

Japan Hospital Insights Survey Findings

Summary materials

2023



Every year, L.E.K. surveys several hundred hospitals across the APAC region to understand their priorities and support MedTech companies make key decisions

L.E.K. conducts an annual survey of several hundred decision-makers at key hospitals in the APAC region, including Japan, to better understand how key strategic priorities and purchasing behaviors are shifting

The survey addresses issues relating to the financial outlook of hospitals, top operating priorities in the next few years, as well as the impact of digitalization on hospitals and their relationships with healthcare companies



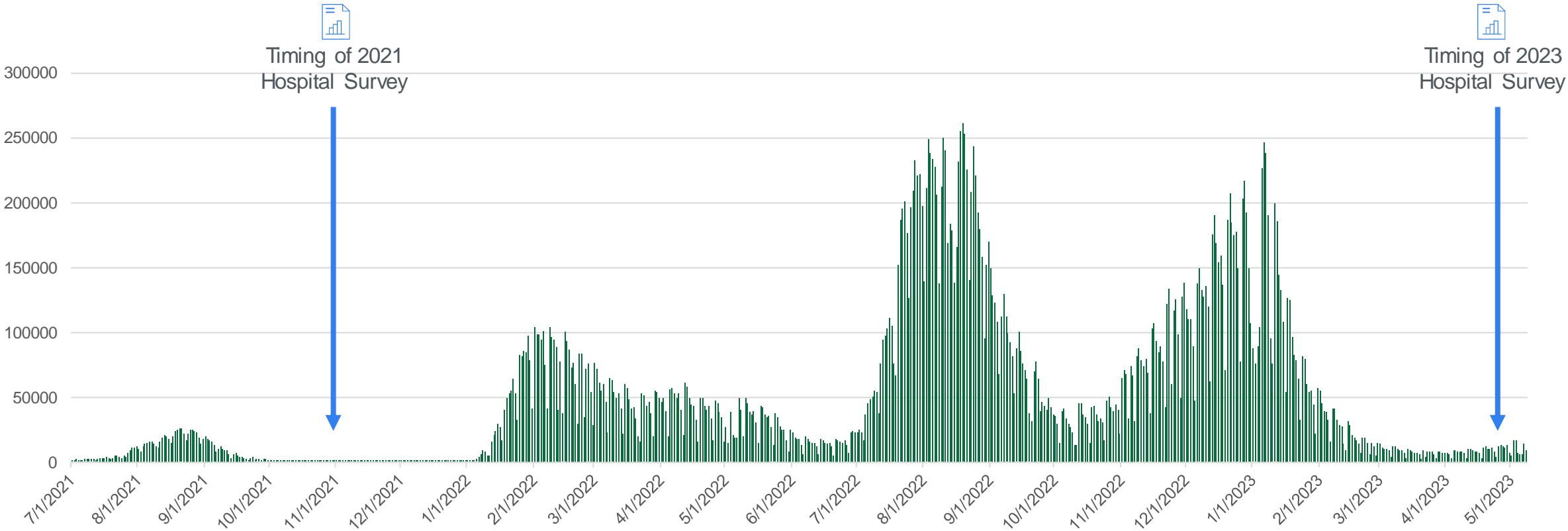
The insights gleaned from these surveys enable healthcare companies to make informed decisions, including:

- Which stakeholders to engage and how
- How to tailor their product and service value propositions to address hospitals' priorities; and
- How to leverage digital channel and enhance their service offerings/engagement models

The 2021/2022 hospital survey was conducted when COVID-19 infection rates were low; the 2023 survey was conducted similarly when rates were low



Number of daily infections in Japan
(Jul 2021 – May 2023)



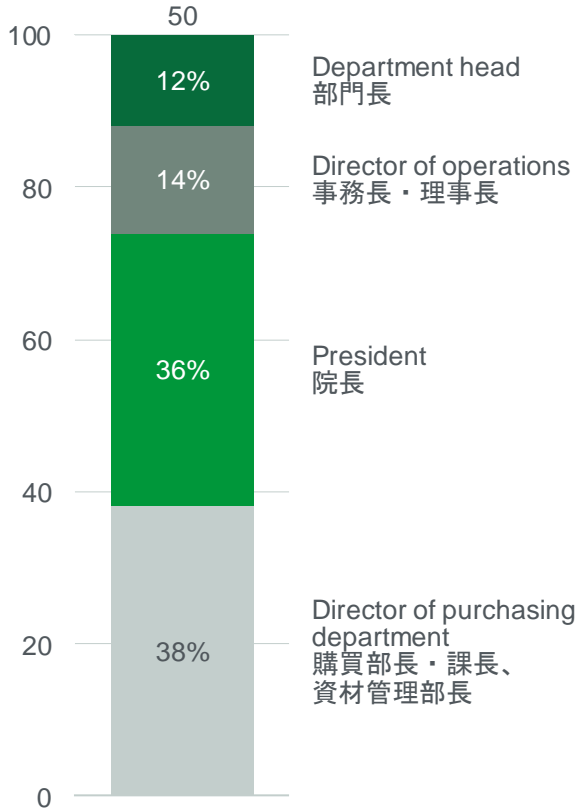
Note: MHLW=Ministry of Health, Labour and Welfare of Japan;
Source: L.E.K. 2021, 2023 APAC Hospital Priority Survey

L.E.K.'s 2023 hospital priorities survey included directors across hospital types, sizes, and locations

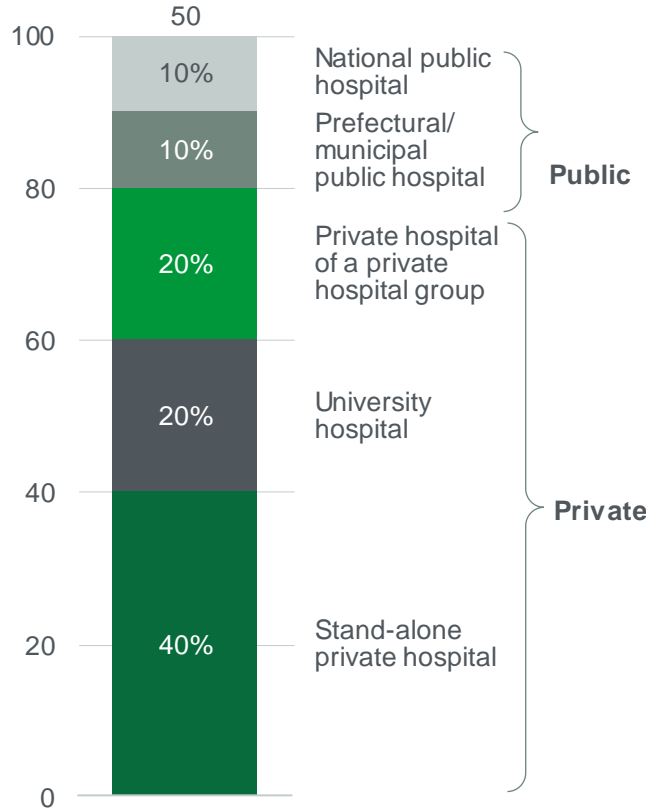


L.E.K. Hospital Priorities Japan survey respondent mix
Percent of respondents (N=50)

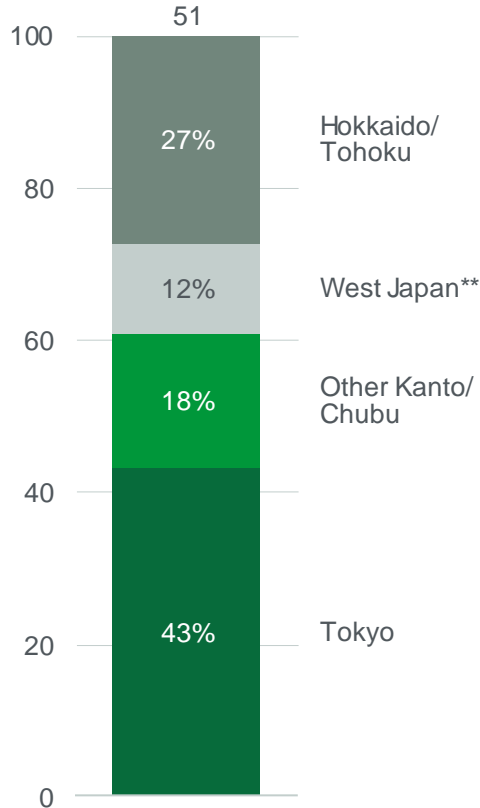
Role at institution



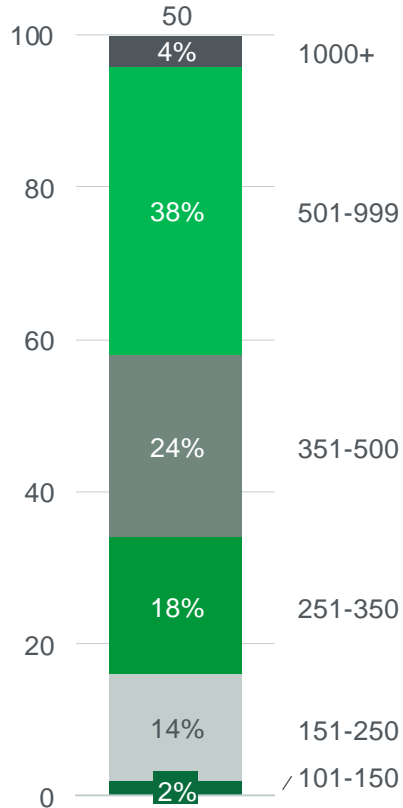
Type of institution



Location of institution*



Number of hospital beds



*One expert reported more than 1 location of institution
**Includes Kansai, Chugoku, Shikoku, Kyushu, Okinawa
Source: L.E.K. 2023 APAC Hospital Priority Survey

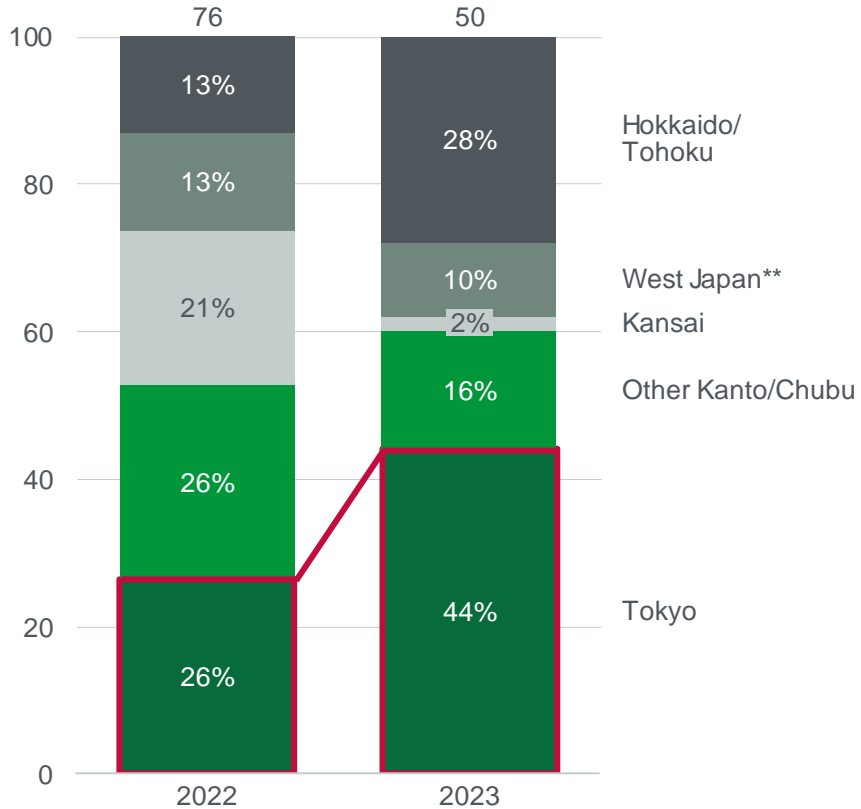


Compared to the 2022 survey, the 2023 survey respondent pool contains more large hospital types and respondents from the Tokyo region

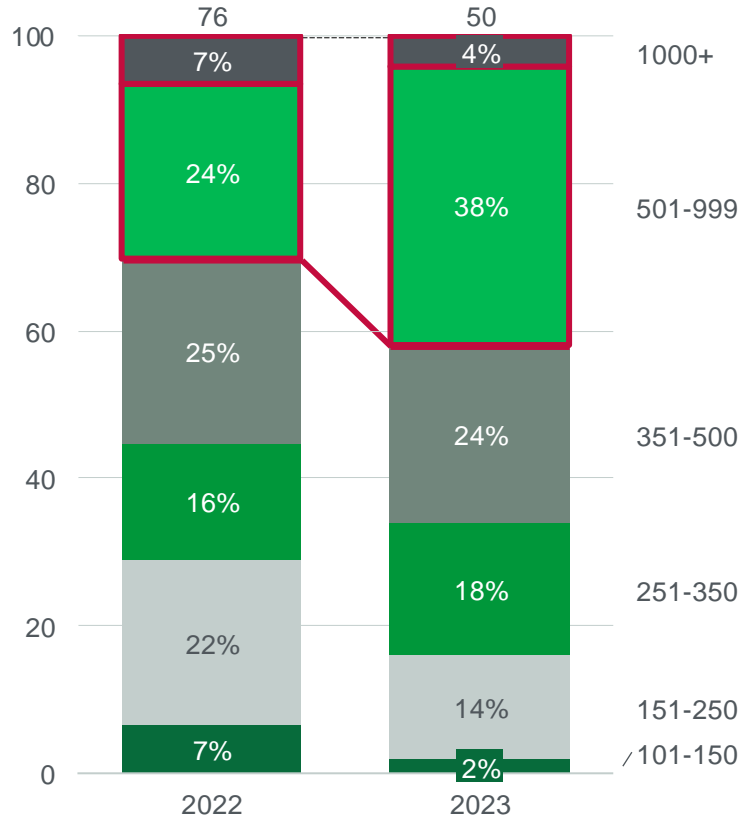


L.E.K. Hospital Priorities Japan survey respondent mix (2022-2023)
 Percent of respondents (2022: N=76, 2023: N=50)

