Trends in integrated elderly care and medical services in China
Exploring "the last mile" of healthy aging
### Private elderly care sector is taking shape yet requiring a focus on the deficiency of medical elements
- Institutional elderly care products are dominated by real estate
- Home and community elderly care services are reliant on homemaking helpers

### Integrating medical and elderly care services is one priority in China's elderly care industry
- Imperative integration of medical and elderly care services
- Difficulties in integrating medical and elderly care services
- Policy support for integrating medical and elderly care services

### Integrated medical and elderly care services drive changes in China's elderly care business formats
- Institutions providing integrated medical and elderly care services focus on cross-industry entry and cooperation
- Resources integration and services capability upgrading are key to home and community based care services for the elderly
- Public-private partnership underpins the development of integrated medical and elderly care services
- Medical and elderly care services integration drives the development of ecosystem supporting industries

### Foreign practices on integrated medical and elderly care
- All-inclusive community care for the elderly in the U.S.
- Japan's three-tier system of integrated medical and elderly care services

### Implications for market players in the context of integrating medical and elderly care services
- Focus on policy changes and reap benefits from policies
- Elderly care service providers should define market positioning and design products based on national conditions
- Service side should focus on tapping and matching demands
- The combination of multi-sited practices of professional healthcare workers with elderly care is worth exploring
- Tier two level hospitals can actively transform into a medical and health care organizations
- Capture market opportunities using digital technologies
- Integrate supply chains to build an ecosystem

### Acknowledgements
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Introduction

China’s population is aging more rapidly. In 2017, the number of people aged over 60 in China reached 188 million, and it is expected to exceed 350 million by 2030, according to the Population Division of the United Nations. China’s aging population as a percentage grows much faster than the world’s average. Moreover, influenced by the one-child policy effective from the 1980s, most aging people are facing the family structure of “four seniors, one young couple and one child”. With increasing dependency ratio, traditional family-supported elderly care can no longer satisfy their needs. As a result, the government has proposed the plan of developing the elderly care industry since the 11th Five-Year Plan period and introduced a series of policies to encourage private capital to engage in during 12th Five-Year Plan period. As estimated by the White Paper on China’s Elderly Care Industry Development released by Chinese Academy of Social Sciences in 2016, China’s elderly care industry will reach RMB13 trillion by 2030. The huge market potential is attracting more market players from various sectors including real estate, insurance, pharmacy and elderly care service.

Though a growing number of new organizations and home and community elderly care products are springing up in the market, most of them have an issue of lacking the medical elements while which are significant for seniors suffering from chronic diseases, disabilities and semi-disabilities. Since 2013, the State Council and various departments have released several documents and guiding principles to develop integrated elderly care and medical services. In a report delivered at the 19th CPC National Congress in 2017, it was mentioned a section on carrying out the Healthy China 2030 initiative that, “As we respond proactively to population aging, we will adopt policies and foster a social environment in which senior citizens are respected, cared for, and live happily in their later years. We will provide integrated elderly care and medical services, and accelerate the development of old-age programs and industries.” The integration of medical service and elderly care service is a clear development priority for the elderly care sector in China.

The ultimate goal of the integration of elderly care and medical services is to deal with “the last mile” problem of the elderly care services. Actively solve the existing shortcomings of the elderly care model, so that the health needs of the elderly not only rely on the hospital, but also strive to be able to enjoy quality medical services in nursing homes and even at home.

Currently, Chinese integrated medical and elderly care sector is still in its early stage and transitioning from top-level design to model exploration. In a global context, Japan and the United States went through a few decades of development before they became leaders in the integrated elderly care and medical services market. To facilitate the future development of integrated elderly care and medical services, China can refer to or draw on foreign models which are more sophisticated and market tested, and integrate with Chinese cultural traditions and actual needs to develop the integrated services and improve the system.

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Private elderly care sector is taking shape yet requiring a focus on the deficiency of medical elements

With almost a decade of development, China private elderly care sector’s business model is now beginning to take shape to be home-based, community-dependent and institution-supported. Institutional elderly care has developed well in both speed and scale and has attracted market players from various sectors. While home and community elderly care grow slowly due to difficulties in profitability and market penetration. Though the industry model has taken shape, a common issue has arisen – the lack of the medical elements to these services – which makes meeting the daily needs of partly incapacitated and incapacitated older people a challenge.

Institutional elderly care products are dominated by real estate

Currently, China’s institutional elderly care market players mainly include real estate developers, insurers and professional elderly care services providers. Extensive development experience and abundant capital flows enable real estate developers and insurers to lead the market. The profit models of mainstream institutional elderly care programs fall into three categories: "non-sales", "sales" and "rent along with sales".

There are three main charging models applied by non-sales institutions for the elderly. The most popular "rental & deposit" model involves paying certain deposits when residing in the institution and paying rentals by month with deposits returned upon the expiration. This model is used by most institutions now, but the huge amount of deposits becomes a growing concern for regulators who may impose limitations on the amount of such deposits. The second model is "membership card & management fee" that is increasingly applied by several high-end institutions for the elderly. Customers buy membership cards to secure the right to live in, of which membership cards can be redefined as financial products that can be traded in the market. The third "insurance bundled" model used by insurance companies involves clients purchasing certain amounts of old-age insurance and be returned benefits per month to cover the expenses for living in the senior care institutions.

