in the public medical costs.

• Connectivity of the NECA with related institutes



• Role and position of the NECA



Role and position of the NECA

As a period for industrializing the medical service comes near, if all the people ultimately do not feel an economic burden and take an enough guarantee for 'essential medical service', it is required for an endeavor not to spoil the medical publicity and simultaneously to develop an industrial side of medical service. Here, the matter of 'essential' and 'selecting' may be decided considering the level for evidence and the social value of medical activity. In other words, it is the moment that a role of the public administration to decide evidences for the medical activities, reflecting the social value, is important. In the future, an appearance of the NECA is to be reborn as an institute for evaluating global healthcare technology to present a global standard in the healthcare. That is, an evaluation in the NECA, through an establishment for system of collaborating research with international institutes for evaluating medical technology, an internationalization of research ability of domestic researchers and operation for training programs, will soon be recognized in the world. Hence, the NECA will be a reliable companion of the experts in the healthcare so that the competitive medical technology developed in Korea can extend to the world. NECA



Soliciting research topics through open survey and establishing a research planning · evaluation · management system

Min-Kyung Hyun Research Planning Team



Background and Necessity

In December 2008, National Evidence-based Healthcare Collaborating Agency was founded based on the Health and Medical Service Technology Promotion Act to conduct economic evaluations and outcomes research on healthcare technology and products of such technology. As a part of the research and development process to achieve the founding goal, it was essential to establish 1) a research topics survey which can solicit socially demanded research topics, 2) a transparent and open review process to extract priority topics, 3) a research conducting system which can optimize research on those topics, and 4) a system enables conducting fundamental and timely research projects through this kind of bottom-up survey.

Process

① Establishing a research planning · evaluation · management system

Research activities of the NECA were classified as in Table 1 to include various types of research, and also customized review processes were prepared to reflect the characteristics of each type. Table 2 shows the committees of outside experts who were recommended by the professional organizations. These committees prioritize the solicited research topics and are given rights to evaluate each project.

[Table 1] Research activities of NECA

Classification	Definition
Solicited Topic Research (NA)	Research from the topic solicitation process and prioritized by the outside review committees.
Basic Research (NB)	Research essential to achieve founding goals of the NECA including research on methodologies for comparative evaluation.
Collaborative Research (NC)	Collaborative research with one or more domestic / international public organizations sharing expenses, human resource and facilities. Also includes research commissioned by the government bodies or public organizations to assist government policy making.
Extramural Research (NS)	Research 100% financially supported by the outside organizations such as the government bodies, public organizations, private organizations, and so on.



Table 2] Organization of NECA

Expert committee by disease subjects	1 st Division	Cardiology, internal medicine, nephrology	13 experts
	2 nd Division	Cancer	11 experts
	3 rd Division	Infection, pulmonology, rheumatology, allergy	14 experts
	4 th Division	Gastroenterology	9 experts
	5 th Division	Obstetrics and gynecology, pediatrics	7 experts
	6 th Division	Brain, spine, mental disease	14 experts
	7 th Division	Ophthalmology-otorhinolaryngology, nursing	9 experts
	8 th Division	Oriental medicine, dentistry, other medicines	6 experts
Research and development managing committee		Minimum 5 experts (Division chairs or research management experts)	

2 Extracting research subjects from research topic solicitation

NECA completed research topic proposal form by referring the methods of suggesting a topic on the homepages of similar organizations abroad, such as the NICE (National Institute for Health and Clinical Excellence) in U.K. and the CADTH (Canadian Agency for Drugs and Technologies in Health) in Canada. After testing on first hand including completion of sample forms and direct input on the NECA homepage, proposals on research topics were accepted through the NECA homepage, email and fax for a month in February. The submitted topics were first classified into the tracks A, B, C and D (see Table 3), and the topics of Track A were subdivided by disease, then high priority ones were extracted through the first and second round reviews by the committees (see Diagram 1). Table 4 shows the added review materials for each topic, which aimed to help drawing objective decisions from the members of review committees.