Location of institution *



Number of hospital beds



- The 2023 respondent pool contains a greater sample from Tokyo, which likely has higher adoption rates for some solution types, e.g., digitalization, and exhibit more progressive purchasing behaviors
- The 2023 survey sample also contains more large hospitals which potentially have larger funding pools to pay for innovative solutions

*One expert reported more than 1 location of institution
 **Includes Chugoku, Shikoku, Kyushu, Okinawa

Source: L.E.K. 2023 APAC Hospital Priority Survey



In the 2023 survey pool, private respondents have a larger contribution from Hokkaido & Tohoku and larger hospital sizes compared to public respondents

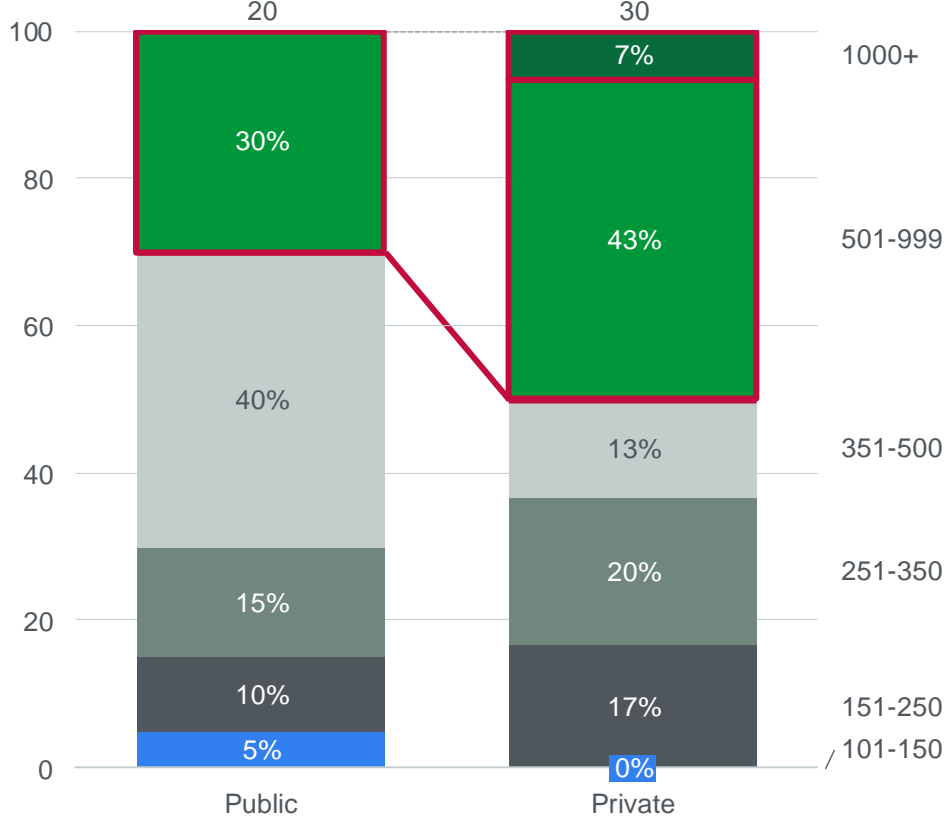


L.E.K. Hospital Priorities Japan survey respondent mix (2023)
 Percent of respondents (Total: N=50, Public: N=20, Private: N=30)

Location of institution*



Number of hospital beds



*One expert reported more than 1 location of institution
 **Includes Chugoku, Shikoku, Kyushu, Okinawa
 Source: L.E.K. 2023 APAC Hospital Priority Survey
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Key findings from our Japanese hospital survey



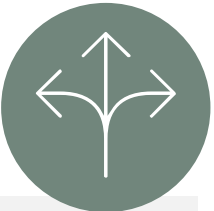
Financial outlook

- More hospitals are expecting to achieve budget surplus in the next 3 years
- Elective surgery volumes are returning to pre-pandemic levels



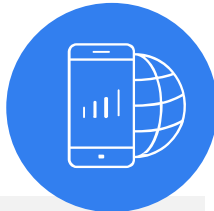
Operating priorities

- Public hospitals prioritize patient outcomes; private hospitals are driven more by efficiency
- Overall number of hospital beds in Japan is expected to continue to decline
- Purchase standardization is most anticipated for medical consumables and clinical support appliances
- Endocrinology and cardiology are key areas of investment



Go-to-market

- Clinical department heads overall play the leading role in purchase decisions
- Restrictions on MRs access to hospitals expected to tighten going forward
- Digital engagement is broadly accepted



Digitalization

- The MHLW has revised the medical fee system to foster the adoption of AI-based solutions
- Hospitals see the benefit of digitalization specifically in the delivery of quality care and for business development opportunities
- Main concerns limiting digital health adoption include patient privacy and increase in administrative load

Note: MHLW=Ministry of Health, Labour and Welfare of Japan; MR=medical representative

The financial situation of most hospitals in Japan has improved over the past year and shows a positive outlook for the coming 3 years, including continued growth of elective procedures

Summary findings



Both public and private hospitals have largely recovered financially from the impact of COVID-19



Respondents reported an increase in elective surgery volumes in 2023 and expect further growth for 2024

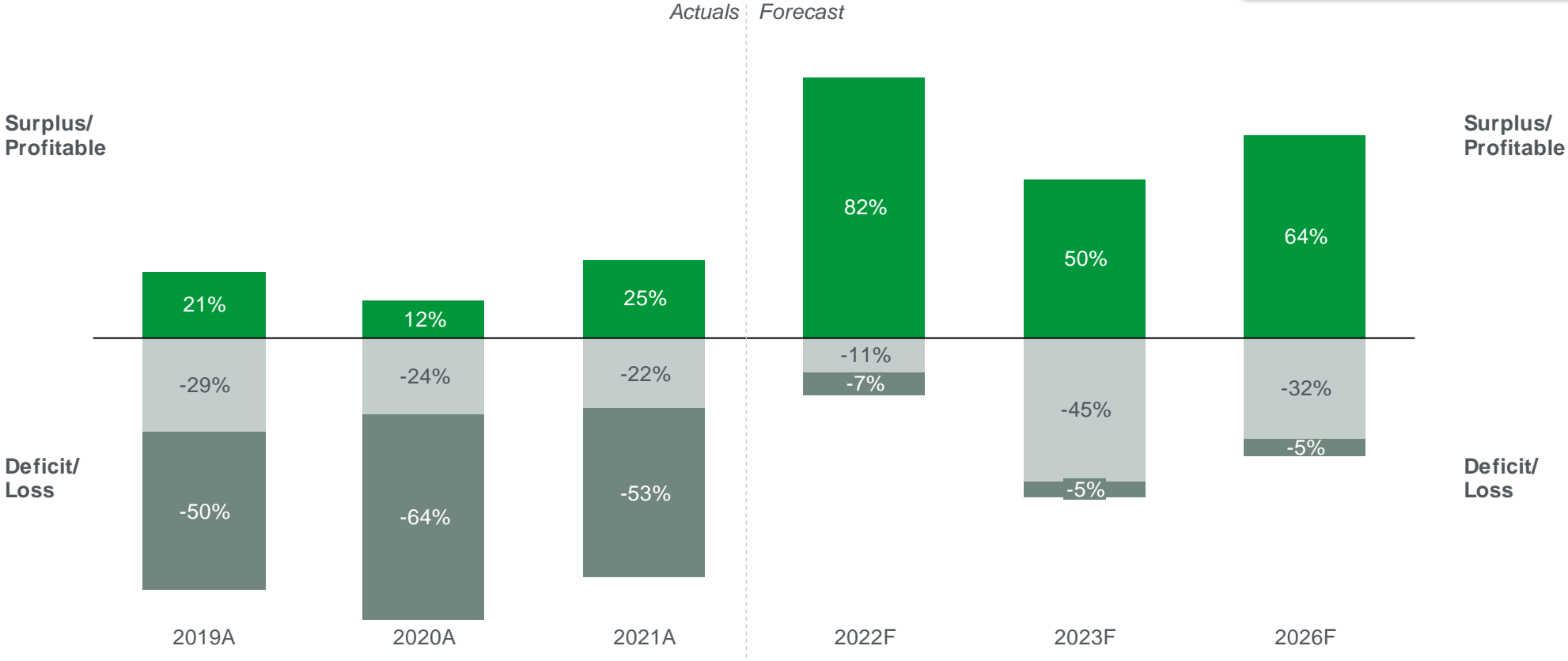
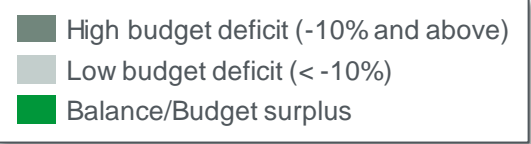


Hospitals' expenditure on capital equipment is projected to increase in the next 3 years

Public hospitals recovered slightly during the pandemic due to COVID-19 subsidies; budgetary outlook is expected to improve significantly



Budget outlook for public hospitals Percent of respondents



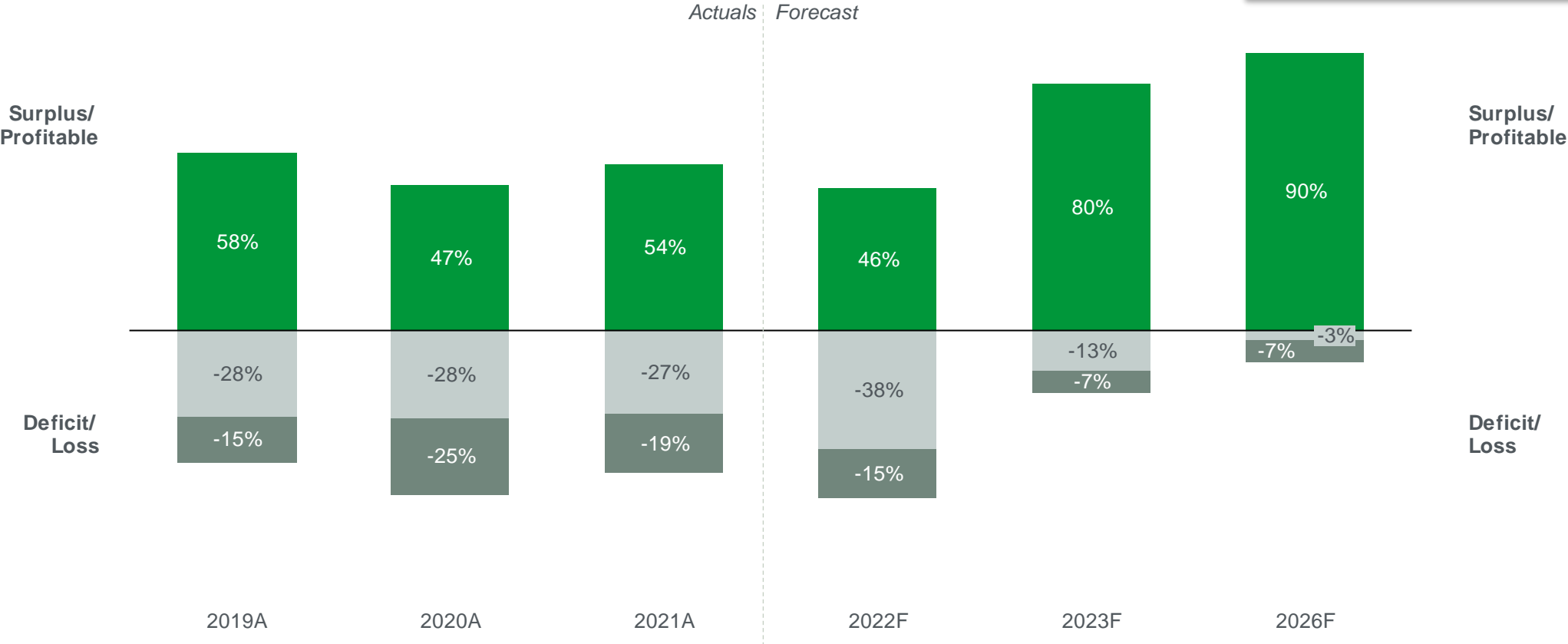
Source: MHLW, Central Social Insurance Medical Council, L.E.K. 2023 APAC Hospital Priority Survey, L.E.K. research and analysis

