

Appendix 1

Articles of the Medical Services Act in South Korea (24) (the legal basis for hospital accreditation)

Article 3-2 (Hospitals) A hospital, dental hospital, Korean medicine hospital and long-term care hospital shall have at least 30 beds.

Article 3-3 (General Hospitals) (1) A general hospital shall satisfy the following requirements:

1. A general hospital shall have at least 100 beds.
2. A general hospital with at least 100, but not more than 300 beds shall have at least seven specialized departments including three specialized departments among internal medicine, general surgery, pediatrics, and obstetrics and gynecology, plus diagnostic radiology, anesthesia and pain medicine, and diagnostic laboratory medicine or pathology, and shall have medical specialists exclusively dedicated to each specialized department.
3. A general hospital with more than 300 beds shall have at least nine specialized departments including internal medicine, general surgery, pediatrics, obstetrics and gynecology, diagnostic radiology, anesthesia and pain medicine, diagnostic laboratory medicine or pathology, neuropsychiatry, and dental surgery, and shall have medical specialists exclusively dedicated to each specialized department.

Article 3-4 (Designation of Tertiary Hospitals) (1) The Minister of Health and Welfare may designate a general hospital providing highly specialized medical services for treating serious diseases as a tertiary hospital among general hospitals satisfying the following requirements:

1. To have at least 20 specialized departments prescribed by Ordinance of the Ministry of Health and Welfare, and have medical specialists exclusively dedicated to each specialized department
2. To be an institution which trains a person who intends to become a medical specialist under Article 77 (1).
3. To have human resources, facilities, equipment, etc. prescribed by Ordinance of the Ministry of Health and Welfare.
4. To meet the standards prescribed by Ordinance of the Ministry of Health and Welfare for the patient distribution in each diagnosis-related group.

(2) When designating a tertiary hospital under paragraph (1), the Minister of Health and Welfare shall evaluate whether the requirements under each subparagraph of paragraph (1) are satisfied, expertise and any other relevant factors. <Amended on Jan. 18, 2010>

(3) The Minister of Health and Welfare may re-designate or revoke the designation of a tertiary hospital under paragraph (1) following an evaluation conducted every three years under paragraph (2).

Article 58 (Accreditation of Medical Institutions) (1) The Minister of Health and Welfare may accredit hospital-level medical institutions and medical institutions prescribed by Presidential Decree (hereinafter referred to as "accreditation of medical institutions") in order to improve the quality of medical services and the safety of patients. <Amended on Mar. 4, 2020>

(2) The Minister of Health and Welfare may entrust affairs pertaining to the accreditation of medical institutions to the Korea Institute for Healthcare Accreditation prescribed in Article 58-11, as prescribed by Presidential Decree. <Amended on Mar. 4, 2020>

(3) The Minister of Health and Welfare may integrate evaluations conducted for medical institutions under other statutes or regulations and have the Korea Institute for Healthcare Accreditation prescribed in Article 58-11 conduct such integrated evaluations. <Amended on Mar. 4, 2020>

[This Article Wholly Amended on Jul. 23, 2010]

Article 58-2 (Medical Institution Accreditation Commission) (1) The Minister of Health and Welfare shall establish the Medical Institution Accreditation Commission under his or her jurisdiction (hereinafter referred to as "Commission") to review major policies on accreditation of medical institutions.

(2) The Commission shall be comprised of 15 or less members, including one chairperson.

(3) The Vice Minister of Health and Welfare shall serve as the chairperson of the Commission, and the commission members shall be commissioned or appointed by the Minister of Health and Welfare from among the following persons:

<Amended on May 29, 2016>

1. Persons recommended by an organization of medical personnel prescribed in Article 28 and an association of medical institutions prescribed in Article 52;

2. Persons recommended by a labor circle, civic organization (referring to a non-profit, non-governmental organization prescribed in Article 2 of the Assistance for Non-Profit, Non-Governmental Organizations Act), and a consumer organization prescribed in Article 29 of the Framework Act on Consumers;

3. Persons with abundant knowledge and experiences in public health;

4. Person with abundant knowledge and experiences in safety diagnosis of facilities;

5. A public official of Grade III or higher who belongs to the Ministry of Health and Welfare, or a public official who belongs to the Senior Executive Service.

