

METHODOLOGY

World's Best Smart Hospitals 2025



Methodology – World's Best Smart Hospitals 2025

Summary of the project

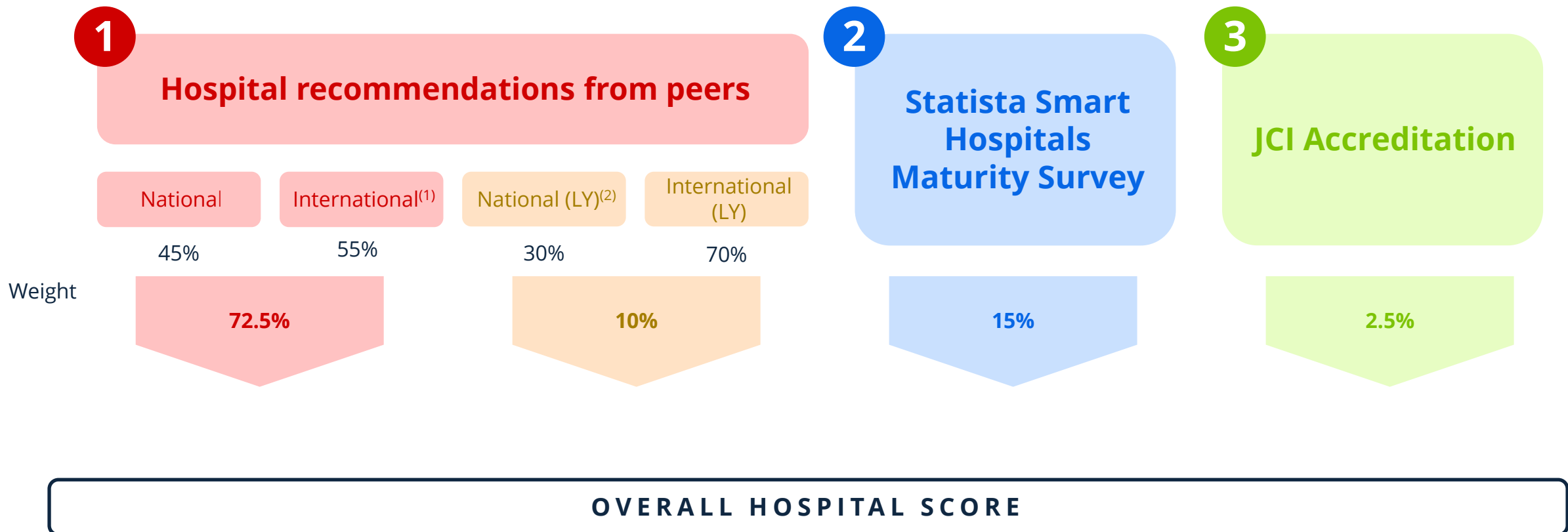
- Smart hospitals leverage state-of-the-art technology to fundamentally rethink how care is delivered within the health system. Utilizing these advanced technologies can not only enhance care delivery outcomes and efficiencies within the hospital but also support broader health goals related to prevention, population health, and quality of life outcomes.
- To enhance transparency in hospitals' efforts to implement digital health technologies worldwide, Statista and Newsweek have partnered once again to recognize the **350 leading "World's Best Smart Hospitals"** from 28 different countries, while also highlighting standout categories.
- The ranking is based on **3 data sources**:
 1. **International online survey**: Hospital managers and health care professionals with knowledge about smart hospitals were asked to recommend leading smart hospitals across the globe.
 2. **Statista Smart Hospitals Maturity Survey (SSHMS)**: Implementation and usage of digital technologies in the hospital was assessed by hospitals and validated by Chief Digital / Information Officers or Senior Management.
 3. **JCI Accreditation**: The Joint Commission International (JCI) hospital accreditation, which is related to the concept of smart hospitals and a highly regarded marker of quality in healthcare, was included in the scoring model.
- **Desk research** was performed **for every nominated hospital** as a validation of the hospital's achievements.