Private hospitals experienced a minor dip during the pandemic which persisted into 2022, but is forecast to rebound significantly



Profitability/EBITDA margin outlook for private hospitals
Percent of respondents

- High budget deficit (-10% and above)
- Low budget deficit (< -10%)
- Balance / Budget surplus



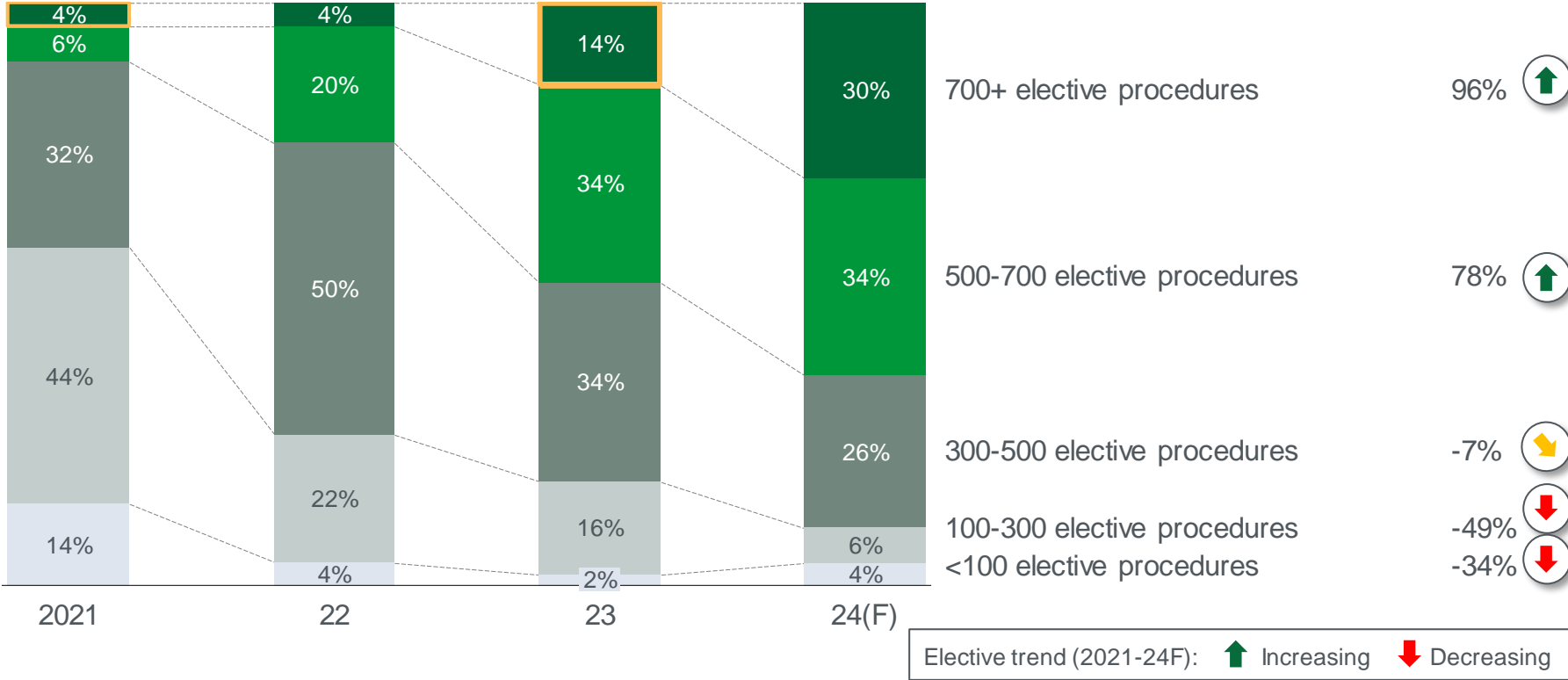
Note: EBITDA=earnings before income tax, depreciation, and amortization
Source: MHLW, Central Social Insurance Medical Council, L.E.K. 2023 APAC Hospital Priority Survey, L.E.K. research and analysis

Elective procedures, strongly affected during the pandemic, are recovering, with hospitals reporting a significant increase in volume for 2023 and expecting further growth for 2024

Number of elective procedures per month performed/expected each year per hospital*
Percent of respondents reporting (N=50)

CAGR
2021-24F

Interpreting the data
2021 data shows that in that year, **only 4% of hospitals** surveyed performed **700+ elective procedures**
Of the same respondent pool **14%** performed 700+ electives in 2023, suggesting an **overall growth in elective volume**
An elective procedure does not always mean it is optional. It refers to procedures that can be scheduled in advance that may be chosen to lead to a better quality of life, but not for a life-threatening condition, e.g., hip replacements

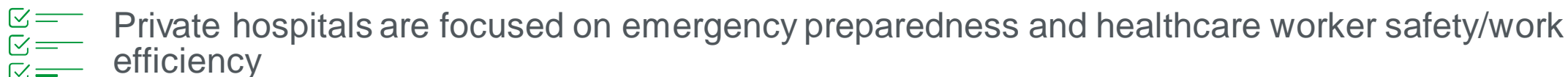


*Survey question: How many elective surgeries did your hospital perform/do you expect your hospital to perform over the following time period (monthly figures)?
Note: CAGR=compound annual growth rate
Source: L.E.K. 2023 APAC Hospital Priority Survey
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Public hospitals are focused on improving clinical outcomes; private hospitals are focused on emergency preparedness; acute capacity is projected to continue declining

Summary findings

 Public hospitals are focused on improving clinical outcomes and reducing cost

 Private hospitals are focused on emergency preparedness and healthcare worker safety/work efficiency

 The MHLW projects the overall number of hospital beds will continue to decline

 Hospitals are looking to standardize their purchases of consumables, clinical support appliances, and diagnostic imaging equipment

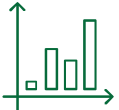
 Endocrinology, cardiology, and cardiothoracic surgery are the three specialties in which hospitals are looking to increase investment/capacity

Note: MHLW=Ministry of Health, Labour and Welfare of Japan

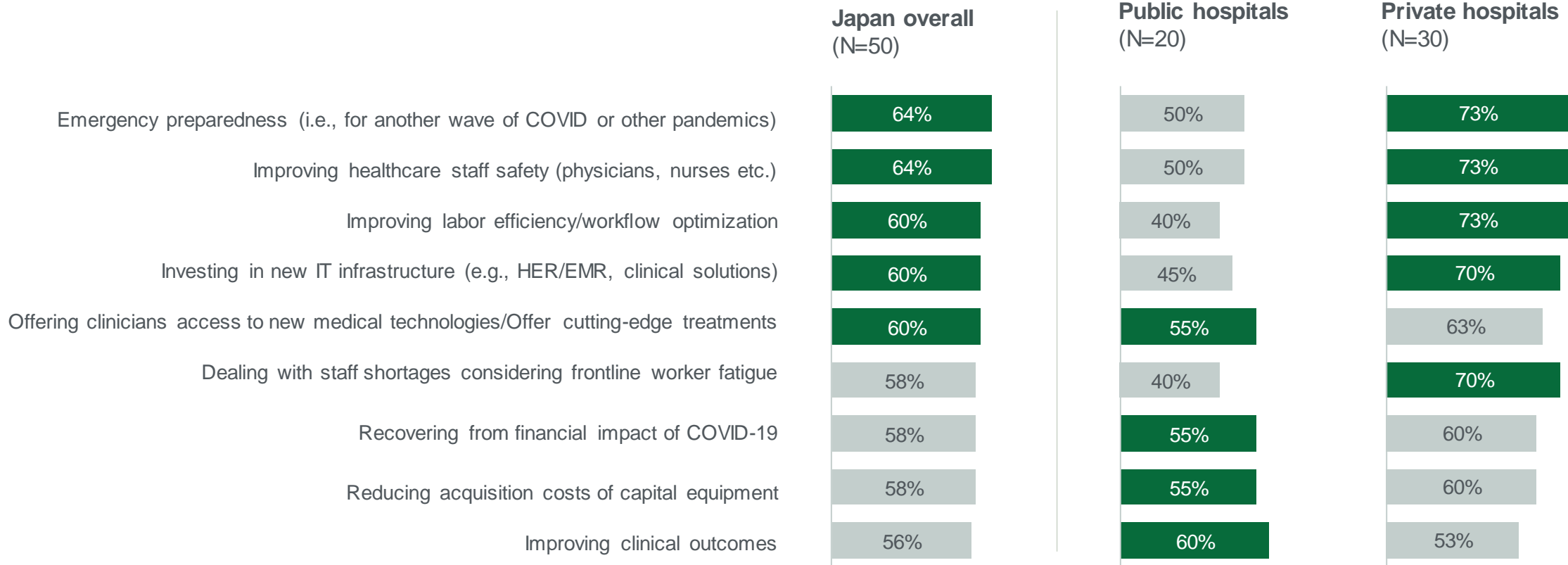
Source: MHLW, L.E.K. 2023 APAC Hospital Priority Survey, L.E.K. research and analysis

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Public hospitals are focused on improving clinical outcomes and reducing cost; private hospitals prioritize emergency preparedness and operating efficiency



Importance of strategic priorities over the next three years*
 Percentage of respondents with “6” and “7” rating**



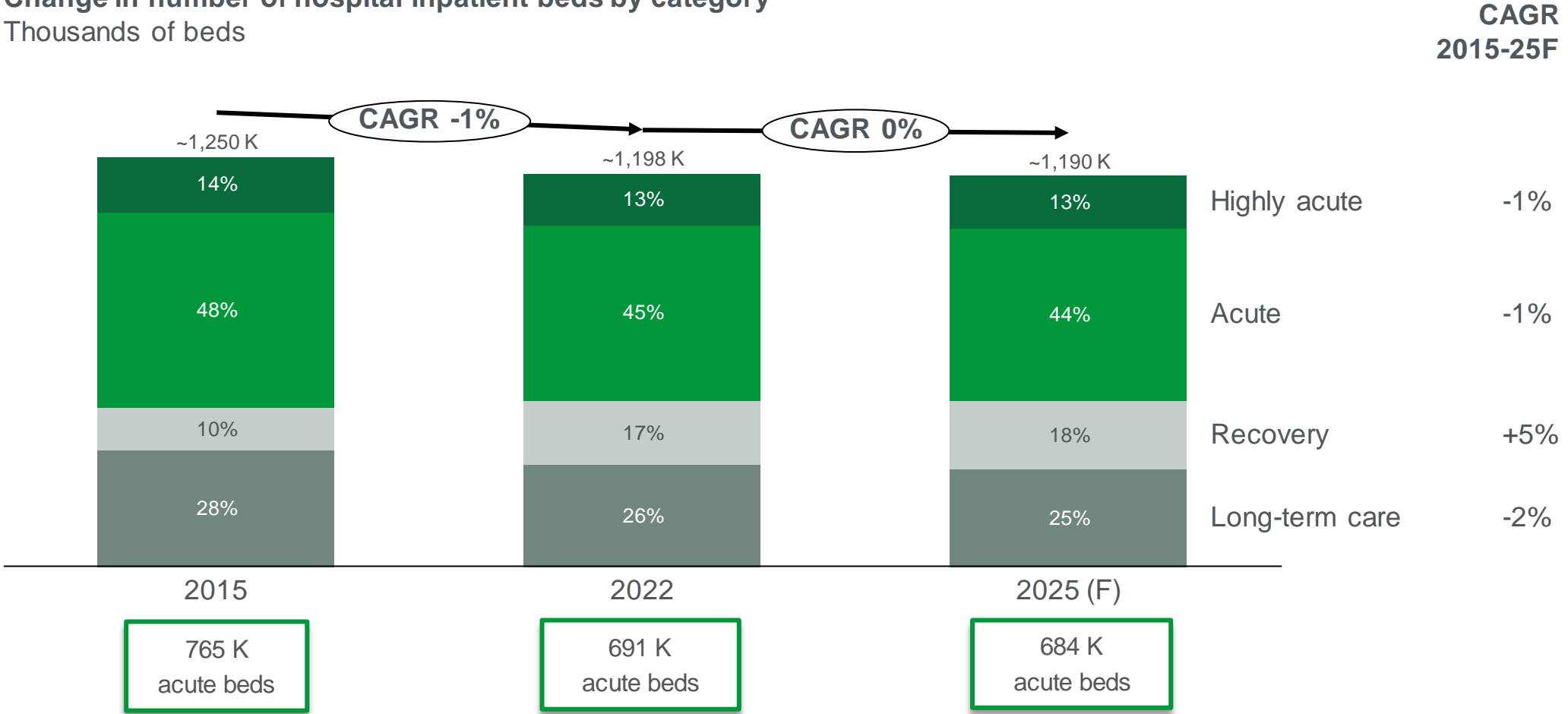
Top priorities

*Question: How important are the following strategic priorities for your hospital over the next 3 years? ** 1=Not important at all; 7=Very Important
 Note: HER=electronic health record; EMR=electronic medical record
 Source: L.E.K. 2023 APAC Hospital Priority Survey
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The MHLW projects the overall number of hospital beds in Japan is expected to continue their decline, with decreasing number of acute beds and increasing number of recovery beds