(4) The Commission shall review the following:

1. Matters concerning major policies on accreditation of medical institutions, including accreditation standards and accreditation publication;

2. Matters concerning integration of medical institution evaluation systems prescribed in Article 58 (3);

3. Matters concerning utilization of accreditation of medical institutions prescribed in Article 58-7 (2);

4. Other matters referred for deliberation by the chairperson of the Commission.

(5) The organization and operation of the Commission and other necessary matters therefor shall be prescribed by Presidential Decree.

[This Article Newly Inserted on Jul. 23, 2010]

Article 58-3 (Accreditation Standards and Methods of Medical Institutions) (1) The accreditation standards of medical institutions shall include the following:

1. Patient's rights and safety;

2. Activities to promote service quality of medical institutions;

3. Procedures for providing medical services and outcomes therefrom;

4. Organization, human resource management and operation of medical institutions;

5. Patient satisfaction.

(2) Accreditation levels shall be divided into accreditation, conditional accreditation and non-accreditation. <Amended on Mar. 4, 2020>

(3) The validity of accreditation shall be four years: Provided, That the validity of conditional accreditation shall be one year. <Amended on Mar. 4, 2020>

(4) The head of a medical institution which has been granted conditional accreditation shall obtain re-accreditation within the validity, as prescribed by Ordinance of the Ministry of Health and Welfare. <Amended on Mar. 4, 2020>

(5) The Minister of Health and Welfare shall determine details of accreditation standards prescribed in paragraph (1). <Amended on Mar. 4, 2020>

[This Article Newly Inserted on Jul. 23, 2010]

Article 58-4 (Application for Accreditation of Medical Institutions) (1) The head of a medical institution may file an application for accreditation with the Minister of Health and Welfare, as prescribed by Ordinance of the Ministry of Health and Welfare.

(2) Notwithstanding the provisions of paragraph (1), the head of a long-term care hospital referred to in Article 3 (2) 3 (excluding medical institutions which meet the requirements under Article 3-2 for medical rehabilitation facilities under Article 58 (1) 4 of the Act on Welfare of Persons with Disabilities) shall file an application for accreditation with the Minister of Health and Welfare, as prescribed by Ordinance of the Ministry of Health and Welfare. <Amended on Mar. 4, 2020>

(3) Where a long-term care hospital required to apply for accreditation pursuant to paragraph (2) obtains conditional accreditation or non-accreditation, or its accreditation or conditional accreditation is canceled pursuant to Article 58-10 (1) 4 and 5, the head of the relevant long-term care hospital shall apply for re-accreditation within the period prescribed by Ordinance of the Ministry of Health and Welfare. <Amended on Mar. 4, 2020>

(4) The Minister of Health and Welfare shall evaluate whether a medical institution applying for accreditation is in compliance with the accreditation standards prescribed in Article 58-3 (1). In such cases, the Minister of Health and Welfare may conduct necessary investigations, as prescribed by Ordinance of the Ministry of Health and Welfare, and the medical institution applying for accreditation shall cooperate therefor unless there exists any good cause. <Newly Inserted on Mar. 4, 2020>

(5) The Minister of Health and Welfare shall notify the head of the relevant medical institution of the results of evaluation prescribed in paragraph (4) and the accreditation level of such medical institution without delay. <Newly Inserted on Mar. 4, 2020>

[This Article Newly Inserted on Jul. 23, 2010]

[Title Amended on Mar. 4, 2020]

Article 58-5 (Objections) (1) The head of a medical institution that has filed an application for accreditation may file an objection with the Minister of Health and Welfare with regards to evaluation results or accreditation level.

(2) The objection under paragraph (1) shall be filed within 30 days from the date the head of a medical institution is notified of the evaluation results or accreditation level: Provided, That where the head of a medical institution could not observe the period due to any cause not attributable to himself or herself, it shall be counted from the date on which such cause has been extinguished.

(3) Matters necessary for the means to file an application for objections under paragraph (1) and notification of process results, etc. shall be prescribed by Ordinance of the Ministry of Health and Welfare.

[This Article Newly Inserted on Jul. 23, 2010]

Article 58-6 (Certificate of Accreditation and Accreditation Mark) (1) The Minister of Health and Welfare may grant a certificate of accreditation to a medical institution which has been accredited, produce a mark showing the accreditation (hereinafter referred to as "accreditation mark"), and permit the medical institution to use such mark.

