“New Entrants, New Health Economy” Survey Findings

May 2017
Table of Content

• Research Background
• Overview of Consumer Health Consumption
• Healthcare Services
• Digital Health
• Implications
PwC has conducted a series of consumer surveys across the globe about New Entrants and New Health Economy

**PwC Global**

“New entrants are resetting the axis of global healthcare. The US$9.59 trillion global healthcare market is receptive to innovations that can supplement or replace traditional person-to-person clinical interaction that accommodates the consumer with care anywhere. In both developed and developing nations, new entrants have pioneered pathways into virtual healthcare, more affordable and convenient care options, clinics that replace inflexible public health, fitness and wellness and much more.”

**PwC US:**

“Abundant opportunity in the expanding health sector is attracting new players from far afield, from Fortune 50 retailers and telecom companies to fledgling startups backed by venture capital. These new entrants are moving fast with fresh ideas about how to satisfy consumers’ appetites for better health and more convenient, affordable, high-quality care.”

— Healthcare’s new entrants: Who will be the industry’s Amazon
Apr 2014

**PwC UK:**

“The UK healthcare landscape is changing, with customers more engaged than ever in their healthcare, fitness and wellness. This opens up opportunities for new entrants to new and existing markets if they can design care models with availability, convenience and value for money at the core of their offer. These opportunities exist whether new entrants are targeting NHS funding or private spend.”

— Capture the growth the opportunities for new entrants in healthcare and wellbeing
Feb 2016

**PwC Canada:**

“Canadians are interested in virtual and mobile health practices that would improve the speed of delivery and access to their care.

An overwhelming majority of Canadians would consider using a secure email system to reach their physician for non-urgent health care issues to increase the speed at which requests could be addressed.”

— Making care mobile
Shifting perspectives on the virtualization of health care
Jun 2013

**PwC Global**

— Global Health’s new entrants: Meeting the world’s consumer, Mar 2015
PwC China initiated New Entrants and New Health Economy project to study the dynamics of healthcare ecosystem

**Consumer : N=1000**

- **Gender**
  - Male: 49.4%
  - Female: 50.6%

- **Age**
  - 18-24: 12.2%
  - 25-34: 17.7%
  - 35-44: 16.5%
  - 45-54: 12.8%
  - 55-64: 21.8%
  - >65: 21.6%

- **Education**
  - High school or below: 63.3%
  - Associate: 16.9%
  - Bachelor: 12.7%
  - Master or above: 4.2%

- **Monthly disposable income**
  - <3,000 RMB: 14.5%
  - 3,001-5,000 RMB: 4.2%
  - 5,001-10,000 RMB: 8.3%
  - 10,001-20,000 RMB: 30.8%
  - >20,000 RMB: 42.2%

**Doctor : N=1317 (Survey Assisted by Trusted Doctors)**

- **Entity nature**
  - Public: 12.2%
  - Private: 27.1%
  - JV: 60.6%

- **Class of hospitals**
  - Tier III: 11.0%
  - Tier II: 2.0%
  - Others: 87.0%

- **Title**
  - Chief doctor: 21.0%
  - Vice chief doctor: 47.1%
  - Doctor in charge: 23.1%
  - Resident doctor: 7.1%

- **Years of practices**
  - <10 years: 21.1%
  - 10-20 years: 39.5%
  - >20 years: 39.5%
Table of Content

- Research Background
- Overview of Consumer Health Consumption
- Healthcare Services
- Digital Health
- Implications
We used personas to collectively showcase consumers’ typical health behaviors and attributes (1/4)

Andy Wang, Male
Age: 22
Education Background: Bachelor
Monthly Disposable Income: ¥6,400
Health Status: Very Good

