J Korean Med Sci. 2026 Jan 26;41(4):e38
https://doi.org/10.3346/jkms.2026.41.e38
eISSN 1598-6357·pISSN 1011-8934

JKMS

Special Article

Medicine General & Health Policy

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Toward the Implementation of Shared Decision-Making in Korean Clinical Practice: Study Protocol for a Foundational Research Project

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OPEN ACCESS

Received: May 14, 2025
Accepted: Sep 16, 2025
Published online: Jan 7, 2026

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ABSTRACT

Shared decision-making (SDM) is an essential component of patient-centered care, yet its implementation in South Korea remains limited due to a persistent physician-centered clinical culture. This project, supported by the Ministry of Health and Welfare, aims to establish a foundation for nationwide SDM implementation by developing a culturally adapted Korean SDM model and creating a framework to support its institutionalization and widespread clinical adoption. This four-year project consists of five interlinked work packages (WPs) organized into two phases, each lasting two years. Using a multi-method approach—comprising nationwide surveys, systematic literature reviews, and psychometric validation studies—we will assess the current landscape (WP1) and develop standardized SDM evaluation tools for primary stakeholders (WP2). A clinical research data management system will be designed and implemented to support data integration and monitoring (WP3). The central component involves developing a Korean SDM conceptual model and corresponding implementation strategies (WP4). Economic evaluations and legal analyses will inform the design of a pilot reimbursement framework to support sustainable system-level integration (WP5). The project is expected to produce the following outcomes: i) an analysis of domestic and international SDM trends; ii) validated SDM assessment tools and guidelines tailored for the Korean context; iii) a standardized and interoperable SDM data management system; iv) a culturally grounded Korean SDM model with evidence-based implementation strategies; and v) policy proposals, including a reimbursement model, to facilitate system-wide adoption. This work will provide the theoretical, empirical, and policy basis required to advance SDM within the Korean healthcare system. By addressing cultural characteristics and structural barriers, the resulting SDM model and policy recommendations

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Funding

This research is supported by the grant of the Korean Health Technology Research and Development Project through the Patient-Doctor Shared Decision-Making Research, funded by the Ministry of Health and Welfare, Republic of Korea (Grant No. RS-2023-KH142275).

Disclosure

The authors have no potential conflicts of interest to disclose.

Data Availability Statement

Not applicable.

Author Contributions

Conceptualization: Yoo SH. Funding acquisition: Yoo SH. Methodology: Yoo SH, Woo KS, Choi H, Chang E, Choi K, Park YS, Kim Y, Kim DH, Kim J, Shin DW. Project administration: Kim MJ, Woo KS, Choi H, Chang E, Choi K, Park YS. Supervision: Yoo SH. Visualization: Kim MJ. Writing - original draft: Kim MJ. Writing - review & editing: Kim MJ, Yoo SH.

are expected to support the sustainable institutionalization of SDM and strengthen patient autonomy and the quality of clinical practice in Korea.

Keywords: Decision Making, Shared; Patient-Centered Care; Patient Participation; Professional-Patient Relations; Health Communication; Republic of Korea

INTRODUCTION

In 1982, the United States President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research highlighted the importance of patient involvement and informed consent, and introduced the term "shared decision-making (SDM)" in the context of healthcare.[1] Genuine ethical consent was described as involving the SDM process, which is based on mutual respect and active patient engagement, rather than simply reciting the lists of treatment risks.[2] The introduction of SDM into clinical practice brought greater attention to the importance of patient-centered care and patient autonomy.[3] Multiple models of SDM have since been developed and applied across various diseases and clinical settings, such as deprescribing medications for patients with schizophrenia[4] or patient-centered decision-making in cardiology,[5] leading to improved patient understanding, satisfaction, and adherence, as well as reduced anxiety.[6]

On the other hand, paternalism still dominates medical decision-making in Korea.[7] In a study investigating the perceptions of healthcare professionals (HCPs), specifically those specializing in internal medicine, 59.9% of 309 participants responded that SDM was not being appropriately implemented, and only 12.3% had received education or training on SDM.[8] However, Lee et al.[9] reported that 77.8% of middle-aged patients in hospice palliative care expressed a desire to participate in SDM about their care plan, and a statistically significant relationship between the implementation of SDM and the presence of pain was observed.