Table 3] The first classification of the submitted subjects (Divided by Track)

Track	Definition
A	- A list of eligible research topics for NECA. - Research topics to be reviewed by each disease division.
B	- Research on research methodologies for comparative evaluation.
C	- Research mainly conducted by other organizations and NECA participating/supporting. - Research conducted in collaboration with other public organizations. - Program evaluation research on the government healthcare projects. - Proposals on improving system and developing national policy. - Evaluation on the impact of health promoting intervention. - Research on epidemiology, utility, and cost. - Research on the standards of insurance coverage.
D	Medical technology development (R&D)

Consulting Organizations
National Health Insurance Corporation, Health Insurance Review & Assessment Service, Korea Health Industry Development Institute, Korea Institute for Health and Social Affairs, Korea Center for Disease Control and Prevention, National Cancer Center, and the government

Diagram 1] Discussion process on the accepted research subject



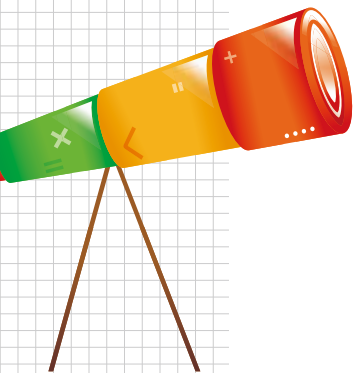


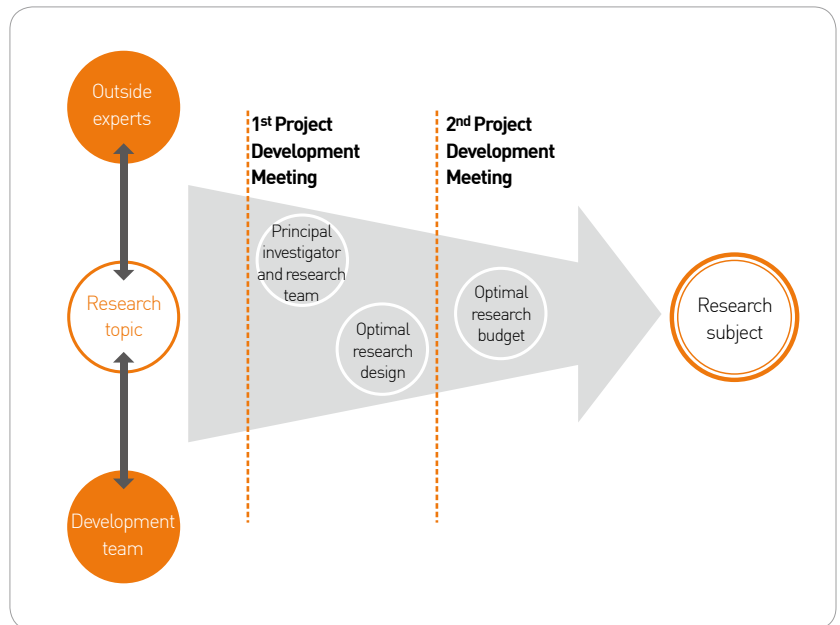
Table 4] Items of discussion materials on each subject

Research Topic Number		
Briefing Note	Research topic	
	Potential output	
	Subject	Patient Intervention
	Study design	
	Disease Division	
	Date of committee meeting	
	Conflict of interest	
Related information	How many qualitative problems in the medical technology?	
	How high is the burden of disease?	
	How high is the social demand?	
	Is it feasible to conduct the research?	
Reference materials		
Suggested Topic Description		

3 Project development of solicited research topics

Among 33 research topics selected from the first review round, 19 topics selected by the second round review priority ranking were developed into projects for this year. As seen in Diagram 2, to deduct the best research output by the most efficient conduct of research, the project development process of each topic includes related literature reviews, pilot analysis, and a number of meetings consisted of an NECA’s development team chair (chief researcher or associate researcher), development team members (a principal researcher and a researcher), and outside experts. During the process, a principal investigator and research team members are finalized along with an optimal research design and budge.

Diagram 2] Project development process of a research topic



Results

The 2009 research projects by research category of the NECA are given in Table 5.

