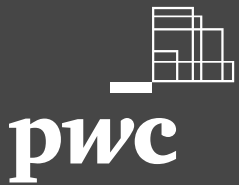


PwC Healthcare Trends of M&A Deal in 1H 2022

Sep, 2022



Introduction

01 Description of the data presented in the report

- The data in the report are based on information provided by the Zero2IPO database, Thomson Reuters, CVSource and PricewaterhouseCoopers analysis, except where noted;
- The Zero2IPO database, Thomson Reuters and CVSource only record deals that are publicly announced, and some announced deals may not be completed;
- Some deals do not disclose information or the amounts, which to some extent affects the comprehensiveness and trend of our analysis. In particular, in the case of some hospital investments, public information is limited due to the sensitivity of the deal information;
- The number of deals mentioned in the report refers to the number of publicly announced deals, regardless of whether their deal amounts are disclosed;
- The amount of deals mentioned in the report only includes deals for which the amount has been disclosed (referred to as "disclosed deal amounts" in the report);
- The average deal size mentioned in the report only considers deals with disclosed amounts, while excluding the impact of individual non-recurring mega-deals;
- "Domestic" data means the deal data occurring in mainland China;
- "Overseas" data means the deal data occurring in Hong Kong Special Administrative Region, Macao Special Administrative Region, the Taiwan Region and other overseas countries and regions;
- The measurement unit of the amount in the report chart is RMB, and the foreign currencies are uniformly converted into RMB, based on the exchange rate on the day of the event.

02 Industry Segment Description

Hospitals & Clinics: Medical institutions with the primary purpose of providing people with diagnosis services and treatment of diseases, and medical groups that own and operate one or more such institutions. Hospitals in this report mainly include general hospitals (including general practice clinics) and specialty hospitals (including dentistry, ophthalmology, medical aesthetics, maternal and child, cerebral, oncology, Chinese medicine, and other types of clinics);

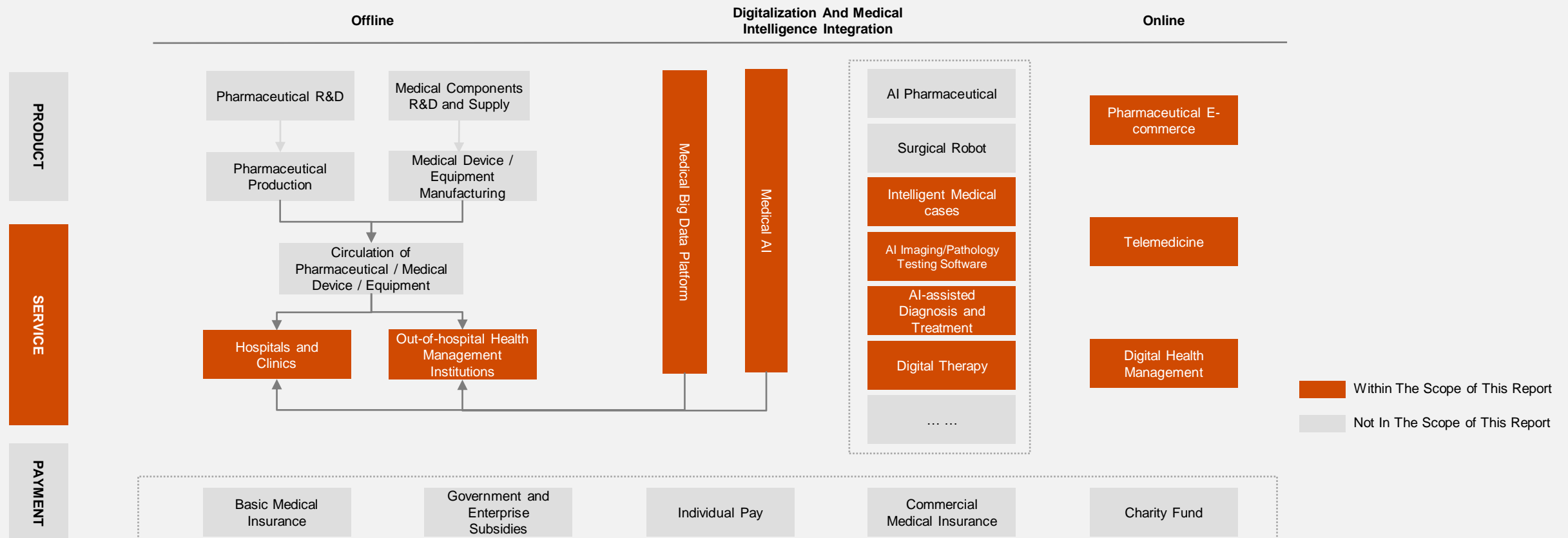
Out-of-hospital Health Management: Medical and health institutions other than hospitals and clinics, professional public health institutions and health management institutions, mainly including third-party medical testing centers (including imaging, genetic, pathological testing and other institutions), medical examination centers, rehabilitation institutions, elderly care institutions, maternity care centre, medical beauty centers, psychological counseling and other service institutions;

Digital Healthcare: Medical and health service providers with data as the core production factor and rely on digital technology (including the Internet, big data, artificial intelligence, blockchain, etc.) as the driving force, mainly including service providers in pharmaceutical e-commerce, online medical diagnosis (including Internet hospitals, online consultation, etc.), medical data platforms, medical AI (including intelligent medical cases, assisted treatment, AI imaging, digital therapy, etc.), digital health management (including health knowledge popularization platforms, remote health monitoring, etc.).

Health Industries



Chart of Medical Big Health Industry Chain in China



Catalogue

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1

Healthcare Policy and Trends



In 2022, the construction and high-quality development of the medical service system have been further deepened



- Increase the per capita financial subsidy standard for medical insurance by 30 yuan, and steadily raise the individual contribution standard
- Promote the development of multi-level medical insurance system and enrich the supply of **health insurance products**
- Gradually establish a result-oriented **payment system for medical services** that takes **disease types** as the basic unit
- Strengthen the network capacity of medical and health institutions at all levels and all types, and promote 5G network coverage
- Carry out **intelligent monitoring of medical insurance** based on big data, and promote the application of face recognition and other technologies

2020 Digitalization Empowers Medical Insurance

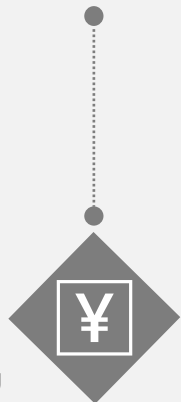


- Continuously promote the transformation of the medical system from treatment-centered to **prevention-centered**
- Accelerate the improvement of the **tiered diagnosis and treatment** system and expand the space for nongovernmental medical enterprises
- Actively increase the supply of **family doctor** services and expand the coverage of contracted services
- Implement the Maternal and Child Safety Action Enhancement plan; promote the establishment of a **multidisciplinary diagnosis and treatment** system
- Encourage the development of third-party medical services such as **professional hospital management groups** and **medical tests**

2022 Strengthen Specialty Construction

2019

Reducing the Burden of Healthcare



- Select 11 cities including Beijing, Xiamen, Chengdu, etc. to organize **centralized procurement of pharmaceutical**
- Carry out pilot evaluation of centralized procurement, summarize the experience, and timely full rollout
- Explore the **new mechanism of open and diversified medical service prices** under new technological conditions
- **Promote centralized procurement**; pilot centralized bulk-buying model nationwide

Source: Public Information & PwC Analysis
PwC Healthcare M&A Deal Trends in 1H 2022

2021

Strengthen the Service System



- Basically complete the **construction of regional medical centers** by 2025
- By 2025, at least **1,000 county hospitals** nationwide will reach the level of medical service capacity of tertiary hospitals
- Promote **the reform of medical insurance payment models** and strive to build a hierarchical treatment pattern
- Steadily increase the proportion of **the added value of the bio-economy** in GDP, and make new breakthroughs in key core technologies
- By 2025, the level of modernization of **the medical equipment** industry chain will be significantly improved

In terms of healthcare system, enhance the quality and convenience of medical service at multiple levels, and improve medical service capabilities for county areas



Important policies for China's healthcare industry in 1H 2022

Subject	Specialty Construction	Medical Insurance Reform	Domestic substitution	Healthcare Digitalization
Example	<ul style="list-style-type: none"> On the Organization of Declaration of Central Financial Support Basic Standards for Chinese Medicine Clinics (2022 Revised Version) 	<ul style="list-style-type: none"> Notice on the Issuance of Key Tasks for Deepening Medical and Health System Reform in 2022 Public Service Information Release on Cross-Province Direct Settlement of Medical Treatment for National Medical Security (Forty-eighth Issue) 	<ul style="list-style-type: none"> Notice on Matters Relating to the Regulation of Government Procurement of Imported Products in Public Medical Institutions Announcement on the Approval of the Registration of 212 Medical Device Products 	<ul style="list-style-type: none"> Notice on the Issuance of the National Catalogue of Restricted Technologies and Management Specifications for Clinical Applications (2022 Edition) Guidelines on Information Technology Functions for Operation and Management of Public Hospitals.....
Initiatives Explanation	<ul style="list-style-type: none"> Provisions for medical institutions to set up TCM departments and rehabilitation departments, financial subsidy support, and lowering the threshold for setting up medical institutions to enhance the penetration rate of specialty construction Music therapy and other interdisciplinary subjects set a precedent to be included in the national health insurance 	<ul style="list-style-type: none"> Direct settlement of inpatient expenses across provinces has been applied to the whole country After DRG/DIP¹ payment reform, hospitals have achieved significant cost reduction, medical service prices have increased, and the value of medical treatment has been reflected 	<ul style="list-style-type: none"> Prioritize the purchase of domestic devices, set domestic procurement ratio and import procurement approval to boost downstream demand Priority review of high-tech devices and accelerate approval of innovative medical devices Domestic substitutions are switching to products with high technical barriers 	<ul style="list-style-type: none"> The restrictions are removed on the application of Ai-assisted therapy technology Pharmaceutical coding popularization, Operation management normalization/standardization The target rate of telemedicine penetration is set at 95%, to compensate for uneven supply and demand matching of geographic medical resources
Keywords	Rehabilitation/elderly care, medical services integration, Chinese medicine clinic, maternal and child paediatrics, psychiatric specialties, psychology	DRG/DIP ¹ , APG ² , Cross-province medical insurance settlement, medical informatization	High-end medical devices and equipment, Large scientific research instruments, the Molecular Diagnosis, Artificial Crystal, the Hemodialyzer, Cranial Titanium Plate, Balloon	Ai-assisted diagnosis and treatment, Pharmaceutical information sharing, Telemedicine service, Electronic health records, Norms and Standards
Number of policies ¹	33 Specialized construction of Medical treatment, Rehabilitation and Recuperation, traditional Chinese medicine, cross- disciplinary	13 Standardized hospital management, facilitate medical insurance settlement	10 Accelerate the process of developing domestic substitution with a clear policy tendency	09 Digitalization continues to penetrate healthcare services with vast market space

注：1.DRG/DIP (Diagnosis Related Groups/Diagnosis-Intervention Packet, There are two kinds of medical insurance payment methods according to the total budget of disease diagnosis related group/region points method and the trial of payment according to disease points), DRG is to pay inpatients according to the nature of the disease grouping, and DIP is based on historical data such as medical records and regional prevalence, combined with calculation data such as point unit price; 2. APG (Ambulatory Patient Groups, outpatient capitation combined with outpatient case grouping) point method is a medical insurance payment method that combines disease type, treatment The number of policies includes key policies at the national and provincial levels in the first half of 2022, including programmatic documents such as development plans and guidelines, as well as management regulations.

Source: Public Information & PwC Analysis

PwC Healthcare M&A Deal Trends in 1H 2022

Create value and promote the multidimensional development of upstream innovation and downstream management standardization in healthcare industry



Important policies for China's healthcare industry in 1H 2022

Topic	Tiered Diagnosis and Treatment	Centralized Procurement	Qualification Opening	Medical Services Operated by Nongovernmental Capital
Example	<ul style="list-style-type: none"> "Thousands of Counties Project" Work Plan for Improving Comprehensive Capacity of County Hospitals (2021-2025) Guideline on Promoting the High-quality Development of Contracted Services for Family Doctors... 	<ul style="list-style-type: none"> Deepening the progress of centralized bulk-buying reform of pharmaceuticals and high-value medical consumables State Council policy briefing Opinions of the General Office of the National Health Commission on Supporting Measures for the Centralized Volume Procurement and Use of High-Value Medical Consumables (Artificial Joints) by National Organizations 	<ul style="list-style-type: none"> Medical Regulations of Shenzhen Special Economic Zone Management Measures for Mutual Recognition of Examination and Test Results of Medical Institutions Management Code for the Clinical Application of Keratoplasty Lens Technology (Draft for Comments) 	<ul style="list-style-type: none"> Annual National Private Hospital Special Inspection Action Guiding Principles for Planning the Establishment of Medical Institutions (2021-2025) The Guiding Opinions of Guangzhou Municipality on Supporting the Participation of Social Forces in the Construction of Key Fields.....
Initiatives Explanation	<ul style="list-style-type: none"> County and community medical services are receiving attention, and the development of primary care capacity to alleviate the "siphon" effect of large hospitals The construction of the national medical center has promoted the service quality improvement of multi-level medical institutions in the region 	<ul style="list-style-type: none"> Institutionalization, normalization, category diversification and regional alliance procurement of pharmaceuticals and equipment consumables The localization rate of collectively procured categories is almost all below 50%, encouraging domestic substitution 	<ul style="list-style-type: none"> In order to promote the convenience of diagnosis and treatment and encourage the flow and development of medical professionals, the Shenzhen Special Economic Zone has opened up the right of nurses to prescribe prescriptions, and allowed doctors from Hong Kong and Macao to perform practices in multi-location, and cross-border registration of traditional Chinese and Western medicine Qualification is now open for orthokeratology lens, which benefits the listed companies engaged in the optometric field. 	<ul style="list-style-type: none"> To supervise the standardized development of private medical institutions under special inspection Encourage social forces in the shortage of specialist areas to establish medical institutions, and elderly care institutions to meet diversified needs Restrict the expansion of public hospital branches to reserve space for the development of private institutions, hence achieving the complementary effect between the public and private institutions.
Keywords	Thousands of counties Project, county-level medical service, medical consortiums/medical community, national medical center, down market, family doctor	Pharmaceutical procurement, medical device supplies procurement (cardiovascular intervention, bone and joint, spine, testing reagents, electrophysiology, dental implants))	Nurses' Prescription rights, doctors' multi-site practice, cross-border registration of chinese and western medicine, mutual recognition of test results, orthokeratology lens	Rehabilitation, nursing care, elderly care, leading medical associations, the community medical service providers, limiting the expansion of public branch hospital districts
Number of policies ¹	06 Strong policy support in favour of basic-level of medical institutions is accelerating development of county medical care	05 Expansion of procurement categories, alliance, drastic price reduction	05 Qualification opening promotes medical convenience, conducive to optometry	03 Standardized development of private medical institutions, survival of the fittest

Note: 1. The number of policies includes key national and provincial policies in the first half of 2022, mainly including development plans, guidelines and other programmatic documents, as well as management regulations

Source: PEDATA, Thomson Reuters, public information and PwC analysis
PwC Healthcare M&A Deal Trends in 1H 2022

2

Overview of M&A Trends from 2019 to 1H 2022



Quality of service and technological leadership are the core values of the healthcare industry