Sales type elderly-care institution’s sales approach is primarily determined by land attribution. Programs involving general property rights or commercial land property rights are directly sold for property rights. Due to difficulties in obtaining lands and higher prices, these programs are usually located in the outer suburbs. Another kind of products involve lands exclusive for elderly care and tourism, which can only be sold for the using right rather than property right. Moreover, the "joint property rights" sales model starts to emerge that houses are jointly owned by institutions and house owners. Gonghe Senior Living launched in December 2017 is the first pilot program of the old-age service facility with joint property rights. The program defines the model of 50-year property rights allocated by companies and consumers at the ratio of 5 percent and 95 percent. A certain percentage of property rights held by institutions can reduce senior citizens' purchasing costs and help maintain institution's attribution of elderly care services for a long term. However, it remains to be seen whether such programs can be widely promoted as they are much dependent on government endorsement.

Besides, some institutional elderly care products involve "rented and sold" model, i.e. programs include dwelling houses as well as elderly apartments. Houses are sold for capital recovery and provide support for the hold type properties while elderly apartments are embedded in ordinary communities for leasing.
**Table 1: Charge models of commercial institutions for the aged**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Charge model</th>
<th>Feature</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-sales</td>
<td>Deposit + rental</td>
<td>• Most common model</td>
<td>SHOUKAI Cuncao Xuezhiyuan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Regulators start to restrict high deposits</td>
<td></td>
</tr>
<tr>
<td>Membership card +</td>
<td>Membership card model is applied in many</td>
<td>• Membership cards are defined as financial products to be traded</td>
<td>Cherish-Yearn</td>
</tr>
<tr>
<td>management fee</td>
<td>high-end products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bundled with insurance</td>
<td>Return the dwelling rights to users as</td>
<td></td>
<td>Taikang Community</td>
</tr>
<tr>
<td></td>
<td>long-term pension insurance benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>Property rights sales</td>
<td>• High costs for lands</td>
<td>Greentown Wuzhenyayuan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mostly located in distant suburbs or commercial properties</td>
<td></td>
</tr>
<tr>
<td>Using rights sales</td>
<td>Land properties are mostly separated for</td>
<td></td>
<td>Vanke Dignified Life</td>
</tr>
<tr>
<td></td>
<td>sales</td>
<td>• It is unable to obtain property rights which is inconsistent</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with Chinese consumption views</td>
<td></td>
</tr>
<tr>
<td>Joint property rights</td>
<td>Realize low sales prices as governments</td>
<td></td>
<td>Beijing Gongheyuan</td>
</tr>
<tr>
<td>sales</td>
<td>permanently reserve certain property rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Highly dependent on government endorsement</td>
<td></td>
</tr>
<tr>
<td>Rent + Sales</td>
<td>Property rights sales + rental</td>
<td>• Drain funds from property rights selling and then gain</td>
<td>Vanke Xingfuhui</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sustainable profits from management and rents of rented properties</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Deloitte Research*

The majority of existing institutional elderly care products focus much more on the property of real estate and consumers mostly look for the investment value on property rights, memberships and insurances rather than elderly care services. Therefore, this kind of products tend to consider elderly care services as a selling point instead of the core value. Many products cannot maintain the quality of elderly care services. Medical services and standards of cares cannot meet the living needs of the disabled and semi disabled elderly. Moreover, the medical services for lively seniors are mainly dependent on surrounding hospitals, which is apparently inconvenient to some degree.

**Home and community elderly care services are reliant on homemaking helpers**

Enormous demands on home elderly care deriving from family structure and Chinese traditional views make it an important focus in the long-term development of the elderly care industry. Also in China, home elderly care and community elderly care are closely connected. At present, home and community elderly care service providers in China are primarily small and medium-sized enterprises, including 2mao.com and E-Care Home, with B2B and B2C as their business models. Payers of B2B model are primarily governments who fund to entrust or subsidize professional elderly care service providers to operate home elderly care service stations and take charge of management and operation after establishment to offer home elderly care services for senior citizens within the community. B2C business refers to serving senior citizens directly paid by individuals or commercial insurances.

At present, most home and community elderly care service providers capture the market shares and expand their presence through B2B model. Once covering certain communities, they start to develop B2C businesses within the region to seek for new customers or provide added values apart from government purchased services for
seniors already served. Over the next three to five years, payers for home and community elderly care services are expected to still be governments. B2C business will remain in the stage of exploring and demand mining with a relatively low share. Therefore, market players should focus on fostering individuals’ habits for paying.

Despite huge market potential, home elderly care services are facing the issue of being excessively "homemaking based". Currently home and community elderly care services includes daily care, entrusted care, mental consolation and cultural services that are not much different from homemaking services which can be provided by traditional homemaking helpers. As a result, such service providers are less recognized by individual payers. Many traditional Chinese families, even with the disabled and semi-disabled elderly, still choose to employ housekeepers through traditional channels to take care of seniors instead of elderly care service institutions.