[Table 5] The list of practice tasks of NECA 2009

Task No.	Task title
NA09-001	Disease burden of seasonal influenza and effectiveness of seasonal influenza vaccination in Korea
NA09-002	The survey and cross-sectional analysis on palliative radiotherapy of bone metastasis to facilitate its proper use in cancer patients
NA09-003	Longterm follow-up after endoscopic submucosal dissection for early gastric cancer
NA09-004	Effectiveness of Glucosamine/Chondroitin in Osteoarthritis
NA09-005	Long-term Safety and Stability of refractive surgery in myopia
NA09-006	The effectiveness for pain reduction of injection therapy on chronic low back pain
NA09-007	A Health Technology Assessment for Effectiveness and Safety of Human Placenta Injection
NA09-008	A Study on Factors Influencing Adherence of Antidepressant Therapies and Cost-Effectiveness of Antidepressant Therapies in Korea
NA09-009	The Evidence of Korean Guidelines for the Use of Lipid Lowering Agents: Drug Utilization Review and Outcomes Research
NA09-010	Effectiveness of treatments for Carcinomas of Unknown Primary Site
NA09-011	Aspirin prescription pattern among the diabetes patients for prevention of cardiovascular disease
NA09-012	Health Technology Assessment on Secondary and Tertiary Prevention of Vascular Dementia
NA09-013	Development of Empirical Treatment Guideline in Febrile Neutropenic Patients on the Bases of Korean Data
NA09-014	Systematic Review of Prophylactic Antifungal and Antiviral administration for patient with Organ transplantation
NA09-015	Drug-Eluting Stents versus Bare-Metal Stents in Acute Myocardial Infarction
NA09-016	A Study on Evaluation Standards of Osteoporosis in Korea
NA09-017	An Outcome Research of the Therapeutic Modalities for Post-partum Hemorrhage
NA09-018	Burden of Irritable Bowel Syndrome in Korea
NA09-019	A study on effectiveness of self-care interventions for subclinical and mild depression
NA09-020	Korean Guideline for the Prophylactic Use of White Blood Growth Factors
NB09-001	Evidence-Practice Gaps Report
NB09-002	The Fundamental Planning for pragmatic clinical trials
NB09-003	Research on Methodologies for Evidence Based Healthcare Decision Making Process in Korea A medical and social implication of effect size in decision-making on acceptability of treatment
NB09-004	Information Knowledge Dataware House
NB09-005	Development of Conceptual Framework and Organization of the National Healthcare Quality Indicator
NC09-001	Resue of single-use Medical Devices: Current evidence and regulations
NC09-002	Societal consensus formation regarding the withdrawal of meaningless life-sustaining treatment Comprehensive Aortic Root and Valve Repair Healthcare Renovation system of R&D TF

Concluding Remarks

In the research and development process, there was some part can be further improved since there were insufficient publicity of its role in the starting period of NECA, time limitation in extracting research topics for this year in a short time, and human resource shortage from being in the middle of building up the organization. However, new possibilities were seen by the attempts to establish a research planning · evaluation · management system, through the topic solicitation survey satisfying professionalism, transparency, publicity and timeliness, in the process of selecting and conducting socially demanded research topics for the NECA. In the future, more efforts will be put on establishing an evolved system by assessment on the entire system and continuous supplementation. **NECA**



Donggwoldo (Painting of Eastern Palace): This astonishing 16-piece long bird-eye-view painting of Changdeok-gung (palace) and Changgyeong-gung-(palace) painted by the members of Dohwaseo in the late Joseon dynasty era. Coincidentally, this is the exact view from the National Evidence-based Healthcare Collaborating Agency (NECA), situated in Wonnam-dong.
National treasure no. 249. Collection of Korea University Museum.

▼ Reaching a societal consensus on pending the issue of meaningless life-sustaining treatments through a series of discussions between experts representing various organizations and stakeholders.

Societal consensus formation on stopping meaningless life-sustaining treatments

◎ On July 30th, National Evidence-based Healthcare Collaborating Agency (NECA) announced nine basic principles on 'Stopping meaningless life-sustaining treatments' in collaboration with various experts in the fields of law, religion, medicine, and social organizations. This is the product of three consecutive public discussions which started from July 10th. 'Stopping meaningless life-sustaining treatments' is an issue that is closely tied with social values as well as medical judgment, and therefore, has become the first topic among the many upcoming social consensus formulating scheduled to be presented by NECA (Refer to the discussion program for more details). As the first step, a total of 22 experts from the fields of religion, law, medicine, social organizations, and the media participated to organize a unified opinion on the basic principles. The consensus statement is composed of a total of nine statement classified by four areas: basic principles, medical judgment, self-determination using the advance medical directive, and the hospital ethics committee (See consensus statement). As of July 27th, 12 organizations including Korean Bar Association, Korean Christian Bioethics Association, The Korean Society of Critical Care Medicine, Korean Association of Medical Law, and Korean Society of Nursing Science, have endorsed the consensus statement. The final social consensus statement is scheduled to include the medical judgement consensus statement regarding meaningless life-