Hot words in the target healthcare industry in 1H 2022¹

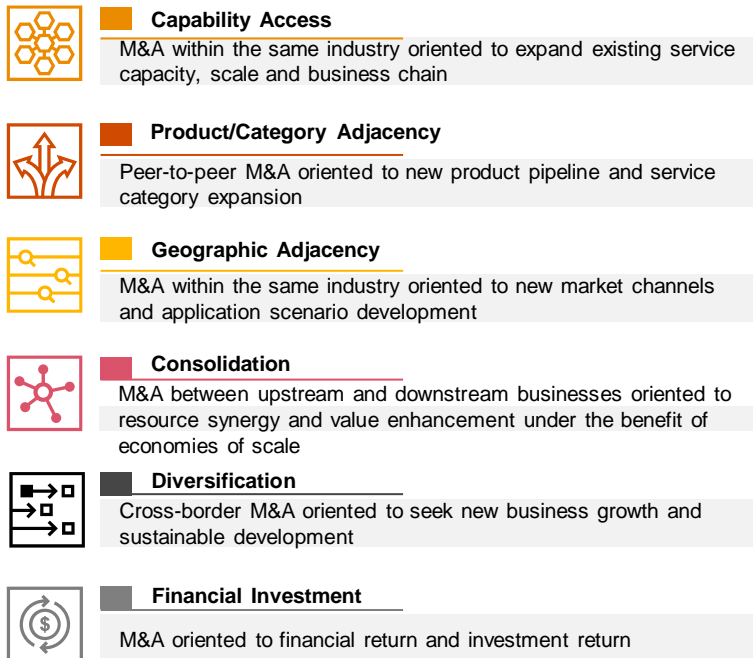


- 1 The core of healthcare value delivery is service and technology
- 2 Data, R&D, and innovation are the drive of technology renovation in healthcare industry
- 3 In more and more cases, healthcare providers are offering medical and health management services in the form of solutions
- 4 Popular areas of investment includes Oncology, Rehabilitation, Ophthalmology, Genetic Testing, Artificial Intelligence, etc

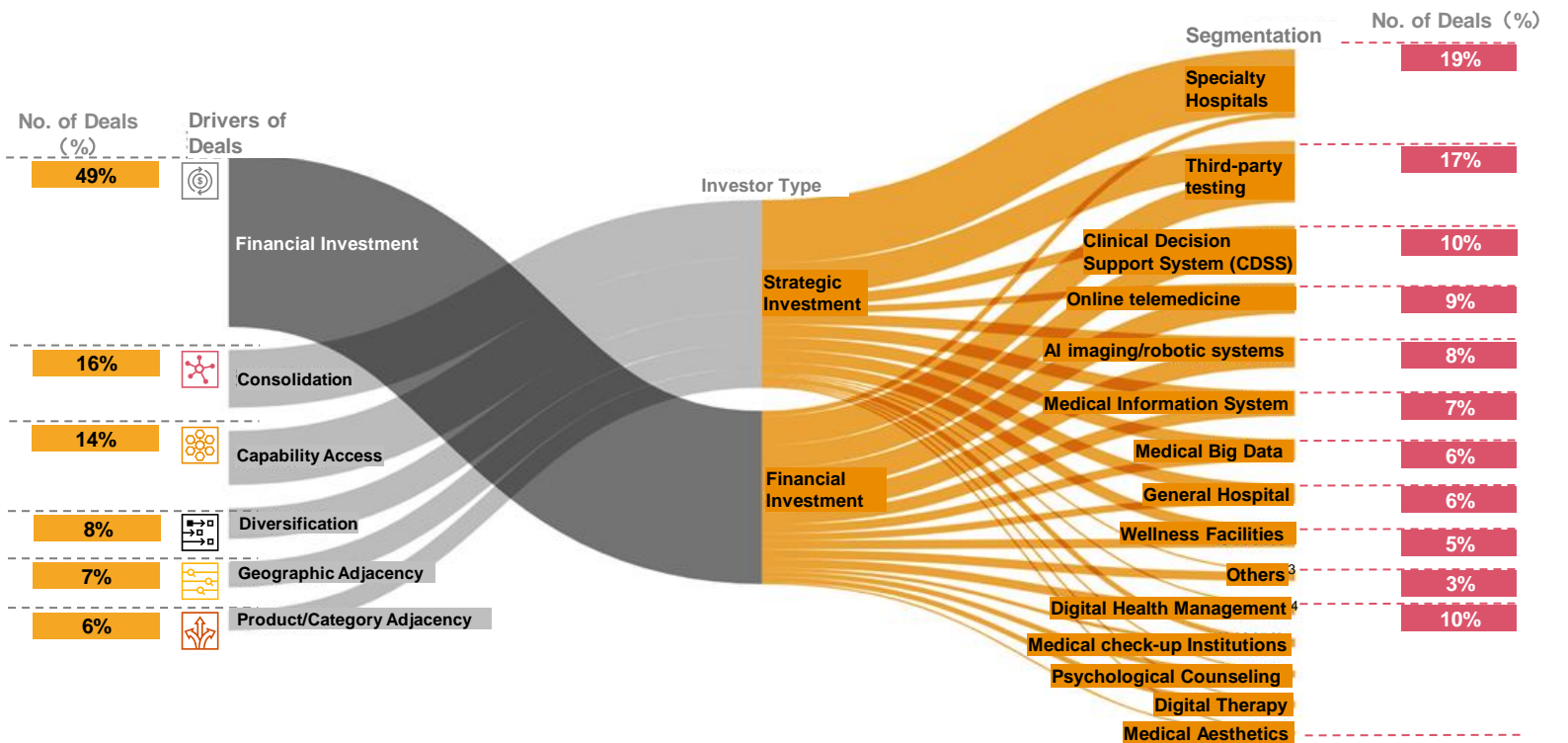
Note: 1. Keywords were extracted based on the business description of the target company in the medical and healthcare services industry in the first half of 2022, sorted by keyword frequencies

Resource integration and capability expansion become main drivers of strategic deals

Drivers of deals¹

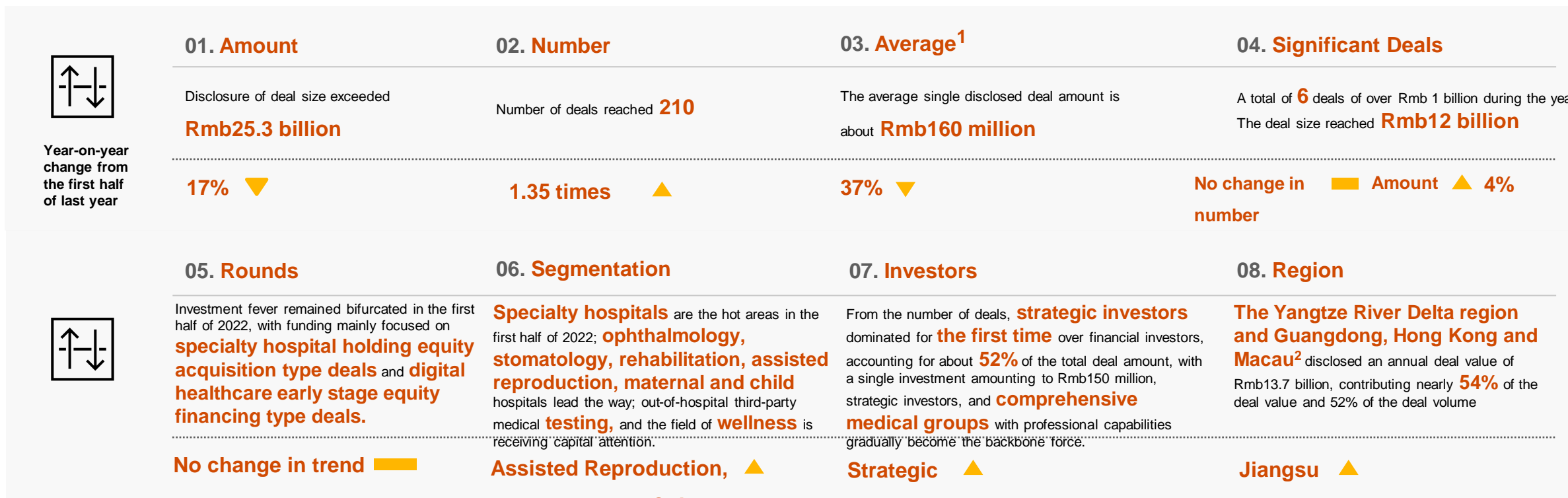


Deal drivers and hot tracks for financial and strategic investor² in 1H 2022



Note: 1. The classification of deal drivers is based on the analysis of global historical M&A deals summarized by PwC's deals advisory department; 2. From the perspective of institutional type, the discussion of deal drivers is mainly conducted by strategic investors, investment institutions with industrial backgrounds, or operational post-investment management capabilities, and for pure financial investors, the deal drivers are classified as financial investments; 3. "Others" mainly includes assisted reproduction, medical aesthetics, maternity centres, pharmaceutical e-commerce, and smart case areas; 4. Digital health management, medical check-ups, psychological counseling and digital therapy accounts for a total of 10%, listed in descending order of quantity, as the combined disclosed number of deals is relatively small.

The number of active deals has a year-on-year increase compared with last year; from the average value of a single deal, funds tend to invest in early stage



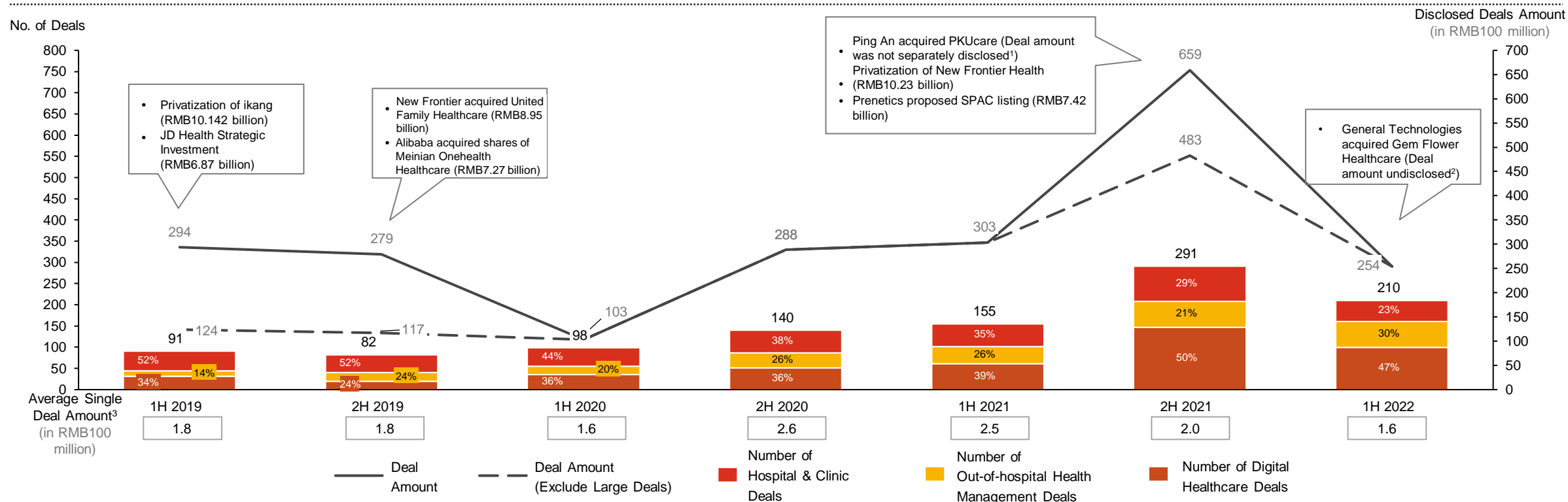
Note: 1. The average single disclosed deal amount here is the disclosed deal amount, 163 deals in total; 2. Guangdong, Hong Kong and Macau statistics include Guangdong Province, Hong Kong and Macau are not included.

■ Constant ▲ Increase ▼ Decrease

Under the impact of Covid-19, the overall transaction activity in 1H 2022 is still recovering compared with the same period last year, and the overall trend is positive in the long run



Deal size and number of healthcare services in China from 2019 to 1H 2022

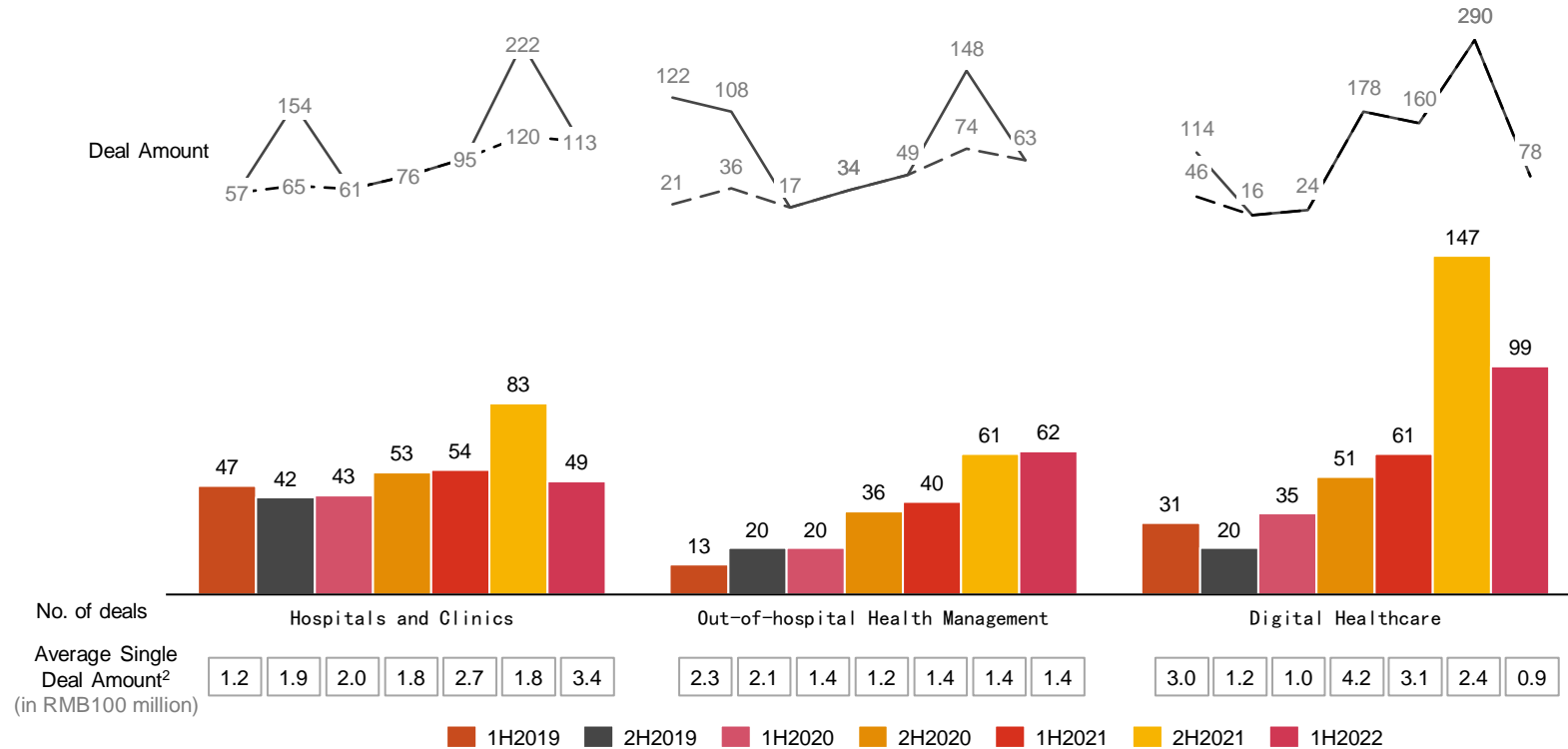



Note: 1. On January 30, 2022, the CBRC formally approved the acquisition of approximately 66.51% equity shares in New Founder Group by Ping An of China Life with their own funds of RMB48.218 billion, which was aimed at deepening the strategic layout of the healthcare industry; since the restructuring transaction included equity-type, debt-type and other assets in the healthcare, finance, information technology, and education segments, the deal amount of healthcare segment was not disclosed separately. The transaction amount was not included in the statistics because the deal amount of the segment was not disclosed separately; 2. On the morning of February 28, 2022, PetroChina Group and General Technology Group signed an official contract regarding the deepening reform and professional integration of Gem Flower Healthcare; after the signing, Gem Flower Healthcare was merged into General Technology Group, and after the completion of the delivery, General Technology will own hospitals 330 hospitals with approximately 46,000 beds under management and 50,000 employees³. The calculation of the average single disclosed transaction amount does not include the number of transactions with undisclosed amounts and does not include the amount of large transactions (above RMB6 billion).