New features and changes in the 2025 edition

- The following list provides a brief overview of all **changes in this year's edition** compared to the *World's Best Smart Hospitals 2024* ranking:
 - **Updated Statista Smart Hospitals Maturity Survey:** Several questions have been revised and 5 new survey topics have been added (i.e., virtualization, patient satisfaction surveys, employee satisfaction surveys, patient safety technologies and accreditations).
 - **Increased Statista Smart Hospitals Maturity Survey weighting:** This year the weighting of the Statista Smart Hospitals Maturity Survey pillar was increased from 5% to 15% within the scoring model to reflect the emphasis on data submitted to Statista on the implementation and usage of Smart Hospital technologies.
 - **Statista Smart Hospitals Maturity Survey visibility:** Within the publication the visibility of SSHMS has been increased by including a single ribbon for hospitals with high performance, and two ribbons for hospitals with very high performance.
 - **Inclusion of previous year's recommendation data:** To account for reputational continuity, recommendations from last year were factored into the reputation pillar.
 - **Inclusion of JCI Accreditation:** The Joint Commission International (JCI) accreditation, which is related to the concept of smart hospitals and a highly regarded marker of quality in healthcare, was added to the scoring model for this year's ranking.
 - **Ranking display:** Due to an updated methodology we are now ranking only the top 100 hospitals. The remaining 101 – 350 hospitals are listed alphabetically.

A score was calculated for each hospital

Scoring model



4 **Notes:** (1) International recommendations were weighted higher than national recommendations, reinforcing the international focus of this ranking.
(2) LY Last year

Medical experts with knowledge about smart hospitals were invited to the survey

From May to July 2024, Statista invited thousands of health care professionals with knowledge about smart hospitals to an online survey.

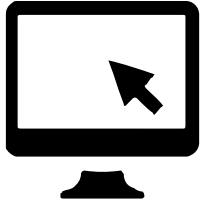
1 Hospital recommendations from peers



International online survey among health care professionals with knowledge about smart hospitals and hospital managers. Participants were invited via e-mail. The survey was also promoted on newsweek.com.



Participants were asked to **recommend notable smart hospitals**. International recommendations were weighted higher than national recommendations for each hospital. Recommendations for own employer / hospital were not allowed.



The assessments and recommendations were used to determine the **reputation score**. Additionally, the professional experience of the participant was considered, and participants could name a **standout category**: Artificial intelligence, digital imaging, electronic functionalities, robotics, telemedicine and virtualization.

SCORE FOR REPUTATION

The Statista Smart Hospitals Maturity Survey enables hospitals to submit data on the usage of smart technologies directly to Statista

Statista Smart Hospitals Maturity Survey – Part 1

2 Statista Smart Hospitals Maturity Survey

- Hospitals were invited to participate in the **Statista Smart Hospitals Maturity Survey** to **assess the implementation and usage of smart technologies** in the hospital.
- The questionnaire was designed with the guidance of Statista's global board of experts. An overview of the current members of the expert boards can be found on slide 9.
- Survey results had to be **validated by an authorized person from the hospital** e.g., Managing Director / Senior Management or Chief Information / Digital Officer to be qualified for the evaluation.
- The survey was structured around **10 topics** (see next slide).
- For an overview of the specific questions, a pdf-version of the questionnaire can be accessed [here](#).
- **Pre-registration** for future cycles is available [here](#).

THE MATURITY SURVEY CONSTITUTES 15% OF THE TOTAL SCORE

The Statista Smart Hospitals Maturity Survey contains in-depth questions in which hospitals can provide information of their initiatives across 10 topics

Statista Smart Hospitals Maturity Survey – Part 2

2



Statista Smart Hospitals Maturity Survey

Survey topics

Hospital Information System (e.g., implementation status of laboratory information system)

Electronic Functionalities (e.g., available options for patients via the patient portal)

Telemedicine (e.g., implementation of technical equipment to conduct teleconsultations)

Artificial Intelligence (e.g., usage of AI and machine learning tools for data analysis and evaluation)

Virtualization (e.g., usage of Virtual and Augmented Reality in patient services or departments)

Robotics (e.g., implementation and evaluation of robotic surgery)

Patient Satisfaction Surveys (e.g., regarding the effectiveness of digital technologies and services)

Employee Satisfaction Surveys (e.g., regarding the effectiveness of digital technologies and services)

Patient Safety Technologies (e.g., implementation of decision support tools to identify potential risks)

Accreditations (e.g., accreditations or certifications obtained pertaining to information technology)

