Executive Summary

Impact assessment of knowledge dissemination activities: Developing user-friendly contents

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□ Background

The knowledge transfer occurs in a two-step process: knowledge creation and dissemination. Health technology assessment (HTA) research products of the National Evidence-based Healthcare Collaborating Agency (NECA) are converted into information that is utilized by customers. In order to provide information to its target users in an effective manner, the NECA has established a platform for knowledge dissemination, and is currently sharing information through publications, online and offline distribution, and educational projects.

Despite creation of various forms of HTA-related information and attempts at dissemination, NECA still has a long way to go in terms of providing content that the lay public can easily understand and utilize. Therefore, a thorough evaluation of the current state of knowledge dissemination efforts is needed along with the production of knowledge based on notable case studies that should be tailored to the lay public.

□ Objective

The objective of this study was to conduct an evaluation of knowledge dissemination activities in order to customize strategies for knowledge dissemination. Through such work, this study ultimately aims to improve efficient dissemination of HTA products to the lay public, publicize the

agency's values, and make better use of proposed policies on HTA results.

☐ Methods

I. Impact assessment of knowledge dissemination activities

The survey result of consumer satisfaction on HTA-related contents was analyzed. The customer utilization of the social media (i.e. blog, facebook) contents were investigated, as well.

II. Pilot project involving university students

From March to July 2016, a project was carried out with the help of Sogang University undergraduate students majoring in communications. As a pilot, students made promotional materials of HTA products from NECA for easier comprehension by the lay public.

III. User-friendly content development

Knowledge transfer team at NECA produced promotional materials suitable for online posting to help the lay public better comprehend concept of evidence-based healthcare and its methodologies as well as to disseminate HTA products of NECA.

□ Results

I. Impact assessment of knowledge dissemination activities

The result of customer satisfaction survey showed that customers' need of HTA information that can be more easily utilized and understood.

As a result of social media utilization research, decreasing trend was found in utilization of NECA's HTA products that are provided through search engine, NAVER in 2016. Monthly views of the agency's blog and its contents were drastically increased after employing the agency's facebook page to promote the blog contents.

II. Pilot project involving university students

Two HTA products of the agency were selected for the pilot project because of those are well reflected on real world policies: "The clinical effectiveness and economic evaluation of bariatric surgery for severe obesity" and "An economic evaluation of human papillomavirus (HPV) vaccine." During the spring semester of 2016, university students who participated in the pilot project were assigned to promote NECA's HTA results by creating social media posts. The students were divided into a total of 5 teams and each team produced promotional materials for each of the two HTA reports.

In early June of 2016, the results of the pilot project were presented at NECA. Senior research fellows and research teams who participated in the selected studies carried out a quantitative assessment according to criteria determined beforehand. Afterward, NECA employees completed an online evaluation regarding their preferences. Based on the assessment results, the best projects were selected and awarded.

III. User-friendly content development

The themes for the promotional materials were divided into evidence-based healthcare methodologies and individual HTA products and then produced into visual news stories and videos.

Evidence-based healthcare (EBH) content was developed in reference to the curriculum from an the evidence-based healthcare training program held at the NECA in 2016. The materials were categorized into content that introduced the concepts of evidence-based healthcare and explained individual methodologies. A total of 6 themes were produced: 1) introduction of evidence-based healthcare, 2) introduction of systematic reviews, 3) the systematic review process, 4) economic analysis, 5) comparative effectiveness research, and 6) NECA resonance: round table conference. A short 3-minute video was produced for the introduction of evidence-based healthcare and visual news stories in the form of web comics were produced for the other themes.

Based on healthcare study results, the content was composed of the following: 1) A information booklet for patients that was published as a result of the 2014 roundtable conference and has since been steadily used, called "A Comprehensive Guide on Stem Cell Treatment," 2) "The clinical effectiveness and economic evaluation of bariatric surgery for severe obesity" and "An economic evaluation of human papillomavirus (HPV) vaccine," which were HTA results with high rates of policy reflection out of the existing researches of the institute. Moreover, a 2015 report, "An economic outcome analysis of drug therapy and surgical treatment for medically intractable epilepsy," was also included so that one of the latest research projects could be disseminated. Because the stem cell medicine materials were readily organized into a booklet, a video was produced so that the public could access the information more easily. Visual news stories in the form of web comics were made for the other research themes.

Content production was carried out in 3 stages—storyboard construction, creation of a scenario, and production of images and videos. The storyboard was constructed based on proposals made by the knowledge transfer team on the content, flow, and scene structure. After the storyboard was passed onto a design agency, a scenario with scenes that matched the storyline was created by the agency. The knowledge transfer team then edited the scenario and the agency produced images and videos based on the final edit.

Conclusions

The pilot project carried out in this study revealed that a gap existed between the knowledge provided by NECA and the knowledge received by the public. Moreover, because the university students who participated in the pilot project were representative of the lay public, their suggestions helped shape the direction of developing appropriate content. During the process of developing user-friendly content, this study aimed to expand the lay public's understanding of health technology assessment with the introduction of

methodologies and dissemination of research. When introducing methodologies, this study aimed to introduce not only the terms frequently used in HTA researches, but also the fundamental role and identity of the NECA as a HTA agency. Finally, relatively recent studies that possess distributive power and that would appeal to the public were selected for dissemination.

Dissemination of HTA products was mainly done through a roundtable conference or the clinical guideline development so far, and developing information for lay public is a relatively new area of knowledge dissemination activities of NECA. However, there were limitations in disseminating early stage HTA studies. To select studies that possess both timeliness and distributive power, consideration of dissemination methods should begin during the research planning stage, and if possible, concrete discussions on dissemination strategies should take place throughout the research process.

For future development of user-friendly content, HTA products must be processed into forms that are suitable for today's mobile communication environment, so that the public can easily access and utilize the information. In addition, specific plans should be devised for impact assessment for HTA products and turning those results into strategies for improvement. Finally, plain language summary should be introduced, so that the public can easily understand the professional and technical information presented.

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Key words

health technology assessment, impact assessment, knowledge dissemination, user-friendly information, online content