Figure 1: Business models of home and community elderly care service providers

<table>
<thead>
<tr>
<th>B2B</th>
<th>B2C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government procurement</td>
<td>Service model</td>
</tr>
<tr>
<td>Provide elderly care services procured by governments for seniors at communities</td>
<td>Periodical payment (by month/day)</td>
</tr>
<tr>
<td>Provide lands to build elderly care service sites at communities</td>
<td>By types of seniors</td>
</tr>
<tr>
<td></td>
<td>Active, semi disable, and disable (dementia) elderly</td>
</tr>
<tr>
<td></td>
<td>By types of caregivers</td>
</tr>
<tr>
<td></td>
<td>Live-in and non-live-in caregivers</td>
</tr>
<tr>
<td></td>
<td>Fee-for-service</td>
</tr>
<tr>
<td></td>
<td>Bath assistance, diagnosis and treatment, cleaning and cooking, etc.</td>
</tr>
</tbody>
</table>

Source: Deloitte Research
Integrating medical and elderly care services is one priority in China's elderly care industry

Imperative integration of medical and elderly care services
Integration of elderly care and medical services refers to the organic combination of medical and elderly care resources that draw together daily care and rehabilitation. As shown by the present state of China's elderly care industry outlined above, one common issue facing both real estate based institutional elderly care and homemaking based home and community elderly care services is of lacking quality medical services. Though some elderly care products and services are designed for the disabled and semi disabled elderly, they are not able to meet the needs of large amounts of Chinese seniors without self-care ability in terms of number and quality. Additionally, many elderly care institutions adopt model of separating medical facilities from elderly care services, which means that they have medical facilities but with a certain distance from houses for the aged. As the majority of the elderly suffer from symptoms requiring repeated treatments such as chronic diseases, it is extremely inconvenient for them to go back and forth to elderly care institutions and medical institutions.

China National Working Commission on Ageing (CNWCA) estimates that by 2020 China will have more than 42 million disabled seniors and over 29 million aged over 80, together accounting for 30 percent of the total aging population. How to ensure the aged living with dignity by improving the medical service capabilities is the next priority of China's elderly care industry. Accordingly, integrating medical and elderly care services will be a top priority in the industry for some times ahead whilst providing opportunities for market players to stand out in the market. According to National Health Commission, as of July 2017, there were 5,814 institutions providing integrated elderly care and medical services in China, accounting for only about 4% of the total number of elderly care institutions. The insufficient number of institutions providing integrated elderly care and medical services means there is ample space for market development.

Figure 2: Prediction on China's elderly population structure in 2020

Empty nesters 49%
Disabled elderly 17%
Venerable age elderly 12%
Others 22%

Source: CNWCA, Deloitte Research
Difficulties in integrating medical and elderly care services

The slow development of integrated medical and elderly care services is a result of multiple factors.

Firstly, it is about multiple regulators. Medical service and elderly care industries are relatively separated and follow two different sets of regulatory systems. Competent authorities on traditional elderly care institutions are civil affairs departments while those on medical institutions are health and family planning departments of all levels. The entry and regulation on integrated medical and elderly care service institutions are under the charge of these two departments. Besides, matters involving expense reimbursement is under the charge of human resources and social security departments. Market players face many difficulties in integrating medical and elderly care services due to multiple regulators. The overlapping functions of competent authorities and unclear responsibilities lead to troubles for the practice of integrating medical and elderly care services. However, since the end of 2017, the process of setting up medical institutions in pension institutions has been simplified to a certain extent. It is believed that in the future, the efficiency of regulation in this field will continue to improve.

Poor medical insurance coverage is another important reason. In addition to some elderly care service institutions in cooperation with and are close to public hospitals, it is hard for the majority of applications for medical supporting facilities owned by elderly care service institutions to be included in the medical insurance. The application for inclusion in the medical insurance should meet the hardware standards of medical infrastructures equipped with a certain ratio of medical staff which cannot be met by many elderly care service institutions. Meanwhile, China's medical insurance fund spending grows at high speed and faster than revenue growth. Combined with a plunging proportion of labor population, the stress on medical insurance fund is expected to continue to increase. It is unlikely that integrated medical and elderly care services will benefit for all people through the full coverage of medical insurance alone. It also requires to improve commercial insurances in terms of scale and category to build a complete and reliable elderly care payment system.

Besides, it is out of balance in China's elderly care personnel, especially with talent shortage in caregivers and nursing staff. As shown in the 2017 Report on Training of Elderly Care Service Staff in China released by China Philanthropy Research Institute of Beijing Normal University, there are less than 500,000 service staff in various elderly care service facilities and organizations, and less than 20,000 personnel with qualification certificates of old-age care. 14 million caregivers are required as calculated by one professional caregiver for three disabled seniors. Such a huge talent gap gives rise to the situation that frontline caregivers have varying levels of skills. Many caregivers are at older age on average and poor educated without systematic medical service training. Moreover, the demand on general practitioners to promote the integrated medical and elderly care services is also huge. Imbalanced education, limited career development and low incomes result in a substantial gap in the number of general practitioners in China. NHFPC data indicate that only 6 percent of Chinese medical practitioners are general practitioners, well below the average of western countries, placing barriers to develop the integrated medical and elderly care in China to some extent.
Finally, it is not easy to make profits from integrated medical and elderly care services, as it is essentially public welfare implemented by the government with narrow margins. Existing commercial elderly care products are less profitable in services and most earnings derive from real estate financial products primarily targeting at few high net worth individuals other than ordinary seniors. Despite a promising future on the demand side, difficulties in managing and operating medical institutions along with poor profitability put various market players off this market, especially of private capitals, to invest much time and capital. Therefore, the profit model of integrated medical and elderly care services still needs to be explored.