Change in number of hospital inpatient beds by category
Thousands of beds

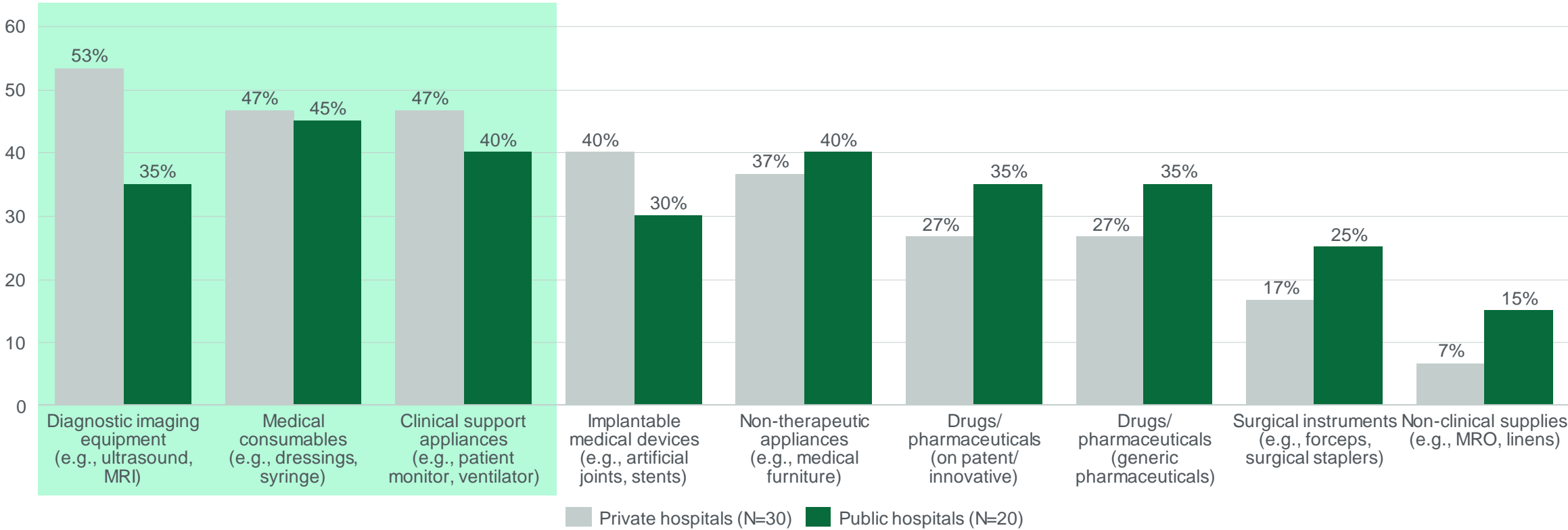


Note: MHLW=Ministry of Health, Labour and Welfare of Japan; CAGR=compound annual growth rate
Source: MHLW; L.E.K. research and analysis

Purchase standardization is most anticipated for medical consumables and clinical support appliances in general, as well as diagnostic imaging equipment in private institutions



Medical supplies/equipment hospital is looking to standardize purchasing*
Percentage of respondents



*Question: Please select top 3 medical supplies/equipment that your hospital is looking to standardize purchasing

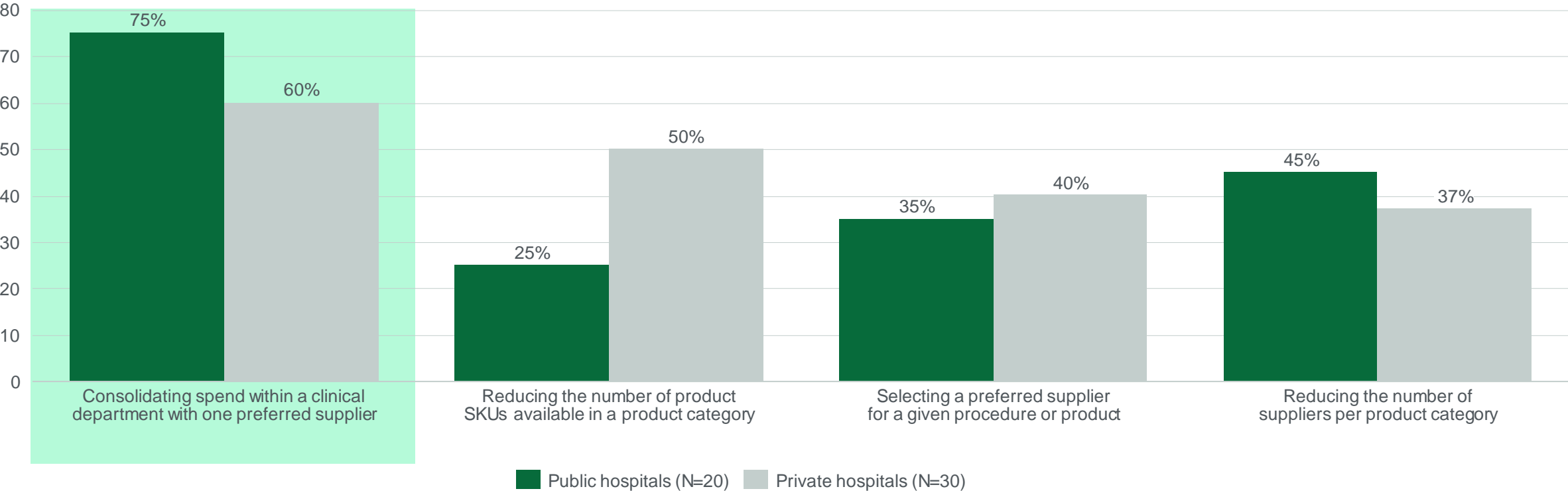
Note: MRO = Maintenance, Repair, and Operation inventory

Source: L.E.K. 2023 APAC Hospital Priority Survey



The main approach to purchasing standardization is through a consolidation with a preferred supplier

 **Approach to purchasing standardization***
 Percentage of respondents



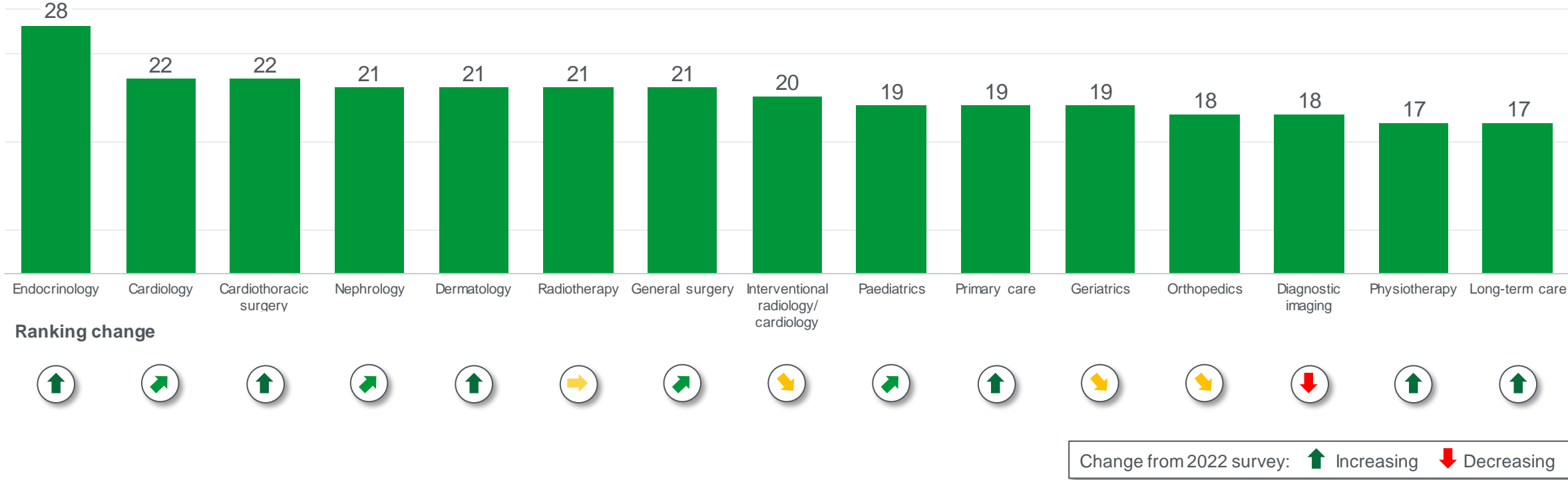
*Question: Please indicate which of the following approaches your hospital uses to standardize the purchasing of medical supplies/devices
 Source: L.E.K. 2023 APAC Hospital Priority Survey

Over the next three years, hospitals want to increase investment/capacity in three specialties: endocrinology, cardiology and cardiothoracic surgery



Clinical service offering outlook*

Respondents said they were **planning to increase investment/capacity in** over the coming three years (n=50)



*Question: Which clinical specialty is being offered in your hospital, what are the expected changes in offering in the next three years? Expected change in clinical specialty offering in the next 3 years?
 Source: L.E.K. 2023 APAC Hospital Priority Survey

Hospitals continue to look for ways to improve quality of care and process efficiency but are unsure if MedTech has the right solutions/services to offer

Summary findings



Clinical department heads play a leading role in purchase decisions in both public and private hospitals, alongside economic stakeholders, with a relative level of influence biased toward economic/admin



Top purchasing criteria differ by hospital types: **improving quality of care** and **patient satisfaction** on public hospital side; **maximizing resources** and **increasing process efficiency** on private institution side



A growing number of hospitals expect restrictions on sales representatives' access to become more significant going forward



Digital engagement is broadly accepted by public and private hospitals



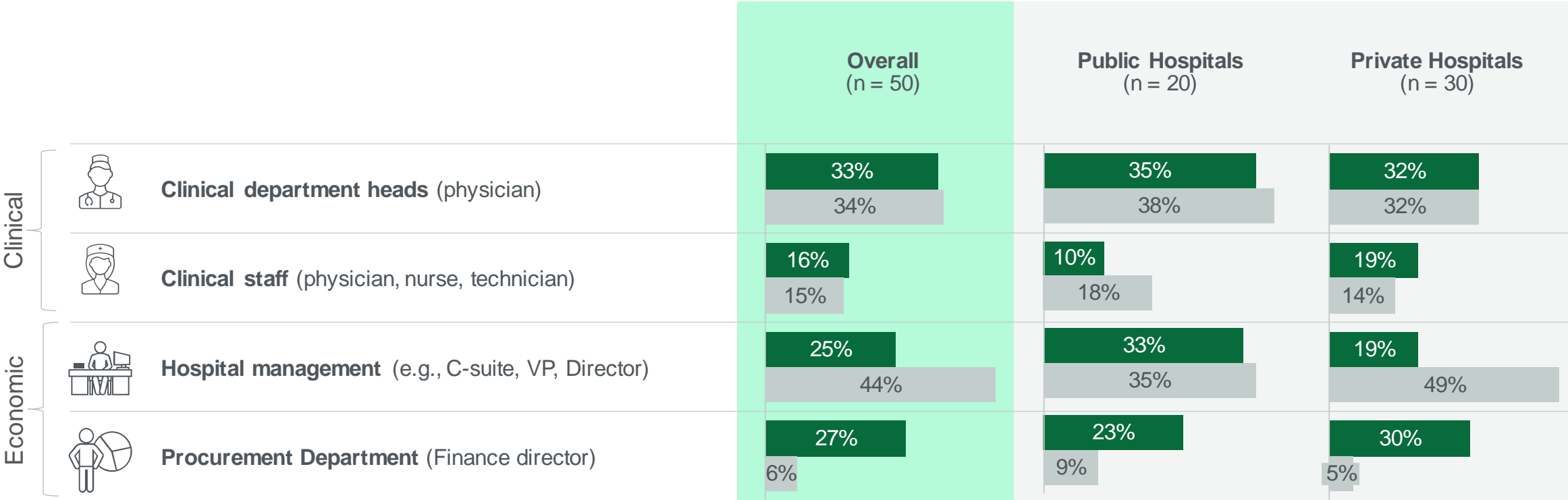
Most hospitals in Japan are in contract with one or more GPO (multiple contracts more common with private institutions) and provides them with a list of preferred suppliers and common purchase with other members to reach significant discounts

Clinical department heads are the most influential stakeholders in purchase decisions, followed by management in public hospitals and by procurement division in private institutions



Most influential position for medical device purchasing decisions overall, by hospital type*
 Percentage of respondents selected “1=Most influential”

2023
2022



*Question: Who has the most influence in purchasing decision for the following medical products today?
 Source: L.E.K. 2023 APAC Hospital Priority Survey