Resale of hospitals and clinics continues with total transaction value down and increased net amount per transaction; digital healthcare transactions with "AI technology + diagnosis" as the core are active



Number of deals and disclosed deal amount by segment from 2019 to 1H 2022¹






Hospitals And Clinics

No.: **49** Amount: RMB**11.3 Billion**


Deals for specialty hospitals and clinic chains are active, while general hospitals continued their trend of resale and rescue transactions, with an increase in the net value per deal



Out-of-hospital Health Management

No.: **62** Amount: RMB**6.3 Billion**

Third-party testing organizations are hot for investments, combined with favourable policies for rehabilitation and retirement institutions, the industry is attractive to investors



Digital Healthcare

No.: **99** Amount: RMB**7.9 Billion**

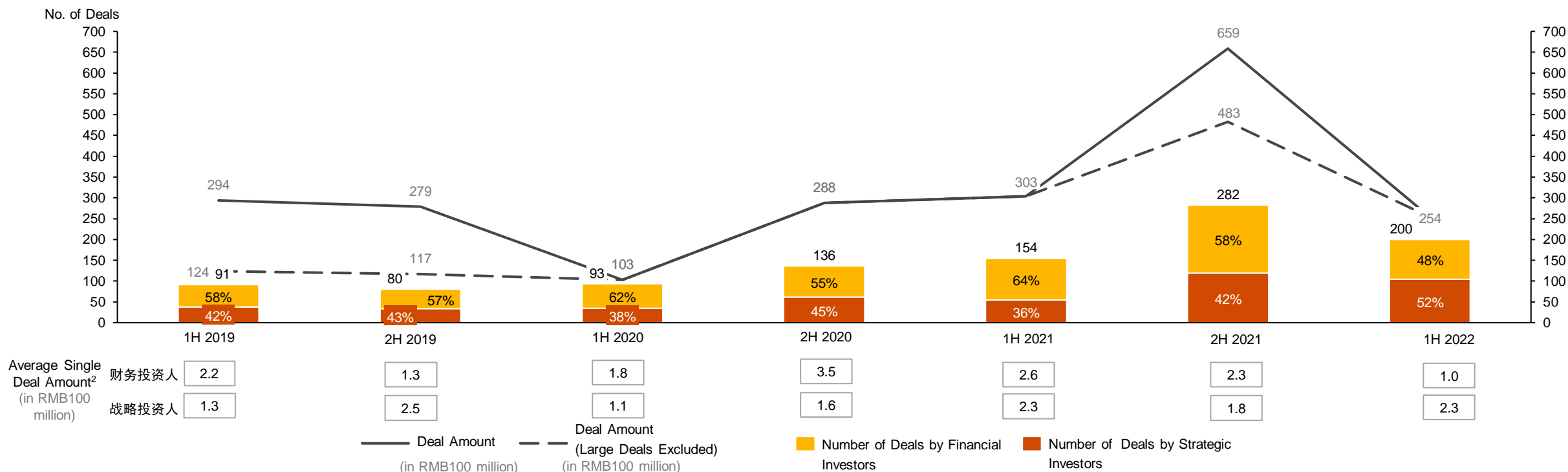
The enthusiasm for digital health investment has reduced, but the overall trend is positive, with cutting-edge technology, artificial intelligence and medical technology converging to create medical value

Note: 1. The deal amounts and deal sizes shown in this report are disclosed deal amounts; M&A deals with undisclosed amounts are not included; 2. Calculation of average single disclosed deal amount does not include the number of deals with undisclosed amounts, and does not include the amount of mega-deals (above RMB6 billion).

Industrial capital in the medical field layout is increased; the proportion of strategic investors has exceeded that of financial investors for the very first time



Total amount and number of deals in each segment from 2019 to 1H 2022, by types of disclosed investor¹

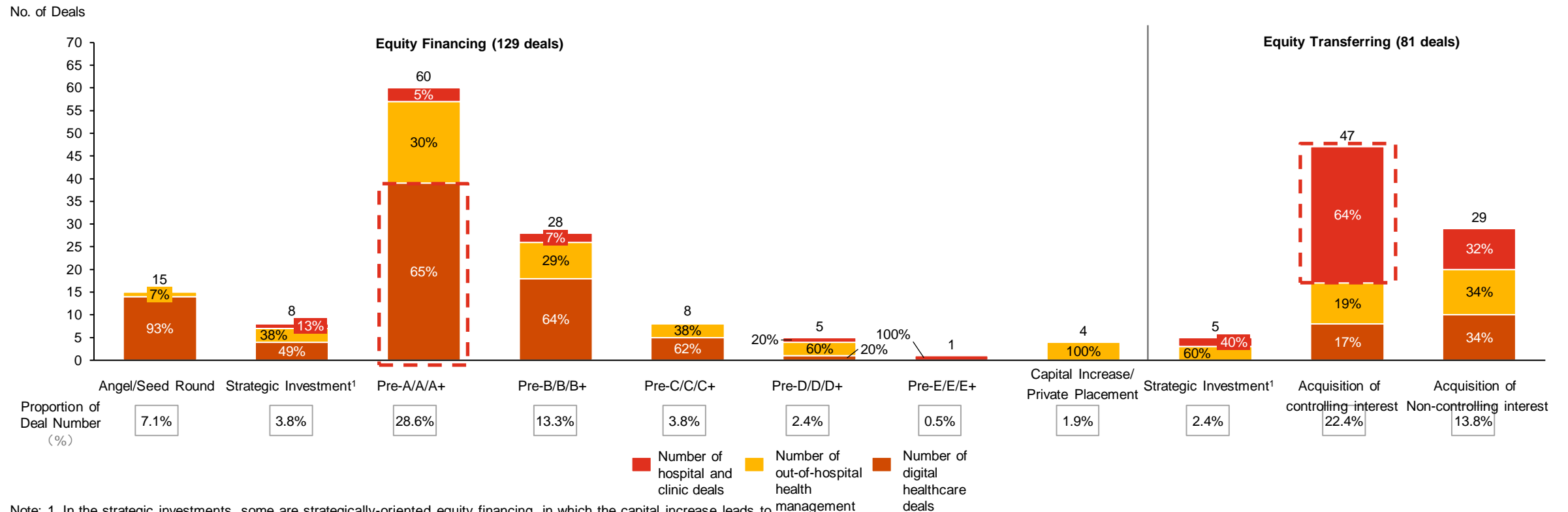


Note: 1. For types of institutions, strategic investors mainly refer to strategic corporate investors, investment institutions/platforms with industrial resources, SOE background or strong integration capabilities of post-investment operation and management, etc.; whereas investors with transaction purpose being the investment returns are classified as financial investors; the basis for classifying investors depends on the driving factor of the leading institution of the deals; 2. Calculation of average single disclosed deal amount does not include the number of deals with undisclosed amounts, and does not include the amount of mega-deals (above RMB6 billion).

Control deal is the dominant type for hospitals and clinic deals, while early-stage equity financing is the dominant type for digital health, with clear differentiation between the two levels



Number of disclosed healthcare services deals in China in 1H 2022, by deal type and round



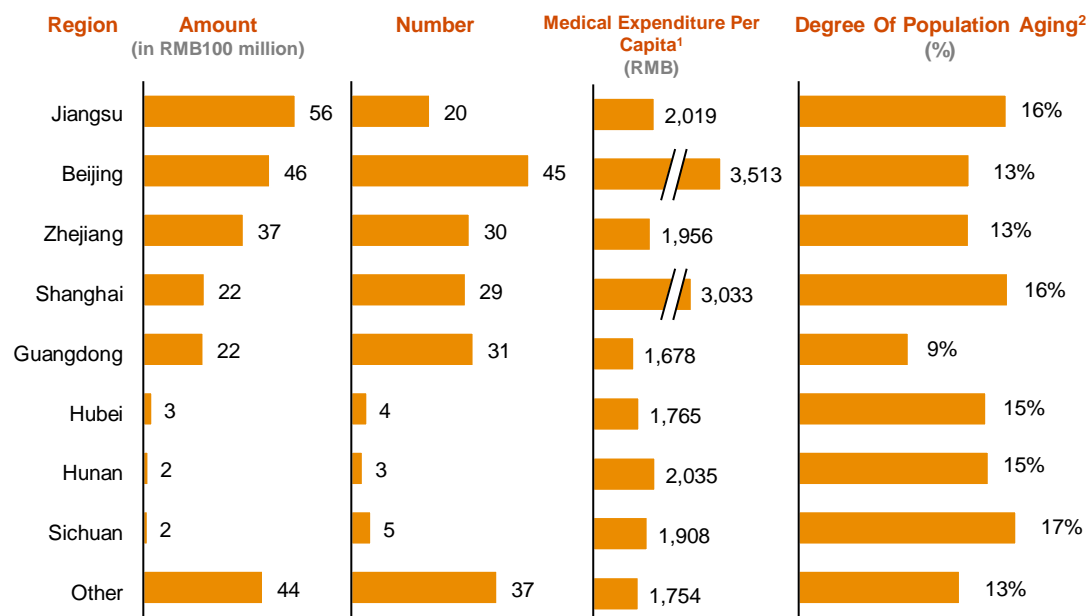
Note: 1. In the strategic investments, some are strategically-oriented equity financing, in which the capital increase leads to changes in equity capital; some are transfers of controlling interest, and the shares are acquired in the form of existing shares

Source: PEDATA, Thomson Reuters, public information and PwC analysis
PwC Healthcare M&A Deal Trends in 1H 2022

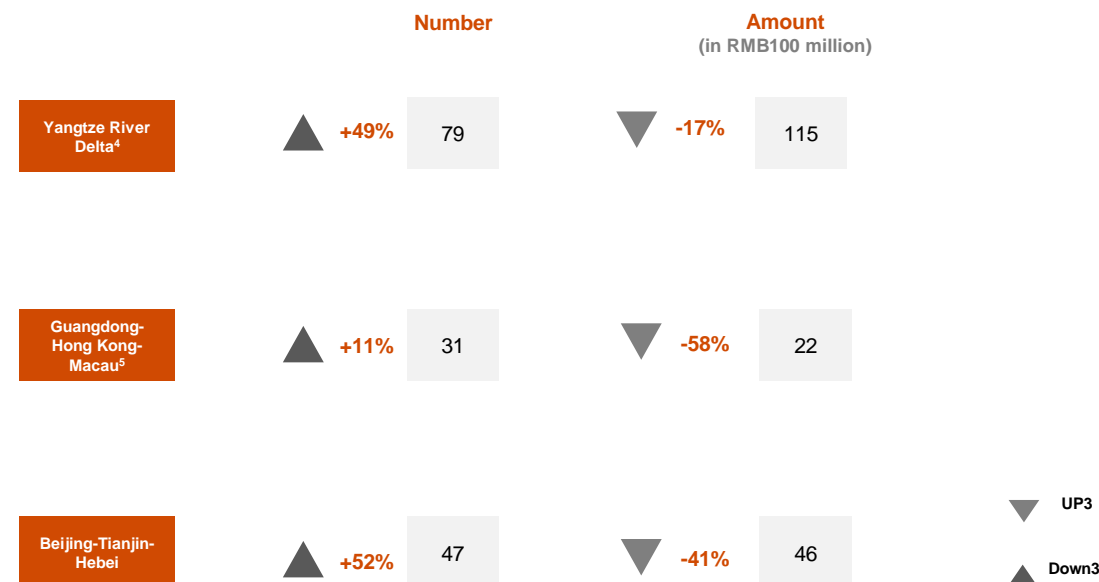
Deals in Yangtze River Delta region accounted for nearly 40% of all the transactions, with Jiangsu ranked first in the size of deals, and the three major economic zones saw year-on-year growth in trading activities



Distribution and macro data of number and amount of investment and financing deals by region for 1H 2022



Investment in China's 3 major economic zones in 1H 2022



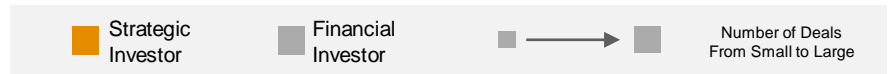
Note: 1. The medical expenditure per capita refers to the data in 2020, and the medical expenditure per capita in Hong Kong is converted to RMB based on the exchange rate by People's Bank of China on December 31, 2021; 2. The degree of population aging is the proportion of the total population aged 65 or above in each province in the seventh population census, 2020; the data in Hong Kong comes from the public data released by the government; 3. Data fluctuations are concluded based on comparisons between 1H 2022 and 1H21; 4. Statistics of the Yangtze River Delta region include Jiangsu, Zhejiang and Shanghai; 5. Statistics of Guangdong-Hong Kong-Macao include Guangdong Province only, and not Hong Kong and Macao.

Source: PEDATA, Thomson Reuters, public information and PwC analysis
PwC Healthcare M&A Deal Trends in 1H 2022

Deals Driver Analysis by Segment



Deal Driving Factor Analysis Of Different Tracks



3

Deals Spotlight

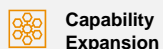


Acquisition of hospital shares dominates in large deals of 1H 2022



Top 10 medical and clinic deals in 1H 2022, ranked by disclosed transaction amounts

	Target Company	Target Company Business	Main Investor	Type Of Investor	Round Of Deal	Driver Of Deal	Segment	Disclosed Deal Amount (in RMB100 million)
1	Suzhou Hongtian Medical ¹	Dental Hospital Operation	Taikang Life Insurance	Private equity	Acquisition of CI			38.2
2	HK Asia Medical	Cardiovascular Hospital Operation	Country Garden VC, Primavera, Taikang Life Insurance, ICBC International	Private equity	D			25.4
3	Novogene	Genetic Technology Products And Services	Undisclosed	Undisclosed	Private Placement			22.9
4	B-Soft	Medical And Health Informatization Services	Philips	Enterprise	Transfer of equity			12.3
5	OncoCare Medical	Specialized Oncology Hospital Operation	Fosun Pharma	Enterprise	Acquisition of CI			10.6
6	ST Hengkang	Integrated Hospital	New Mileage Capital	Enterprise	Acquisition of CI			10.5
7	Guangdong Kangzhi Hospital ²	Specialized Reproductive Hospital Operation	Jinxin Reproduction	Enterprise	Acquisition of CI			9.5
8	Mingzhou Rehabilitation Hospital ³	Specialized Rehabilitation Hospital Operation	Samsung Healthcare	Enterprise	Acquisition of CI			8.4
9	Heren Health	Overall Solutions of Medical Informatization	TC Medical	Enterprise	Transfer of equity			7.7
10	Aidoc Medical	AI Healthcare	Technology Crossover Ventures, CDIB Capital	Private equity	D			7.4



Capability Expansion



Category Expansion



Market Development



Resource Integration

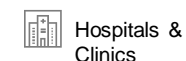


Diversification Strategy



Financial Investment

Note: 1. The institution holds five dental hospitals; 2. The deal includes the equity acquisition of Yunnan Jiuzhou Hospital and Kunming Hewanjia Maternity Hospital; 3. The deal includes the purchase of equity of 5 Mingzhou Rehabilitation Hospitals.