Given all that, integrating medical and elderly care services cannot be achieved overnight but requires joint efforts in terms of regulation on entry, talent development, funding support and business model innovation to seek the most suitable direction for integrated medical and elderly care services in China.

Figure 3: General practitioners as a percentage of total practitioners

Source: OECD, NHFPC, Deloitte Research

Figure 4: Difficulties in integrating medical and elderly care services in China

Source: Deloitte Research
Policy support for integrating medical and elderly care services

In order to better expand the integrated medical and elderly care services, various departments have introduced a range of policies to offer support since the concept of integrated medical and elderly care services officially proposed in the Opinions on Accelerating the Development of Elderly Care Service Industry published by the State Council in 2013.

Table 2: Summary of integrated medical and elderly care services related policies

<table>
<thead>
<tr>
<th>Time</th>
<th>Department</th>
<th>Document</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 2013</td>
<td>State Council</td>
<td>Opinions on Accelerating the Development of Elderly Care Service Industry</td>
<td>Promote the development of integrated medical and elderly care services and explore new cooperation models between medical institutions and elderly care service organizations</td>
</tr>
<tr>
<td>Sept. 2013</td>
<td>State Council</td>
<td>Opinions on Promoting the Development of Health Service Industry</td>
<td>Strengthen the cooperation between medical institutions and elderly care service organizations</td>
</tr>
<tr>
<td>Sept. 2014</td>
<td>National Development and Reform Commission (NDRC)</td>
<td>Circular on Accelerating the Construction of Projects Relating to Healthcare and Elderly Care Services</td>
<td>Accelerate the building of integrated medical and elderly care services facility projects</td>
</tr>
<tr>
<td>Feb. 2015</td>
<td>Ministry of Civil Affairs (MCA)</td>
<td>Implementing Opinions on Encouraging the Participation of Private Capital in the Development of the Elderly Care Service Industry</td>
<td>Support elderly care institutions with mature conditions to set up internal medical institutions or enter into agreements with medical institutions and be included in the medical insurance</td>
</tr>
<tr>
<td>Mar. 2015</td>
<td>State Council</td>
<td>Planning Outlines for National Healthcare Services System (2015-2020)</td>
<td>Support medical institutions with mature conditions to set up beds for the aged; support elderly care institutions with mature conditions to set up internal medical institutions</td>
</tr>
<tr>
<td>Nov. 2015</td>
<td>NHFPC</td>
<td>Guiding Opinions Promoting the Integration of Healthcare and Elderly Care Services</td>
<td>Support elderly care institutions to develop medical services; encourage private capitals to build integrated medical and elderly care service institutions; encourage healthcare organizations to integrate with elderly care services</td>
</tr>
<tr>
<td>Apr. 2016</td>
<td>NHFPC, MCA</td>
<td>Circular on Licensing Work for Integrated Medical and Elderly Care Service Institutions</td>
<td>Civil affairs department and health and family planning departments shall put a high premium on licensing for integrated medical and elderly care services institutions and strengthening communication and cooperation</td>
</tr>
<tr>
<td>Jun. 2016</td>
<td>MCA, NHFPC</td>
<td>Circular on Determining the First Batch of National Pilot Units for Integrated Medical and Elderly Care Services</td>
<td>Designate 50 cities (districts) including Dongcheng District, Beijing to be the first batch of national pilot units for integrated medical and elderly care services; at least one provincial pilot per province shall be launched by the end of 2016</td>
</tr>
<tr>
<td>Jul. 2016</td>
<td>Ministry of Human Resources and Social Security (MOHRSS)</td>
<td>Guiding Opinions on Developing Pilot Programs for Long-term Care Insurance System</td>
<td>Actively encourage and support the building of long-term care services organizations and platforms and advance the development of the long-term care services industry</td>
</tr>
</tbody>
</table>
The policy tide on integrated medical and elderly care services falls into three phases. Firstly, the top-level design led by the State Council from 2013 to 2015 mainly defines the importance and general policies on integrating medical and elderly care services. Secondly, the task planning led by the MCA and NHFPC from 2015 to 2016 identifies regulatory responsibilities and specific directions. Thirdly, the rule implementation led by the NHFPC since 2017 proposes clear missions for implementation and pilot work on integrating medical and elderly care services. Additionally, in order to relieve the pressure of social security fund, China Insurance Regulatory Commission (CIRC) also introduces a series of documents as efforts into the growth of commercial health and old-age insurance.