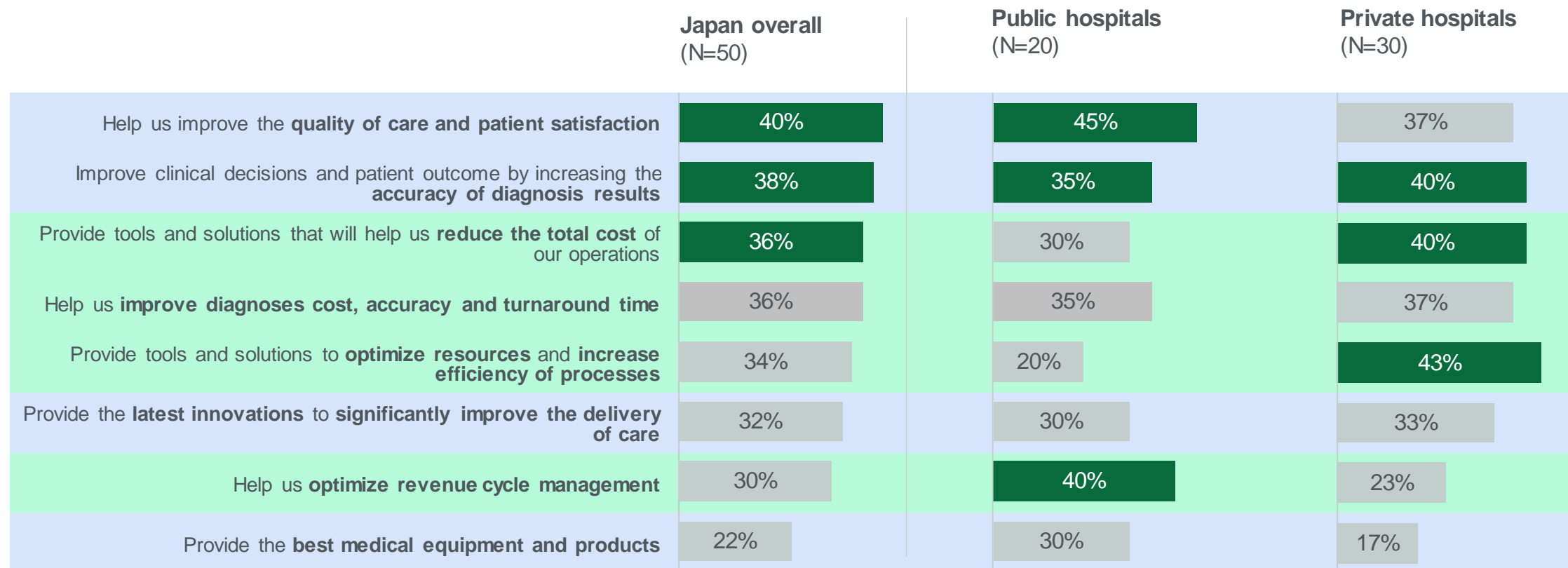
Public hospitals see improvement in quality of care and patient satisfaction as their top purchase criteria; private hospitals are more focused on optimizing resources and increasing efficiency



Top three most important criteria when purchasing from a MedTech company*

Percentage of respondents

■ Cost and efficiency-oriented criteria
■ Clinical-oriented criteria
■ Top 3

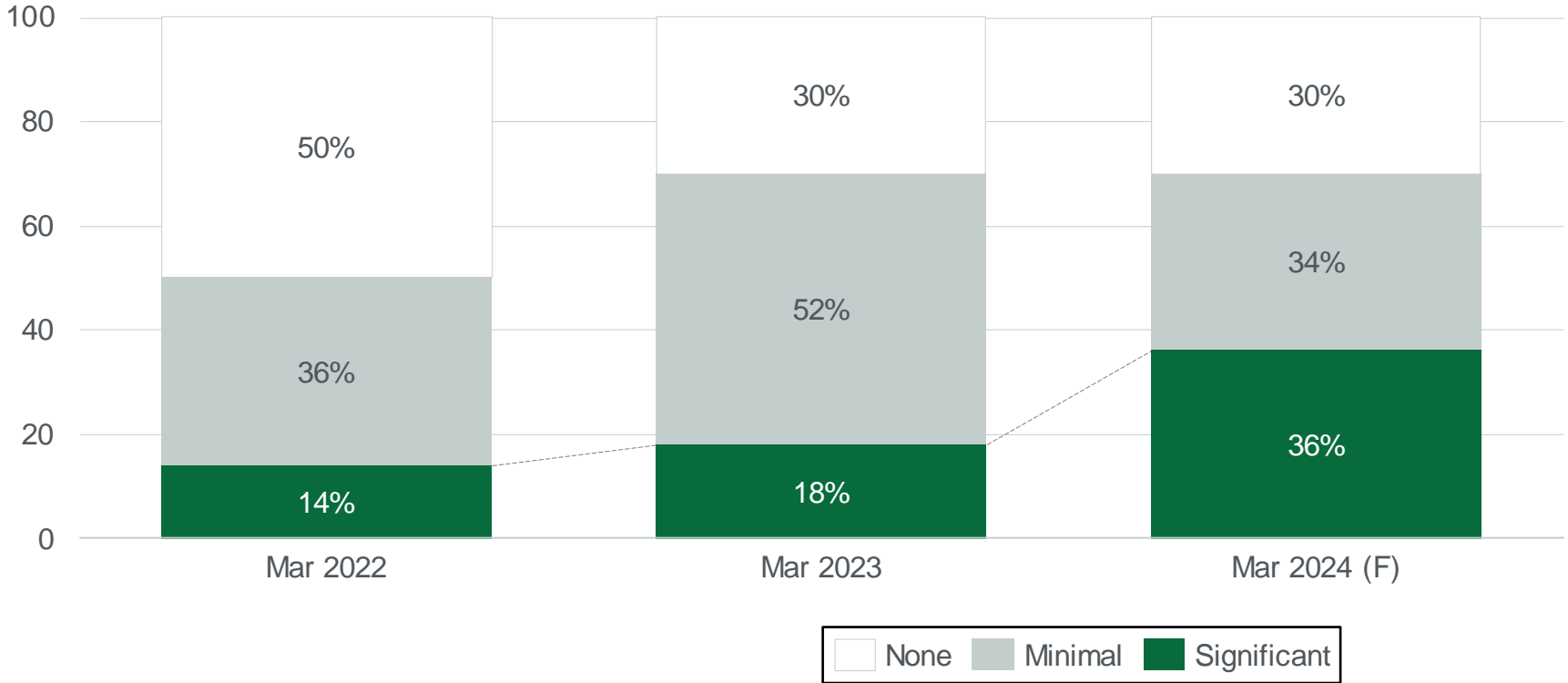


*Question: Please rank the top 3 most important criteria for procuring from a medical equipment supplier
 Source: L.E.K. 2023 APAC Hospital Priority Survey

A growing number of hospitals expect restrictions on sales representative access to become more significant going forward



Sales representative hospital access restrictions in 2022, 2023 and 2024*
Percent of respondents reporting (N = 50)



Despite easing COVID-19 restrictions, hospitals continue to limit the frequency of MR visits due to:

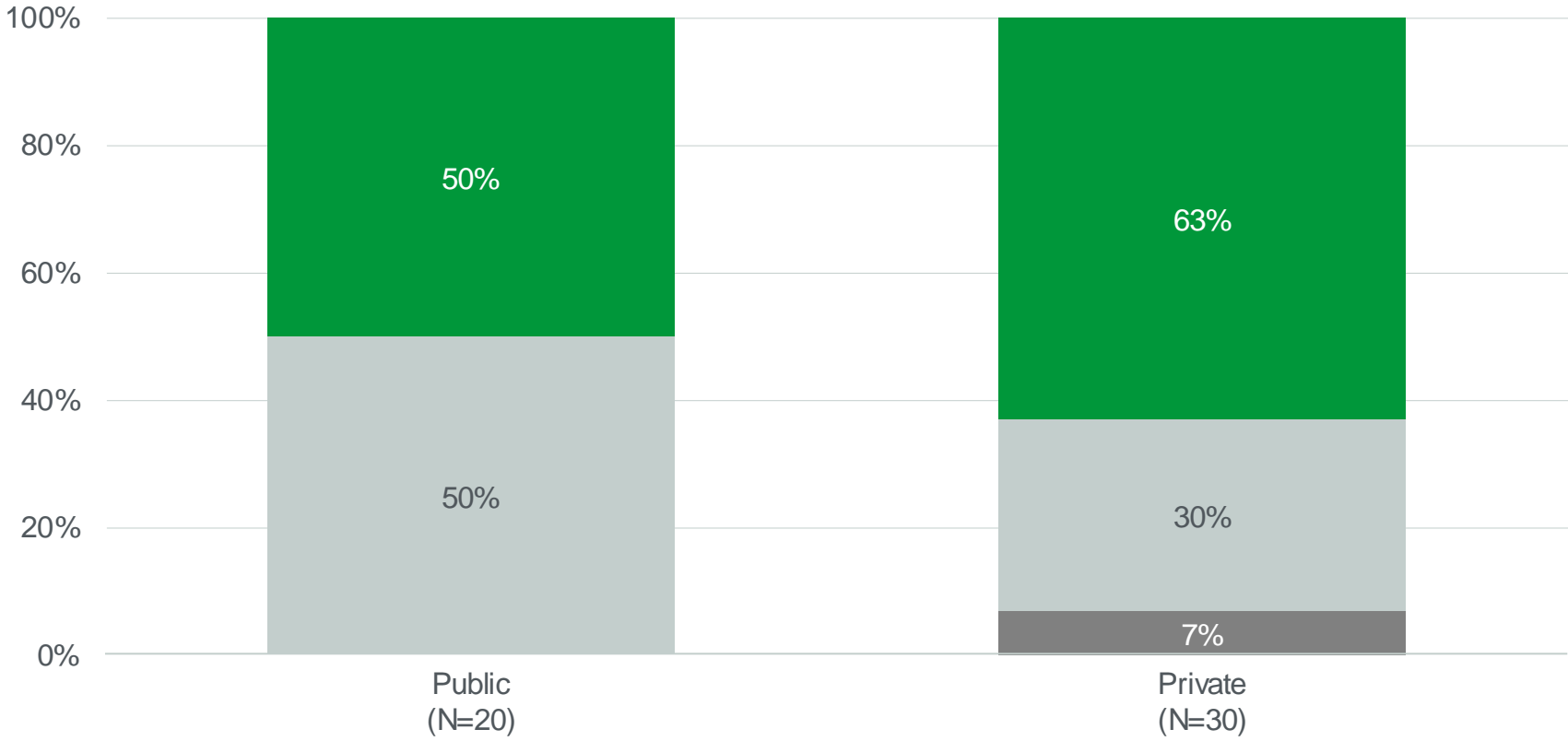
- Hospitals preferring a shift to interacting with MRs via an online platform to accommodate the busy schedules of physicians
- The increase in persistent MRs, causing disturbance in hospital affairs by lining up in front of the examination rooms, disturbing patients, etc.

*Question: Please select which of the following best describes your hospital's approach to managing suppliers (e.g., pharma, Medtech) sales/marketing representative access in your facilities
 Note: MR=medical representatives
 Source: Nikkei Medical; L.E.K. 2023 APAC Hospital Priority Survey, L.E.K. interview and analysis
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Digital engagement is broadly accepted by public and private hospitals



Digital engagement preference*
Percent of respondents who chose each statement



Completely acceptable



Acceptable in combination with regular physical visits



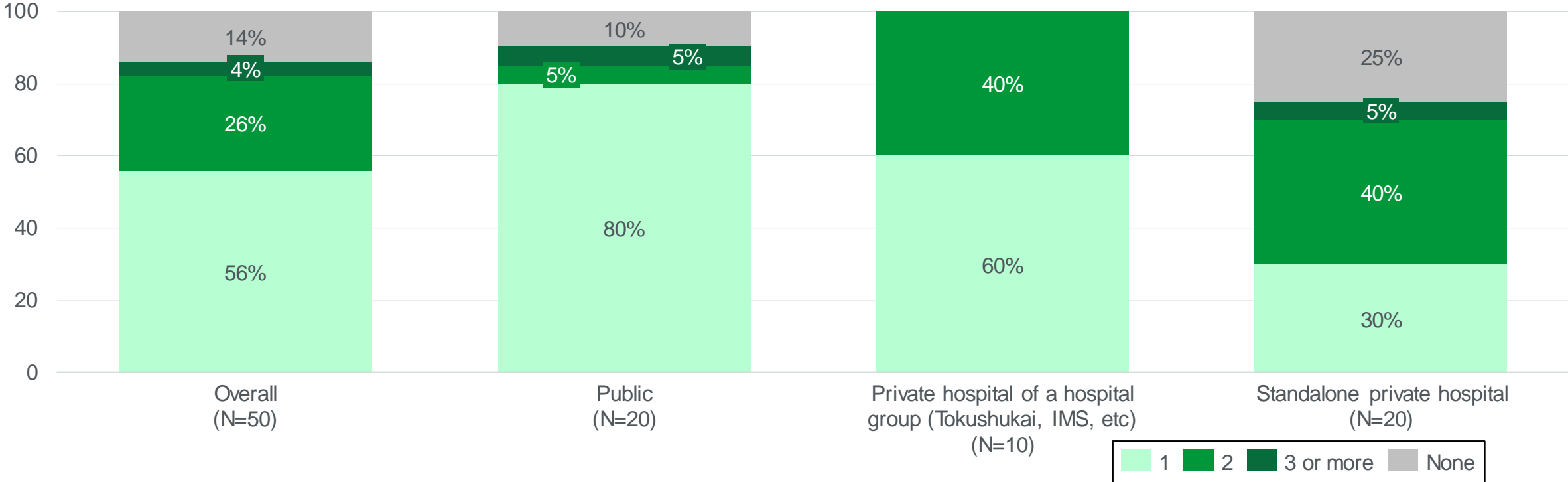
Relatively acceptable in the short term, but should disappear once physical interactions are able to resume