Hospitals & Clinics



Out-of-hospital Health Management



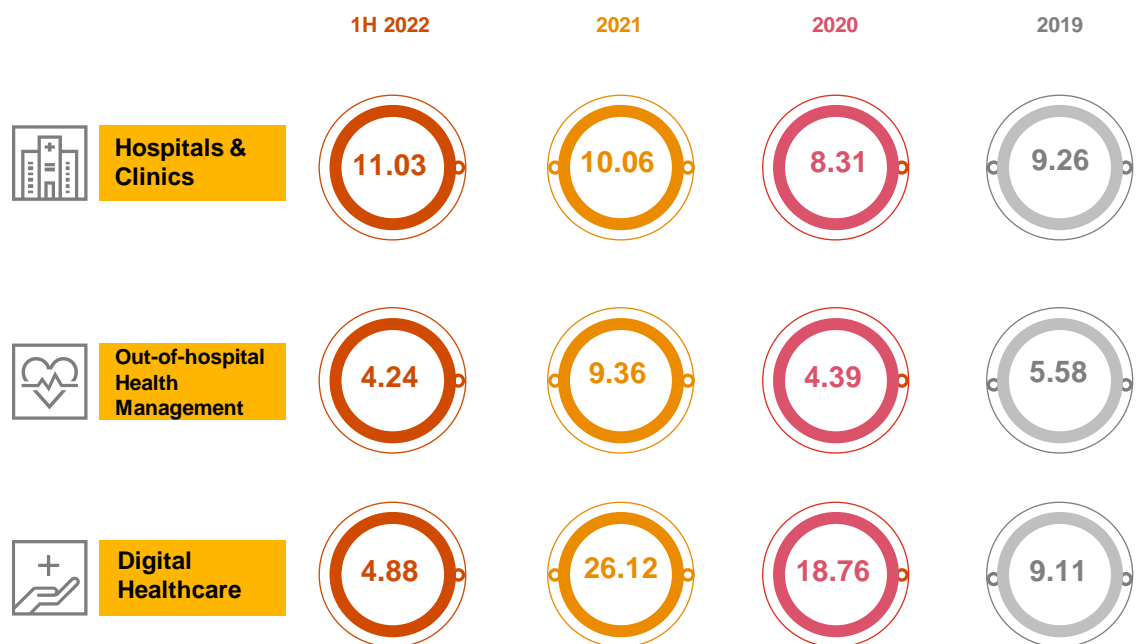
Digital Healthcare

Source: PEDATA, Thomson Reuters, public information and PwC analysis
PwC Healthcare M&A Deal Trends in 1H 2022

The single investment of top amount transactions of hospitals and clinics is increasing year by year, with 60% deals are above RMB2 billion; Deal amounts for digital medical treatment are mainly distributed over the RMB tens-of-million to RMB hundreds-of-million range

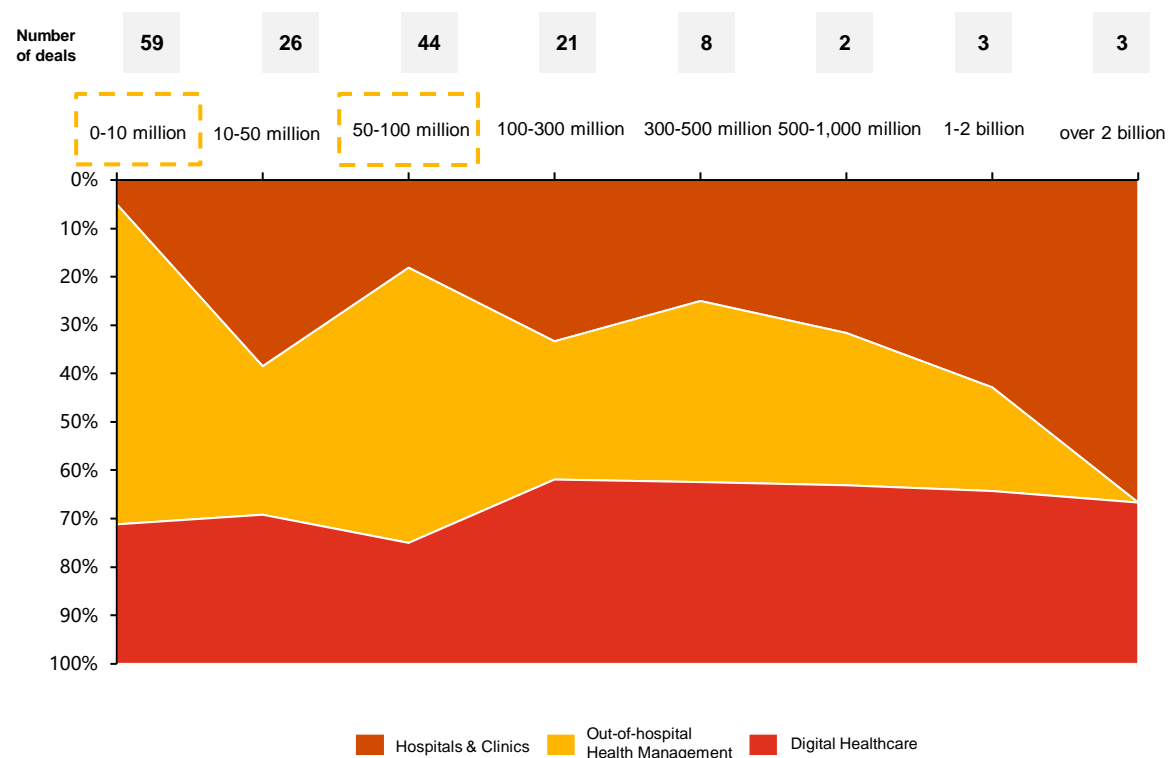


Average amount per disclosed deal of the top 10 investments from FY2019 to 1H 2022¹



Unit: RMB 100 million

Number and proportion of deals in different value ranges in 1H 2022



Note: 1. The calculation of the average amount per disclosed deal does not include the number of deals with undisclosed amounts nor the amount of mega deals (amount over RMB6 billion).

Source: PEDATA, Thomson Reuters, public information and PwC analysis
PwC Healthcare M&A Deal Trends in 1H 2022

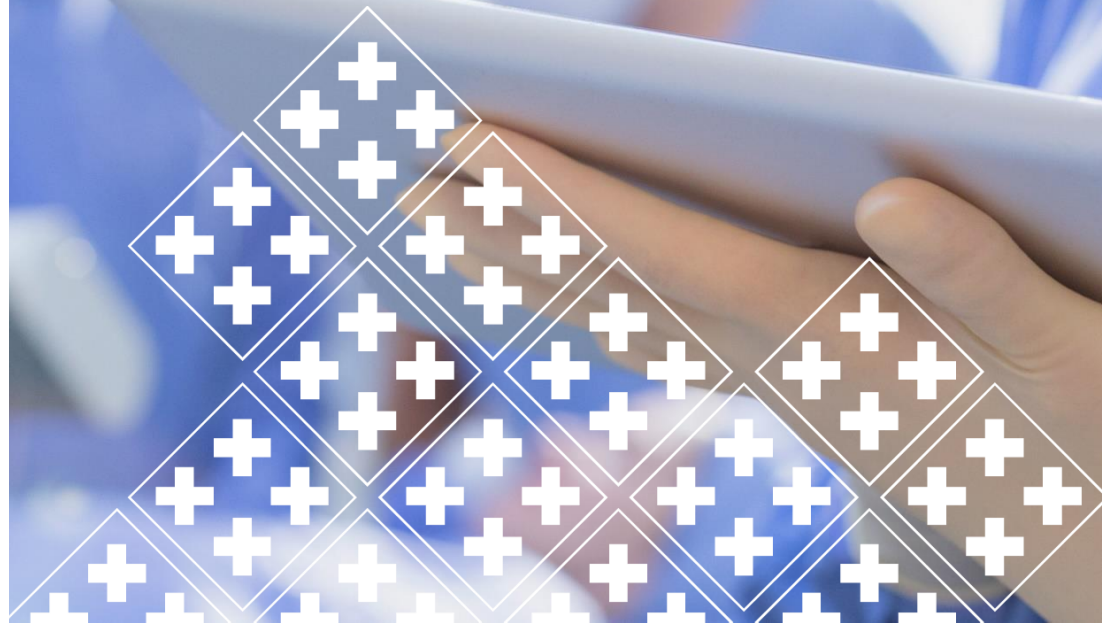
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M&A Trend by Segment





Hospitals and Clinics

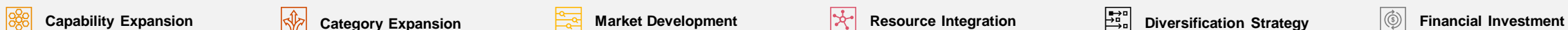


Acquisition of shares for dental chains stays popular, and acquisition of shares for cardiovascular, oncology, kidney disease, and other specialties with significant clinical implications are active, with diversified drives and mainly by capability expansion



Top 10 hospital and clinic deals, ranked by disclosed deal value 1H 2022

	Target Company	Business of Target Company	Major Investment Institutions	Investor Type	Deal Round	Driver of deal	Disclosed Deal Value (in RMB100 million)
1	Suzhou Hongtian Medical ¹	5 Dental Hospitals	Taikang Life Insurance	PE	Acquisition of CI		38.2
2	HK Asia Medical	Cardiovascular Specialized Hospital	Country Garden VC, Primavera, Taikang Life Insurance, ICBC International	PE	D		25.4
3	OncoCare Medical	Private Oncology Hospital	Fosun Pharma	Corporate	Acquisition of CI		10.6
4	Hengkang Medical	Integrated Medical Group	New Mileage Capital	Corporate	Acquisition of CI		10.5
5	Guangdong Kangzhi Hospital ²	2 Assisted Reproduction Specialty Hospitals	Jinxin Reproduction	Corporate	Acquisition of CI		9.5
6	Mingzhou Rehabilitation Hospital ³	5 Rehabilitation Hospital Chains	Samsung Healthcare	Corporate	Acquisition of CI		8.4
7	Jiangxi Dakang Medical	Nephrology Specialized Hospital And Hemodialysis Center	Ganjiang New Area Health Industry Investment, Nanjing Hi-tech New Innovation, Central Enterprise Poor Regions Industry Investment Fund	PE	E		4.0
8	Shenzhen Glenfiled Oral	Dental Hospital Chain	Winsan Medical	Corporate	Acquisition of CI		1.6
9	Pili Jichen	Dental Medical Services	EC Healthcare	Corporate	Acquisition of CI		1.1
10	Renshu Medical	Otolaryngology	Genova	PE	Pre-B		1.0



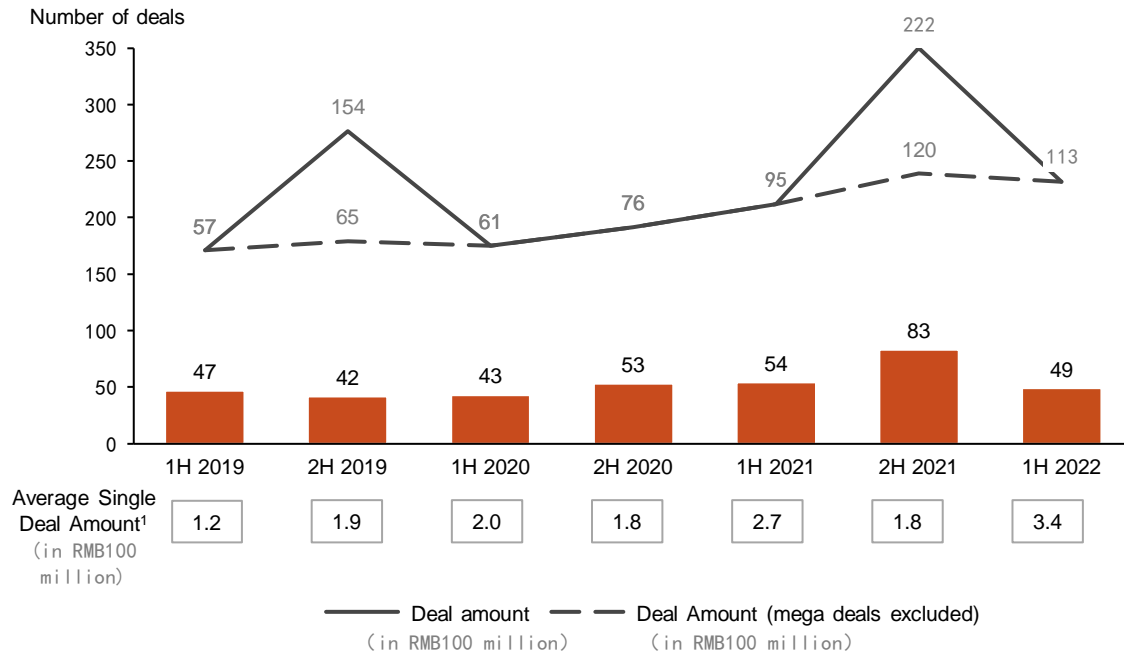
Note: 1. The institution holds five dental hospitals: Suzhou Dental Hospital, Taian Dental Hospital, Kunshan Tongji Dental Hospital, Bengbu Dental Hospital and Wuxi Dental Hospital; 2. The deal includes the acquisition of controlling interest of Yunnan Jiuzhou Qinniao Reproduction Special Hospital and Kunming Jinxin Reproduction Hospital, with both hospitals being licensed by In Vitro Fertilization (VIF) and available for Assisted Reproduction Service (ARS); 3. The deal included the acquisition of controlling interests of five Mingzhou Rehabilitation Hospitals, namely Wuhan Mingzhou Rehabilitation Hospital, Changsha Mingzhou Rehabilitation Hospital, Changzhou Mingzhou Rehabilitation Hospital, Nanjing Mingzhou Rehabilitation Hospital and Ningbo Beilun Mingzhou Rehabilitation Hospital

Source: Pedata, Thomson Reuters, public information and PwC analysis

The average single deal amount increased for acquisitions of hospitals and clinics, 80% of which were acquisitions of shares



Numbers and amounts of hospitals and clinics deals, 2019 - 1H 2022

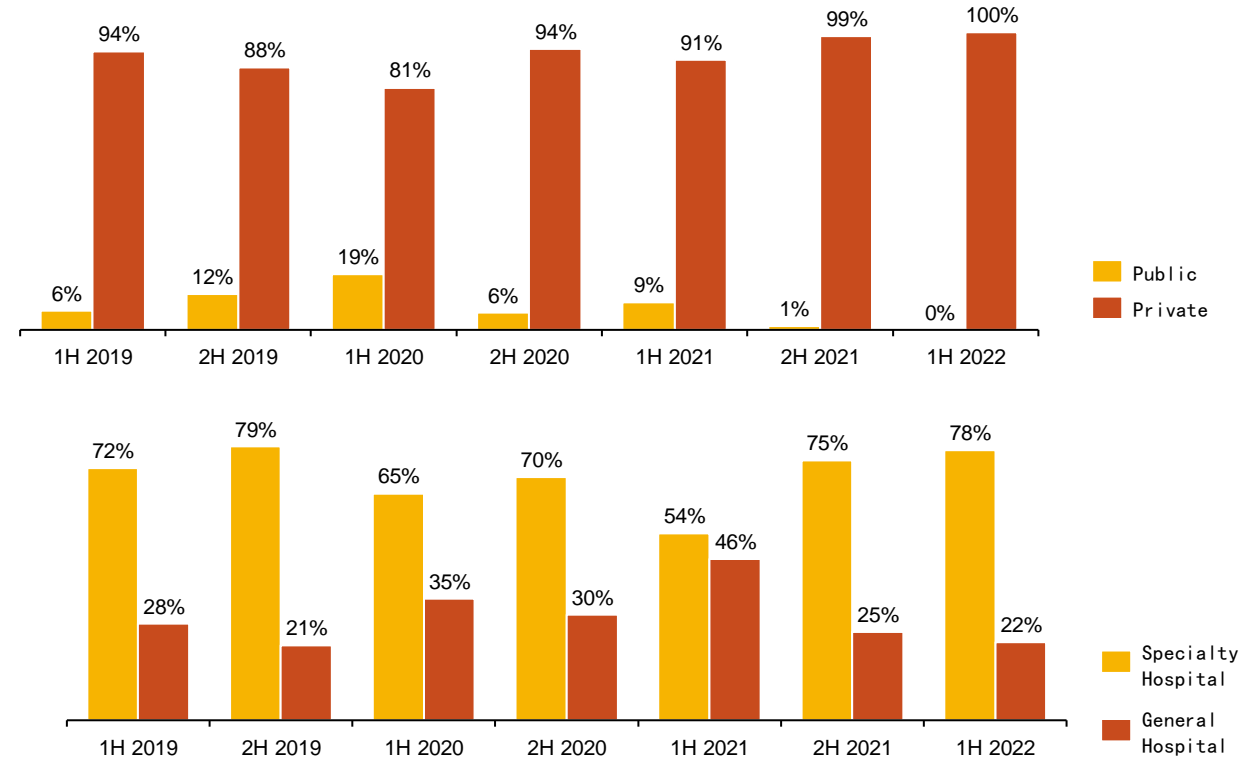


Note: 1. the calculation of the average single deal amount disclosed does not include the number of deals with undisclosed amounts, and does not include the amount of mega deals (above RMB6 billion).