In terms of healthcare management, SDM holds significant value for society. In the 1900s, health expenditures were estimated to account for approximately 1% of the country's total gross domestic product. In contrast, recent estimates show that health expenditures account for 16.9% of the gross domestic product in the United States, 11.2% in Japan, 11.1% in Germany, and 11% in France.[10] Factors that contributed to this increase include the growing demand for healthcare services, rising healthcare costs, and substantial investments by both government and private sectors.[11] Conversely, SDM may help reduce medical costs, as informed patients often choose less expensive and more conservative treatment options.[12] Through the use of patient decision aids, SDM helps patients identify unnecessary procedures, thereby reducing variability in care and promoting the efficient use of limited medical resources.[13] For example, patients with inflammatory bowel disease who engaged in SDM reported significantly lower total all-cause medical costs than those who did not ($9,404 vs. $25,071).[14] Similarly, patient-centered care that emphasized SDM can yield notable economic benefits.

In a cross-sectional survey targeting patients, all participants responded that they wanted to engage in medical decision-making concerning themselves.[15] The top priority in health communication regarding patients' preferences was the interaction between patients and doctors, along with other experts.[16] A few successful models that have been implemented in healthcare settings, including "SHARE TO CARE"[17] or "SDM:HOSP,"[18] provide comprehensive

implementation frameworks or strategies. For instance, SHARE TO CARE outlines its strategy as including the training of all physicians, the integration of all nurses, the activation of all patients, and the provision of evidence-based patient decision aids across every department.[19] Although SDM appears promising in enhancing patient autonomy and promoting patient-centered care, its implementation is limited in Korea, where family-centered values tend to exert a stronger influence. High levels of family involvement in personal decision-making substantially influence Korean patients. Therefore, SDM may need to be adapted to incorporate family engagement in order to be effectively implemented within the Korean healthcare system. In essence, leveraging successful cases of SDM introduction and institutionalization from other countries, a culturally modified version of the model may be more appropriate for Korean society and its medical environment.

Similar to these models, commonly used tools have been developed to evaluate whether SDM has been appropriately applied in clinical practice, serving as a basis for reimbursement and policy decisions within healthcare systems.[20,21] For example, the Nine-item SDM Questionnaire is an instrument designed to assess SDM during clinical encounters from the patient's perspective,[22] whereas the Observing Patient Involvement in Decision Making Observer scale was developed to objectively evaluate the extent to which HCPs engage patients in SDM processes.[20] In this context, developing a standardized Korean SDM model and adopting evaluation tools for the Korean healthcare system may help key stakeholders in implementing SDM with greater acceptance, thereby promoting its smooth integration into both clinical practice and broader societal frameworks.

The objectives of this project are i) to investigate domestic and international trends and contexts of SDM, ii) to create standardized evaluation tools and assessment guidelines for SDM, iii) to design a clinical research data management system for SDM, iv) to develop a standardized Korean SDM model and its guidelines, and v) to establish the rationale for the dissemination and institutionalization of SDM (**Fig. 1**). This project aims to clinically implement a Korean SDM model and foster an SDM-friendly environment that supports its widespread adoption.

METHODS

This project is supported by a grant from the Korea Health Industry Development Institute and funded by the Ministry of Health and Welfare of the Republic of Korea (Grant No. RS-2023-KH142275). Accordingly, the outcomes of this project may have a significant impact on patient-centered care in the Korean healthcare system.

Project design

This project is structured around five work packages (WPs), each with its own purpose and methodology, to be carried out over a four-year period aimed at introducing and institutionalizing SDM in Korean clinical practice (**Fig. 1**). The four-year period is divided into two phases, Phases I and II, each lasting for two years.