Policies and regulatory responsibilities as well as responsibilities of departments for integrating medical and elderly care services will be further refined and determined in the future. Policies are expected to focus on the following aspects:

- Further ease and simplify the approval process for institutions for the aged to establish internal medical infrastructure and offer convenience for existing institutions for the aged to establish healthcare infrastructure including geriatric hospitals, rehabilitation hospitals, caregivers, traditional Chinese medicine hospitals and hospices.
- In addition to management standards and requirements on above healthcare infrastructure, it is likely to impose standards and requirements on health check healthcare infrastructure.
- In terms of talent shortage in integrating medical and elderly care services, professionals such as doctors and nurses will be encouraged to practice at multiple sites. Qualification assessment and registration management on doctors and nurses of institutions for the aged will be optimized to provide more talents that are qualified.
- Follow up on the outcomes and progress of existing pilot programs of integrated medical and elderly care services and expand the pilot scope. Build demonstration bases for integrated medical and elderly care services and set up assessment mechanisms.
Integrated medical and elderly care services drive changes in China’s elderly care business formats

Currently, China is still seeking for the business model of integrated medical and elderly care services, and different types of market players have stepped in intending to actively explore the model that can be tailored to Chinese market.

**Institutions providing integrated medical and elderly care services focus on cross-industry entry and cooperation**

In terms of institutional elderly care, varying operating entities are seeking for the models of integrated medical and elderly care services through cross-industry entry and cooperation.

The most popular model of integrated medical and elderly care services in China is establishing medical institutions such as geriatric hospitals, rehabilitation hospitals, medical rooms and nursing homes in the institutions for the aged with professional medical teams deployed to operate. The demand of institutions for the aged on in-house medical services has gone beyond the demand on improving the quality of traditional elderly care services. Below are some examples. Beijing No.1 Social Welfare House, founded by Beijing Municipal Government, established one A second-tier geriatric hospital approved by health departments. Cuncaochunhui Home for the Aged, Chaoyang District, Beijing, set up one medical room with full-time licensed doctors and registered nurses as well as multi-sited practicing doctors. Medical institutions established in the senior care institutions ensure seniors to gain immediate medical diagnosis and treatment with qualified services when needed. NHFPC releases the circular on cancelling administrative approval and implementing record-filing management for senior care institutions to establish internal medical institutions in November 2017, lowering policy barriers and providing convenience. But establishing medical institutions requires more time, manpower and capital costs for senior care institutions and not all of such medical institutions can be included as medical insurance designated institutions. Therefore, there are still certain obstacles when it comes to practice.

Besides, the traditional cooperation by signing contract is another popular model starting early in the market, i.e. senior care institutions and medical institutions sign cooperation agreements under which medical institutions regularly send medical staff to visit senior care institutions and provide medical services while senior care institutions are responsible for nursing services during the rehabilitation and recovery process after treatment. Since 2015, the Second Hospital of Beijing has sent doctors every week to Beijing Golden Tide Homes for Elderly, Beijing’s largest chain pension institution, to practice at multiple sites. In this model, senior care institutions can leverage existing resources to serve the elderly. However, in the context of immature telemedicine technologies and applications, these institutions still have to send seniors in need of deep treatment and nursing to hospitals, which causing problems of untimely services and limited service categories.
Newly built elderly care and medical service integrated institution is one emerging model, such as INTECH Rehabilitation Complex in Balizhuang, Beijing, and Shuangjing Gongheyuan. Planning, building and operation of senior care institutions and medical institutions at the same time can deliver various kinds of comprehensive services for the elderly, however, problems of high costs and risks and difficulties in multiple regulations should not be overlooked.

Moreover, a few hospitals set up beds for the aged. A typical case is the Qinggang model in Chongqing. The Zhenxiang Nursing Home in Qinggang County opened at the end of 2014. It is the first experimental unit of combining medical care with senior care in Qinggang. The predecessor of the nursing home was Zhenxiang Branch of Qinggang County Hospital of Traditional Chinese Medicine, which was later transformed into a nursing home for the aged with emphasis on medical attributes. However, in general, the number of such products is relatively small. The main reason is medical institutions have no impetus to provide elderly care services, together with potential risks resulted from undefined natures of these beds. Therefore, some medical institutions, especially private providers, have stayed on the sidelines.

Resources integration and services capability upgrading are key to home and community based care services for the elderly
Elevating the capabilities of health services by integrating medical resources is key to integrate home and community elderly care. To date, three models have emerged.

The first model incorporates elderly care into community services. Similar to institutional elderly care, it combines the functions performed by community care center and health service center and makes full advantage of senior daycare beds by coordinating operational management. The second paradigm is on-demand homecare. Some senior care institutions are collaborating with nearby medical institutions to acquire professionals that can administer medication, provide rehabilitation training guidance and perform medical examinations for seniors. In addition, some other institutions are dedicated to training personnel who provide both caregiving and medical services. Some commercial homecare providers combine these three models and utilize internet and telemedicine technologies to enhance the quality and capability of medical services, deliver efficiency and convenience, turning specialized homecare into reality. One example is the virtual nursing home, a local elderly care cloud platform powered by information and telemedicine technologies. Elderly people can contact the cloud platform via telephone or internet, and the platform will assign a caregiver that meets case-specific requirements. While the professional is performing his/her job, the platform monitors the quality of the services. Youhuwanjia, for instance, is a company that offers multifaceted training in medical services and elderly care, operates geriatric care centers and provides in-home services. 80 percent of Youhuwanjia’s medical care resources come from grade-A tertiary hospitals in Beijing. Other companies that provide integrated medical and elderly care services include Baihuiji and Ci’aijia, who offer home and community based integrated medical and elderly services as well as training.
Public-private partnership underpins the development of integrated medical and elderly care services