Hee-Young Lee Director, Healthcare Assessment Team

sustaining treatments currently led by the Korean Medical Association. In the meantime, surrounding issues that require further discussions, such as the process of speculating the wishes of a patient and the decision as to include persistent vegetative patients as a candidate for stopping meaningless life-sustaining treatments, will be discussed and the results will be included in the final report. Dr Dae-Seog Heo, President of NECA, who chaired the discussions said, "There had been a great confusion with stopping meaningless life-sustaining treatments. The experts in the fields of law, religion, medicine, and social organizations gathered to discuss their opinions and came up with these basic principles they can agree upon. It is my sincere hope that such an effort will become the foundation for the social agreement that will contribute to reducing the number of terminal patients suffering from meaningless life-sustaining treatments." By drawing out the first clear social statement on the much-debated issue of stopping meaningless life-sustaining treatments, NECA is receiving attention from the press after the announcement of the consensus statement. In the press conference marking her 1st year in office, Jae-Hee Jeon, Minister of Health, Welfare and Family Affairs praised NECA and said, "Now that we have a consensus statement that can serve as the basis of the law on stopping meaningless life-sustaining treatments, it has become possible to propose a law after further discussions." **NECA**

➤ Consecutive discussions for formulating a societal consensus on stopping meaningless life-sustaining treatments

Classification	Discussion Topic	Participants
1 st Discussion (7.10 / 16:00)	Unification of nomenclature and terminology	-Presenter : Jong-Myon Bae -Debaters : Kyo-Hun Chin Prof., Myoung-Sei Sohn Prof., Chul-Joong Kim Journalist, Young-Seon Hong Prof., Tae-Heon Noh Judge, Kyeong-Kwon Lee Lawyer
2 nd Discussion (7.17 / 16:00)	Approach to bioethnics & uncertainty · Target disease, and the types and ranges of life-sustaining treatments. · Who should decide the possibility of recovery. · Decision criterion of withdrawing treatments and the issue of uncertainty. · Concern about the slippery slope.	-Presenter : Hee-Young Lee -Debaters : Dong-Il Lee Priest, Chul-Joo Choi Journalist, Sang-Won Lee Prof., Soon-Nam Lee Prof., Ock-Joo Kim Prof., Young-Ho Yun Director
3 rd Discussion (7.24 / 16:00)	The process of coming to a decision · Advance medical directives & surrogates.	-Presenter : Ho-Geol Ryu -Debaters : Hui-Tae Seog Prof., In-Young Lee Prof., Youn-Suck Koh Prof., Joon-Sik Choi Prof., Si-Young Kim Prof., Hye-Ree Ahn Journalist

▶▶ **Nine basic principles**

➤ **Basic Principles**

- ❶ Meaningless life-sustaining treatments, which merely prolong the time of death, can be stopped in terminal patients who have no chance of recovery.
- ❷ Euthanasia and physician-assisted suicide are not permitted.
- ❸ In order for the corresponding policies and procedures to be effective with the least amount of side-effects, it is essential to expand social economic support, such as the reinforcement of social security system and hospice and palliative care.

➤ **Medical Judgment**

- ❶ The state of terminal condition should be diagnosed by the attending physician and two or more physicians with expertise in the corresponding field.

➤ **Regarding self-decision based on the advance medical directive**

- ❶ Physicians should explain the option of palliative care and the advance medical directive to the terminal patient.
- ❷ Basic medical care including nutrition, fluid infusion, and pain relief should be maintained.
- ❸ If a terminal patient refuses cardiopulmonary resuscitation or the use of a respirator, the wishes of the patient should be respected.
- ❹ The terminal patient can express his or her wishes regarding the life-sustaining treatments other than cardiopulmonary resuscitation and the use of a respirator on the advance medical directive. The decision as to whether or not accept the wishes will be decided in accordance with the medical judgment of the medical staff and the value of the patient.

➤ **The hospital ethics committee**

- ❶ As a safety device to minimize the problems resulting from the uncertainty surrounding the medical judgment and value judgment, the role of hospital ethics committee is paramount. Hospitals should provide their hospital ethics committee, which should include experts in the areas of medical ethnics and bio-philosophy unrelated to the organization, with support, supervision, and authority.

