

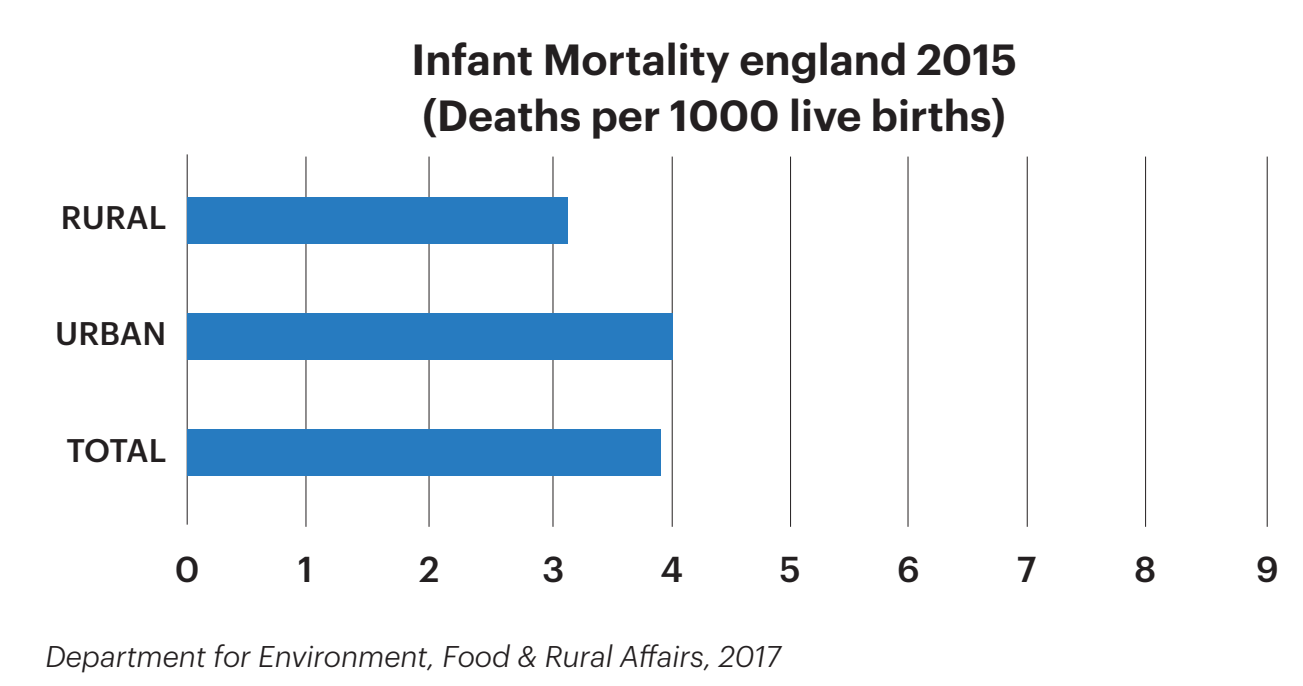
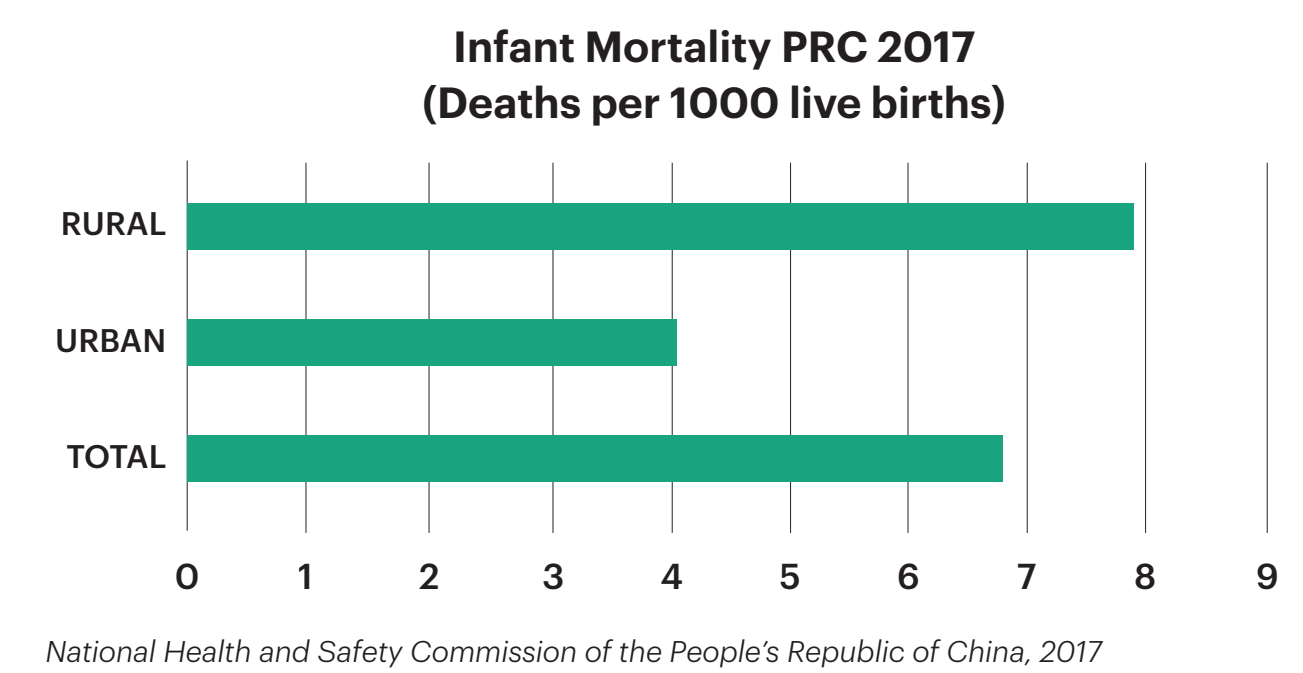
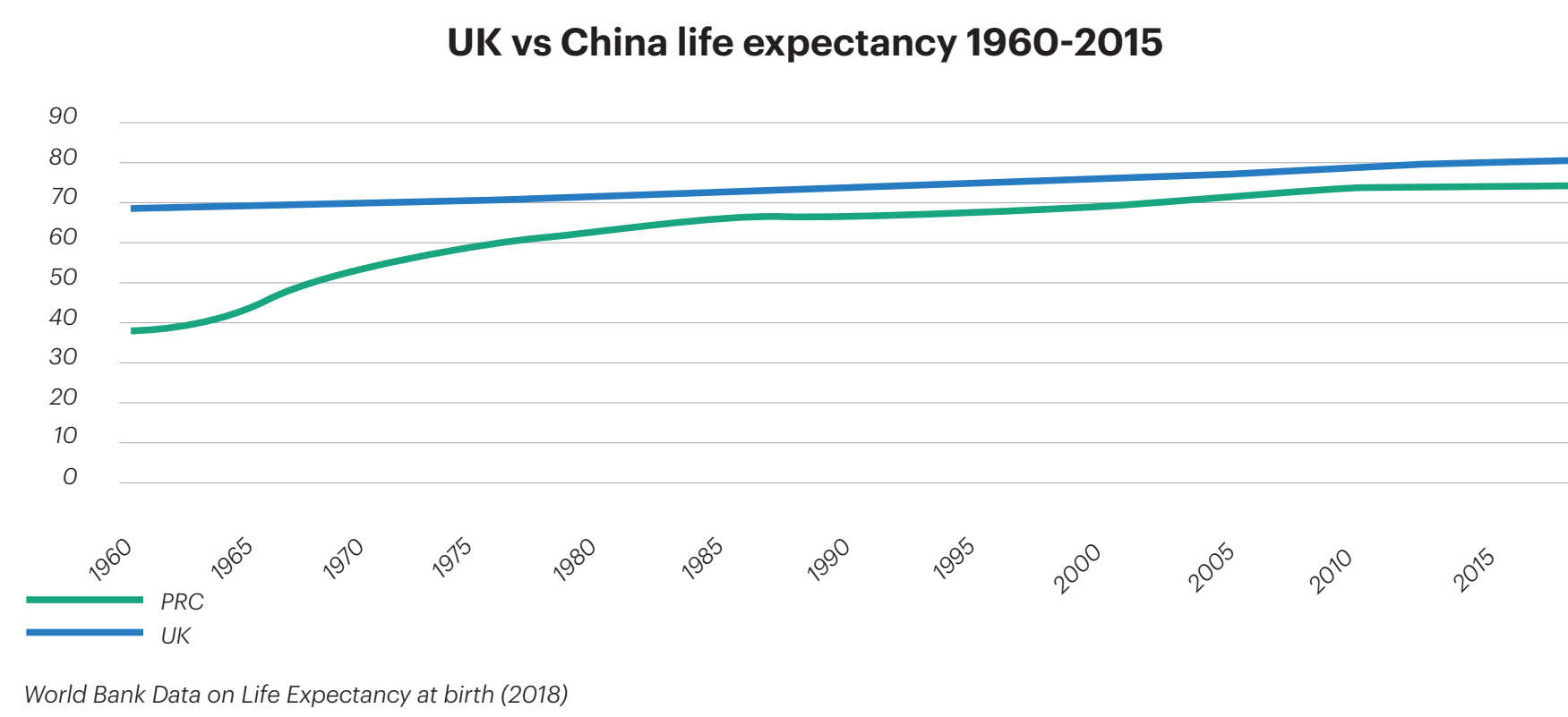
# How Will Health Care Design in China Be Impacted by Social and Health Policies, and Demographic and Population Health Trends?