The JCI Accreditation was used as an additional element of the scoring model

JCI Accreditation

3 JCI Accreditation

- The **Joint Commission International (JCI)**, a worldwide leader in advancing quality improvement and patient safety in healthcare, signifies a healthcare organization's dedication to achieving high standards of quality and patient safety.⁽¹⁾
- While the JCI Accreditation itself is not explicitly labeled as a smart hospital accreditation, it is inherently related to the concept of smart hospitals, as it supports the implementation of advanced technologies and practices that enhance the overall quality of healthcare delivery. The accreditation standards for hospitals include aspects such as information technology, data-driven decision-making, and general continuous improvement.⁽²⁾
- For healthcare organizations from the United States, the accreditation from the **Joint Commission (TJC)** was used as an equivalent.⁽³⁾

THE JCI ACCREDITATION CONSTITUTES 2.5% OF THE TOTAL SCORE

A global board of renowned experts supports the continuous development of the methodology

Overview of global board of medical experts



Prof. Dr. David Bates

Professor of Medicine, Harvard Medical School, USA



Dr. Gary Kaplan

CEO Emeritus
Virginia Mason
Franciscan Health
Common Spirit Board of Trustees, USA



Prof. Dr. med. Christoph Meier

Director, Department of Internal Medicine, University Hospital Zürich, Switzerland



Dr. med. Jens Deerberg-Wittram

Founding President, International Consortium for Health Outcomes Measurement, Germany



Prof. Dr. Eyal Zimlichman, MD

Chief Transformation and Innovation Officer, Sheba Medical Center, Israel



Prof. Dr. Gregory Katz

Chair of Innovation Management & Value in Health, University of Paris Medical School, France



THE GLOBAL BOARD OF MEDICAL EXPERTS PROVIDES GUIDANCE FOR THE METHODOLOGY OF THE RANKING

Every nominated hospital was reviewed through a rigorous process

Quality assurance via desk research

Approach

- All nominated hospitals must be known for **technical innovations** and a **leadership role** in the field of smart hospitals
- Eligibility for the ranking was based on results from the **international survey** and the passing of the **quality assurance process**
- The project team conducted **desk research** and analyzed the implementation of smart technologies in eligible hospitals

Review process

- **Sources for technological innovations:** established healthcare technology websites (e.g. healthcareglobal.com), scientific publications (e.g. PubMed) and press releases
- Survey **subcategories** were used as keywords for the search
- **Additional keywords** used (excerpt): technological innovation, Internet of Things (IoT), Machine learning, smart buildings, preventive analytics