▶▶ **Writers**

Youn-Suck Koh (President, The Korean Society of Critical Care Medicine)	Kyeong-Kwon Lee (Medical Law Dept., Seoul National University School of Medicine Bundang Hospital)
Si-Young Kim (Hematology / Medical Oncology, Kyunghee University College of Medicine)	Dong-Ik Lee (Dean, Nicholas Cardinal cheong Graduate School for Life)
Ock-Joo Kim (Medial Ethnics, Seoul National University College of Medicine)	Sang-Won Lee (Prof., Chongshin University Dept. of Christian Education)
Chul-Joong Kim (Journalist, The Chosun Ilbo)	Soon-Nam Lee (Dean, Ewha Womans University College of Medicine)
Tae-Heon Noh (Research Judge, The Supreme Court of Korea)	In-Young Lee (Prof. Hongik University College of Law)
Ho-Geol Ryu (National Evidence-based Healthcare Collaborating Agency)	Hee-Young Lee (National Evidence-based Healthcare Collaborating Agency)
Jong-Myon Bae (Prof. Dept. of Preventive Medicine, Jeju National University School of Medicine / College of Medicine)	Kyo-Hun Chin (Honorary Prof., Dept. of Ethics, Seoul National University)
Hui-Tae Seog (Honorary President, The Korean Society of Law and Medicine)	Joon-Sik Choi (President, Korean Association for Thanatology)
Myoung-Sei Sohn (Prof. Dept. of Medical Law, Yonsei University College of Medicine)	Chul-Joo Choi (Ex-consulting columnist, JoongAng Daily)
Hye-Ree Ahn (Journalist, JoongAng Daily)	Dae-Seog Heo (National Evidence-based Healthcare Collaborating Agency)
Young-Ho Yun (Executive Director, National Cancer Center)	Young-Seon Hong (President, Asia Pacific Hospice Palliative Care)

▶▶ **Organizations that officially endorsed the statement (as of July 27, 2009)**

Korean Bar Association	Korean Society of Nursing Science
Korean Academy of Medical Sciences	Korean Academy of Rehabilitation Medicine
Korean Christian Bioethics Association	The Korean Academy of Clinical Geriatrics
Korean Society for Hospice and Palliative Care	The Korean Urological Association
The Korean Society of Critical Care Medicine	Korean Society of Clinical Oncology
Korean Association of Medical Law	The Korean Society of Nephrology



Comparative Effectiveness Research and Evidence-based Health Policy

The Milbank Quarterly, Vol. 87, No. 2, 2009 (pp. 339-367)

**KALIPSO CHALKIDOU, SEAN TUNIS, RUTH LOPERT, LISE ROCHAIX,
PETER T. SAWICKI, MONA NASSER, and BERTRAND XERRI**

National Institute for Health and Clinical Excellence (UK);

Center for Medical Technology Policy (USA);

Department of Health and Ageing (Australia);

Haute Autorité de Santé (France); Institut für Qualität und

Wirtschaftlichkeit im Gesundheitswesen (Germany)

◉ In the latest issue of 'The Milbank Quarterly', a scientific journal to introduce a health and medicine policy and its related research, a paper to introduce examples of the England, France, Australia and Germany about the comparative effectiveness research (CER) and evidence-based health policy is printed.

The comparative effectiveness research is a relatively new and unique 'American term'. Other countries, to express the same activity substantially, use the terms like the Health Technology Assessment or the Evidence-based Policy Making. According to the definition of the report from the U.S. IOM (Institute of Medicine), the comparative effectiveness research compares one diagnosis or treatment option to one or more others. Primary comparative effectiveness research involves the direct generation of clinical information on the relative merits or outcomes of one intervention in comparison to one or more others, and secondary comparative effectiveness research involves the synthesis of primary studies to allow conclusions to be drawn.