Project timeline

Phase I will commence with WP1, followed by the initiation of WP2 through WP4 before the end of the Phase. Phase II will begin with the completion of WP1 and the commencement of WP5. Once WP2 and WP3 are completed in the early part of Phase II, the focus will shift to

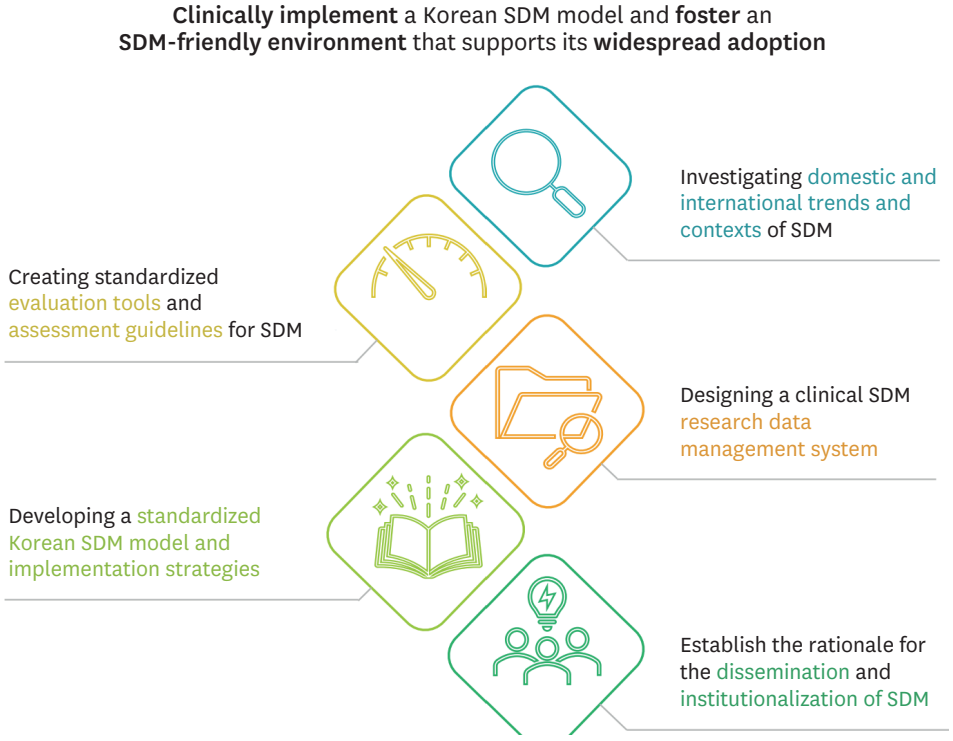

Fig. 1. Project objectives.
SDM = shared decision-making.

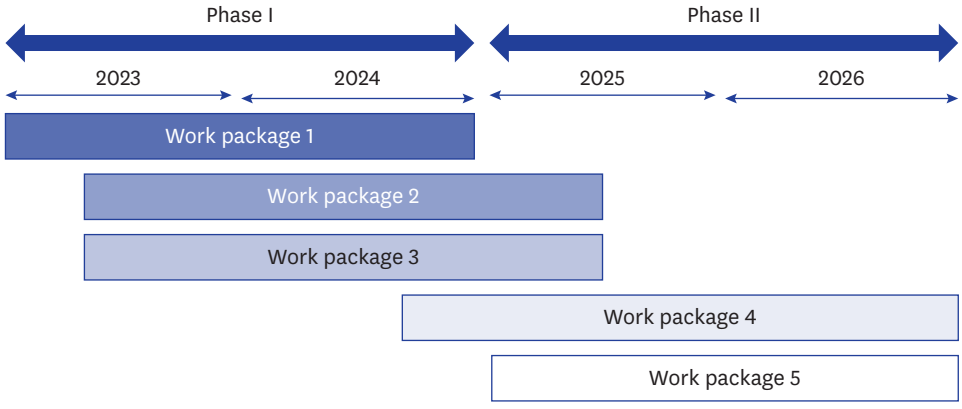

Fig. 2. Project timeline.