(2) Without being accredited pursuant to Article 58 (1), no person shall produce or use a certificate of accreditation or an accreditation mark or assume accreditation in other means.

(3) Matters necessary for the design of an accreditation mark and methods of indication, etc. shall be prescribed by Ordinance of the Ministry of Health and Welfare.

[This Article Newly Inserted on Jul. 23, 2010]

Article 58-7 (Publication and Utilization of Accreditation) (1) The Minister of Health and Welfare shall publish, on its website, etc., matters prescribed by Ordinance of the Ministry of Health and Welfare, such as accreditation standards, term of validity of accreditation, and evaluation results under Article 58-4 (4) of a medical institution which has been accredited. <Amended on Mar. 4, 2020>

(2) The Minister of Health and Welfare may provide a medical institution with the following administrative and financial support, etc. based on the evaluation results and accreditation levels under Article 58-4 (4): <Amended on Mar. 4, 2020>

1. Designation of tertiary care hospitals under Article 3-4;
2. Designation of specialized hospitals under Article 3-5;
3. Support for education and consulting to upgrade the quality of medical services and safety of patients;
4. Other matters prescribed in other Acts or deemed necessary by the Minister of Health and Welfare.

(3) Matters necessary for notification, etc. under paragraph (1) shall be prescribed by Ordinance of the Ministry of Health and Welfare.

[This Article Newly Inserted on Jul. 23, 2010]

Article 58-8 (Request for Data) (1) If necessary for accreditation, the Minister of Health and Welfare may request the relevant administrative agency, medical institution, other public organization, etc. to provide data and cooperation.

(2) A person who has been requested to provide data and cooperation under paragraph (1) shall comply with such request unless there exists any good cause.

[This Article Newly Inserted on Jul. 23, 2010]

Article 58-9 (Follow-Up Management of Accreditation of Medical Institutions) To maintain the effectiveness of accreditation, the Minister of Health and Welfare may investigate whether a medical institution that has obtained accreditation is in compliance with the accreditation standards prescribed in Article 58-3 (1), as prescribed by Ordinance of the Ministry of Health and Welfare.

[This Article Newly Inserted on Mar. 4, 2020]

[Previous Article 58-9 moved to Article 58-10] <Mar. 4, 2020>]

Article 58-10 (Cancellation of Accreditation of Medical Institutions) (1) Where a medical institution that has obtained accreditation falls into any of the following cases during the validity of the accreditation, the Minister of Health and Welfare may order the cancellation of the accreditation or conditional accreditation of such medical institution, suspension of use of accreditation mark or correction: Provided, That where falling under subparagraphs 1 and 2, the Minister shall cancel the accreditation or conditional accreditation: <Amended on Mar. 4, 2020>

1. Where a medical institution obtains accreditation or conditional accreditation by fraud or other improper means;
2. Where permission for the establishment of a medical institution is canceled or an order for the closure of a medical institution is issued pursuant to Article 64 (1);
3. Where a grave fact that serves as the premise or basis of accreditation or conditional accreditation, such as the change of type of medical institution, is changed;
4. Where a medical institution fails to meet the accreditation standards prescribed in Article 58-3 (1);
5. Where a medical institution violates an order for the suspension of use of accreditation mark or correction.

(2) No medical institution of which accreditation is canceled pursuant to paragraph (1) 1 shall apply for accreditation within one year from the date on which its accreditation or conditional accreditation is canceled.

(3) Procedures necessary for the cancellation of accreditation or conditional accreditation of medical institutions, suspension of use of accreditation marks, etc., standards for sanctions, etc. prescribed in paragraph (1) shall be prescribed by Ordinance of the Ministry of Health and Welfare. <Newly Inserted on Mar. 4, 2020>

[This Article Newly Inserted on Jul. 23, 2010]

[Title Amended on Mar. 4, 2020]

[Moved from Article 58-9 <Mar. 4, 2020>]

Article 58-11 (Establishment of the Korea Institute for Healthcare Accreditation) (1) The Korea Institute for Healthcare Accreditation (hereinafter referred to as the "KOIHA") shall be established to efficiently conduct business concerning the accreditation of medical institutions and various evaluation business for medical institutions.

(2) The KOIHA shall conduct the following business:

1. Business concerning the accreditation of medical institutions, which is entrusted pursuant to Article 58 (2);
2. Evaluation business for medical institutions under other statutes, which the Minister of Health and Welfare entrusts;
3. Other business the Minister of Health and Welfare entrusts under this Act or other statutes.