This paper analyzes the NICE, HAS, PBS and IQWiG of 4 countries through 10 common frames and describes; ①stated purpose and objective ②scope of assessment (for example, drug, technologies management strategy, etc) ③topic selection and prioritization process ④type of research evidence used (prospective trial, claim data analysis, systematic reviews and decision analysis etc) ⑤relationship with research infrastructure (links with academic institutions and research groups; responsive research arrangement) ⑥structure and relationship to healthcare system ⑦budget and source of funding ⑧consideration of costs (budget impact analysis, CEA, etc.) ⑨status of guidance (eg., mandatory, advisory) and relationship with coverage and reimbursement decisions ⑩dissemination and implementation/enforcement strategy (eg., audit, educational tools, academic detailing, financial incentive)

The conclusion of this paper points out that the roles of the comparative effectiveness research, according to the healthcare system of each country, have developed differently one another, but relating factors, that is to say, engagement with stakeholders, independence from the

central government and other interesting organizations, adaptability to changeable environment are essential conditions for the successful operation of each organization.

Currently, in the U.S. in the middle of passionately debating institutes for comparative effectiveness research, several institutes to provide information to the healthcare policy and medical treatment through considering evidences have already been established. By various reasons, these institutes have gone through many changes like suspension of their tasks, but this reflects that there are many political obstacles in connecting objective analysis for evidences with decision-making in the field. An important lesson which the implementing institutes in the U.S. and many other countries found out through each experience that fierce debates, negative attitude of the press and rapid changes are indispensable for them. An institute to make an effort to avoid debates and critics may have a high possibility that it cannot fulfill its inborn function, a role to give useful information to the decision-makers.

This paper proposes three factors for the success of the institutes for the Comparative Effectiveness Research like follows: The first factor is a strong political endorsement. Particularly, in an initial stage for establishing an institute, it does so more. The second is that, while, at an initial stage, by inducing stakeholders, it communicates with them through all process, receive a problem to be controversial issue and explains a negative result of decision, it has to give a chance to debate with methods including legal action, appeals and judicial challenge rather than avoiding to face directly one another. The third is that, to receive professional approval, it has to devote evidently to find out the most excellent medical technology.

To come by methodological strictness and to make well-known clinical and non-clinical researchers join there help legalize a role of institutes in many countries. Looking around experiences of the foreign institutes and the recent debate in the U.S. like the above, we expect to induce the long term strategy necessary to develop the evidence-based health policy in Korea. **NECA**

1st Presentation Meeting for Research Topic Suggestions



NECA held a presentation meeting for topic suggestions of research projects in the Lee Gun Hee Hall of the Seoul National University on the 18th of February. NECA planed the meeting to encourage public understanding and interest in the selection of research topics to be implemented, receive topic suggestions in diverse paths, and set priority of social agenda for the healthcare field openly and clearly.

NECA Opening Ceremony



NECA held an opening ceremony prosperously on the 25th of March, as around 200 healthcare relating experts participated in, including Jeon Jae-Hee, the Minister for Health, Welfare and Family Affairs, Shim Jae Cheol, a member of National Assembly, members of Health, Welfare and Family Affairs Committee, and chiefs of other national agencies related to healthcare. On this day, NECA announced mid- and long-term vision and aim to be 'a global organization to provide evidence-based healthcare information' and Ms. Jeon Jae-Hee said "please make efforts to improve evidence-based healthcare in Korea." and "the Ministry for Health, Welfare and Family Affairs will provide

positive support to NECA."

NECA Released Selected 2009 Research Projects



On the 15th of May, NECA released the result of selection of research topics through press conference.

NECA prioritized 26 topics to be undertaken in 2009 among the suggested 388 topics, and initiated research work in order to provide healthcare professionals with evidences regarding clinical impact, safety and economic burden of the health technology. As the selection for research topics also generated media attention and concern among the public, 6 major daily newspapers and 15 technical journals reported the result. For the list of new projects and more information, please visit www.neca.re.kr.

First Step in Construction of a Global Collaborative Research System with HTA Organizations in the US and Canada



From the 11th of June, Dr. Heo Dae Seog, the CEO & president of NECA, and Dr. Lee Sang Moo, the executive director of HTA research division of NECA, visited the AHRQ (Agency for Healthcare Research and Quality), IOM (Institute of Medicine), CMTP (Center for Medical Technology Policy), and CADTH (Canadian Agency for Drugs and Technologies in Health),

to discuss current issues of health technology appraisal (HTA) and research collaboration. NECA, through this visit, made a first step forward to construct a system for global collaborative research.

NECA Held Forums about 'Withdrawal of Life-sustaining Treatment'



NECA have held three continuous forums in order to induce a social agreement about 'withdrawal of life-sustaining treatment' jointly with experts from legal, religious, medical, and social aspects. They have made an agreement to the fundamental principles of nine issues. For the issues to need additional debates, a final agreement will be made through further opinion collection.