WP4 and WP5, with the aim of developing the SDM model and its implementation plan in the Korean healthcare system. The project timeline is shown in **Fig. 2**.

Research strategies

To successfully conduct the WPs, we set up three research strategies. First, we will organize our interdisciplinary research team into four groups and one advisory committee, drawing on the framework of the Korean Academy on Communication in Healthcare. Each group is responsible for i) investigating the environment and perspectives on SDM, ii) developing a Korean SDM model and evaluation tool, iii) preparing for dissemination and institutionalization, and iv) managing and coordinating the overall project. The advisory

https://doi.org/10.3346/jkms.2026.41.e38

Fig. 3. Research team organization.

committee will provide expert support across various fields as needed. Furthermore, we will collaborate closely with empirical research projects during Phases I and II (**Fig. 3**).

Second, we will develop a standardized model and evaluation tool for SDM tailored to Korean cultural and healthcare contexts. Considering that these contextual and cultural factors are imperative, as the successful implementation and diffusion of SDM are highly contingent upon acceptance and understanding by both the medical community and the broader Korean community.[22] Third, we will conduct pragmatic studies to support the proposed SDM model by providing empirical and theoretical rationales. Our study will be based on clinical practices in Korea to institutionalize SDM. As this project pursues implications for policies and practices, its strategies and methodologies are set according to the objectives.

FIVE WORK PACKAGES

WP1: Investigating domestic and international trends and contexts of SDM

In WP1, we will conduct primary studies to investigate the current status of SDM in both domestic and international contexts and to explore the perspectives of key stakeholders involved in its implementation.

A scoping review will be conducted to map the key concepts and characteristics of SDM within the Korean context, following the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Extension for Scoping Reviews.[23] In accordance with the Joanna Briggs Institute methodology,[24] the Population-Concept-Context framework will be applied, focusing on articles related to Korea (population), SDM (concept), and Korea as the setting (context).

In addition, nationwide cross-sectional surveys will be conducted among the general public and HCPs to assess perceptions, experiences, and preferences related to decision-making in

https://doi.org/10.3346/jkms.2026.41.e38

healthcare and SDM.[25] Using well-developed questionnaires, both online and face-to-face surveys will be administered. Public respondents will be asked about their experiences with medical decision-making, awareness of SDM, and preferences for patient participation. HCPs will be asked about their clinical decision-making practices, experiences with SDM, patient receptivity, and opinions on desirable formats and content for patient involvement.

To gain deeper insight, qualitative research will be conducted to examine how key stakeholders perceive and experience SDM in greater depth.[26] This will include in-depth interviews with patients living with chronic diseases, focus-group discussions with caregivers, and a photovoice project involving marginalized groups such as older adults, individuals with disabilities, low-income populations, and migrant women. These studies will be guided by the social-ecological model, which provides a framework for understanding and addressing health behaviors.[27] Anthropological fieldwork will also be conducted to explore broader patterns of medical practice, with a particular focus on cancer care (**Supplementary Table 1**).[28]

WP2: Creating standardized evaluation tools and assessment guidelines for SDM

The quality and effectiveness of SDM can be systematically assessed using standardized instruments that also identify areas for improvement from the perspectives of key stakeholders. The findings from such evaluations are vital for the wide adoption and institutionalization of SDM, including the development of appropriate reimbursement models.[29] Previous systematic reviews have identified and classified a range of SDM evaluation tools.[30-32] Broadly, these can be categorized as patient-reported, clinician-reported, or observer-rated instruments.

In WP2, we will identify tools appropriate for the Korean healthcare context through comprehensive reviews of existing SDM evaluation tools, as well as a systematic review of observer-based methods for SDM evaluation. Selected tools, including versions for patients, clinicians, and observers, will be translated, culturally adapted, and psychometrically validated for the Korean population.[33] During this validation process, we will concurrently explore how these instruments can be integrated into training programs for HCPs and, in the future, linked to the national payment system.