• Andy constantly pays close attention to his health. He works out 3-4 times a week, but hasn’t taken any health examination.
• He gets information related to healthy living from data search, websites, health counselling apps as well as TV/radio programs.
• Andy uses health-related mobile apps almost every day. He spends around ¥100 to purchase nutritional food or gym equipment online using apps every year. He’s ok about sharing his health information & data with software providers, but prefers not to receive promotional information.
• He loves new gadgets, so he likes to take a look at new apps, and uses different devices, including wearable devices, to monitor his exercise. He also has sports club membership.
• Andy visited healthcare service providers 4 times last year, twice going to private clinics and twice going to tier 3 public hospitals.
We used personas to collectively showcase consumers’ typical health behaviors and attributes (2/4)

Vivian Ye, Female
Age: 30
Education Background: Bachelor
Monthly Disposable Income: ¥8,500
Health Status: Good

- Vivian cares about her health and appearance, so she does physical exercise 2-3 times a week, and sometimes pays attention to what she eats.
- Vivian pays very close attention to the well-being of her children. Her channels of getting health related information include TV programs, data searches, website articles and online counselling.
- Vivian has purchased private health insurance for herself in addition to what her company already provides.
- Vivian uses health-related apps several times a week. She is ok about sharing her personal information and data with online or app providers, but she doesn’t want any promotional material.
- She is concerned about her weight, so she’ bought weight scale, and she’s increasingly interested in using a wearable device to help monitor her activity and sleep levels.
- Vivian visited local hospitals 7 times in the last year, and is more comfortable with pubic hospitals.
We used personas to collectively showcase consumers’ typical health behaviors and attributes (3/4)

Joe Li, Male
Age: 42
Education Background: Master
Monthly Disposable Income: ¥15,000
Health Status: Good

• Joe is at manager level in large company. He has a gym membership, but only finds time to work out once per week, sometimes a bit more. He doesn’t really pay attention to his diet.

• Joe uses health-related apps multiple times a week, and has spent ¥200+ on online purchases for some medical devices for his parents using these health apps over the last year. He is fine with his health information and data being shared with web and app providers, but is not interested in receiving product promotional information.

• Joe visited a local hospital only once last year, although he has considered seeing a doctor for a couple of times, he lacked of the time to wait a long queue at the hospital.

• If he needs to take drugs, he will only take imported patented drugs.

• He’s purchased a private health insurance plan for himself and his family.
We used personas to collectively showcase consumers’ typical health behaviors and attributes (4/4)

Anna Chen, Female

Age: 67
Education Background: High school or below
Monthly Disposable Income: ¥3,000
Health Status: Fair

• Anna is a retired grandmother and does physical group exercise 2-3 times a week at the neighbourhood park. She is quite careful with her daily diet.
• She gets almost all of her health management information from TV programs, newspapers or from physicians.
• Anna uses very few mobile Apps. None of them are health related.
• She was diagnosed with diabetes a few years ago, and uses a blood glucose meter, but she does not have other medical devices. She prefers to use traditional Chinese medicines if she needs medicines.
• Anna visited local public hospitals 12 times in the year before, of which 8 times were to community health centres.
We quantify typical issues among consumers who seek healthcare services when in need, including 1) time conflict, 2) economic reasons, 3) lack of trust in healthcare services provider.

Figure 1. Percentage of consumers who abandon seeking services when in need

38% of consumers have experiences abandoning seeking healthcare services in the past year.

Distribution of the reasons:
- Symptoms relieved: 59%
- Due to time conflict with work: 51%
- Due to time conflict with family: 35%
- Economic reasons: 28%
- Lack of trust in healthcare services provider: 19%
Our studies also cover a wide range of topics along with the healthcare value chain