*Question: How acceptable do you find digital engagement from suppliers vs. traditional physical interactions?
Source: L.E.K. 2023 APAC Hospital Priority Survey

A majority of hospitals have contracts with GPOs; while public hospitals tend to prefer contracting with only one GPO, private institutions frequently use multiple GPOs



Number of GPOs that hospitals belong to*



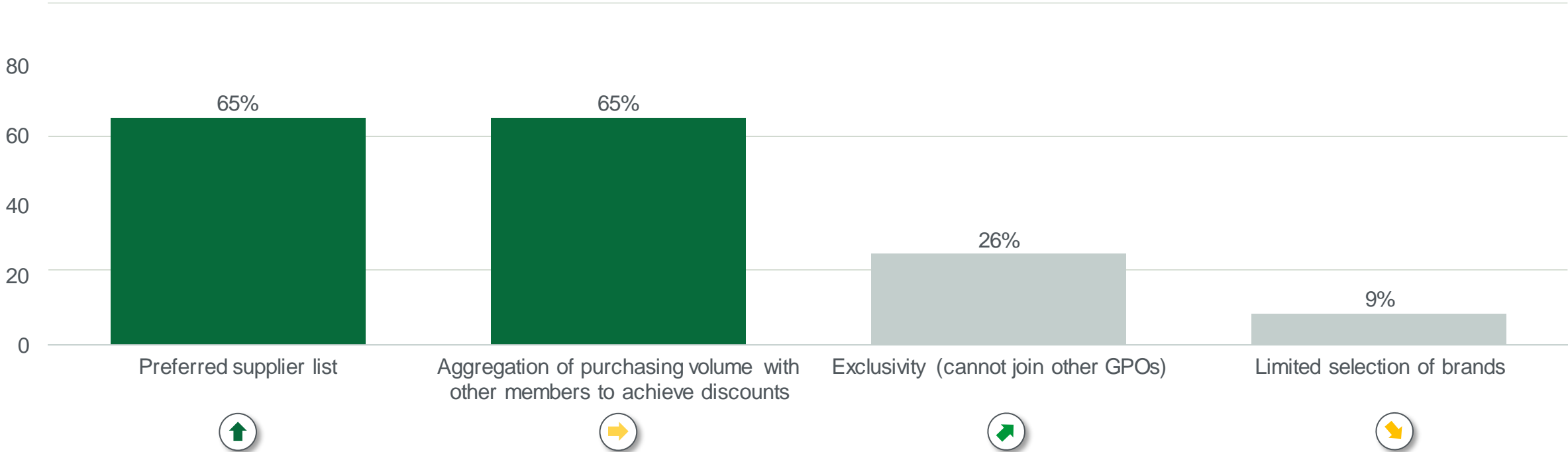
*Question: Aside from centralized purchasing, how many GPOs (Group Purchasing Organization – that is not part of the hospital) does your hospital belong to?

Note: GPO=group purchasing organization; IMS=Itabashi Medical System

Source: L.E.K. 2023 APAC Hospital Priority Survey

The most common features of GPO contracts with hospitals include a preferred supplier list and purchase volume aggregation with other members to achieve discounts

Key features of GPO contracts*
 Percent of respondents (N = 43)**



Change from 2022 survey: ↑ Increasing ↓ Decreasing

*Question: What are the key features of the GPO contract(s)?
 ** Respondents may select multiple answers
 Note: GPO=group purchasing organization
 Source: L.E.K. 2023 APAC Hospital Priority Survey

Although public and private hospitals differ in their views on digital solutions' value and preferences, most hospitals are interested in exploring and trialing new digital solutions

Summary findings



A 2019 MHLW study found that overall adoption of digital health solutions was stubbornly low; in 2022, the MHLW revised the medical fee system to increase adoption of AI-based solutions



Our survey shows that public hospitals see the benefit of digitalization specifically on the delivery of quality care



Private institutions see benefits from potential business development opportunities, e.g., expanding catchment area, and in general are greater adopters of digital solutions than are public hospitals



Public hospitals focus their use of digital solutions for patient information on health records; private hospitals use digital tools to push information to patients



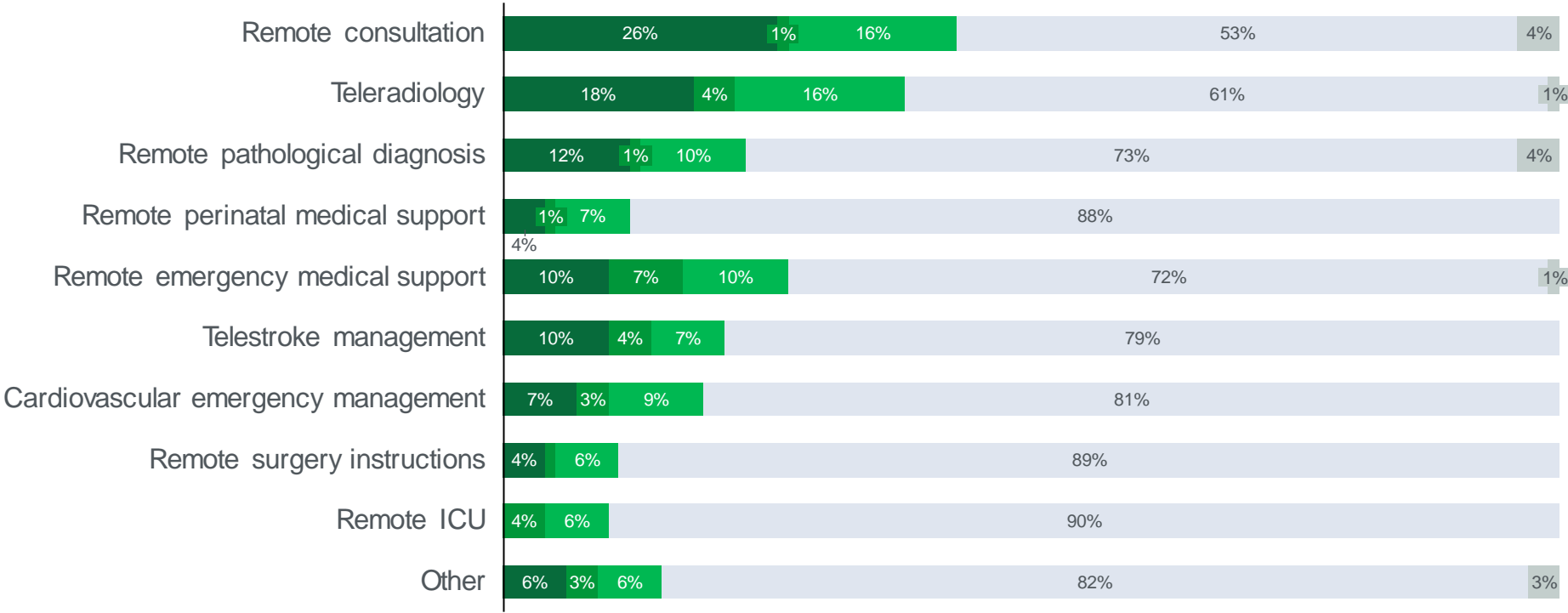
The main concerns limiting digital health adoption include patient privacy and increased administrative load

Remote consultation and teleradiology are the two most-adopted digital health solutions among medical institutions in Japan



Adoption of digital health solutions in 2019

Percentage of respondents (N=68)*



- An MHLW study from 2019 suggests that the overall digital adoption rate is low
- Most hospitals that use digital health solutions are larger hospitals (e.g., university hospital, leading regional hospital), which is in line with survey results

Currently using
 Preparing to adopt
 Planning to adopt in future
 Not a priority
 Previously adopted but stopped using

*Respondents include medical institutions, medical information coordination network, vendor etc.
 Note: MHLW=Ministry of Health, Labour and Welfare of Japan
 Source: Ministry of Internal Affairs and Communications; L.E.K. research and analysis



Medical services fee revisions in 2022 mean certain AI applications are covered by insurance



Source: MHLW, Medie; L.E.K. research and analysis

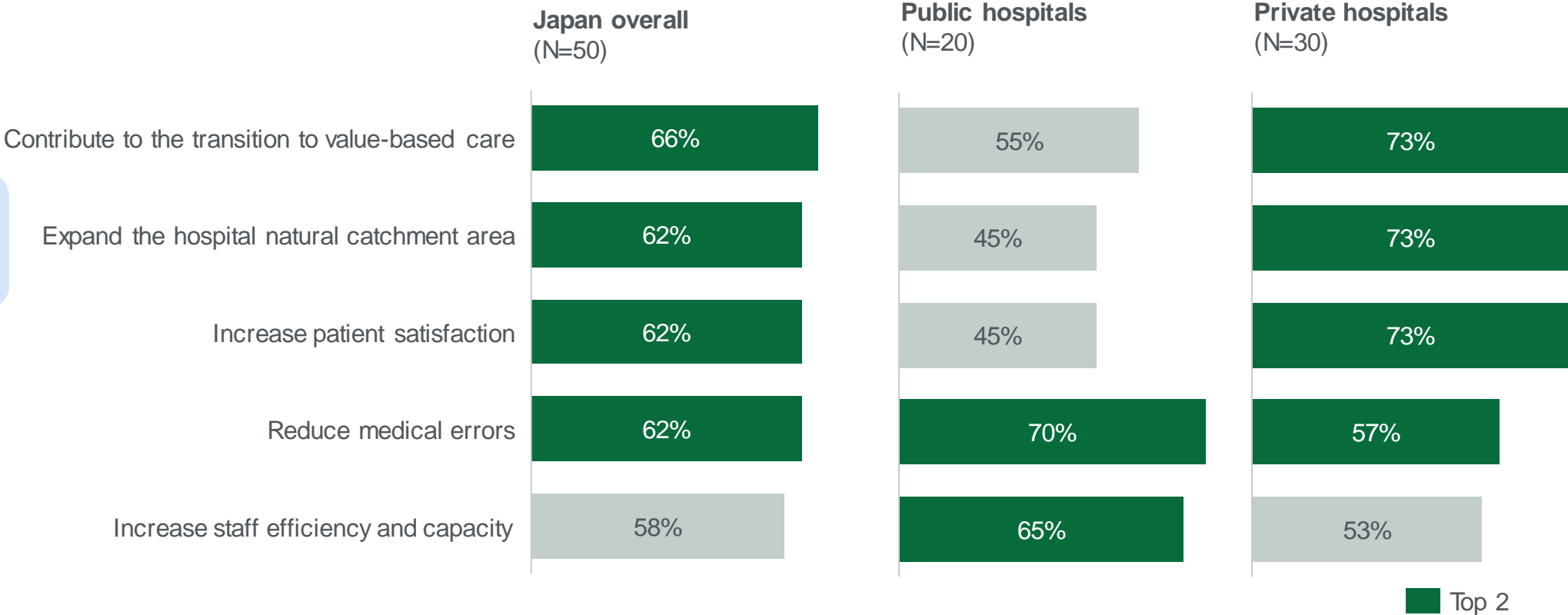
The perceived value of digital solutions varies largely by institution type: public hospitals value the quality of care delivery; private institutions value business development



Value from digital health solution adoption*

Percentage of respondents (1-7 scale, 1=not likely, 7=very likely)