(3) The KOIHA shall be a juristic person and shall be established by filing a registration of incorporation at the location of its principal office.

(4) The KOIHA shall have executives and necessary employees, as prescribed by the articles of association.

(5) The Minister of Health and Welfare may provide subsidies for expenses necessary for the operation and business of the KOIHA within budgetary limits.

(6) The KOIHA may collect costs incurred for accreditation from the heads of medical institutions applying for accreditation by obtaining approval from the Minister of Health and Welfare.

(7) The KOIHA may conduct profit-making business, such as education and consulting, within the extent not interfering with conducting business prescribed in paragraph (2), as prescribed by Ordinance of the Ministry of Health and Welfare.

(8) The provisions pertaining to incorporated foundations in the Civil Act shall apply mutatis mutandis to the KOIHA except for the matters prescribed by this Act and the Act on the Management of Public Institutions.

[This Article Newly Inserted on Mar. 4, 2020]

Appendix 2

Legal and institutional framework regulating hospital accreditation in Korea (39)

Scope of application

The Hospital Accreditation Program encompasses all medical institutions. Hospitals and higher-level medical institutions are eligible to voluntarily apply for accreditation. However, to account for the unique characteristics of medical services and to safeguard patients' rights, the Medical Services Act has mandated the compulsory application for accreditation by long-term care hospitals since 2013.

Application process

Medical institutions may submit their accreditation applications online via the official accreditation website (www.koiha.or.kr). Hospitals and higher-level medical institutions can select the timing of their accreditation survey and apply accordingly. Applications must be submitted at least two months prior to the intended start date of the survey.

Accreditation as a prerequisite for designation

1. Tertiary hospitals

Accreditation is a prerequisite for designation as a tertiary general hospital.

(Medical Services Act, Article 3-4; Regulations on the Designation and Evaluation of Tertiary General Hospitals, Article 2)

2. Specialized hospitals

Hospitals seeking designation as specialized hospitals must obtain accreditation.

(Medical Services Act, Article 3-5; Regulations on the Designation and Evaluation of Specialized Hospitals, Article 2)

3. Training hospitals

Accreditation is required for designation as a training hospital.

(Act on the Improvement of Training Environments and Status of Medical Residents, Article 13, and its Enforcement Decree, Article 4)

4. Research-centered hospitals

Hospitals aspiring to become designated research-centered hospitals must acquire accreditation.

(Health and Medical Technology Promotion Act, Article 15, and its Enforcement Rules, Article 12)

5. Hospitals authorized to attract foreign patients

Accreditation is mandatory for hospitals seeking designation as institutions authorized to attract foreign patients.

(Act on Support for Overseas Expansion of Healthcare and Attraction of International Patients, Article 14; Ministry of Health and Welfare Notification No. 2017-4)

6. Long-term care hospitals

Long-term care hospitals are legally obligated to apply for accreditation, as stipulated in the Medical Services Act since 2013. This requirement considers the specific nature of their services and the protection of patients' rights.

(Medical Services Act, Article 58-4, Paragraph 2)

7. Rehabilitation hospitals

Accreditation is a prerequisite for medical institutions seeking designation as rehabilitation hospitals.

(Enforcement Rules of the Act on Guarantee of Rights to Health and Medical Access for Persons with Disabilities, Article 10, Paragraph 1)

Notification of accreditation survey schedules

The accreditation body determines the survey schedule in coordination with the applicant institution, considering the preferred survey dates and application order. The final schedule is communicated to the applying institution within 30 days of receiving the application.

Appendix 3

Survey method of hospital accreditation in South Korea (16)

For Structure, the evaluation is based on whether the understanding of the standards, inclusion of all elements within the standard, and adherence to regulations and related evidence are accurate and safe, including whether procedures are written with details and are based on evidence. The plan should align with the institution's status and adjust priorities according to timing and budget. This is categorized as High, Medium, or Low.

For Process, the degree of performance according to regulations and guidelines is checked by the number of cases. If standards are quantifiable, the degree of fulfillment is determined as a percentage of the total number of cases surveyed. For committees, the composition, reporting, and related documents are checked for compliance with standards. The performance level within the institution is evaluated and categorized as High, Medium, or Low.