Another paradigm of integrated medical and elderly care services is based on PPP (Public-Private Partnership) and operated through BOO (Build-Own-Operate) and BOT (Build-Operate-Transfer). In a BOT model, the government provides the land and the private organization acts as the developer and operator until it returns the land to the government upon expiration of the contract. A contract of this kind generally expires in thirty years. BOO is also known as the “government subsidized, privately run” model, which means a nursing home is funded, established and owned by private investors. The government provides the land and grants favorable policies to the investor. BOO originated from BOT but differs from the latter in that the private investor and the project company are owners of the BOO project.

PPP projects have begun to emerge in large numbers since 2015. Statistics published on Project Database of the National PPP Integrated Information Platform as of August 2017 suggests 307 senior care PPP projects were made public. The proportion of projects that integrate medical and elderly care has risen year-on-year, reaching 42.1 percent in 2017. This upward trend speaks volumes of the government’s agenda to buttress integrated medical and elderly care services.

The implementation of the PPP projects nevertheless faces some challenges, the first of which is geographical disparity. The daunting land costs in tier-1 and tier-2 cities have caused PPP projects to be largely concentrated in tier-3 and tier-4 cities. Moreover, private investors may find themselves having weak bargaining power against the government, who initiates over 90 percent of the projects.
Medical and elderly care services integration drives the development of ecosystem supporting industries

Apart from upgrading service offering, the integration of medical and elderly care services have spawned investment opportunities in other industries within the ecosystem, attracting an increasing number of enterprises and investors to tap into the markets of senior friendly renovation and rehabilitation equipment.

To better cater to the needs of the elders with mobility issues, especially those suffering from disability and semi-disability, community care centers and families have stepped up with efforts to make the physical environment more friendly for the elderly. The market potential is remarkable considering that quality amenities for the elders are lacking in most communities and homes. Currently there are two types of market participants in China. The first league consists of services providers that specialize in senior friendly renovations as well as the conventional remodeling contractors. Companies in this category include eoefe and Shunxinjia, whose services mainly include installation of hand railings, non-slip and shock absorption solutions and accessible bathroom facilities to help the elders navigate their surroundings more safely and conveniently.

The second league of companies, such as Legrand, Ankaingtong and e-ling, capitalize on intelligent technologies. They can install intelligent monitoring systems in the home or neighborhood of the customer, provide GPS elderly trackers and emergency alarm systems that are synced with mobile devices to deliver family members and caregivers the real-time information.

Generally, the market of senior friendly renovation is similar to that of home and community based senior care services in the sense that the government pays for home and community renovations and, in some cases, senior care institutions would purchase services in a whole batch. Activities on the "To C" end are rare and diffuse as many customers prefer to hire small 'construction team' or even do the renovation by themselves. As a result, market penetration can be challenging for businesses.
Another area of opportunities is the market of therapy and rehabilitation equipment as senior care institutions are setting up hospitals and rehabilitation centers to extend their services. According to a list of integrated medical and elderly services projects that call for bidding, issued by the government, products in demand include nursing beds, comprehensive experience machine, training stairs for walking rehabilitation, cervical traction chair, electronic muscle stimulator, multifunctional parallel bars, electric adjustable traction bed, multi-parameter vital signals monitor equipment and orthopedic shockwave therapy machine, etc. Market participants in this area include specialized rehabilitation equipment providers and emerging cross-border investors such as Baolihepin. Established in 2015 as an affiliate of Poly Group, Baolihepin, as a link on Polygroup’s entire senior care value chain, is mainly engaged in selling rehabilitation equipment and senior friendly products to elderly care institutions, communities and homes. Apart from a supplier for Poly Group’s elderly care projects, Baolihepin is also a partner of multiple other property enterprises, senior care services providers, publicly funded sanatoriums and welfare centers. This is a sign that pioneers in the industry are increasing margins by compressing the value chain.

Figure 5: Numbers and proportions of elderly care PPP projects and PPP projects for integrated elderly care and medical services

Source: Project Database of the National PPP Integrated Information Platform, Deloitte Research
Integrating medical and elderly care services cannot happen overnight. Countries that have more mature integrated medical and elderly care systems have gone through years or even decades of exploration. Their development models and proven practices are good references and guidance for China to develop its own integrated medical and elderly care system in the future.

All-inclusive community care for the elderly in the U.S.
The Program of All-inclusive Care for the Elderly (“PACE”) in the U.S. is a good example of integrated medical and elderly care model. PACE was introduced in 1971. After about 20 years of improvements, it was finalized in the 1990s and became an extensively recognized exemplary model for comprehensive care. PACE is designed for aged individuals who need home-level nursing care and are able to live safely in the community. The core of the model is to provide packaged health management, medical care and social services combining short-term medical treatment and long-term care, with day care centers as the main service carriers. PACE communities usually employ a comprehensive range of health care professionals, including physicians, pharmacists, physical therapists, dieticians, nurses, etc.