Potentially by better monitoring outcome quality vs. treatment cost

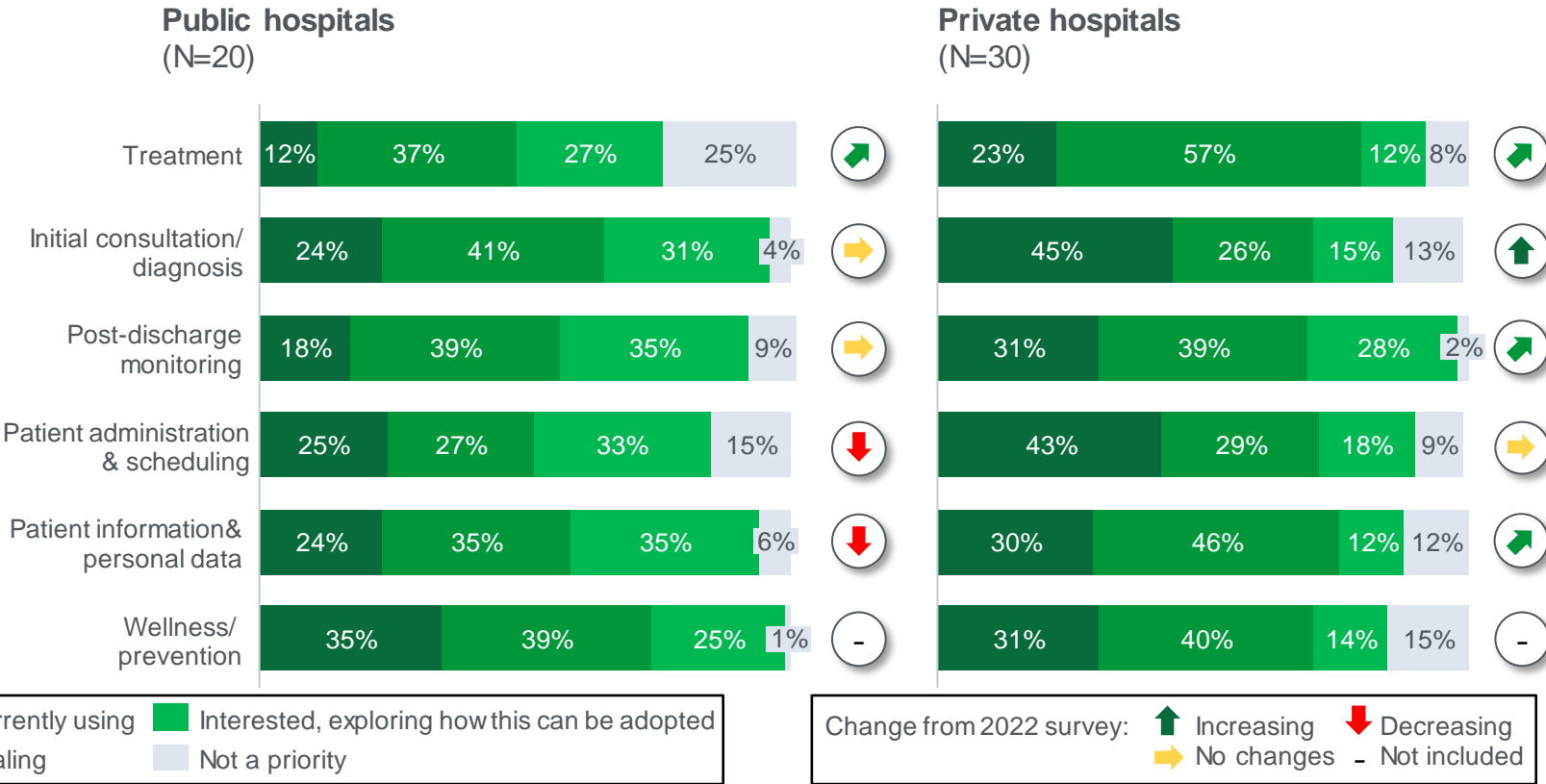


*Question: What value do you think digital health solutions will likely bring about for your hospital? (1=not likely, 7=very likely)
 Source: L.E.K. 2023 APAC Hospital Priority Survey

Private hospitals have a higher digital solution implementation rate than public institutions overall, especially in areas helping with patient administration, logistics and initial consultation



Adoption of digital health solutions* Percentage of respondents



- In 2022, the MHLW amended the telemedicine guideline to permanently allow remote initial consultations
- Recent adoption of “My Number” card as health insurance card has revealed information misregistration issues that may be driving less use of digital tools in patient information management

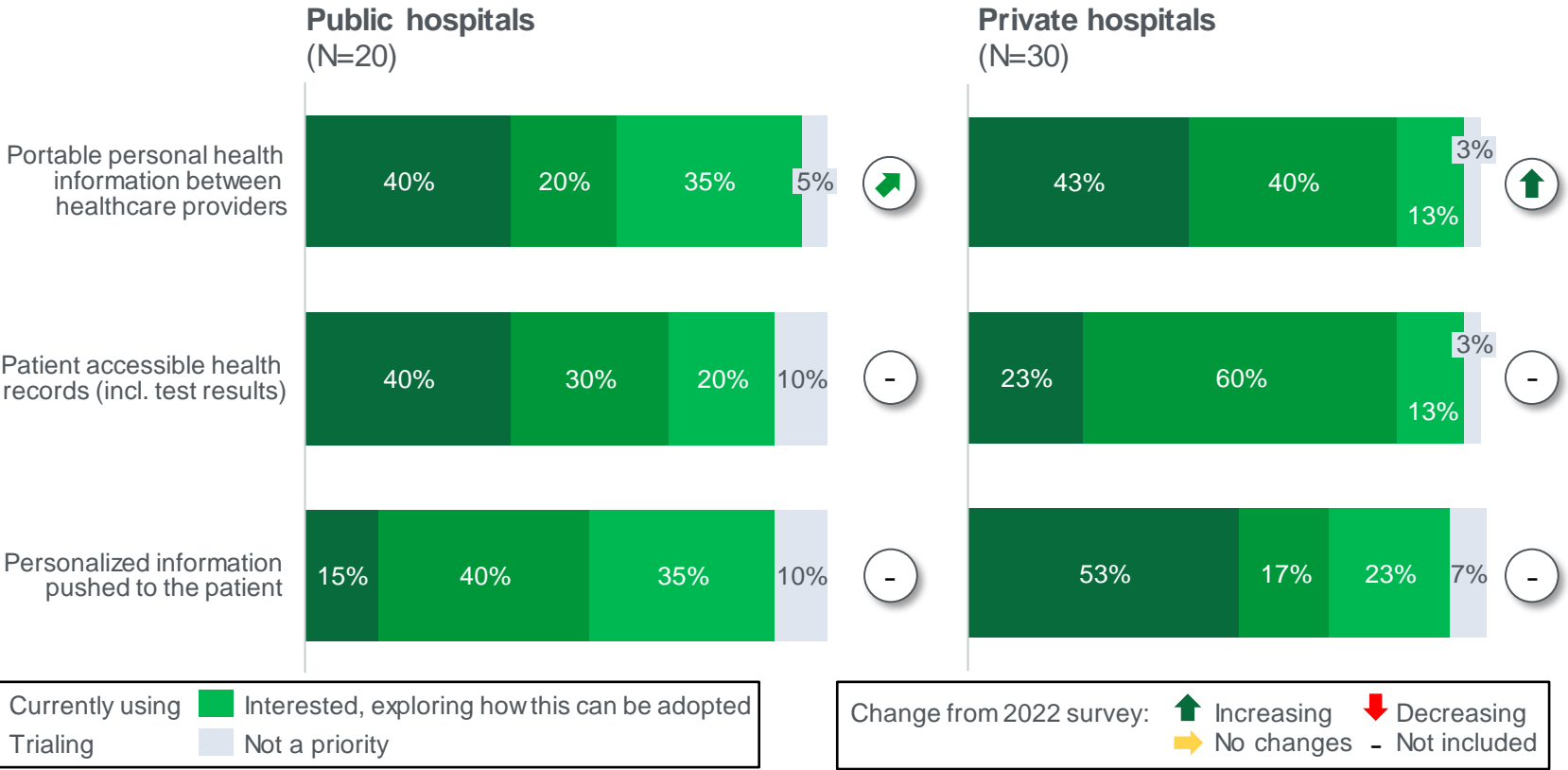
*Question: Digitalization of hospitals is gaining traction in many countries. What digital health solutions have you adopted/would you like to adopt?
 Source: L.E.K. 2023 APAC Hospital Priority Survey; Gemmed; NHK; L.E.K. research and analysis



Public hospitals focus their use of digital solutions for patient information on health records; private hospitals uses digital tools more to push information to patients



Adoption of patient information & personal data digital solutions* Percentage of respondents



- As of 2020, the MHLW has been promoting standardized use of EMRs by providing funds to smaller/medium sized institutions
- Private hospitals with IT capabilities have been quick to incorporate EMR solutions for efficient patient data management
- Although overall adoption of EMRs in the past years has grown to ~60% (7-10% CAGR), the pace is expected to reach a plateau, due to:
 - Long history of paper medical record usage
 - Lack of dedicated IT staff

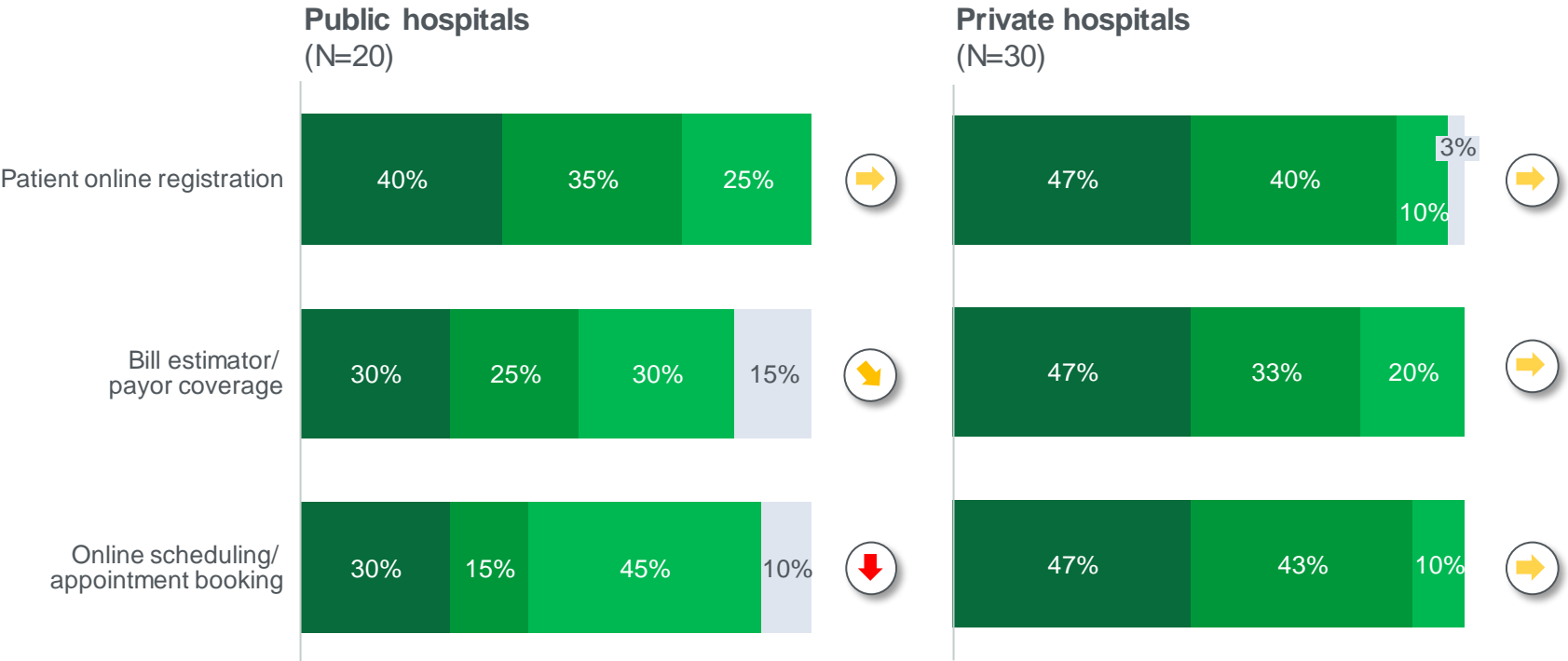
*Question: Digitalization of hospitals is gaining traction in many countries. What digital health solutions have you adopted/would you like to adopt?
 Note: MHLW=Ministry of Health, Labour and Welfare; EMR=electronic medical record; CAGR=compound annual growth rate
 Source: MHLW; L.E.K. 2023 APAC Hospital Priority Survey



The adoption of digital solutions for patient administration and scheduling is high across the board in both public and private institutions, but growth may have stalled relative to other solutions



Adoption of patient administration & scheduling digital solutions* Percentage of respondents



■ Currently using ■ Interested, exploring how this can be adopted
■ Trialing ■ Not a priority