Source: Pedata, Thomson Reuters, public information and PwC analysis

PwC Healthcare M&A Deal Trends in 1H 2022

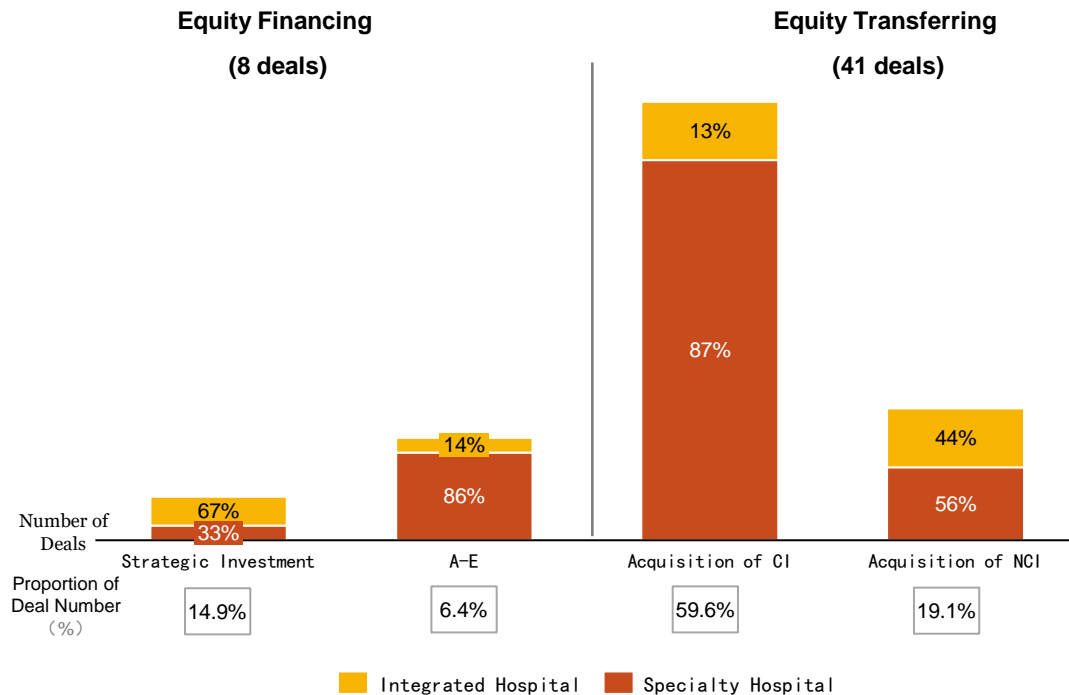
Number of deals of hospital and clinics in % 2019 - 1H 2022



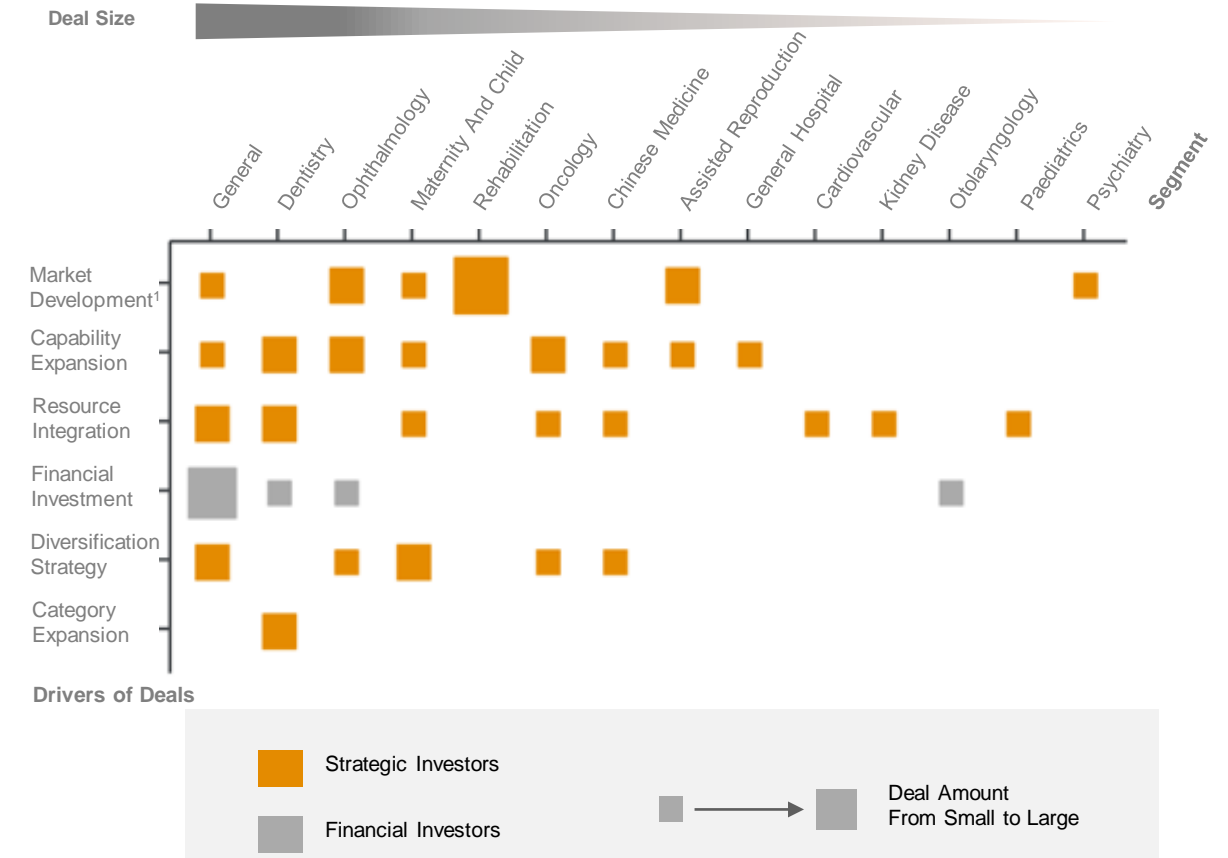
Equity resales of specialty hospitals continued to be active; strategic investments were primarily driven by the integration of upstream and downstream channels, brand resources, and the expansion of medical treatment and service capabilities



Numbers of deals for hospitals in %, by disclosed deal rounds, 1H 2022



The M&A deal drivers, segment track and investor segment distribution in hospital in 1H 2022



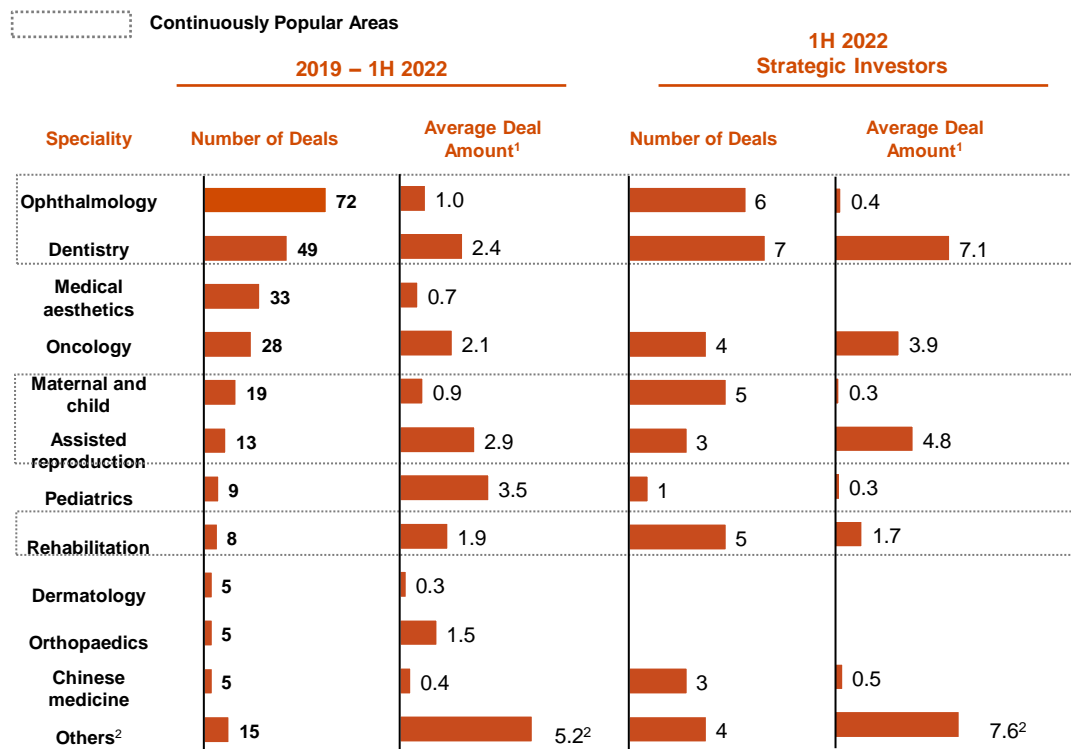
Note: 1. 5 of the market development-driven deals are Samsung Healthcare's acquisition of 5 Mingzhou Rehabilitation Hospitals, with one deal recorded for each hospital acquisition. Therefore, the number of deals is higher than the capacity expansion and resource integration type. If the impact of the change is excluded, the number of capacity expansion and resource integration deals is higher

Source: Pedata, Thomson Reuters, public information and PwC analysis

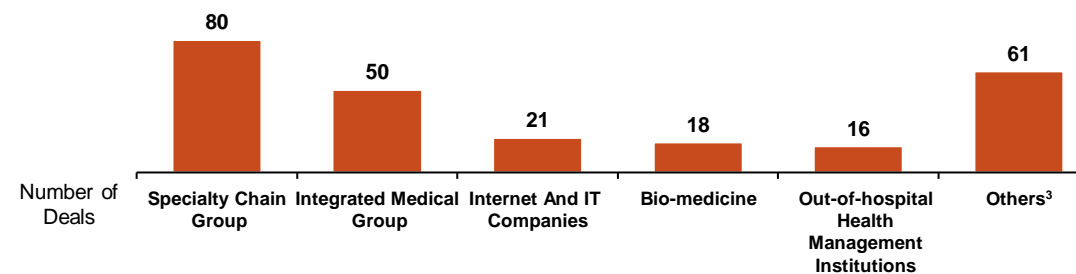
The track is led by deals for dentistry, ophthalmology, rehabilitation, maternal & child and assisted reproduction, with consumer attributed specialty chained institutions moving up in deal amounts; integrated medical groups and specialty chains are the main investors



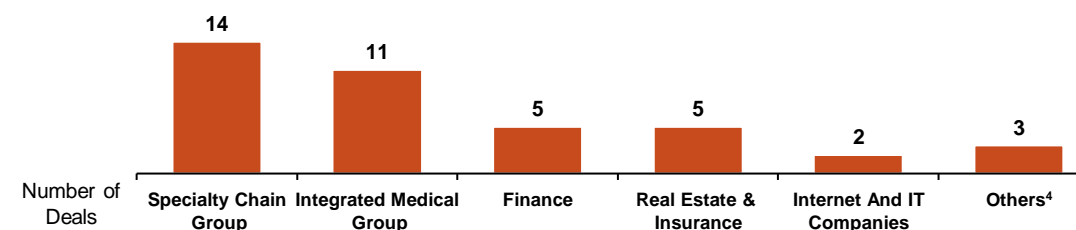
The M&A deals numbers and amounts in specialized hospitals, 2019 - 1H 2022



Number of M&A deals in specialty hospitals by strategic investors, 2019 - 1H 2022

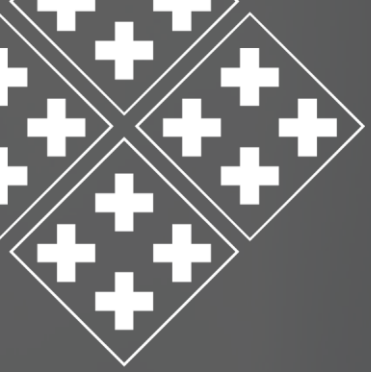


Number of M&A deals in specialty hospital by strategic investors in 1H 2022



Note: 1. The calculation of the average single disclosed deal amount does not include the number of deals with undisclosed amounts, and does not include the amount of mega deals (above RMB6 billion); 2. Other specialties include cardiovascular and cerebrovascular, psychiatry, and otolaryngology. The cumulative and average single deal amount in 2019 - 1H 2022 and 1H 2022 was mainly due to the fact that the single financing amount of Hong Kong Asia Medical Group, a cardiovascular specialty hospital service brand, exceeded RMB2.54 billion and after deducting this deal, the average single deal amount was RMB180 million and RMB170 million, respectively; 3. Other types of investors include medical devices, manufacturing, insurance companies, financial industry, real estate, etc.; 4. Other investors include biopharmaceutical companies and construction engineering companies

Source: Pedata, Thomson Reuters, public information and PwC analysis



Out-of-hospital Health Management



Genetic testing companies attract capital market's attention; rehabilitation institutions continued to be the investment hotspot; the value of prevention-oriented medical treatment reflected



Top 10 out-of-hospital health management deals in healthcare services industry, ranked by disclosed deal amount, 1H 2022

	Target Company	Business of Target Company	Major Investment Institutions	Investor Type	Deal Round	Driver of Deal	Disclosed Deal Amount (in RMB100 million)
1	Novogene	Gene Sequencing Services And Equipment	Undisclosed	PE	Capital increase/Private Placement		22.9
2	Fourier ¹	Rehabilitation Training, Robotics	SoftBank, Vision Plus Capital, Prosperity 7 Venture	PE	D		4.0
3	Sunowe	Senior Care Services, Health Consultation	Zhuji Tiancheng Hongwei Real Estate Co., Ltd. ²	Corporate	Acquisition of NCI		3.4
4	Carriergene	Reproductive Health And Oncology Genetic Testing	AstraZeneca CICC Medical Industry Fund, China Resources Zhengda Life Science Fund, Panlin Capital	PE	B		3.4
5	Amcarelab	Genetic Diseases And Oncology Genetic Testing	CICC, Bessen Medical Fund, GVCGC, Jointown	PE	B		2.0
6	OST Therapy	Children's Speech Therapy, Rehabilitation	Temasek, Taikang Capital, Eight Roads Cenova, Long Hill Capital, etc.	PE	D		1.9
7	Oriomics	Tumor Genetic Testing And Early Detection	Hotgen Biotech ³	Corporate	B		1.5
8	ClaireView	Gene Therapy And Cell Therapy Technology Development	Metropolitan Investment, Harris Landon Group	Corporate	A		1.3
9	Medmotion	Sports Rehabilitation	Qiming Venture Capital, Taifu Capital	PE	A		1.0
10	Simple Mind	Mental Health	Cenova	PE	B		1.0

