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World's Best Specialized Hospitals 2024 – Methodology

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1 Introduction

Hospitals play a crucial role in modern healthcare systems, providing a wide variety of medical services in different medical fields to ensure adequate medical care for the general population in the surrounding area. General hospitals are best suited to deliver care for patients with the most common diagnoses and illnesses; however, the more specialized hospitals become, the more they can treat increasingly complex and rare cases. These hospitals are often at the forefront of scientific development in their medical fields and excel in certain surgeries or procedures, thus incentivizing other hospitals or doctors to transfer their patients to these facilities to get the best treatment. Specialized hospitals can be leading general hospitals which excel in certain fields or smaller hospitals which focus on a few or even just one area of expertise. On a health care system level, almost all developed countries trend towards more centralization of medical expertise in the hospital sector, ensuring more specialization and thus deeper know-how in particular medical fields.

For patients, the decision to choose the right hospital for their specific condition is often determined mainly by the hospital's reputation and expertise in the medical field they require, while the overall reputation of the hospital is only of secondary importance. However, many of the existing web-based portals, websites and news articles only compare on a broad hospital level, with data also only being reported on a hospital level (if at all). Most available resources also focus solely on one specific country.

Thus, the World's Best Specialized Hospitals 2024 ranking is a comprehensive resource for international rankings of specialized hospitals at the medical field level. The fourth edition **ranks the best hospitals in 12 medical fields across the world.**

The medical fields included are:

- Cardiac Surgery
- Cardiology
- Endocrinology
- Gastroenterology
- Neurology
- Neurosurgery
- Obstetrics & Gynecology
- Oncology
- Orthopedics

- Pediatrics
- Pulmonology
- Urology

The ranking features the top 300 hospitals for Cardiology and Oncology, the top 250 for Pediatrics, the top 150 for Cardiac Surgery, Endocrinology and Gastroenterology, the top 125 for Neurology, Neurosurgery, Orthopedics, Pulmonology and Urology and the top 100 for Obstetrics & Gynecology. While global top hospitals are represented in multiple medical fields, leading specialized hospitals which are highly renowned in one or two specific medical fields or treatments, are featured on the lists as well.

Hospitals which are not accessible to the public and/or are very small were excluded from the ranking to ensure a sufficient number of recommendations for inclusion in the final lists.

As the majority of internationally available hospital quality metrics are reported solely on an aggregated hospital level (e.g. infection rates) and the few available metrics on a specialty level are not comparable across countries (e.g. staffing ratios), the ranking is based mostly on peer recommendations for specific areas of expertise from a global survey of medical professionals.

Furthermore, as Patient Reported Outcome Measurements (PROMs) and the pursuit for patient centered care has become a key topic in health care systems worldwide, Statista and Newsweek once again surveyed leading hospitals around the world on their implementation and use of PROMs across different specialties and departments. Results of the survey allow for a patient outcome focused metric, which is comparable internationally (see Section 2.1 PROMs implementation score for further detail). Thus, results from the PROMs Implementation survey were factored into the scoring model for the second time.

To acknowledge the diverse specializations within the field of pediatrics, **standout categories for awarded hospitals in the pediatrics list** were introduced for the first time. Participants were provided with the opportunity to select one standout medical field for each recommended/assessed hospital. The available standout medical fields for participants to choose from included: Cardiology, Cardiac Surgery, Endocrinology, Gastroenterology, Oncology, Neurology, Neurosurgery, Neonatology, Orthopedics and Urology.

Lastly, the accreditation by FACT (Foundation for the Accreditation of Cellular Therapy) was considered in this edition for the first time for the lists of Oncology and Pediatrics.

2 Study Design

The following sections provide an overview of the study design and the underlying methodology used to determine the ranking. First, the general approach is outlined in chapter 2.1, followed by a description of the role of the Global Expert Board in chapter 2.2 and the approach that was used to create the lists in the ten medical fields in chapter 2.3

2.1 Methodology

The study design of the “World’s Best Specialized Hospital 2024” project is based on a global survey among tens of thousands of medical professionals (doctors, health care professionals and hospital managers).

The recommendation score is based on two sub-scores, for primary recommendations and secondary recommendations. In cooperation with Newsweek, Statista invited tens of thousands medical experts (medical doctors, healthcare professionals, hospital managers and directors) in over 30 countries to an online survey. Additionally, experts from all over the world were able to participate in the survey for “World’s Best Specialized Hospitals 2024” on newsweek.com. The data was collected by Newsweek and Statista during an initial survey period from June to July 2023.

Reputation Score

As previously mentioned, participants in the survey were asked to recommend hospitals based on their expertise in one primary medical field (e.g. Cardiology for Cardiologists) and had the option to select an optional secondary and tertiary area of expertise in which they are also knowledgeable (e.g. due to frequent cooperation with other medical fields). However, these secondary/tertiary recommendations were given a lower weight than primary recommendations (see 2.3 for scoring details). Regarding the survey for specialists in the field of pediatrics, participants were given the opportunity to select a standout medical field for each recommended hospital based on their perception of the hospital’s specialized expertise.