For Outcome, monitoring data analysis, improvement activities, and related documentation on management reporting and staff sharing methods are reviewed. The level of management awareness and staff performance is assessed and categorized as High, Medium, or Low. However, legal standards for medical personnel, continuous medication dispensing, and mission and core values announcements are judged as Present or Absent.

Source: KOIHA. 4th Cycle Acute Care Hospital Accreditation Standards and Standard Guidelines Published: Ministry of Health and Welfare; 2021. https://www.koiha.or.kr/web/kr/library/establish_board.do



Figure S1 Basic diagram of the hospital accreditation standards in South Korea (44). *Figure S1* illustrates the initial concept of hospital accreditation from 2011, which is why it was originally placed first. As of 2024, the Basic Value System includes only Patient Safety Assurance Activities, as shown in *Figure 2*.

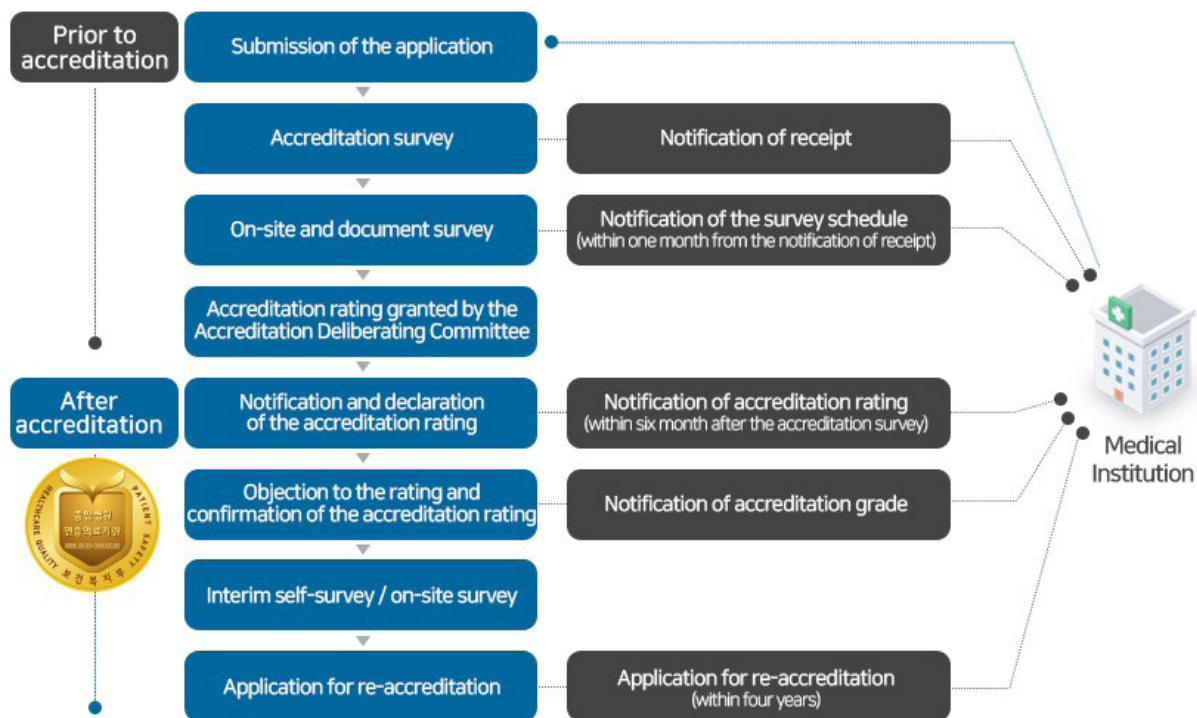


Figure S2 Hospital accreditation process in South Korea (38).