Capability Expansion
 Category Expansion
 Market Development
 Resource Integration
 Diversification Strategy
 Financial Investments

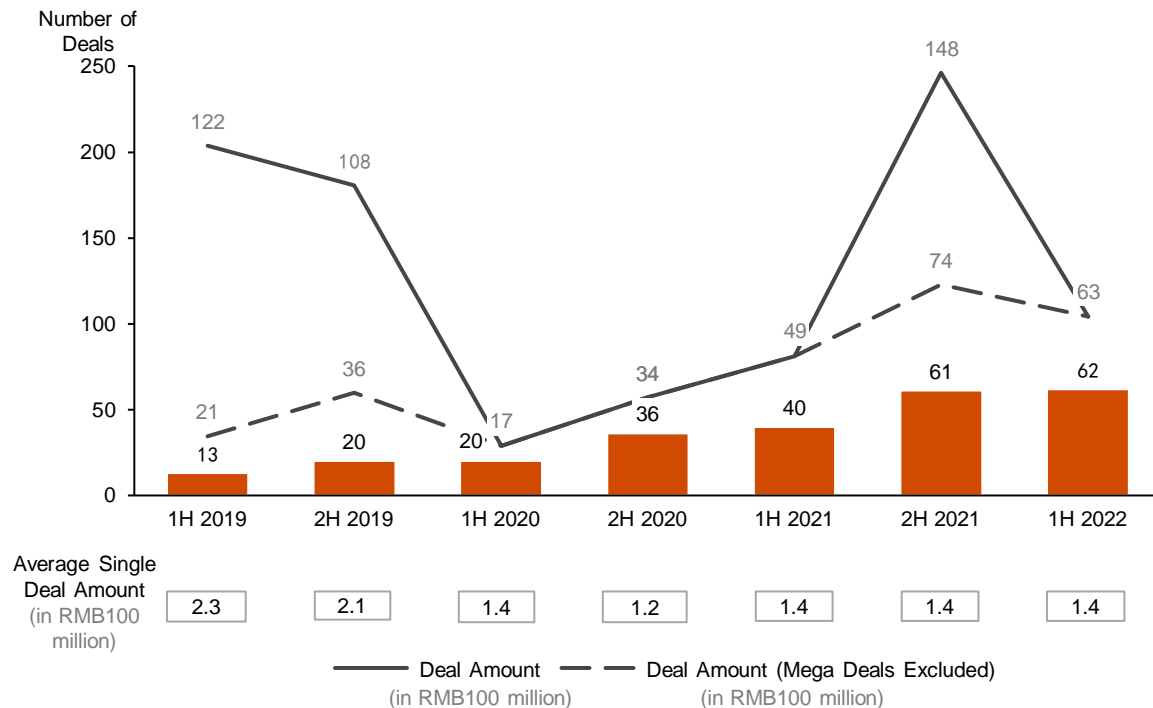
Note: 1. Fourier Intelligent Rehabilitation Robot provides rehabilitation services to more than 1,000 institutions and performs more than 400 million rehabilitation training actions; as of July 31, 2020, it has set up several intelligent rehabilitation projects in Shanghai, Zhejiang, Hubei, Hunan, etc.; The business scope of Zhuji Tiancheng Hongwei Real Estate is real estate development and operation, etc.; 3. Hotgen Biotech has a comprehensive layout of various liquid biopsy technologies for tumor early detection; the investment of Hotgen Biotech in Oriomics is "equity participation", not "controlling".

Source: Pedata, Thomson Reuters, public information and PwC analysis

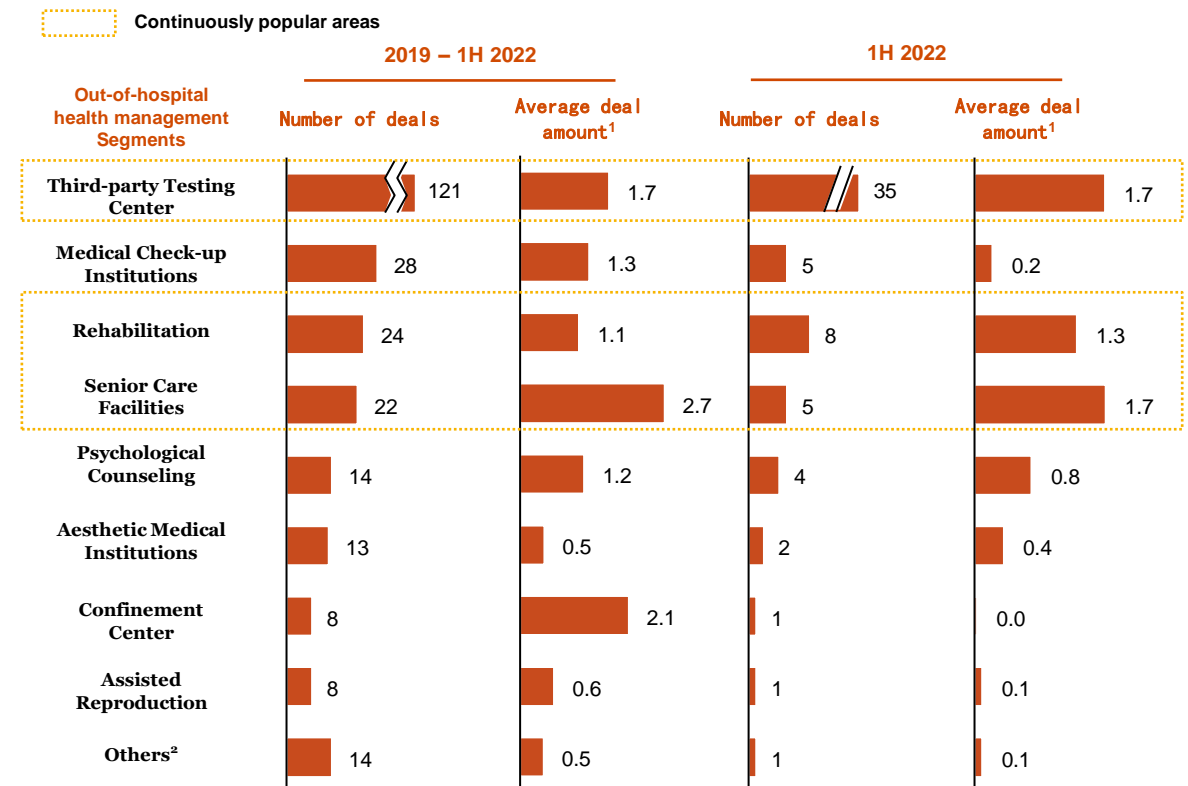
Investments featuring third-party testing and wellness facilities are significantly higher in deal amount than other out-of-hospital health management facilities



Number and amount of deals for out-of-hospital health management, 2019 - 1H 2022



Number and amount distributions of out-of-hospital health management deals, by segments of the track, 2019 – 1H 2022



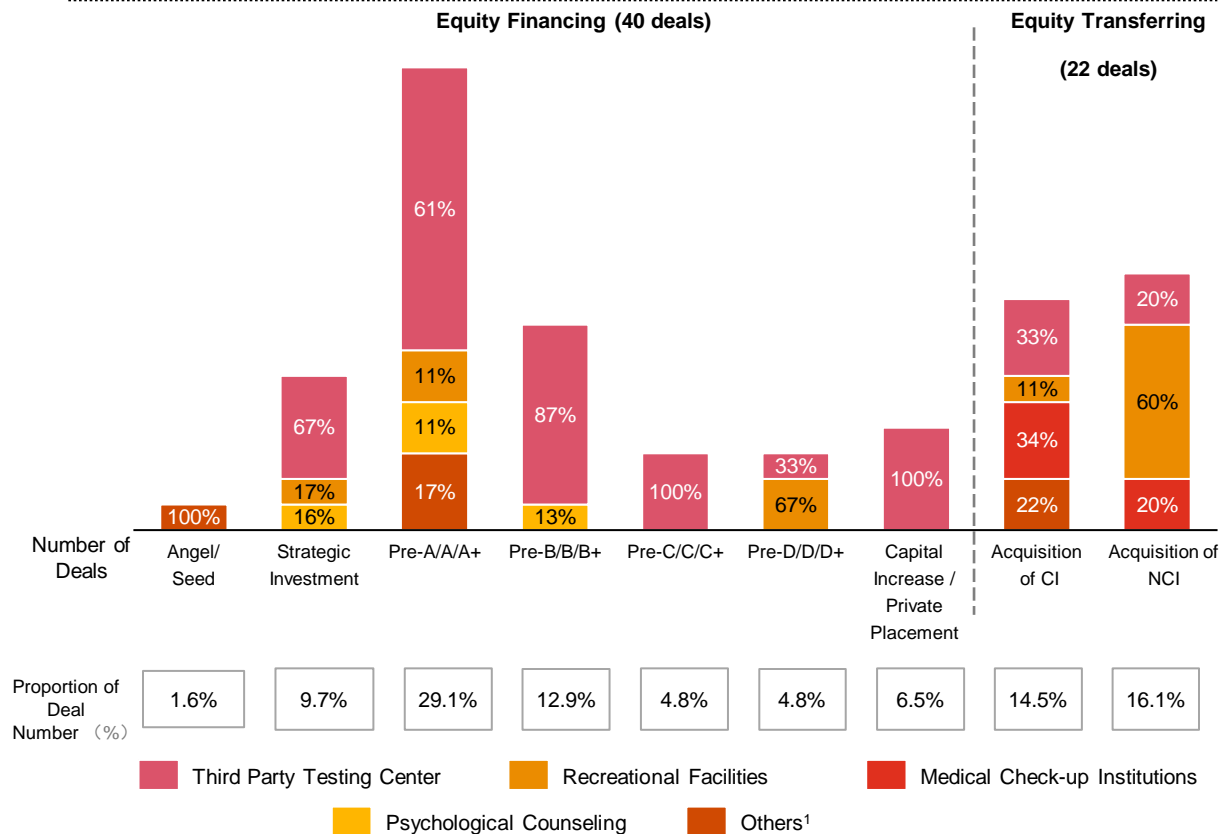
Note: 1. the calculation of the average single disclosed deal amount does not include the number of deals with undisclosed amounts, and does not include the amount of mega deals (above RMB6 billion); 2. other segments of the track include nursing stations, patient intermediary services

Source: Pedata, Thomson Reuters, public information and PwC analysis

Early investment in third-party testing services stays popular; M&A integration and chainization of health institutions are accelerating under favorable policies



Number of M&A deals in out-of-hospital health management in %, by rounds of disclosed deal, 1H 2022

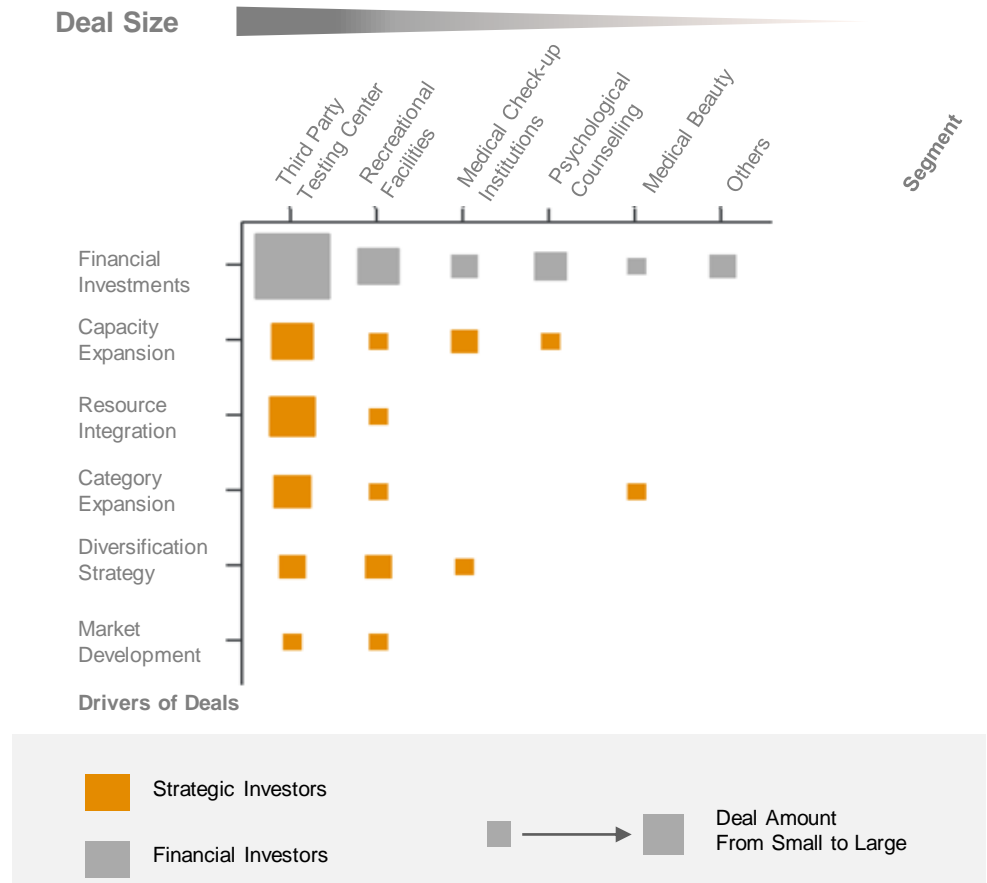


Note: 1. Others include the out-of-hospital health management track such as patient internment services

Source: Pedata, Thomson Reuters, public information and PwC analysis

PwC Healthcare M&A Deal Trends in 1H 2022

The M&A deal drivers, segment track and investor segment distribution in out-of-hospital health management, 1H 2022





Digital Healthcare



Financial investments focused on the integration and application of digital technology and medical services, while strategic investments focused on technology and industrial resources cooperation, with emphasis on technology leadership and uniqueness



Top 10 deals in China's digital health industry in 1H 2022, ranked by disclosed deal amount

	Target Company	Business of Target Company	Major Investment Institutions	Investor Type	Deal Round	Driver of Deal	Disclosed Deal Amount (in RMB100 million)
1	BSOFT	Medical Information Technology Solutions	Philips	Corporate	Transfer of CI		12.0
2	Heren Health	Medical Information Technology Solutions	TC group	Corporate	Acquisition of NCI		8.0
3	Aidoc Medical	AI-assisted Treatment	Technology Crossover Ventures, CDIB International	PE	D		7.0
4	Sibionics (Shenzhen)	AI Medical Imaging & Pathology	CPE Fund, China Life Invest, Qianhai FOF, JG Invest, etc..	PE	C++		5.0
5	Xingmai IT	AI Medical Imaging & Pathology	Fosun Pharmaceutical Group	Corporate	Acquisition of CI		3.4
6	Medicalsystem	Medical Information Technology Solutions	Mianyang Anxian Investment Holding ¹	Corporate	Acquisition of NCI		3.4
7	HugoBiotech	Disease Diagnosis & Management Platform	Long Capital, LYFE Capital	PE	C		3.0
8	Singlera	Disease Diagnosis & Management Platform	Fstone Capital, CGS, Sansure Biotech, etc..	PE	B+		3.0
9	Aden Tech	AI Application And Medical Big Data Platform	Dingying Investment, LegendStar, Beijing Sinoloom, etc..	PE	B		2.0
10	Palline	Medical Big Data Platform	Bluerun Ventures, Yunqi VC, etc..	PE	A		2.0