The questionnaire did not suggest a list of recommended hospitals, therefore respondents were free to suggest any hospital they deemed recommendable (aided by an auto-complete function for convenience). Self-recommendations were not allowed. Statista performed plausibility checks on all data to prevent self-nomination.

In the second portion of the survey, Statista asked specialists from the 12 medical fields to classify a set number of hospitals. The list was comprised of leading hospitals from the previous year's ranking as well as highly specialized hospitals in each medical field (both criteria had a considerable overlap). Participants were asked to assign a ranking position to these hospitals (e.g. Top 1, Top 5, Top 10, Top 20, Top 50, Top 75, Top 100, Top 150, Not in the Top 150). In case of pediatric specialists, they were also given the opportunity to select a standout medical field for each assessed hospital based on their perception of the hospital's specialized expertise.

To determine the final rankings, the answers were then weighted accounting for two factors: a) working experience by profession, with primary recommendations from doctors in the relevant medical field receiving the highest weight e.g. Cardiologists for Cardiology) and b) the confidence respondents had in their vote (0-100%). Combined, the two survey parts resulted in over 24,500 individual hospital recommendations.

Finally, the combined data was analyzed and an overall reputation score (0-100%) was calculated for every hospital across all medical fields based on the total weighted number of recommendations and the ranking score. The hospital with the highest number of weighted recommendations received a recommendation score of 100% while the next best hospitals received a score relative to the weighted number votes they received, e.g. when hospital A received the most votes with 100, hospital B with 80 votes receives a score of $\frac{80}{100} = 80\%$.

The reputation score accounts for 92,5% of the overall hospital score. Hospitals that specialize in more than one medical field received specific recommendation scores for each medical field based on the respective recommendations. Therefore, one hospital can be represented in more than one list if it receives enough recommendations in each medical field.

PROMs Implementation Score

Patient Reported Outcome Measurements (PROMs) are defined as standardized, validated questionnaires completed by patients to measure their perception of their functional well-being and quality of life. In recent years, PROMs measurement and the pursuit for patient centered care has become a key topic in health care systems worldwide. Newsweek and Statista have recognized the importance of this topic for global advancements in health care delivery and, together with the guidance of the Expert Board, have developed a survey about the implementation and use of PROMs across different specialties and departments in hospitals.

During the 2023 survey cycles, hospitals were invited to participate in this initiative. The overall **purpose of this survey is to determine the status quo of implementation of generic and condition specific PROMS** in hospital settings as well as the hospital's efforts towards reporting and using the data both internally and externally for the purpose of improving health care delivery. For this, the Expert Board provided methodological input and guidance regarding the importance and development of the PROMs topic in a clinical setting. Furthermore, the board provided feedback on each of the questions within the survey to capture the most relevant PROMs information from the hospitals. An outline of the questions can be found below and the full questionnaire can be accessed via this [link](#).

PROMS Questions:

- The hospital has a unified platform for PROMS collection? (Yes/No)
- Number of standardized PROM instruments are measured and the departments they are being measured for.
- The condition and/or department measuring PROMs, whether case-mix adjustment was taken into account, and the percentage of patients that complete the PROMs questionnaire for each condition.
- Auditing of the data prior to being published. (Internal/External/Both)
- Internal reporting of PROMs data to clinicians and/or patients. (Yes/No)
- External reporting of PROMs results. (Yes/No)
- Use of PROMs data to optimize care processes (Yes/No)
- Use of PROMs data to support therapeutic decisions in real-time. (Yes/No)
- Sharing and comparing of PROMs data with other institutions to learn from each other. (Yes/No)

Furthermore, in collaboration with the Expert Board, a grading system was developed to determine the PROMS Implementation score. The score is assessed on a range from 50 to 100%, meaning that only hospitals achieving a minimum of 50% (of the maximum 100% score) were eligible to be graded on the PROMs score curve (as shown in the scoring model in 2.3). The PROMS Implementation score accounts for 2.5% of the overall hospital score.

To highlight the efforts of hospitals which participated in the survey and received a PROMs Implementation score, the ranking prominently displays those hospitals that reported measuring PROMs in the corresponding column.

The upcoming survey cycle which will be valid for all hospital rankings published in 2024 will be announced on [newsweek.com](https://www.newsweek.com) and shared via e-mail with preregistered participants. Hospitals interested in participating in future cycles can pre-register through the provided link [here](#). To provide an overview of the questionnaire's content and structure, a sample PROMs Implementation questionnaire can be accessible for review [here](#).

By continuously improving the PROMs Implementation survey in collaboration with the Expert Board, Newsweek and Statista strive to drive PROMs implementation and promote patient-centered care on a global scale. The long-term goal is to establish this questionnaire as the leading measure for PROMs implementation on an international level. The ongoing participation and engagement of hospitals worldwide are crucial in achieving this shared vision of improving healthcare standards through the integration of patient-reported outcomes.