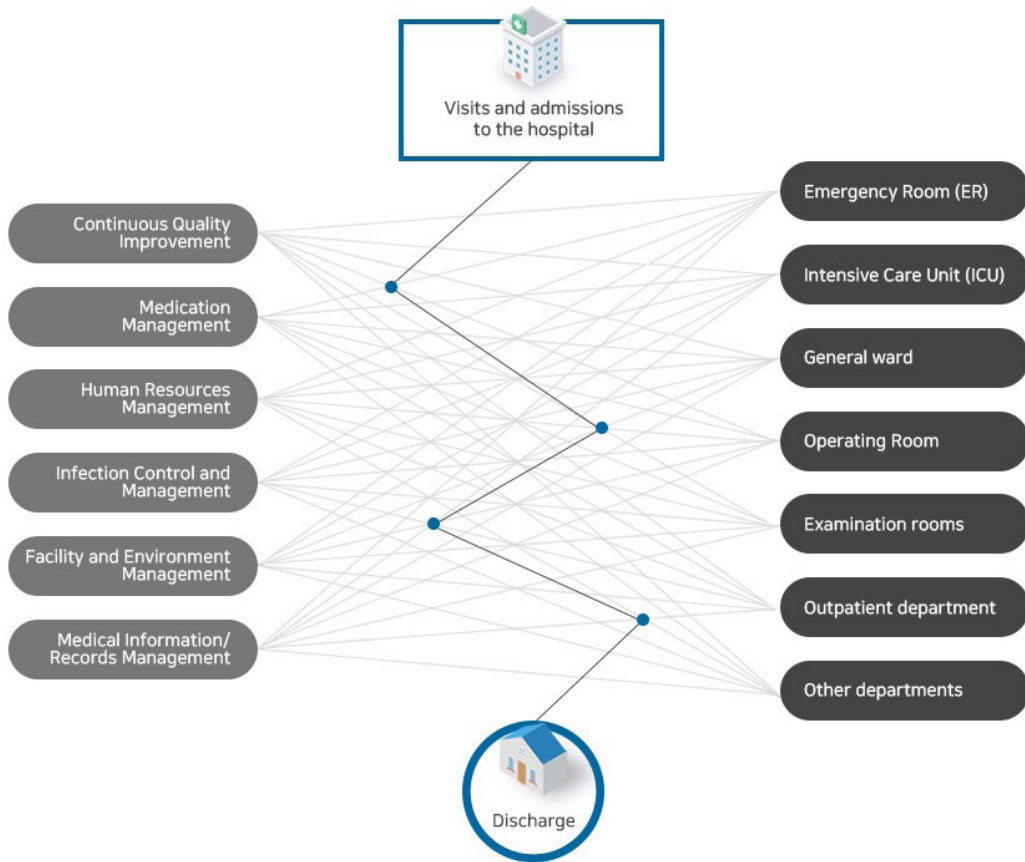


Figure S3 System tracer method in financial ratio analysis of hospitals in Korea (18,32).

Table S1 Accreditation level determination criteria of Korea's hospital accreditation program (18)

Level	Classification	Required elements	Average score for measurable elements			Remarks
			Overall	For each standard	For each chapter	
Accreditation	Hospital	No "Low"s at all	8 or more points	Score 5 or more points on all standards	Score 7 or more points on all chapters	All conditions 1 through 4 must be met
	General hospital					
	Tertiary general hospital		9 or more points		Score 8 or more points on all chapters	
Non-accreditation	Hospital	One or more "Low"s	Less than 7 points	3 or more standards scoring below 5 points	1 or more chapters scoring below 7 points	If any one of conditions 1 through 4 is met, it will be non-accredited
	General hospital			2 or more standards scoring below 5 points		
	Tertiary general hospital			1 or more standards scoring below 5 points	1 or more chapters scoring below 8 points	
Conditional accreditation	All cases where there is no "High" in the required elements and the average score for measurable elements (overall, by standard, and by chapter) does not correspond to either accreditation or non-accreditation					

Table S2 Encouraging participation of small and medium-sized hospitals in accreditation: step-by-step policy coordination measures (60)

Short-term policy coordination measures (first cycle, 2011~2014)	Mid to long-term policy coordination measures (second cycle, 2015~2019)
<ul style="list-style-type: none"> • Phase 1: Support for Accreditation of Medical Institutions in Vulnerable Areas and Support for Advertising Activities • Phase 2: Coordination with Specialized Hospital Accreditation, Integration of Card Fees, and Strengthening Designation Requirements for Screening Institutions and Training Hospitals • Phase 3: Support for Accreditation of Public and Industrial Accident Hospitals, and Subsidy for Consulting Costs for Small and Medium-sized Hospitals • Phase 4: Support for Accreditation of Open Hospitals, Excellent Institutions for Industrial Accident Insurance, and Automobile Insurance 	<ul style="list-style-type: none"> • Phase 1: Coordination with National Disasters and Government Policies, and Integration with Expanded Coverage Policies • Phase 2: Development of Fees for Referral and Transfer Opinions for Accredited Hospitals • Phase 3: Integration of Patient Safety Management Fees and Specialist Fee Add-ons • Phase 4: Policy Coordination Related to Nursing Management Fee Levels and hospital category-Specific Add-on Rates

The prioritization of each phase may vary depending on the interests of the stakeholders (government, healthcare providers, insurers, and beneficiaries). ‡ Small and Medium-Sized Hospitals means small hospitals and general hospitals.