QA PROCESS ENSURED AWARDED HOSPITALS HAVE A LEADERSHIP ROLE

As a result, the 350 best smart hospitals were awarded

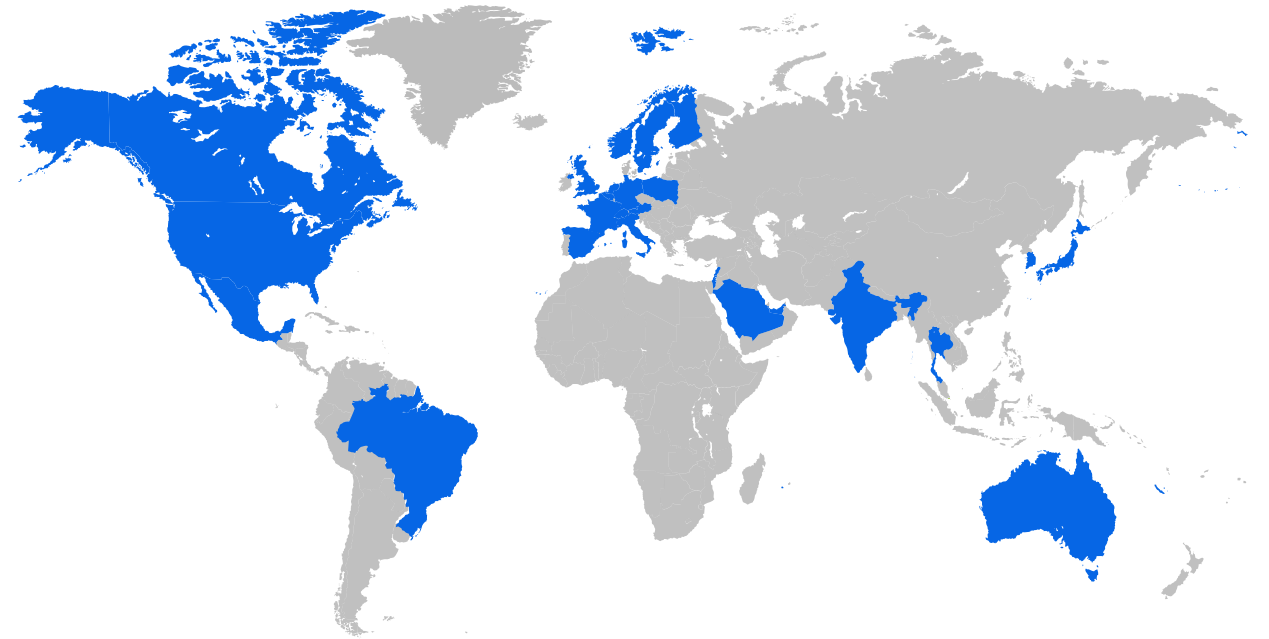
Rank	Hospital	City	Country	Standout Category
1	Cleveland Clinic	Cleveland	United States	Artificial Intelligence, Electronic Functionalities, Robotics
2	Mayo Clinic - Rochester	Rochester	United States	Artificial Intelligence, Digital Imaging, Telemedicine
3	The Johns Hopkins Hospital	Baltimore	United States	Artificial Intelligence, Digital Imaging, Robotics
4	Massachusetts General Hospital	Boston	United States	Artificial Intelligence, Digital Imaging, Robotics
5	Memorial Sloan Kettering Cancer Center	New York	United States	Artificial Intelligence, Robotics

[...]

350 LEADING SMART HOSPITALS WERE AWARDED

The list includes smart hospitals from 28 different countries

Country	Hospitals awarded	Country	Hospitals awarded
United States	104	Australia	7
Germany	27	Brazil	6
United Kingdom	22	Finland	5
Italy	21	Israel	5
France	20	Norway	5
South Korea	15	Belgium	4
Spain	15	Saudi Arabia	4
Canada	14	Sweden	4
Switzerland	13	Austria	3
Japan	11	United Arab Emirates	3
Singapore	10	India	2
The Netherlands	9	Mexico	2
Denmark	8	Thailand	2
Taiwan	8	Lebanon	1



World's Best Smart Hospitals partner network

Overview of involved parties

Newsweek

About Newsweek

Newsweek is a premier news magazine and website that has been bringing high-quality journalism to readers around the globe for over 80 years.

Newsweek provides the latest news, in-depth analysis and ideas about international issues, technology, business, culture and politics. In addition to its online and mobile presence, Newsweek publishes weekly English print editions in the United States, Europe/Middle East/Africa and Asia as well as editions in Japanese, Korean, Polish, Serbian and Spanish.

[newsweek.com](https://www.newsweek.com)

statista 

About Statista R

Statista R is a world leader in the creation of company, brand, and product rankings and top lists, based on comprehensive market research and data analysis: Statista R recognizes the best. With a team of over 100 expert analysts and in cooperation with more than 40 high profile media brands across all continents, Statista R creates transparency for consumers and business decision makers and helps companies build trust and recognition across a plethora of industries and product categories. Visit r.statista.com for further information about Statista R and our rankings.

Statista R is a division of Statista. The leading data and business intelligence portal provides an extensive collection of statistics, reports, and insights on over 80,000 topics from 22,500 sources in 170 industries. Find out more at [statista.com](https://www.statista.com).

Disclaimer

The rankings are comprised exclusively of hospitals that are eligible regarding the scope described in this document. The ranking is the result of an elaborate process which, due to the interval of data-collection and analysis, is a reflection of the last 12 months. Furthermore, events preceding or following the period August 07, 2023 – August 06, 2024, and/or pertaining to individual persons affiliated/associated to the facilities were not included in the metrics. As such, the results of this ranking should not be used as the sole source of information for future deliberations.

The information provided in this ranking should be considered in conjunction with other available information about hospitals or, if possible, accompanied by a visit to a facility. The quality of hospitals that are not included in the rankings is not disputed.