## CHALLENGE

There is a lack of coherent information regarding China's health policies and demographic trends as they relate to the design of health care environments. Health care design is inextricably linked to the achievement of government targets in public health and should be taken as seriously as improvements in education, funding and human resources.

### Aim

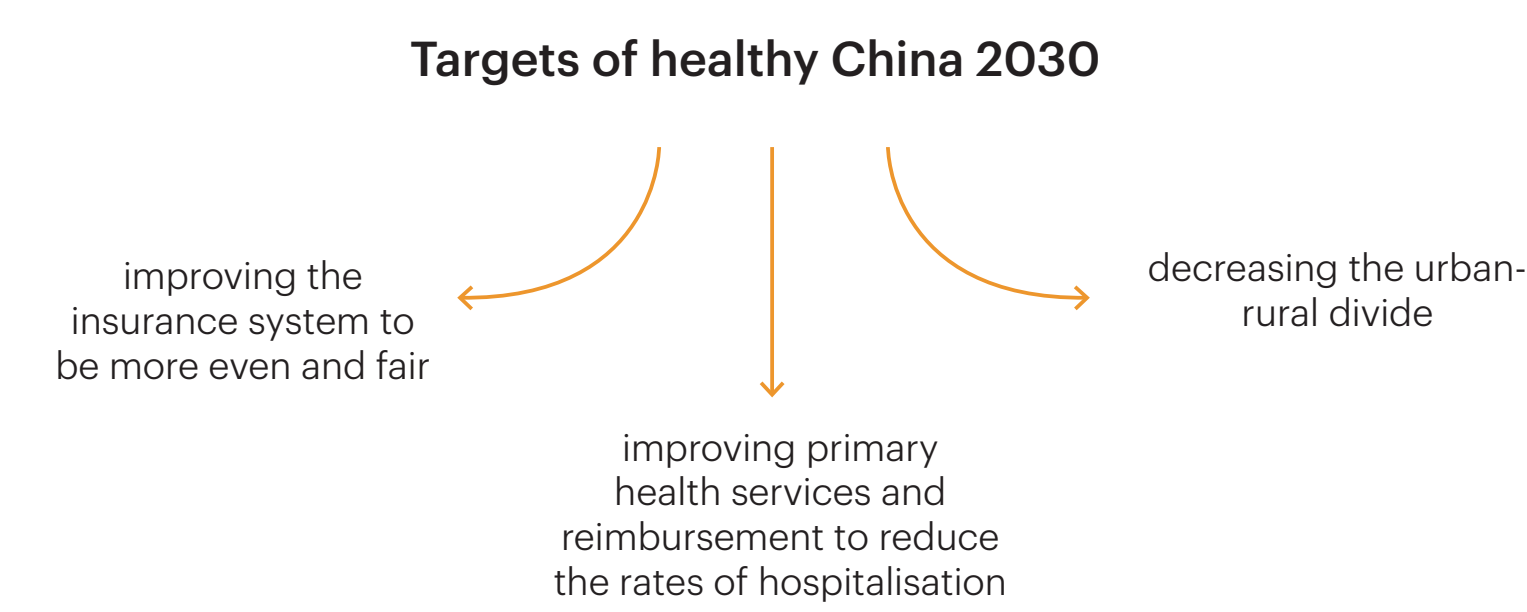
This report aims to provide key areas of focus for the planning and design of health care facilities in China to ensure that facilities designed and built in the coming years can cope with existing and future challenges as well as actively contribute to the achievement of government health goals.