Capacity Expansion
 Category Expansion
 Market Development
 Resource Integration
 Diversification Strategy
 Financial Investments

Note: 1. The actual controller of Mianyang Anxian Investment Holding is Anzhou District State-owned Assets Supervision and Administration Commission of Mianyang City

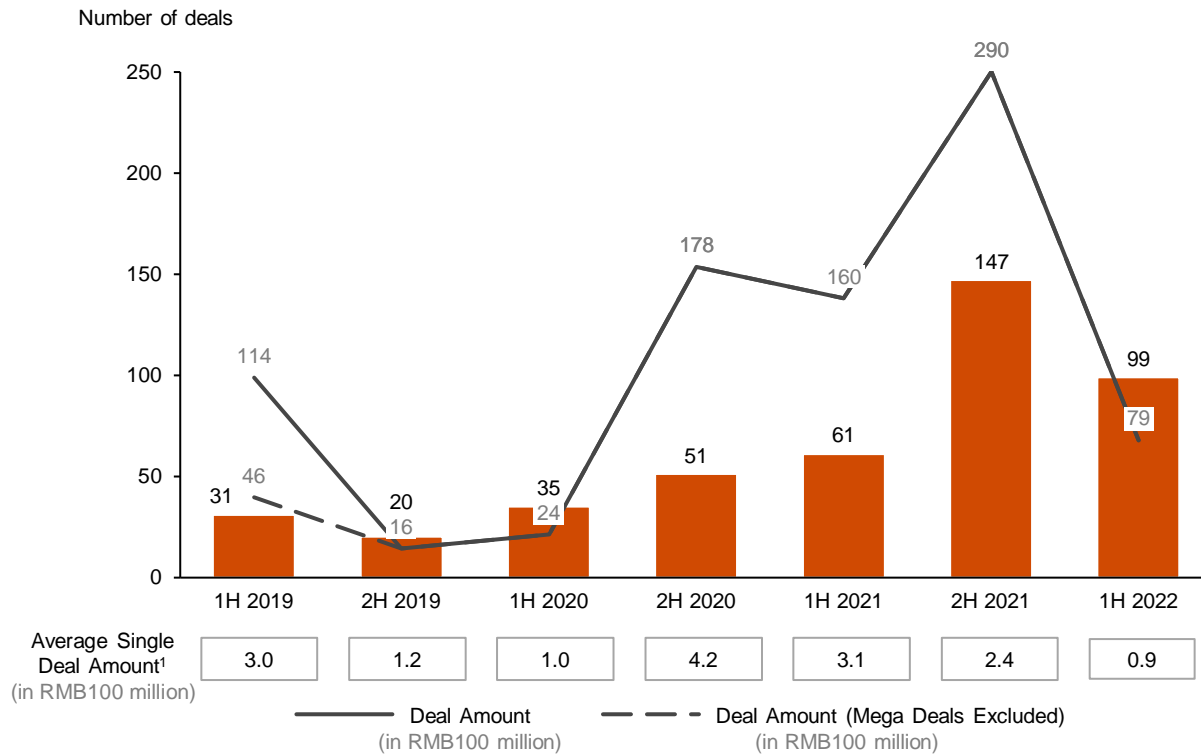
Source: Pedata, Thomson Reuters, public information and PwC analysis

PwC Healthcare M&A Deal Trends in 1H 2022

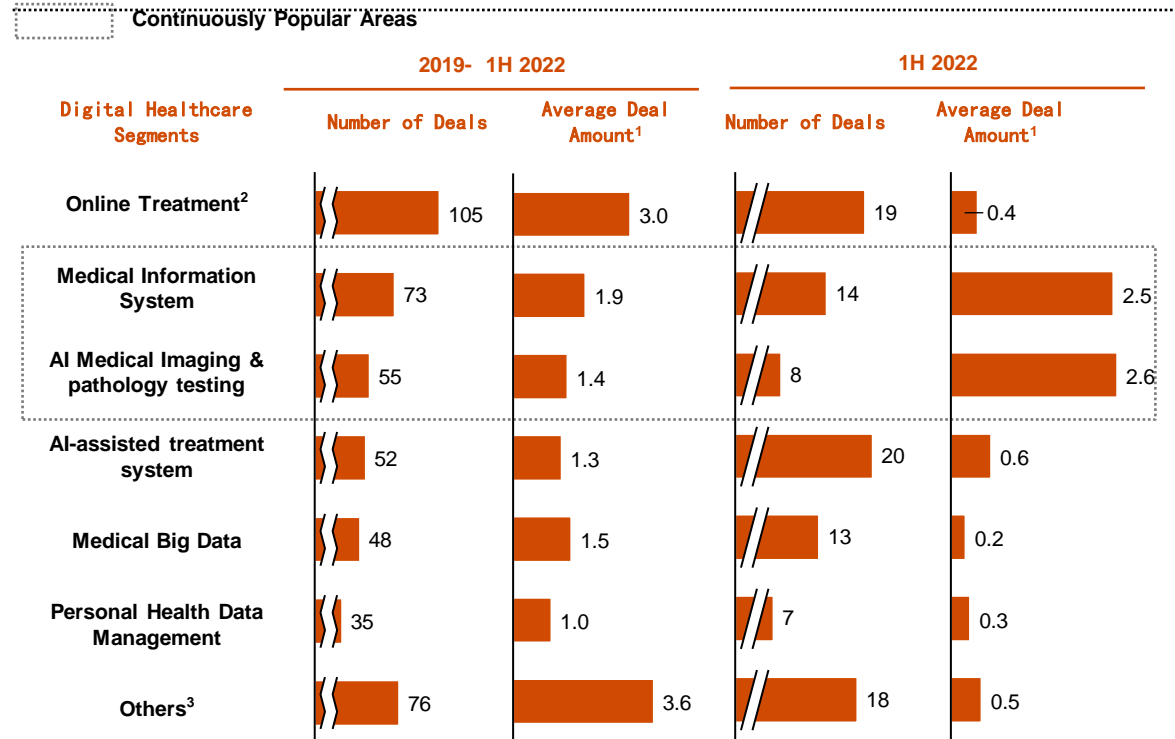
Artificial intelligence, big data, and information technology are hotspots for investment with increased average amounts of single disclosed deal in AI medical imaging and pathology testing, and medical information systems



Number and amount of deals for digital healthcare, 2019 - 1H 2022



Number and amount distributions of digital healthcare, by segments of the track, 2019 – 1H 2022



Note: 1. the calculation of the average single disclosed deal amount does not include the number of deals with undisclosed amounts and does not include the amount of mega deals (above RMB6 billion); 2. online treatment refers to disease diagnosis and management platforms, including remote chronic disease management platforms, online consultation platforms, etc.; 3. other segments of the track include AI medical robotic system, personal health data management, health knowledge science platform, medical information system, medical big data, digital marketing of medicine, pharmaceutical e-commerce, digital therapy, intelligent medical case

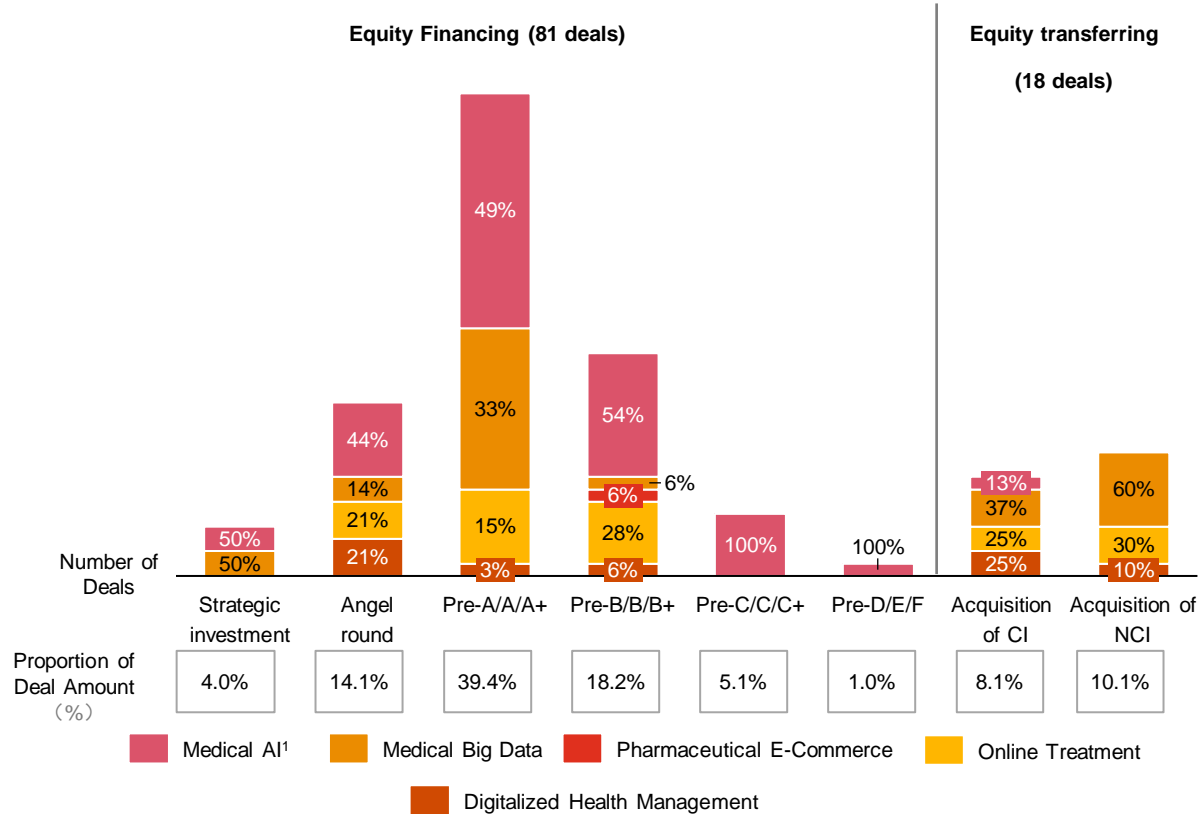
Source: Pedata, Thomson Reuters, public information and PwC analysis

PwC Healthcare M&A Deal Trends in 1H 2022

With the aid of financial investors, digital healthcare achieved R&D and downstream application channel development; with the aid of industrial investors, digital healthcare achieved resource integration, technical capability breakthrough, and product power upgrading



Number of M&A deals in digital healthcare by disclosed deal round in %, 1H 2022

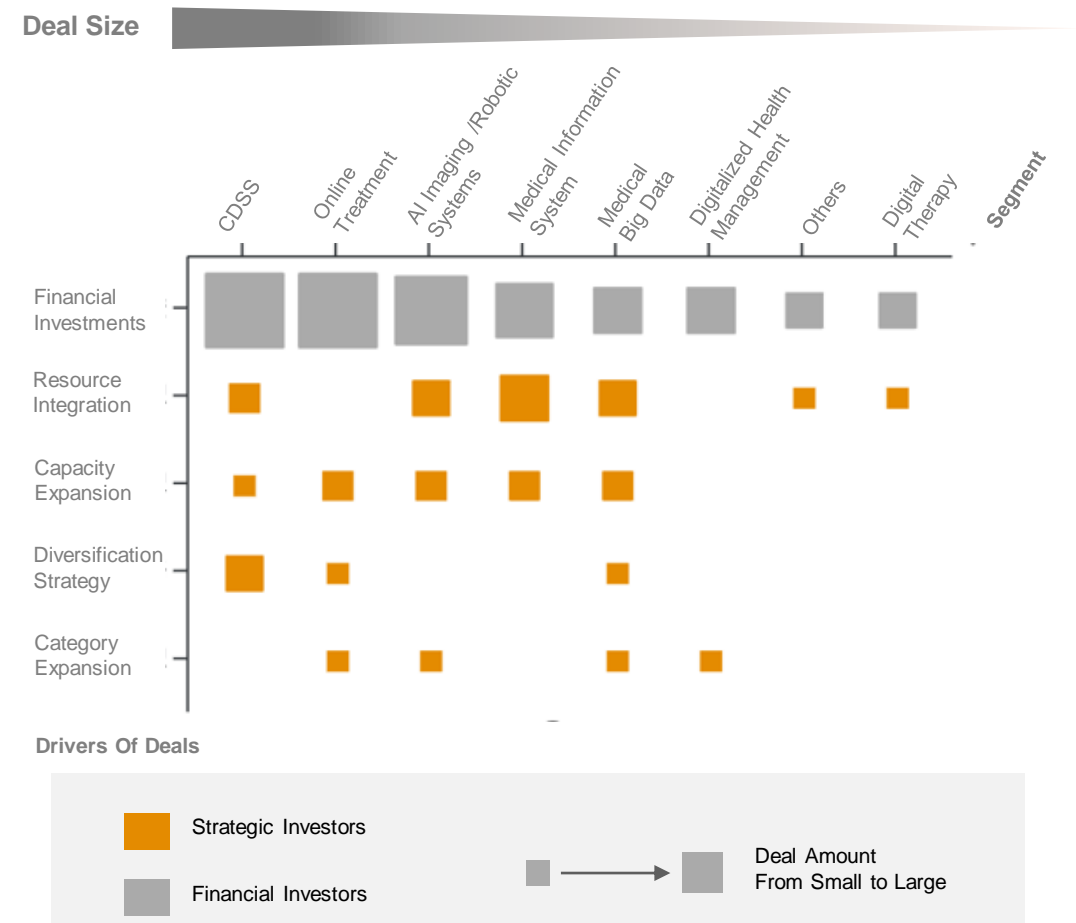


Note: 1. Medical AI includes digital healthcare areas related to artificial intelligence such as Clinical Decision Support Systems (CDSS), AI imaging/robotic systems, etc.