Speech about Healthcare Policy Direction



On the 23rd of June, Dr. Park Ha Jeong, the chief of the Office for Healthcare Policy, the Ministry for Health, Welfare and Family Affairs, gave a speech entitled 'the change of healthcare environment and its countermeasure' in NECA. Through this speech, audience recognized the governmental perspective on current situation of Korean healthcare and direction for its improvement, and ruminated on the NECA's aim to ultimately improve the quality for healthcare

International Evidence-based Healthcare Workshop

- National Evidence-based Healthcare Collaborating Agency plans to hold International Evidence-based Healthcare Workshop on the understanding and application of evaluation and diagnostic tests regarding the scientific evidence level of medical treatment. The workshop includes practical training sessions and small group discussions as well as lectures for the actual medical field work.

With the theme of 'Indirect Comparison', several domestic lecturers and Dr. Georgia Salanti will be giving lectures and practice on the meta-analysis, which is a method of selecting the best medical treatment. Also, Dr. Patrick Bossuyt, a world-renowned expert in diagnostic tests, will deliver a lecture and lead a small group discussion under the theme of 'Understanding and Systematic Literature Search on Diagnostic Tests' for two days. [NECA](#)

- **Date and Location** : October 5th-8th, 2009 (Mon.-Thur.) / Grand conference room, 11th floor, NECA
- **Registration fee**(lecture CD & lunch included) : 700,000 won(general) / 500,000won(public organizations and academia)
- **Contact** : Eun-Hee Shin(hshin@neca.re.kr)principal researcher

Time	October 5 th	6 th	7 th	8 th
8:00-9:00	Registration			
9:00-10:30	Special Issues in Systematic Literature Search : Advanced Course · Hee-Young Lee : the director of Healthcare Assessment Team, NECA	Weighing Risk Versus Benefit in Therapeutic Decision Making · Soo-Young Kim : Prof. Department of family medicine, Hallym university medical college	The Architecture of Medical Test Evaluation	Systematic Reviews of Test Accuracy Studies
10:40-12:00	Effect size and Outcome · Seung-Soo Sheen : Prof. Internal Medicine, Ajou University Medical Center	Introduction of Appraisal in Therapeutic Intervention · Sang-Moo Lee : the executive director of HTA research division of NECA		
12:00-13:00	Lunch Time			
13:00-14:30	Meta-analysis : Exploring heterogeneity and meta-regression · Byeong-Ho Nam : the head of Office of Clinical Research Coordination, National Cancer Center	Indirect and mixed treatment Comparison · Dr. Georgia Salanti (University of Ioannina School of Medicine)	Diagnostic Test Accuracy Studies	Tests for Prognosis, Prediction, and Monitoring
14:40-17:00	An introduction of Bayesian method · Jeong-Hoon Ahn : the director of Economic Evaluations, NECA		· Dr. Patrick Bossuyt : University of Amsterdam (Small group discussion)	



Date : 9AM - 5PM, Sat. October 31
Location : Conference room, 11th floor, NECA
Lecturer : Jeong-Hoon Ahn, director of Economic Evaluations
Preparation : Personal laptop computer installed with WinBUGS
freeware (downloadable free of charge from <http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml>)
Registration fee (lunch included) : 200,000 won (general) / 100,000 won (public organizations and academia)
Contact : Jeong-Hoon Ahn (jahn@neca.re.kr), director of Economic Evaluations

Indirect and Mixed Treatment Comparison Methods for Economic Decision Modeling

National Evidence-based Healthcare Collaborating Agency will host a workshop (with practice sessions) on indirect and mixed treatment comparison methods. Tentative topics the followings.

- An Introduction to Indirect Comparison Methods
- An Introduction to Bayesian Methods and WinBUGS Program
- Bayesian Meta Regression : fixed effect vs. random effect
- Mixed treatment comparisons
- Bayesian Evidence Synthesis and Economic Decision Model
- Matching and Indirect Comparison



National Evidence-based Healthcare Collaborating Agency (NECA) provides scientific evidences to the policy makers and the general public, by analyzing economical efficiency of pharmaceuticals, medical devices and health technology ultimately contributing to the enhancement of public health. <Evidence and Value> is a journal of NECA to develop the necessary evidences in healthcare sector for rational decision making and efficient resource utilization.