<table>
<thead>
<tr>
<th>Exampled questions</th>
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</thead>
<tbody>
<tr>
<td>Mindset to healthcare</td>
</tr>
<tr>
<td>Level of attention to health.</td>
</tr>
<tr>
<td>Healthy Diet</td>
</tr>
<tr>
<td>Consumer’s frequency of keeping a diet</td>
</tr>
<tr>
<td>Fitness</td>
</tr>
<tr>
<td>Consumer’s frequency of doing exercises; Ownership of gym membership</td>
</tr>
<tr>
<td>Physical Examination</td>
</tr>
<tr>
<td>Number of physical examination conducted in the past five years</td>
</tr>
<tr>
<td>Nutritional Products</td>
</tr>
<tr>
<td>Frequency of taking various nutritional products</td>
</tr>
<tr>
<td>Health Insurance</td>
</tr>
<tr>
<td>Whether consumers have purchased private health insurance; Expenses on private health insurances</td>
</tr>
<tr>
<td>Healthcare Services</td>
</tr>
<tr>
<td>Where do consumers seek healthcare services; Their attitude towards different types of healthcare services</td>
</tr>
<tr>
<td>Medication</td>
</tr>
<tr>
<td>What categories of drugs consumers trust more</td>
</tr>
<tr>
<td>Medical Devices</td>
</tr>
<tr>
<td>The ownership of household medical devices</td>
</tr>
</tbody>
</table>
28% of people have a membership from gym or other sports club, the penetration rate is strongly correlated with monthly income level.

Figure 2. Gym/sports membership by income level

<table>
<thead>
<tr>
<th>Monthly income (RMB)</th>
<th>Membership Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3000</td>
<td>10%</td>
</tr>
<tr>
<td>3001-5000</td>
<td>18%</td>
</tr>
<tr>
<td>5001-10000</td>
<td>32%</td>
</tr>
<tr>
<td>10001-20000</td>
<td>37%</td>
</tr>
<tr>
<td>&gt;20000</td>
<td>57%</td>
</tr>
</tbody>
</table>
22% of consumers have smart bands and that the penetration of smart bands increases with income level.

Figure 3. Percentage of consumers owning electronic bracelets by income group.
Only around 1/3 of consumers have physical examination 5+ times in the past five years

Figure 4. Percentage of consumers who have different times of physical examination in the past five years

Figure 5. Percentage of consumers who have five times or more physical examinations in the past five years by income level

None | Once | 2-4 times | 5 times or more
---|---|---|---
5% | 15% | 51% | 30%

<3000 | 3001-5000 | 5001-10000 | 10001-20000 | >20000
22% | 21% | 29% | 48% | 52%

Monthly income (RMB)
Among all nutritional products, consumers intend to use vitamins most frequently, seconded by minerals

• By analyzing social-economic factors, we find that intake habits of nutritional products and income are positively correlated. Consumers with higher income level take vitamins more frequently.

• Interestingly, consumers in good or fair conditional are more likely to take vitamin. People in very good condition might think taking vitamins unnecessary while people in poor conditions should take medicines instead of vitamins.

• In China, intake of nutritional products is still an emerging lifestyle compared with that in developed countries. Consumer used to be skeptical of the quality of nutritional products, but nowadays consumers can easily purchase nutritional products online through trusted local suppliers or overseas ones.
38% of consumers say they have purchased private health insurance for themselves, which is a relatively higher penetration rate compared with that in the national level.

Figure 6. Percentage of consumers who purchase private health insurance by income level

Figure 7. Annual spending on private health insurance

Yearly Spending (RMB)
65% of consumers have access to certain household-based medical devices. Simple monitoring devices are most popular, such as weight, temperature, blood pressure and blood glucose monitoring.

Percentage of consumers who use household medical devices for health management

<table>
<thead>
<tr>
<th>Diagnosis &amp; monitor devices</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic weight scale</td>
<td>51%</td>
</tr>
<tr>
<td>Electronic thermometer</td>
<td>47%</td>
</tr>
<tr>
<td>Blood pressure meter</td>
<td>39%</td>
</tr>
<tr>
<td>Blood glucose meter</td>
<td>28%</td>
</tr>
<tr>
<td>Electronic band</td>
<td>22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Therapeutic devices</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep therapy device</td>
<td>11%</td>
</tr>
<tr>
<td>Nebulizer</td>
<td>4.7%</td>
</tr>
<tr>
<td>Vision therapy device</td>
<td>4.4%</td>
</tr>
<tr>
<td>Respiratory machine</td>
<td>4.4%</td>
</tr>
<tr>
<td>Hearing aids</td>
<td>4.2%</td>
</tr>
<tr>
<td>Electromagnetic therapy device</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wellness devices</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massage device</td>
<td>20.2%</td>
</tr>
<tr>
<td>Foot bath device</td>
<td>19.0%</td>
</tr>
<tr>
<td>Cupping device/scraping plate</td>
<td>15.0%</td>
</tr>
<tr>
<td>Oxygen generator</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
Table of Content