Source: Pedata, Thomson Reuters, public information and PwC analysis

PwC Healthcare M&A Deal Trends in 1H 2022

The M&A deal drivers and distributions by track segments and investor types in digital healthcare, 1H 2022



5



















Key Issues of IPO for Healthcare Companies



Digital medical companies take up half of the healthcare companies to be listed; specialty hospital and clinic chains are ready to go public



Medical service companies to be listed in 1H 2022

Company	Board	IPO Date ¹	Industry	Track Type	Process ²	Company	Board	IPO Date ¹	Industry	Track Type	Process ²
 Eddatech	HKEx Mainboard	2022-01-10	Digital Healthcare	AI Medical Robotic Systems	Lapsed ³	 DentalDoctor	HKEx Mainboard	2022-03-29	Hospitals and Clinics	Dental Clinic	Submitted Prospectus
 ETAO International	Nasdaq	2022-01-31	Digital Healthcare	Medical Big Data	Submitted Prospectus	 Center Technology	HKEx Mainboard	2022-04-19	Digital Healthcare	Disease Diagnosis And Treatment Platform	Submitted Prospectus
 Pulse Medical	HKEx Mainboard	2022-02-11	Digital Healthcare	AI Image Detection	Lapsed ⁴	 Beauty farm	HKEx Mainboard	2022-04-22	Out-of-hospital Health Management	Medical Aesthetic Institutions	Submitted Prospectus
 Keep	HKEx Mainboard	2022-02-25	Digital Healthcare	Digital Health Care	Lapsed ⁵	 China Dental Medical Group	HKEx Mainboard	2022-04-29	Hospitals and Clinics	Dental Clinic	Submitted Prospectus
 Medbanks	HKEx Mainboard	2022-02-25	Digital Healthcare	Disease Diagnosis And Treatment Platform	Submitted Prospectus	 Meizhong Jiahe	HKEx Mainboard	2022-05-31	Hospitals and Clinics	Oncology Clinic	Submitted Prospectus
 ClouDr	HKEx Mainboard	2022-03-01	Digital Healthcare	Medical Big Data	Listed ⁶	 Barley	HKEx Mainboard	2022-06-29	Out-of-hospital Health Management	Hair Transplant Clinics	Submitted Prospectus
 Adicon	HKEx Mainboard	2022-03-04	Out-of-hospital Health Management	Third-party Testing	Submitted Prospectus	 Lu Daopei Hospital	HKEx Mainboard	Proposed IPO	Hospitals and Clinics	Hematology	Not Started Yet
 Dingdang Health	HKEx Mainboard	2022-03-16	Digital Healthcare	Pharmaceutical E-commerce	Passed ⁷	 Wuhan Asia Heart Hospital	HKEx Mainboard	Proposed IPO	Hospitals and Clinics	Cardiovascular Department	Not Started Yet
 Clifford Hospital	HKEx Mainboard	2022-03-23	Hospitals and Clinics	Single-site General Hospital	Submitted Prospectus	 IFLY Health	HKEx Mainboard	Proposed IPO	Digital Healthcare	AI-assisted Diagnosis And Treatment	Not Started Yet

Note: 1. Time of prospectus submission/initiation of IPO counseling; some companies submitted prospectuses in 2021 but have not yet been listed, including: Huaxia Eye, Sanbo Hospital, Shulan Hospital, etc.; 2. Main nodes of IPO progress: 1) not yet started; 2) in counseling period, not yet declared; 3) submitted prospectus; 4) lapsed; 5) passed/failed to pass/ suspended IPO, to be listed information as of 31 August 2022; 3. on 11 July 2022, the status of the Eddatech's IPO application was changed to "lapsed" due to the failure to pass the hearing within 6 months after the filing of the prospectus; 4. Pulse Medical IPO application status was changed to "lapsed" on 12 August 2022 due to failure to pass the hearing within 6 months of filing the prospectus; 5. Keep's IPO application status was changed to "lapsed" on 26 August 2022 due to failure to pass the hearing within 6 months of filing the prospectus; 6. ClouDr was officially listed on the Hong Kong Stock Exchange on 6 July 2022; 7. Dingdang Health passed the HK Exchange hearing on 17 August 2022















Source: Pedata, Thomson Reuters, public information and PwC analysis

 Hospitals and Clinics  Out-of-hospital Health Management  Digital Healthcare

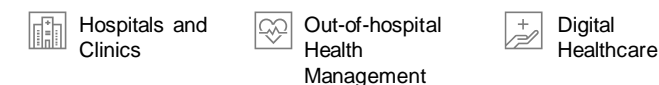
Listed companies in 1H 2022 are mainly specialty clinic chains and medical testing organizations; the newly-listed medical testing organizations outperform companies of other tracks in the stock prices and performances



List of listed healthcare service companies in 1H 2022

Company	Board	IPO date	Industry	Field	Initial Fund Raising Amount (in RMB100million)	Revenue ¹ (in RMB million)	Net Profit Margin (%)	EBITDA (%)	Market Capitalization Of IPO Day And Current ² (in RMB100 million)	Share Price Movement After Listing ³
He Eye Hospital	GEM	2022-03-22	 Hospitals and Clinics	Ophthalmology Clinic	13.0	963.7	6.97%	25.45%	60 / 54	
Huakang Medical	GEM	2022-01-28	 Out-of-hospital Health Management	Hospital System Providers	10.4	785.5	7.28%	13.07%	49 / 41	
YunKang Group	HKEx Mainboard	2022-05-18	 Digital Healthcare	Third-Party Testing Organization	9.6	1,211.5	21.92% ⁴	30.24%	52 / 112	
Arrail Group	HKEx Mainboard	2022-03-22	 Hospitals and Clinics	Dental Clinic	6.8	1,516.3	7.44%	-26.11%	80 / 75	
Cowealth Medical	SH/SZ Mainboard	2022-02-16	 Digital Healthcare	Third-Party Testing Organization	4.2	1,229.8	6.66%	11.02%	24 / 50	
Megagenomics	HKEx Mainboard	2022-06-22	 Digital Healthcare	Third-Party Testing Organization	2.2	204.2	38.90% ⁴	46.97%	43 / 43	
ClarityMedic	HKEx Mainboard	2022-02-18	 Hospitals and Clinics	Ophthalmology Clinic	2.0	222.4	16.11%	18.58%	8 / 6	

Note: 1. Revenue data as of 31 December 2021; 2. Market capitalization as of 30 June 2022; 3. Post-IPO stock price trend is from the IPO date to 30 June 2022; 4. The net profit margin of YunKang Group is the after-tax profit margin from continuing operations in FY2021, and Mainline is based on the net profit margin in FY2020



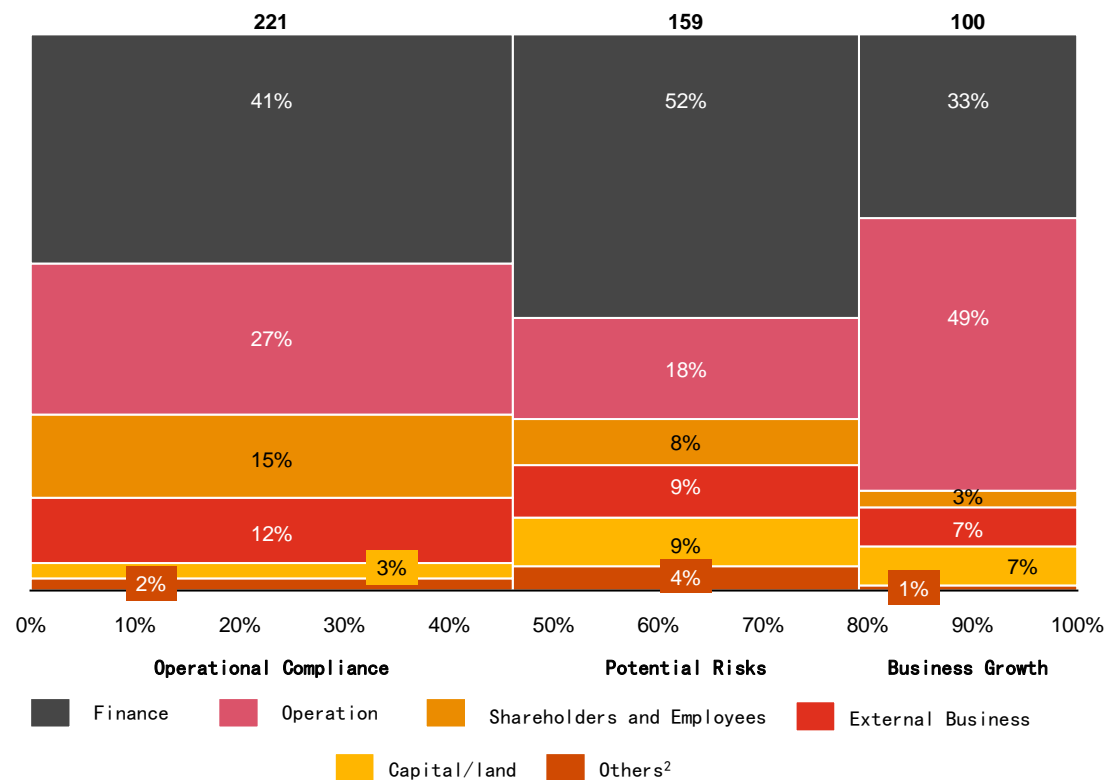
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PwC Healthcare M&A Deal Trends in 1H 2022

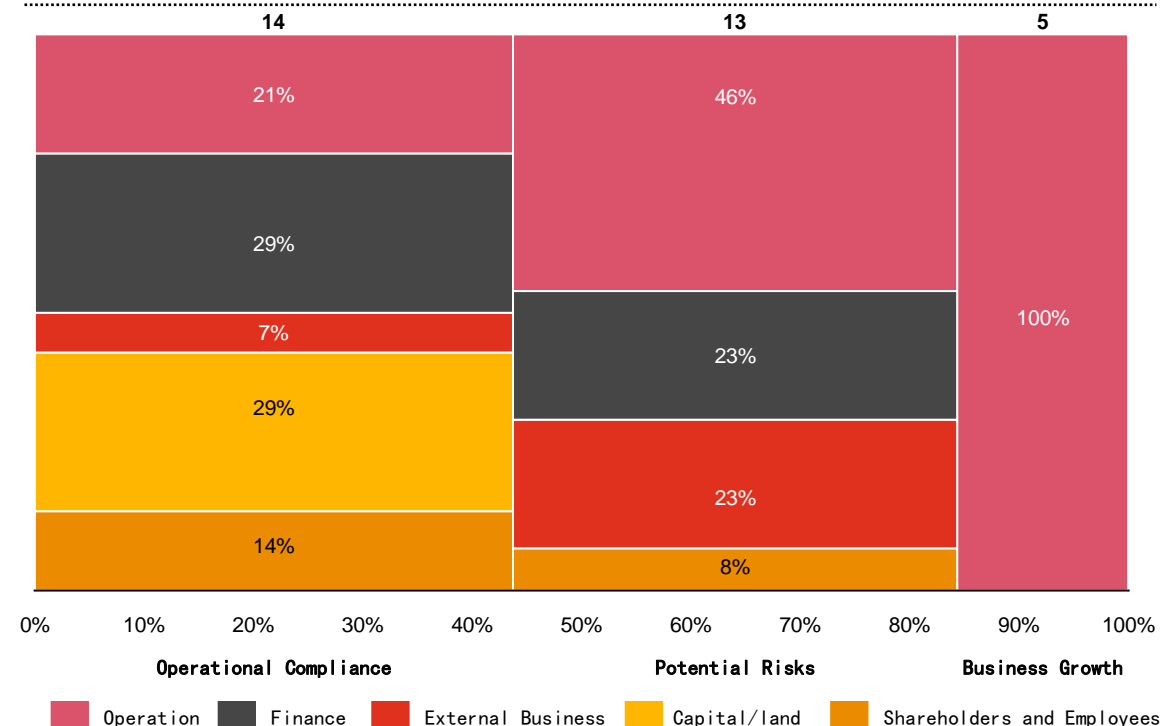
Key listing issue differs for medical service providers going listed in Mainland China and Hong Kong, mainly related to financial/operational compliances



CSRC inquiry letter questions from listed medical service companies in 1H 2022¹



Features of concerns for Hong Kong listings of healthcare service companies in 1H 2022



Note: 1. For mainland listed companies, we have gathered 480 questions in the inquiry letters from the China Securities Regulatory Commission for mainland listed companies, and for Hong Kong proposed listed companies, we have gathered over 30 questions for anonymous healthcare companies in the Hong Kong Stock Exchange's listing decision documents in the past ten years since 2012. 2. "Others" includes foreign market relations, data authority, history and changes, etc.

Source: Pedata, Thomson Reuters, public information and PwC analysis

Mainland listings focused on financial and business process compliance and changes that deviate from industry common sense, while Hong Kong focused on legal compliance and material integrity



Mainland listing Key Issues¹

HK listing Key Issues¹

Operational Compliance



- Abnormal financial situations such as a large number of cash deals to match the business, deliberate misrecording of accounts, the timing of revenue recognition, management fee rates higher than the industry average, cost accounting methods, etc.
- Focus on illegal acts in sales, procurement and bidding, and foreign hospital cooperation; whether medical institution construction and operation comply with safety and environmental protection regulations, and business activities that are different from common sense or industry characteristics
- Illegal behavior of shareholders and management, external relations, transfer of benefits



- Compliance of financial activities with Mainland/Hong Kong tax laws and regulations; compliance of shareholders and management with the lock-up period for profits from stock sales; deliberate tax avoidance by shareholders
- Compliance with 18-A core product eligibility requirements for products that have applied for overseas/mainland approved clinical trials; material integrity of the distribution business model
- Change in control and ownership of the company in the last year; compliance with the planned sales of share options to the trusts; explanation and disclosure of bribery incidents



Potential Risks



- Long recovery cycle, the excessive proportion of accounts receivable, etc., impairment charges for market fluctuations, abnormal changes in financial data during a certain period
- Over-reliance on the upstreams and the downstreams; specific measures in respond to regulatory policy changes, increasing market costs and insufficient demand in medical industry; customers disputes, administrative penalties and etc.
- Explanation of the deviation of the number of personnel, per capita salary and rent amounts from the operating financial data; the large gap between various personnel expenses and that of the same industry



- Loan guarantee of related personnel from banks; foreign exchange risk hedging measures
- Excessive reliance on a physician for revenue; incomplete disclosure of main business may mislead investors; incomplete disclosure of planned arrangements in subcontracting operations; rebates from distribution operations
- Export of products to sanctioned countries; bribery incidents



Business Growth



- Granularity of disclosure levels according to core indicators such as gross margin of products or services, changes in core indicators, explanation of price fluctuations
- Status of industry position and competitiveness; sustainability and growth of business model; explanation of operation-related features
- The impact of operating qualifications and credit lines on operations; the commercial rationality of the establishment of branches and other actions, and whether the external business model is in line with industry characteristics



- Performance regression, insufficient growth in the existing business, no business improvement plan provided; no disclosure of market position in terms of OEM/ODM and private label sales; high dependence on major customers and no indication of initiatives to reduce dependence



Finance



Performance



Others

Note:1. For mainland listed companies, we have gathered 480 questions in the inquiry letters from the China Securities Regulatory Commission for mainland listed companies, and for Hong Kong proposed listed companies, we have gathered over 30 questions for anonymous healthcare companies in the Hong Kong Stock Exchange's listing decision documents in the past ten years since 2012; 2. not all concerns have been exhausted in the above-mentioned collection, and questions are summarized according to the frequency of keywords in the inquiry letters.

Source: Pedata, Thomson Reuters, public information and PwC analysis

Data Methodology and Disclaimers



Statistics from earlier news releases may not match the data in this study and press release. There are three main explanations for this: first, PwC excludes some transactions that are essentially not a transfer of control but more like an internal corporate restructuring; second, PwC data from prior years is sourced from other sources; and third, the ClearBridge Database and Thomson Reuters regularly update their historical data when deals are finalized or completed.

Deals included

- | | |
|---|--|
| • Investments in listed and unlisted companies (minimum 5% ownership) | • Spin-off of assets (including spin-off of wholly-owned subsidiaries through listing) |
| • Change of control resulting from acquisitions of listed and unlisted companies | • Reverse takeover and special purpose acquisition company (SPAC) M&A deals |
| • Leveraged buyouts, management buyouts, management share sales | • Corporate restructuring, reorganization, bankruptcy dispositions and auctions |
| • Business or asset divestitures resulting in a change of control at the parent company level | • Directed share issuance and repurchase for non-actual controllers |
| • Joint venture company buyout as a whole | • Capital increase by non-controlling shareholders/new shareholders |
| • Business merger | • Transfer of shares by agreement |
| • Joint venture arrangement | • Tracking Stock in the course of corporate equity restructuring |
| • Re-injection of capital | • IPO ¹ |
| • Solicitation of acquisitions | • De-listing and privatization deals of listed companies |

Deals excluded

- | | |
|--|--|
| • Non-medical service industry deals | • Investment in new construction projects (including investment in hospital greenfield projects) |
| • Rumored but unannounced deals | • Non-fairly priced deals |
| • Options to acquire additional equity interests offered in connection with the acquisition of 100% equity interests | • Related party transactions under the same control |
| • Purchase of trademark usage rights | • Share repurchase by controlling shareholders |
| • Transfer of assets | • Capital increase by controlling shareholders |
| • Capital raising in fund market | |
| • Mutual fund share purchase | |
| • Open market repurchase or cancellation of shares of listed companies beyond the company privatization | |
| • Balance sheet restructuring or internal restructuring | |

Note: 1. IPO trading are not included in the overall deal amount and number of deals, and are presented and discussed separately in the listing section

Source: Pedata, Thomson Reuters, public information and PwC analysis

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Thank you!

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