Change from 2022 survey: ▲ Increasing ▼ Decreasing
➡ No changes - Not included

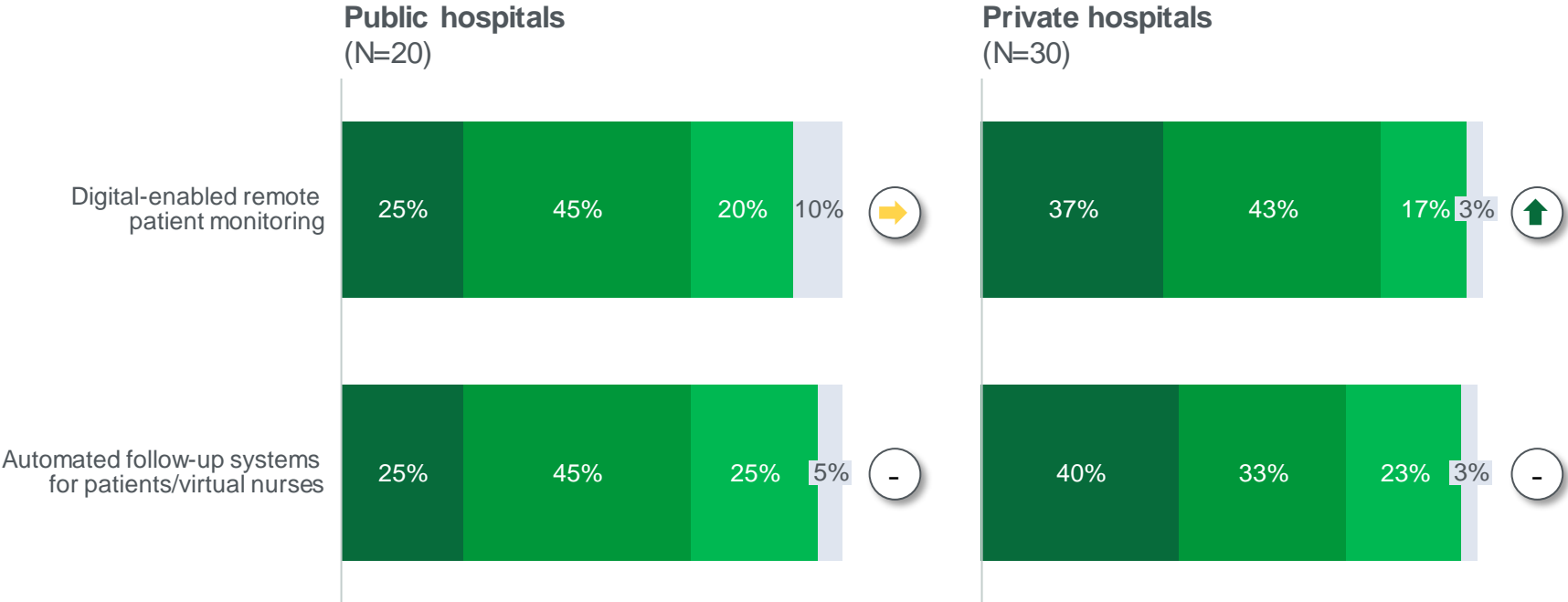
- In 2021, the “Online eligibility verification” system was introduced to confirm insurance qualification, manage patient information, etc.
- While ~60% of institutions have applied for card readers required for online eligibility verification, only 24% of the facilities have completed system modifications, with only 18% that have started operation

*Question: Digitalization of hospitals is gaining traction in many countries. What digital health solutions have you adopted/would you like to adopt?
 Source: L.E.K. 2023 APAC Hospital Priority Survey

Hospitals' interest in post-discharge digital solutions is higher in the private setting than in public institutions



Adoption of post-discharge digital solutions*
Percentage of respondents



- High adoption in private hospitals, potentially due to greater WTP e.g., a private hospital in Nagasaki uses a rheumatoid arthritis medical system to diagnose patients remotely
- As a direct result of the government efforts to encourage digital tools via medical services fee initiatives, adoption in many private hospitals may be peaking

■ Currently using ■ Interested, exploring how this can be adopted
■ Trialing ■ Not a priority

Change from 2022 survey: ↑ Increasing ↓ Decreasing
→ No changes - Not included

*Question: Digitalization of hospitals is gaining traction in many countries. What digital health solutions have you adopted/would you like to adopt?

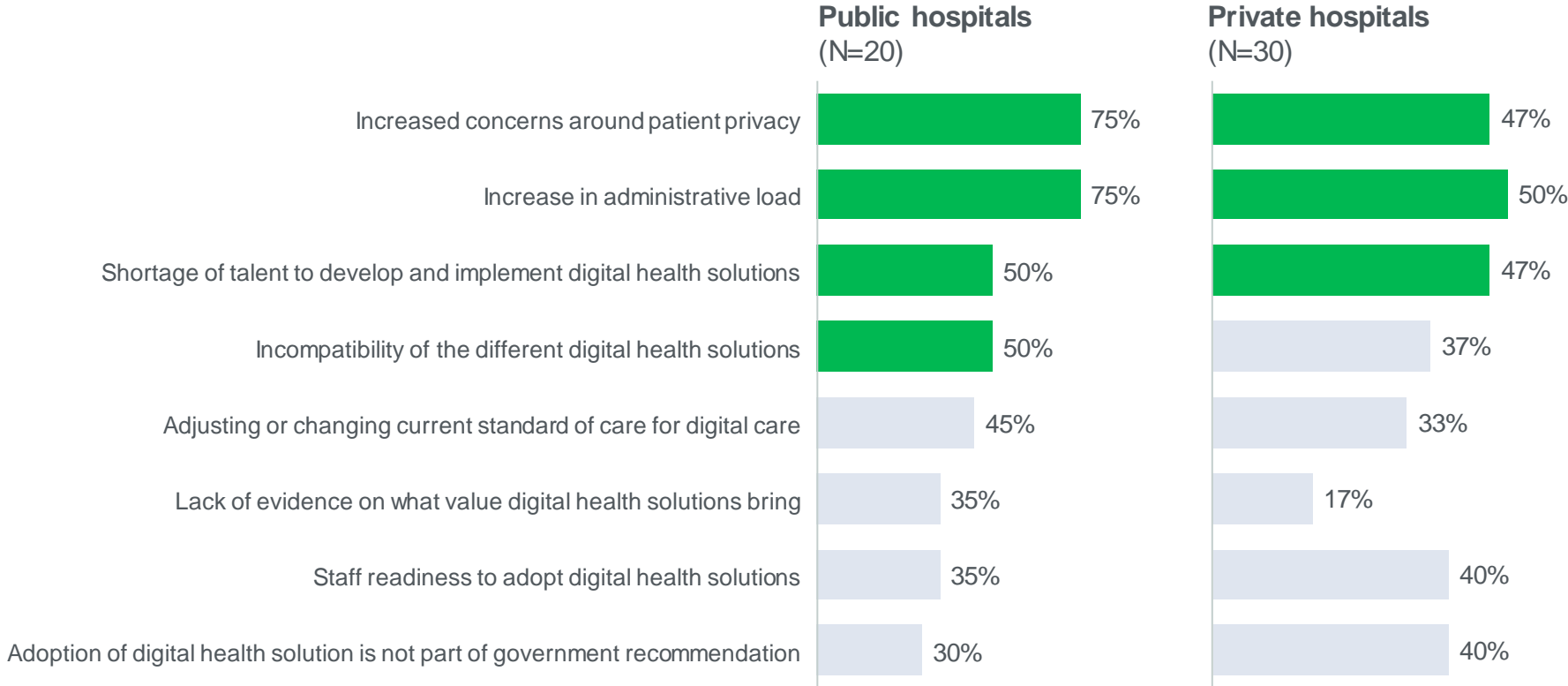
Note: WTP=willingness to pay
Source: Information-technology Promotion Agency, Japan, L.E.K. 2023 APACHospital Priority Survey

Patient privacy, administrative burden and staff shortages are top concerns for hospitals



Top concerns for digital health adoption*

Percentage of respondents



- Administrative load and shortage of staff has increased as a concern, potentially as hospitals start to implement solutions and directly feel the effects of the increased workload/lack of talent
- Concerns about patient privacy may have increased as proper management of private data has become an increasingly prevalent issue as data leaks increase

*Question: What are your concerns for digital health adoption?
 Source: L.E.K. 2023 APAC Hospital Priority Survey

L.E.K. is a consulting firm uniquely positioned to deliver the strategic perspectives of a large strategy firm combined with the granular insights of a research specialist



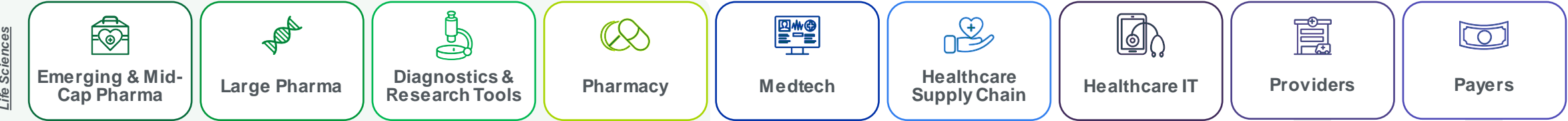
L.E.K.'s key points of differentiation

- Hands-on senior team with deep expertise** L.E.K.'s Partner-led execution model ensures depth of insights and an actionable strategy
- Fact-based approach** Data-driven and highly analytical approach leveraging world-class Market Insight capability; conclusions are based on facts, not conjecture or "pre-packaged solutions"
- Industry thought leadership** High caliber team of PhDs, MDs, and MBAs regularly publishing insights and engaging with market leaders & innovative challengers
- Bias to action** Acknowledgement that solutions have no value unless they can be readily acted upon. Deep experience working with management teams to develop actionable strategic plans
- Speed and flexibility** L.E.K.'s heritage as a transaction advisor has created a working style enabling high quality, rapid execution

L.E.K. covers all parts of the healthcare ecosystem with deep expertise across all major practice areas

L.E.K. Healthcare Sector Overview

L.E.K. Vertical Practices



L.E.K. Horizontal Practices



L.E.K. Capabilities

- ~75 full-time healthcare-focused Managing Directors/Partners globally across 9 vertical and 4 horizontal practices
- **Hundreds of dedicated** healthcare consulting staff across the world (plus hundreds more in critical supporting functions)
- Global network of **10,000+** healthcare industry executives, experts, clinicians, thought leaders (for research and industry insights)
- **Hundreds of projects** per year with a diverse range of large-cap, mid-cap and PE-backed clients
- Industry-leading **thought leadership and Intellectual Property** (e.g., best-in-class methodologies, benchmarks, market fact-bases, industry surveys)
- Recognized as a leading advisor for **growth strategy, M&A support** and solving key **strategic and complex business issues**

Our MedTech practice is a recognized thought-partner and trusted advisor to senior executives across the MedTech industry



L.E.K.'s MedTech Practice



Engaged with **9 of the top 10** largest medical device companies



Works across **all medical device categories** and the entire **value chain**



Completed **600+ engagements** in the MedTech industry



Global network of 10,000+ healthcare **industry experts and thought leaders**



Experience across key customer segments including **IDNs** and **payers**



Deep experience with **Corporate M&A Strategy, Acquisition Screens, and Diligence**



Creativity and Energy engagements in and outside of MedTech

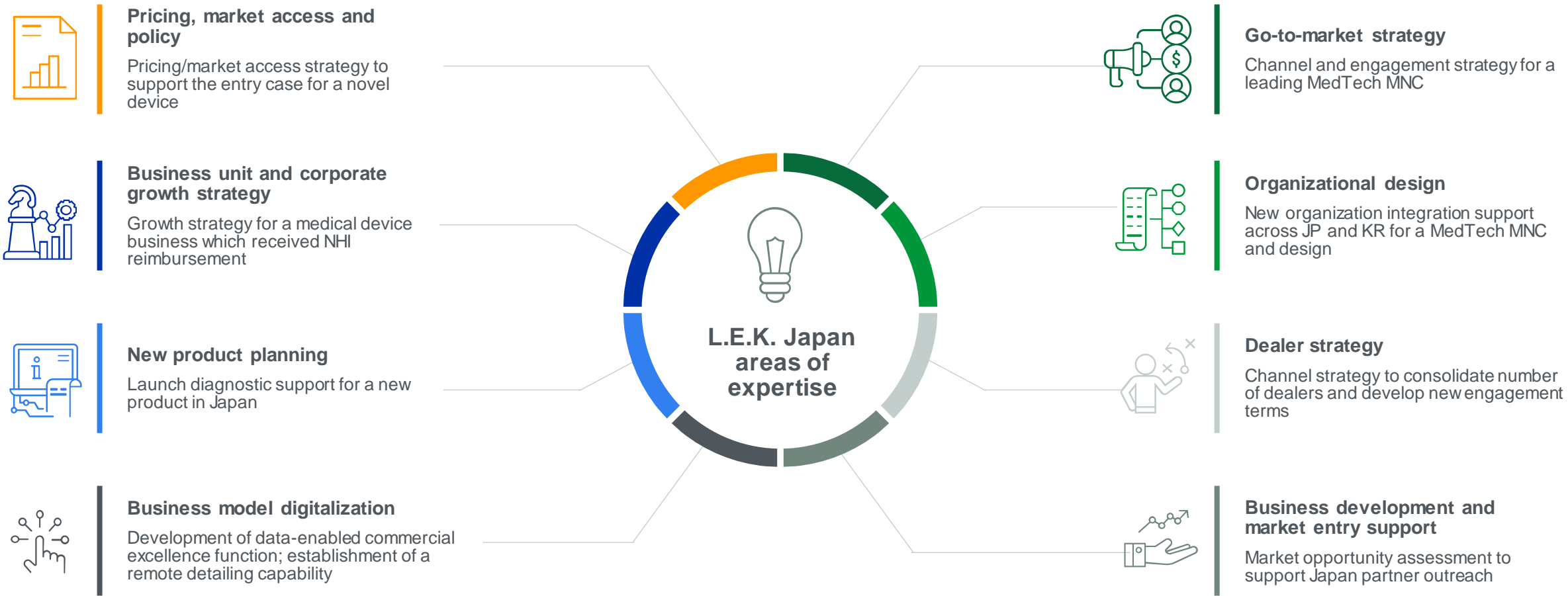


Customized and experienced team of **Ph.D.s, M.D.s, MBAs** and **industry experts** for each engagement



Dedicated, "Hands-on" Senior Team that executes projects

We have deep experience assisting MedTech players across a range of strategic issues in Japan



Note: NHI=National Health Insurance; MNC=multinational corporation




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