• Research Background
• Overview of Consumer Health Consumption
  • Healthcare Services
• Digital Health
• Implications
Consumers who seek health services visited hospitals on average 7.1 times per year; large public hospitals are still the first choice

- Our survey results show about 80% of consumers have sought health services in the last year.
- On average, among the patients who have been to hospitals go there for 7.1 times in the past 1 year.
- Among them, public health providers are still the first choice for most. Large public hospitals have the highest average visits, 2.45 times per year.

Figure 9. Frequency of going to different types of healthcare organisations

Average patient visits per year:
Public vs. Private ≈ 4 : 1
Large public Tier III hospitals are still preferred over other types of healthcare organisations

Figure 10. Preferences towards different types of healthcare organisations
However, over 40% of respondents have tried healthcare services in private healthcare organisation in the past 1 year

- Overall, the profiles of people who have experienced private healthcare services tend to be younger with higher education and income levels, and have private health insurance.
- **Male:** Male consumers tend to be more willing to try private healthcare organisations, although the difference between men and women is not large.
- **Age:** Consumers who have received health services in private healthcare organisations are significantly younger and nearly half are under the age of 35.
- **Income:** Consumers who have received health services in private hospitals tend to have relatively higher incomes — nearly 70% have income over RMB 5000.
- **Private health insurance:** Our survey also finds that of people who go to private health organisations, 62% have private health insurance.
Consumers are becoming more willing to conduct small checks & surgeries in private clinics, but less so for more serious medical procedures

Figure 11. Patient’s likelihood to conduct examinations and surgeries in private clinics

<table>
<thead>
<tr>
<th></th>
<th>Very unlikely</th>
<th>Unlikely</th>
<th>Not Sure</th>
<th>Likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small examinations</td>
<td>8%</td>
<td>10%</td>
<td>17%</td>
<td>17%</td>
<td>45%</td>
</tr>
<tr>
<td>Small surgeries</td>
<td>8%</td>
<td>11%</td>
<td>21%</td>
<td>18%</td>
<td>40%</td>
</tr>
<tr>
<td>Large examinations</td>
<td>17%</td>
<td>18%</td>
<td>24%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>Large surgeries</td>
<td>30%</td>
<td>20%</td>
<td>23%</td>
<td>18%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Small checks include blood testing, B-mode ultrasound etc.
Small surgeries include removing stitches
Large examinations include CT/MRI etc.
Large surgeries include chemotherapy, dialysis etc.

- With the considerable development of private healthcare services in China, consumers are considering the use of private clinics for particular services more.
- According to our survey, most consumers are willing to conduct small or routine check-ups & smaller surgeries in private clinics. But as the check-ups or surgeries become “larger”, the likelihood of using private clinics decreases.
Doctors in public hospitals see 93 patients per week on average

Patient Volume in public hospitals

- The outpatient workload of doctors in public hospitals is indeed burdensome. From this study, on average, doctors see around 93 patients per week.

- We see a large variance amongst outpatient workload although doctors duty on inpatient duty explain part of the variances.

Figure 12. Weekly outpatient visits volume from doctor in public hospital

Mean: 93.2 person
**Among patients doctors see, a high portion of them, over 50%+, are first-time visitors**

**First-time visit vs follow-up visits**
- In current China’s healthcare environment, it is not very feasible for patients with chronic diseases keep visiting the same doctor to have more continued care.
- In the survey, the average percentage of outpatients who are first-time visitors is as high as 55%, only 11% of doctors whose first-time patients ratio is below 20%.
- As digital technology enables more and more online appointments to be made, patients’ follow up with same doctors should be easier. Doctors’ familiarity with their patients’ condition will benefit both sides.