Building on this work, we will develop guidelines and a toolkit for evaluating SDM from the perspectives of patients, HCPs, and third-party observers, thereby enhancing the utility of SDM assessment in clinical practice. If deemed necessary, we may also consider developing a novel evaluation tool tailored to the Korean context, based on established methodological frameworks (**Supplementary Table 2**).

In addition to commonly used evaluation instruments, we will consider incorporating Patient-reported outcomes, defined as outcomes directly reported by patients without clinician or proxy interpretation. Patient-reported outcomes capture health status, quality of life, and functional capacity, serving as complementary indicators of the broader impact of SDM within the healthcare delivery system.[34]

WP3: Designing a clinical SDM research data management system

To support collaboration with empirical research teams and to promote the dissemination and institutionalization of SDM in clinical practice, all generated data must be systematically documented and managed.[35] To this end, in WP3, we will establish a standardized data management system and develop an artificial intelligence-based application to support SDM.

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First, we will interview members of the empirical research team to identify the essential data elements to be collected and utilized within their research. We will also review international and domestic regulations and procedures related to data management for administering SDM-related clinical research data.[35] Based on these findings, we will develop standard operating procedures and detailed guidelines as a data management system to ensure the integrity, quality, and security of data across studies. Furthermore, we aim to extend the use of this standardized system from research settings to routine clinical practice, in preparation for future SDM implementation.

Second, we will develop an artificial intelligence-powered system for real-time tracking of SDM in clinical encounters. This system will provide primary stakeholders, specifically physicians, immediate feedback, highlighting which SDM elements have been addressed and which require further attention during consultations. It will integrate a fine-tuned large language model to classify SDM elements,[36] leveraging automated real-time speech recognition, transcription, and utterance analysis to generate actionable feedback (**Supplementary Table 3**).

WP4: Developing a standardized Korean SDM conceptual model and implementation strategies

WP4 represents the core component of this project. In this WP, we will develop a standardized SDM conceptual model and its implementation strategies tailored to the Korean sociocultural and healthcare context. Recognizing that SDM extends beyond theoretical constructs, we will emphasize the feasibility and effectiveness of both the model and strategies from an implementation science perspective.

The Korean SDM model will be drafted through a comprehensive review of existing conceptual models, with core elements extracted to establish its foundational framework. Findings from WP1 will provide guidance for defining and contextualizing SDM in the Korean healthcare system. A draft version of the model will be circulated to a wide range of stakeholders, including foundational research investigators, empirical research teams, the advisory committee, external experts, patient representatives, and the general public, to ensure contextual grounding and diverse perspectives. This iterative process will refine the model to enhance its theoretical rigor and practical applicability.

In parallel, implementation strategies will be designed to facilitate the systematic uptake of SDM in routine care. These strategies will include key components such as educational programs for HCPs, patient decision aids, and patient activation approaches, informed by both international evidence and local needs. Stakeholder feedback will be used to iteratively refine these strategies and components to enhance their applicability within the Korean healthcare environment.

Building on the outcomes of WP1–WP4, the newly developed SDM model and implementation strategies will be pilot-tested in an oncology setting. The pilot study will assess feasibility, acceptability, and fidelity, as well as patient- and clinician-reported outcomes related to decision quality and SDM effectiveness. A digital health platform enabling patient symptom reporting and clinician feedback[37] will be employed to support implementation and ongoing refinement (**Supplementary Table 4**).

https://doi.org/10.3346/jkms.2026.41.e38

WP5: Establishing the rationale for the dissemination and institutionalization of SDM

WP5 constitutes the final phase of the project, focusing on the practical implications and institutionalization of SDM in Korean clinical settings. While earlier WPs established conceptual and practical foundations, WP5 extends this work by embedding SDM into the structural, financial, and cultural dimensions of the healthcare delivery system.