Figure S4 Accreditation marks by type of medical institutions in South Korea (16,17).

Table S3 Growth rate analysis in financial ratio analysis of hospitals in Korea (34)

Distinction	Year	Accredited hospital (unit: %)	Non-accredited hospital (unit: %)
Total asset growth rate	2019	87.3±936.0	5.2±9.7
	2020	30.4±205.1	4.1±20.2
Medical revenue growth rate	2019	76.3±669.4	90.9±357.7
	2020	15.5±90.2	-1.1±76.8
Inpatient revenue growth rate	2019	74.1±609.5	99.1±357.7
	2020	16.0±95.6	-2.8±74.9
Outpatient revenue growth rate	2019	96.5±927.4	91.8±307.9
	2020	25.5±144.8	4.3±101.5
Net income growth rate	2019	-11.0±815.2	-153.9±759.9
	2020	-459.6±2,761.5	-1,324.2±8,739.2
Net income growth rate before special purpose projects	2019	-47.0±683.6	-158.5±743.0
	2020	-235.8±874.3	-1,219.2±8,677.8

Table S4 Profitability ratio analysis per 100 beds in financial ratio analysis of hospitals in Korea (34)

Distinction	Year	Accredited hospital (unit: %)	Non-accredited hospital (unit: %)
Return on assets from medical services	2019	1.0±30.2	-2.9±16.6
	2020	-5.5±15.0	-11.3±27.3
Medical revenue profitability ratio	2019	-2.4±3.8	-0.6±5.6
	2020	-4.2±11.7	7.7±18.0
Return on assets from operating income	2019	3.6±36.6	1.6±8.9
	2020	-0.2±5.0	-0.4±6.4
Operating income margin on medical revenue	2019	0.5±2.4	0.8±51.0
	2020	-0.2±4.9	-0.4±5.5
Return on assets	2019	0.2±5.7	0.8±8.2
	2020	-0.3±4.9	-0.4±6.2
Net profit margin on medical revenue	2019	0.1±2.2	0.3±4.8
	2020	-0.3±4.7	-0.4±5.4

Table S5 Accreditation status by healthcare facility characteristics (unit: number of hospitals) (34)

Classification	Subject	Application	Survey completed	Survey results			
				Sum	Accreditation	Conditional accreditation	Non-accreditation
Total	4,286	1,918 (44.8)	1,873 (43.7)	1,860	1,751 (40.9)	9 (0.2)	100 (2.3)
Autonomy							
Acute care hospital	1,797	412 (22.9)	410 (22.8)	402	399 (22.2)	0	3 (0.2)
Tertiary general hospitals	45	45 (100.0)	45 (100.0)	45	45 (100.0)	0	0
General hospitals	330	209 (63.3)	209 (63.3)	205	204 (61.8)	0	1 (0.3)
Hospitals	1,422	158 (11.1)	156 (11.0)	152	150 (10.5)	0	2 (0.1)
Dental hospitals	238	13 (5.5)	13 (5.5)	12	11 (4.6)	0	1 (0.4)
Oriental medicine hospitals	567	20 (3.5)	20 (3.5)	20	20 (3.5)	0	0
Mental health hospital	253	63 (24.9)	58 (22.9)	58	49 (19.4)	0	9 (3.6)
Obligation							
Care hospitals	1,431	1,410	1,372 (95.9)	1,368	1,272 (88.9)	9 (0.6)	87 (6.1)

Reference data from the Health Insurance Review and Assessment Service as of December 31, 2022. Note: Not included from after the completion of the survey until the accreditation announcement (inconsistency with the number of completed surveys). Hospitals are included rehabilitation medical institutions (applications: 56 locations, completed surveys: 54 locations, accreditation: 51 locations) and excludes hospitals with expired accreditation validity and those that have closed. The numbers in parentheses represent the proportion of the total.