**Figure 13. Percentage outpatient as first-time visit**

![Bar chart showing the percentage of outpatients as first-time visit](chart.png)

- **Mean:** 54.5%
- **% Doctor**
  - 0-20%: 11%
  - 21-40%: 22%
  - 41-60%: 29%
  - 61-80%: 30%
  - 81-100%: 8%

Percentage of outpatients as first-time visit
The average duration of first-time visits are 40% longer than follow-up visits

Average length of visit
- Our survey finds, doctor spend on average 14 minutes with first-time patients, which is 40% more time than for follow-up patient visits.
- Further, 45% of follow-up patients visits take less than 5 minutes. Innovation to avoid such visits if patients are for example, just refilling drug prescriptions, online refill prescriptions could help.

Figure 14. Average length of visits between first-time visits and follow-up visits

Avg First-time visit: 14.2 min  Avg Follow-up visit: 10.2 min
Doctors say stability is the largest advantage of working at public hospital while excessive administrative burden is the most negative issue

Advantages of working at public healthcare organisations
- Doctors take job stability very seriously as an advantage of working for a public health organisation.
- Also, public hospitals have more patients for them to gain clinical experience.
- Another important advantage is the view that the public institutions have better reputations.

Disadvantages of working at public healthcare organisations
- As to the disadvantages, physicians feel that excessive amount of administrative burden is the greatest issue while working in public health.
- Uncompetitive pay comes in at 2nd place.
- High workload, is the 3rd rated disadvantage perhaps related to the first disadvantage but also inter-related to the advantage of having greater numbers of patient flow.
- Office politics also rates fairly highly in the disadvantages.
Doctors recognise higher income as the greatest advantage of working in private healthcare organisations, but are concerned about its negative impact on their scientific research & academic achievements.

Advantages of working at private healthcare organisations
- Doctors put higher pay as the most important reason to work at private organisations.
- Perhaps related to that, doctors also say that working in private organisations can better realise the value of their quality work.

Disadvantages of working at private healthcare organisations
- Doctors think that working in a private institution is unhelpful for their academic achievements. At the same time many feel it’s advantage that there is no compulsory research requirements.
- Another key disadvantage is lack of sense of belonging perhaps to the greater healthcare community.
Doctors in public healthcare organisations show great interests in “Multiple-site Practices”, nearly half of them considering part-time jobs at private healthcare organisations.

Figure 15. Physicians’ attitude towards multi-site practices

<table>
<thead>
<tr>
<th>Activity</th>
<th>Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working full-time at public hospitals part-time at private one(s)</td>
<td>34%</td>
<td>14%</td>
</tr>
<tr>
<td>Working at multiple public hospitals</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>Starting own private healthcare business</td>
<td>18%</td>
<td>6%</td>
</tr>
<tr>
<td>Working for private healthcare organizations</td>
<td>16%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Table of Content

• Research Background

• Overview of Consumer Health Consumption

• Healthcare Services

• Digital Health

• Implications
Across 10 dimensions around digital adoption status, we find great progress by Chinese consumers in adopting digital health.

- Using digital means for health research behaviors among consumers is very high.
- Mobile health app use, their use frequency and data sharing attitudes have room to grow.

1. **73%** use web pages or health apps to obtain health related information
2. **51%** use web-based or mobile health apps for online medical inquiry consultation when in the need for medical services
3. **65%** have household medical equipment to monitor their health condition.
4. **48%** have installed a health related app
5. **51%** of consumers who have a health app are willing to share data to trusted parties and accept push advertisements
6. **43%** use health apps for more than once a week
…yet, there is still room to grow

- Payment via digital, like other consumer sectors has seen dramatic increases in China.
- Patients seeing doctors through online video streams (internet hospital model) is still in the early days trial status.
- Consumer spending on healthcare services online or purchasing products through digital health platforms has not matured. However, given growing spending on health and welfare, this area should prove promising in the future when adequate controls and regulatory compliance mature.

11% Have experienced seeing a doctor through an online video.