Legal, institutional, and sociocultural contexts that shape SDM adoption will be systematically investigated through document review, qualitative inquiry, and anthropological approaches, complemented by scenario-based social impact assessment.[38]

In parallel, economic evaluations will be conducted to assess the value and efficiency of SDM integration. These will include cost-effectiveness, cost-utility, and willingness-to-pay analyses, generating evidence to guide the development of compensation models that address resource-related barriers in clinical practice.[39]

Drawing on this evidence, a pilot reimbursement framework linked to the national health insurance system will be developed and tested to assess financial feasibility, incentivize clinician participation, and support sustainable patient engagement (**Supplementary Table 5**).

Detailed protocols for all 13 studies across the five WPs, including objectives, study design, methodology (covering data collection and analysis), ethical considerations, and dissemination plans, are provided in **Supplementary Tables 1-5** to ensure transparency and accountability.

Ethics statement

This project is conducted in accordance with the Declaration of Helsinki of the World Medical Association[40] and relevant Korean laws[41] and regulations.[42] Prior to study initiation, approval from the Institutional Review Board (IRB) of each participating university or institution will be obtained. All participants, including patients, their significant others, and HCPs, will be fully informed of the study and invited to participate. Voluntary informed consent will be obtained from all the participants.

The findings of this project will be presented at academic conferences and published in peer-reviewed journals, in accordance with the recommendations of the International Committee of Medical Journal Editors.[43] Summaries written in simple language may also be produced for dissemination through various channels, including social media and websites. Details regarding IRB approval for each work package are summarized in **Supplementary Material 1**.

DISCUSSION

This project is expected to have several academic, practical, and social implications. First, this foundational and comprehensive SDM project will advance interdisciplinary research in clinical medicine, communication in healthcare, health policies, and medical education. It is expected to foster academic development through publications and international scholarly exchange. Second, by developing and implementing the SDM model, guidelines, and evaluation tools, the project will support decision-making processes that are clinically sound, ethically appropriate, and aligned with patient values. This will enhance respect for patient autonomy and preferences, ultimately promoting patient-centered care.[44] Third,

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the implementation of SDM in clinical practice may improve trust in healthcare, reduce unnecessary interventions and associated costs,[12] and support informed choice among patients. Moreover, the findings may contribute to the development of legal and policy frameworks that facilitate the institutionalization of SDM, offering evidence to guide legislation, healthcare governance, and long-term system integration.

During the project, our objective is not merely to complete the five WPs, but ultimately to ensure integration of SDM into Korean clinical practice. Achieving this goal requires institutional support, as disease-centered or high-value care has long been regarded as a widely accepted approach to improving individual health outcomes.[45] However, to implement patient-centered care, a fundamental shift in this paradigm is necessary. We believe that this project will lay the groundwork for justifying the adoption of SDM and facilitating its integration into clinical workflows. Accordingly, these findings will be disseminated beyond the academic community to actual clinical settings.

Despite its strengths and significance, this study has some limitations. This project will focus on developing a generic SDM model, evaluation tools, and guidelines, rather than addressing specific clinical contexts or detailed scenarios. Furthermore, the patients were not involved in the conceptualization or design of the project, which may be considered an additional limitation.

ACKNOWLEDGMENTS

We would like to express our sincere gratitude to Dr. Yoong Cho for technical support throughout this research plan.

SUPPLEMENTARY MATERIALS

Supplementary Material 1
Summary of ethical approvals and Institutional Review Board (IRB) status

Supplementary Table 1
Detailed protocols for the three studies included in Work Package 1—investigating domestic and international trends and contexts of SDM

Supplementary Table 2
Detailed protocols for the three studies included in Work Package 2—creating standardized evaluation tools and assessment guidelines for SDM

Supplementary Table 3
Detailed protocols for the two studies included in Work Package 3—designing a clinical research data management system for SDM

Supplementary Table 4
Detailed protocols for the two studies included in Work Package 4—developing a standardized Korean SDM conceptual model and implementation strategies

Supplementary Table 5

Detailed protocols for the three studies included in Work Package 5—establishing a rationale for the dissemination and institutionalization of SDM

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