According to the statistics of U.S. National PACE Association, as of February 2018, there were 250 PACE Centers in the U.S. sponsored by 123 organizations, providing comprehensive care services for over 45,000 elderly people. These people, with an average age of 76, all need home nursing-level care, and 46 percent of them are diagnosed with dementia. Though most elderly people PACE serves are frail and incapacitated, 95 percent of them are still able to live safely in the community, and only 5 percent need to reside in a nursing home. Therefore, the PACE model is a good integrated health and care approach that enables older people with disabilities to live with dignity.

However, many issues remain for China to explore its own model similar to PACE. First of all is the payment problem. In the U.S., funding for PACE programs mainly come from Medicare and Medicaid, the top two U.S. public health insurance programs. However, in China, due to its growing population of disabled elderlies and increasing pressures of medical insurance deficit, it is hardly possible for China to achieve a full coverage of medical insurance. Moreover, as a comprehensive premium integrated health and elderly care model, PACE is hardly affordable by most elders in China through individual or commercial insurance payments given their purchasing power. Therefore, under China’s current environment, market players seeking to explore PACE model should focus on reducing costs methods such as via outsourcing, resource sharing, etc. and develop midrange products affordable to most disabled elders to gain a better position to serve market needs. In addition, PACE has high requirements for basic facilities in community, which are yet to be available in most communities in China. Lastly, PACE also has specific criteria to select qualified elders for its programs, aiming at older people who highly need nursing home-level care but are also able to live safely in the community. However, China has not yet developed sound criteria to define levels of disabilities for elders. It would place both program operators and payers at risk if older people qualified for PACE could not be properly selected.
Japan’s three-tier system of integrated medical and elderly care services
As one of countries with the largest aging population, Japan has similar cultural traditions with China, therefore Japan’s integrated medical and elderly care service model, formed by three tiers of organizations, is particularly instructive for China.

Elderly health and welfare centers at community as the first tier mainly provide services such as health check, healthcare and health management for those seniors living independently within communities, aiming at health management and disease prevention. Day care centers as the second tier target on seniors living independently yet in need of nursing services including some semi disabled elderly and those in need of rehabilitation training. Day care centers are responsible for transporting the elderly in the morning and afternoon and deploy professionals for caregiving and rehabilitation training. Special nursing homes as the third tier are equipped with professionals including nurses and caregivers to take care of the disabled elderly, the handicapped and the elderly with dementia.

In addition to service models, to solve the urgent old-age healthcare problems, Japan has implemented a national long-term care insurance act since 2000 to raise funds from the group aged over 40 and make clearly specified regulations on the elderly who can enjoy nursing services: people aged over 65, people who require care such as for bathing, bodily waste elimination, meals, etc., and require the functional training, nursing, management of medical treatment, and other medical care to maintain dignity and an independent daily life routine according to each person’s own level of abilities. For groups requiring nursing services, the government has departments and doctors in place to assess and rate them. 90 percent of expenses are covered by the long-term care insurance and the rest by individuals, and also the excess part are entirely borne by individuals. The long-term care insurance has partly driven the development of quality community integration of medical and elderly care services and partially overcome the difficulty in the growth due to low purchasing power of the elderly.

Figure 6: Integrated medical and elderly care structure in Japan

Source: Deloitte Research
Implications for market players in the context of integrating medical and elderly care services

Focus on policy changes and reap benefits from policies
The government will continue to specify policies regarding integrated medical and elderly care which is an important part of the Outline of the Healthy China 2030 Plan and provide preferential policies in land, tax and subsidy while simplifying entry processes. Meanwhile, the elderly care service industry is highly policy driven and the development, implementation and benefit of many projects, both institutions for the aged and home and community care for the elderly, are heavily dependent on government endorsement and procurement. Accordingly, existing market players and potential investors should actively focus on policy changes and keep up-to-date on policy trends to reap the benefits from policies and improve profitability and market competitiveness while offering quality products. Additionally, researches on local policies are required for selecting regional markets as detailed preferential and subsidy rules are often specified by local governments.

Elderly care service providers should define market positioning and design products based on national conditions
Despite steadily high economic growth China has sustained, the overall purchasing power has been enhanced slowly. Especially the Chinese old people have formed the habit of thrift for a long time, they have not strong willingness to pay for the high-end pension consumption which the total amount of the payment is difficult to predict. Therefore, it is not practicable to apply the model of high-end maternal and child care service centers to the elderly care service industry. Most of existing high-end senior care institutions and houses for the elderly with high occupancy are mainly products with property rights sales based on real estate. Users pay for these products primarily for the investment value of property rights instead of the service value. As a result, high-end senior care institutions that are not for sales see a relatively low occupancy rate. Besides, despite low costs of many public institutions such as homes for the elderly and nursing houses, they have so poor conditions that cannot satisfy the demands of living with dignity but only meet the basic living needs of the elderly.