34% of consumers use digital means to pay for medical expenses such as WeChat, Alipay etc.

15% use a health app to purchase drugs or health-related products of more than 100 RMB per year

7% use a health app to purchase health services more of more than 100 RMB per year
As is expected, younger people with higher education & income levels tend to be pioneers for digital health adoption

Digital health adoption

Younger and higher-income consumers, which co-relate well to the pioneers group, tend to be early adopters of digital health.

• Gender: males are slightly more likely to be early adopters, whilst females are slightly more likely be laggards
• Age: The pioneer group is significantly younger, with 52% younger than 34 years of age, whilst 30% of laggards are over 65
• Income: 82% of pioneers earn between 5001 and 20,000 RMB. 73% of followers earn between 3000 and 10,000 RMB whilst 93% of laggards earn less than 10,000 RMB
• Education: Laggards tend to be less educated
As is expected, pioneers are willing to spend more for their own healthcare, laggards are less willing to do so, and followers are somewhere in between.

Figure 16. Digital health adoption groups and their healthcare spending profile

- Pioneers spend much more than other two groups. The median amount of annual healthcare consumption is 4,900 RMB per year, compared with 3,000 RMB among Followers, and 2,000 RMB among Laggards.
Pioneers in digital health are more likely to purchase private health insurances, go to private healthcare organisations, and seek overseas healthcare services.

Figure 17. Digital health adoption groups and other healthcare spending

<table>
<thead>
<tr>
<th></th>
<th>Pioneers</th>
<th>Followers</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of consumers who have purchased private health insurance</strong></td>
<td>54%</td>
<td>43%</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Seek healthcare services overseas in the past 1 year</strong></td>
<td>20%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Go to public healthcare organizations</strong></td>
<td>76%</td>
<td>57%</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Go to private healthcare organizations</strong></td>
<td>81%</td>
<td>46%</td>
<td>75%</td>
</tr>
<tr>
<td><strong>N=</strong></td>
<td>123</td>
<td>540</td>
<td>337</td>
</tr>
</tbody>
</table>
In China, healthcare organisations are in the process of digitisation to improve operation efficiency and to provide better patient experiences. Meanwhile, our doctors’ digital mindset is stimulated by the environment.

1. **51%** of surveyed doctors say their healthcare institution provide online bookings, and another 20% are planning.

2. **79%** of healthcare institutions surveyed have enabled e-prescriptions, and another 11% are planning.

3. **53%** of the healthcare institutions surveyed through doctors routinely connect with other hospitals for remote consultation, and 22% are planning.

4. **37%** of healthcare institutions have opened digital payment channels (such as WeChat, Alipay), and another 28% are preparing.

5. **28%** of healthcare organisations have achieved regional patient data sharing, and another 30% are planning.

6. **17%** of healthcare institutions surveyed have opened a direct reimbursement system connecting to private health insurance, and around 28% are in the preparation stage.
Doctor believe digital health can promote doctors’ personal brands, make better use of spare time, and raise income. For patients, digital health can save time and help long-term care.

Figure 18: The value of digital health to doctors

- Help to enhance the personal brand: 8.8
- Make better use of spare capacity to help patients: 8.4
- Help to raise their own income levels: 7.0
- Help to improve their own clinical, medical experience: 6.0
- To avoid friction: 4.0

Figure 19: The value of digital health to patients

- Can save time for patients (traffic, queuing, etc.): 9.5
- Help the patient's long-term management and long-term care, increase the value of diagnosis and treatment: 9.0
- Save the patient travel expenses: 6.8
- Increase patient compliance: 5.8
Digital health cannot replace traditional healthcare, but there are applications across the value chain and across certain patient/consumer segments where digital can play well.

Doctors see that digital health is more suitable among patients with mild diseases and patients with chronic diseases. Nearly 80% of doctors believe that these types of patients are the best fit for digital health.

Doctors views are that there are benefits of digital if patients have already been diagnosed and a follow-up visit is conducted. They also feel that younger patients are a more appropriate consumer segment. 60-70% of doctors believe that these patients could apply digital health well. There is an overwhelming sense that digital diagnosis can not match the level of accuracy as offline. Face-to-face communication and physical examination, if enough time allows, provides interaction to understand patients’ condition.