Accreditations/Certifications Score

Several accreditations/certifications have been taken into account in the scoring model (where available). Accreditations/certifications reflect a range of structural and/or quality requirements which are now relevant for the specialized rankings.

The following accreditations/certifications¹ from the following institutions were considered:

- CARF International (Commission on Accreditation of Rehabilitation Facilities)
- IAC (Intersocietal Accreditation Commission)
- JCI (Joint Commission International)
- FACT (Foundation for the Accreditation of Cellular Therapy)

In addition to general hospital certifications, any available accreditations/certifications relevant to specific medical fields (e.g. Pediatric Specialty Program for Pediatrics, Brain Injury Specialty Program for Neurology) were also used.

The Accreditations/Certifications Score accounts for 5% of the overall hospital score.

2.2 Methodological input by the Expert Board

The following section outlines the function of the global board of medical experts which was founded by Statista to support the World's Best Specialized Hospital Project.

The idea behind the board of experts was to create an independent body that was tasked with the continuous development of the quality and scope of the project. The board of experts was tasked to provide input on possible improvements and expansions of the current questionnaires and methodology, most notably the PROMs Implementation survey. The members of the board of experts were carefully chosen based on their national and international expertise and decade-long experience in their respective medical fields as well as their scientific output. Current members of the board of experts are:

¹ Additional information about the accreditations/certifications are available here: [CARF International](#), [IAC](#), [JCI](#) and [FACT](#)

Global Board of Experts

Prof. Dr. David Bates
Professor of Medicine, Harvard Medical School, USA

Dr. Gary Kaplan
Senior Advisor and Senior Vice President, CommonSpirit Health, USA

Prof. Dr. med. Christoph Meier
Director, Department of Internal Medicine, University Hospital Zürich, Switzerland

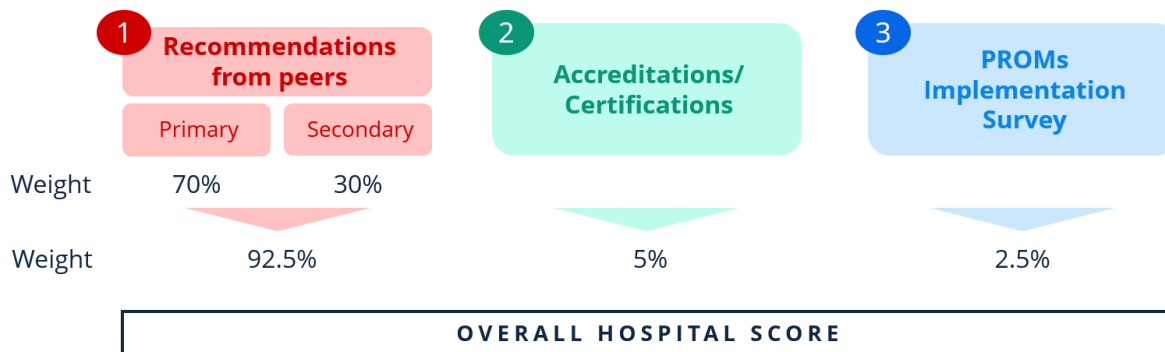
Prof. Dr. Eyal Zimlichman, MD
Chief Transformation and Innovation Officer, Sheba Medical Center, Israel

Prof. Dr. Gregory Katz
Chair of Innovation Management & Value in Health, University of Paris Medical School, France

Dr. med. Jens Deenberg-Wittram
CEO, RoMed Kliniken, Germany

2.3 Scoring Model

The scoring model is based on the reputation score, the accreditations/certification score, and the PROMs implementation score and uses different weights for the individual components as shown in this overview:



As shown above, primary recommendations from experts in each medical field account for 70% of each hospital's reputation score. Secondary and tertiary recommendations from medical professionals with knowledge in more than one medical field received a weight of 30% towards the reputation score. The total reputation score accounts for 70%, the accreditations/certifications accounts for 5% and the PROMs implementation survey score accounts for 2.5% of the overall hospital score.

Based on the overall hospital score, hospitals are ranked top to bottom in lists for each medical field. In the field of Obstetrics and Gynecology, the top 50 hospitals are ranked. The remaining 51-100 top hospitals are listed alphabetically. The results of this ranking are displayed in the lists published by Newsweek.

3 Disclaimer

The rankings are comprised exclusively of hospitals that are eligible regarding the scope described in this document. A mention in the ranking is a positive recognition based on peer recommendations and publicly available data sources at the time. 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 calendar year. Furthermore, events preceding or following the period 02/08/2022-01/08/2023 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. Please note that data are subject to change and may be affected by continuing differences among states in abortion laws. The quality of hospitals that are not included in the rankings is not disputed.