Given all that, what China lacks most are affordable middle-end senior care institutions and nursing homes that can enable the elderly live with dignity so as to satisfy the increasingly large group of the middle class. As the integrated medical and elderly care services expand, market players with the intention to build new institutions for integrated medical and elderly care services or renovate existing facilities should take this chance to review their market positioning, design optimal products and accurately capture market needs based on location and the purchasing power of the surrounding groups.
Service side should focus on tapping and matching demands

At present, home and community elderly care services in China remain less diversified. Data from the 2014 Chinese Longitudinal Healthy Longevity Survey by Peking University show that healthcare is in the highest demand within people who need home and community elderly care, followed by emotional support, and then daily care, which is relatively low in demand for elderly care services. However, most of the providers of home and community elderly care services in China have failed to match such demands and focused on daily care instead, with lacking of segmentation and differentiation in healthcare services.

Thus, future participants in home and community elderly care market should focus on tapping and matching specific demands of the elderly group, and offer different services and products based on the age, health condition and financial situation of elderly people. However, there are also risks for service providers and payers as China still lacks a relatively mature classification system in terms of elderly people’s capacity status as well as policy and legal support in defining different types of elders. Therefore, it requires joint efforts from multiple parties to improve home and community elderly care services.

The combination of multisited practices of professional healthcare workers with elderly care is worth of exploring

As mentioned above, a major obstacle for integrated medical and elderly care in China is the lack of specialized talents, with shortage of professional elderly care workers as well as limited resources of medical service personnel available to nursing homes and home care service providers. It is hard to attract experienced physicians whether through cooperation with hospitals from the surroundings or through self-built hospitals. In addition, given the complexity of health conditions among elderly people, and the fact that nursing homes or home care services are usually not supported by equipment as good as in hospitals and plus the higher requirements for physicians, the elderly care services and effects are hardly satisfied.
Tier two level hospitals can actively transform into a medical and health care organizations

At present, the China state is vigorously promoting the development of hierarchical diagnosis and tier treatment as well as the construction of the "medical conjoined body". Under this big framework, primary medical institutions and tertiary hospitals occupy a more important position, while the positioning of secondary hospitals has become relatively vague. Therefore, in order not to be eliminated by the market, secondary hospitals should seek a new path of transformation as soon as possible. The promotion of the integration of medical and elderly care services provides a good opportunity for the transformation of secondary hospitals.

Generally, the beds of tertiary hospitals are tight, so the willingness of them to add elderly services is not strong, while the medical service capacity of primary medical institutions is relatively inadequate. The tier two level hospitals can make use of their existing resources to transform into the old age rehabilitation orientation. On the one hand, they should continue strengthen the service ability in chronic diseases, geriatric management and postoperative rehabilitation, on the other hand, add value-added services such as health care for the elderly. Only in this way, can secondary hospitals get differentiated competitive advantage and enhance their position in the market.

To address this issue, an approach worth exploring is to work with organizations of physicians and nurses to make nursing home or community one of the sites for the multi-sited practices of medical and care workers, finally improving the quality of integrated medical and elderly care services through increased utilization of talents. Undeniably, such model would also give rise to a series of new issues including higher costs. Thus, medical groups, nursing homes and policymakers need to work together and further explore how such model can be implemented.
Capture market opportunities using digital technologies

Players with systemic investments in the elderly care sector may leverage digital technologies to innovate their products and services to improve added-value and profitability.

At present, there are several major applications of digital technologies in China’s elderly care sector. For community and home elderly care, the core application would be the building of regional health information network and the implementation of personal health records for the elderly. In the future, with the accumulation of data and improvements in analytics, home and community elderly care service providers may define and classify their clients, offering targeted services and products to elderly people based on their health conditions, service needs, financial situations and individual preferences.

For institutional operators, it is of vital importance to upgrade the elderly care information system, and connect and integrate it with the medical information system. Apart from current elderly care information system, integrated medical and elderly care service institutions should also incorporate information system that provides functions for electronic health records management, medical checkup management, pharmacy management, physiotherapy management and clinical workstation management, etc., in order to offer better integrated medical and elderly care services, instead of isolated services for the elders.

In addition, the application of telemedicine and telecare technologies is also of great importance, whether to institutional operators or home/community elderly care service providers. As chronic diseases are commonly seen among most elders, there are significant demands for chronic disease management and long-term care, thus it is of great significance to leverage the application of IoT, picture communications, wearables, pre-bed care and other technologies to realize remote health monitoring, remote diagnosis and telecare for elderly people.

Integrate supply chains to build an ecosystem

Due to its inextricable characteristic of serving the public good, elderly care service is a sector of small profits. Thus, its profit margins would be further diluted with every new layer added to its industry chain. As a result, certain powerful corporations should leverage their existing resources and advantages to integrate the supply chain and increase profit margins. Specifically, the supply chain model of a private medical group previously mentioned may be of reference. Under such model, intra-group drug and equipment suppliers make direct supplies to hospitals affiliated to the group, thus reducing supply chain costs while shifting points of profitability upstream.

As mentioned above, Poly Group are vigorously building its ecosystem of elderly care industries. From the setup of strategic platform to the integration of supply chain links, and then to the design and operation of specific products, Poly seeks to establish an overall integrated medical and elderly care industry chain.
Figure 7: Building ecosystem of integrated medical and elderly care industries (Poly as example)

Conduct in-depth cooperation with hospitals, information technology enterprises, media and nursing training institutions to obtain technical and expert support, or convert them into their own resources in the supply chain through investment and M&A.

Source: Deloitte Research
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