Doctors also feel that non-local patients can benefit from digital health.
Doctors obtain less compensation than they expect through digital health platforms. It can be predicted that digital health platforms will experience greater competition in attracting or retaining doctors.

Figure 20. Current and Expected fees for online medical inquiry (15 minutes counselling)

Doctors’ compensation status and outlook in online healthcare inquiry

- 67% of doctors earn less than 25 RMB for a 15 minute patient counsel, yet 74% believe they should be earning 25 RMB or more in the future.
- Currently, according to doctors, 37% are providing free online patient counsel.
- In the future, to keep doctors engaged in the platforms, their compensation will need to increase.
Physicians views on overall trend of sales/marketing of pharma products: less sales rep visits, more online conference and less offline conferences, and more digital marketing is inevitable

Figure 21. Doctor’s prediction on frequency trends of various sales and marketing format from Pharma/Medtech

<table>
<thead>
<tr>
<th>Sales and Marketing Format</th>
<th>Significant Decrease</th>
<th>Slight Decrease</th>
<th>Unchanged</th>
<th>Slight Increase</th>
<th>Significant Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale reps academic visit</td>
<td>27%</td>
<td>18%</td>
<td>37%</td>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>Sale reps social visit</td>
<td>39%</td>
<td>17%</td>
<td>35%</td>
<td>7%</td>
<td>2%</td>
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Table of Content

- Research Background
- Overview of Consumer Health Consumption
- Healthcare Services
- Digital Health
- Implications
Implications for your business (1/2)

For New Entrants

• New entrants from large groups should be both confident and patient whilst building new disruptive business models, the market environment and favorable policies will continue to stimulate healthcare consumption.

• New entrants should focus unrealized or unmet needs whilst paying attention to the cost incurred by them to educate consumers when entering niche segments or building new markets.

• Consumer segments that are relatively younger while having higher incomes will be key segments to target. With low switching costs however, they can easily shift to better alternatives offered by other new entrants. For relative senior group, pay attention to users experiences brought by new technologies to ensure smooth adoption.

• For new entrants in digital health space, consumer’s willingness to pay is still not high, so an advertising model/ecommerce model+ free services can be more sustainable. Costs to operate should be kept to a minimum.

• Invest more in data privacy and safety, which eventually will influence consumers’ purchasing behavior and willingness to share data.

For Existing players

• Traditional healthcare services players, such as hospitals should keep investing in digital to match the pace of consumers’ habits. Digital may be defined broadly including Internet of Things and using artificial intelligence as a differentiator to provide both convenience and effectiveness to patients, doctors, and hospital management.

• In the new health economy, doctors continue to be the most important strategic asset. With the growing interest of doctors to practice outside of their public hospital, besides financial incentives, to retain top talent, organisations might innovate around reducing administration burden, balancing workloads, etc.

• Pharma and medical devices companies should continue to make strategic investments in digital initiatives, positioning “digital” to coordinate with other operational and commercial initiatives.
Implications for your business (2/2)

For Investors
• The target should have value proposition caters to “pioneering” patients in China that are naturally suitable for digital health and trying new modes of care.
• To attract medical talent into new entrant’s service businesses, it’s important to build a sense of belonging and connectedness into the health eco-system, provide higher pay and value recognition, and highlight operation efficiencies and lean administrative processes/burden for clinicians.
• Focus on both the quantity of consumers for the target as well as the quality/demographics of those consumers.
• Players that are at the top of their game in a particular therapeutic area are going to be more attractive for obvious reasons, but also switching costs are going to be higher for consumers

For Regulators
• Look for increasing the requirements of patient health data security and data privacy
• Develop guidelines on digital health evaluation to enable a pathway to showcase its effectives.
• Further encourage leveraging any capacity of doctors, encouraging multi-site practicing to reflect doctors’ value in the market.
For more information, please contact

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Thank you!