## WHAT WE DID

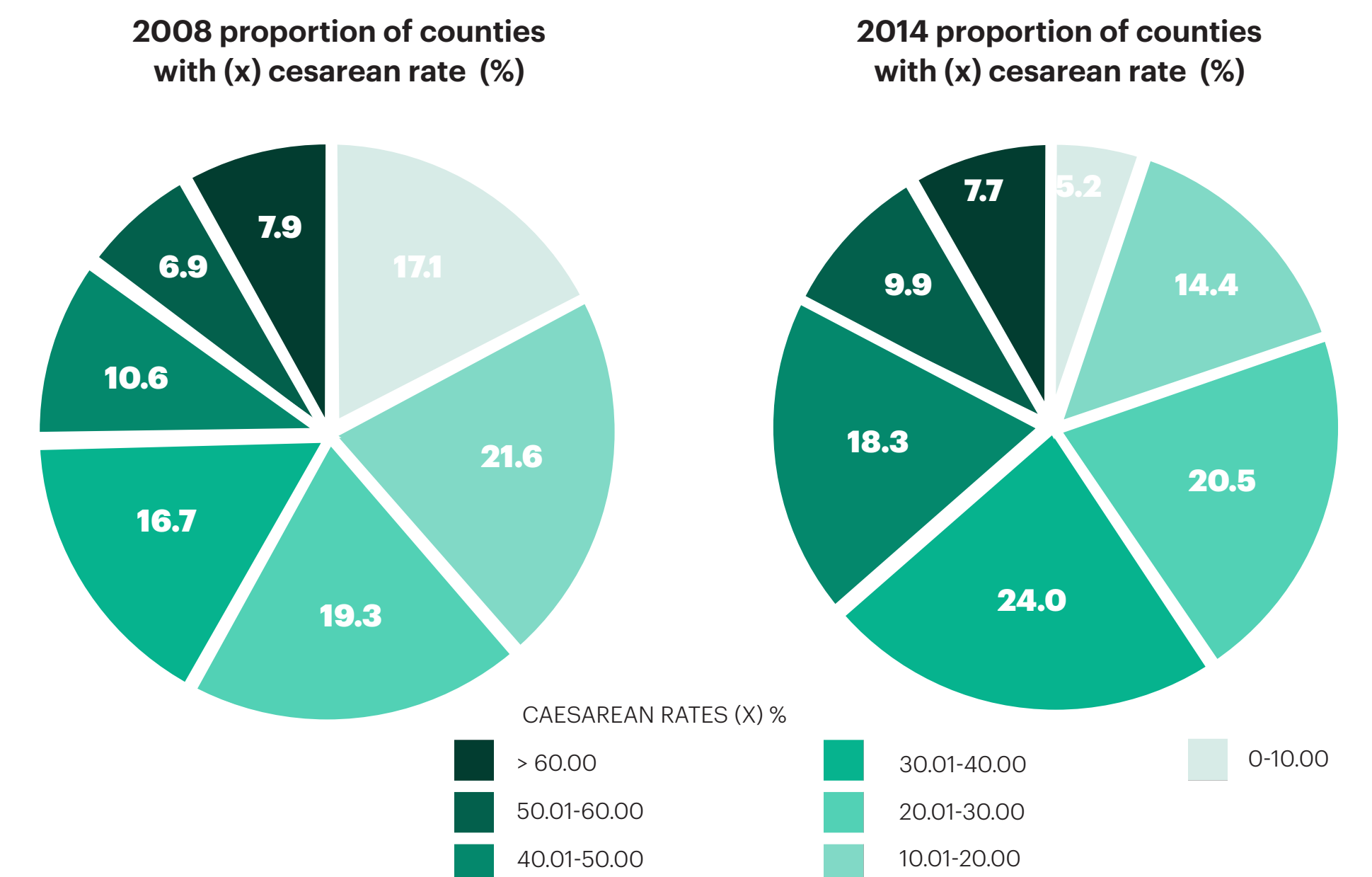
### Approach

Data and information from publicly available government policy documents and national health statistics, reports and data from international non-government organisations, and journal articles regarding contemporary conditions in China's health care system were compiled and analysed.



### Method

Data and information were collated to form a clear story of China's current health care market and population health as well as aims for them in the coming years in relation to the design of health care facilities in the country. Although the government publishes annual statistics, it is not always clear how the figures have been reached and the years for comparison are not always consistent. Meanwhile, some publications provided more detail regarding how the statistics were calculated than others. This meant that the author used as many documents as possible to gather trend data on various health statistics.



## WHAT WE FOUND

### Results

Four key impact areas emerged from the study: the urban-rural divide and the HuKou; health insurance and current health policy; the One Child Policy and demographics; and the end of the One Child Policy relating to the care of women and children. From each of these key impact areas two design recommendations or opportunities were extracted: urbanisation requiring growth and flexibility in health care; a focus on health care environments improving rural health; improving the patient-doctor interaction through waiting design; impacts of prioritising primary health on facility requirements; elderly population's needs from design; need for China specific elderly care typologies; impact of LDR design on cesarean section rate targets; and paediatric design considering shifting family structures

### Deliverable

The results are presented in the form of a written report supported by graphs, tables and other graphics to visually represent data and conclusions.



## WHAT THE FINDINGS MEAN

### Application

HKS is a global firm working all over the world, including in China's health care market. It will be beneficial to designers and planners to understand problems and opportunities that exist in the health care market in 2019, and those that might develop over the next decades, to ensure that the facilities we design today continue to serve users' needs and government objectives for years to come.

### Future

This knowledge, and further knowledge built from this report, will enable designers to directly contribute to the achievements of public health targets in China.

### Key Takeaways

1. Urbanisation requiring growth and flexibility
2. Focus on Health care environments to improve rural health
3. Improving the Patient-Doctor Interaction through waiting design
4. Impacts of Prioritising primary health on Facility requirements
5. Elderly population's needs from design
6. Need for china specific elderly care typologies
7. impact of LDR design ON caesarean section Rates targets
8. Paediatric design Concerns considering shifting family structures



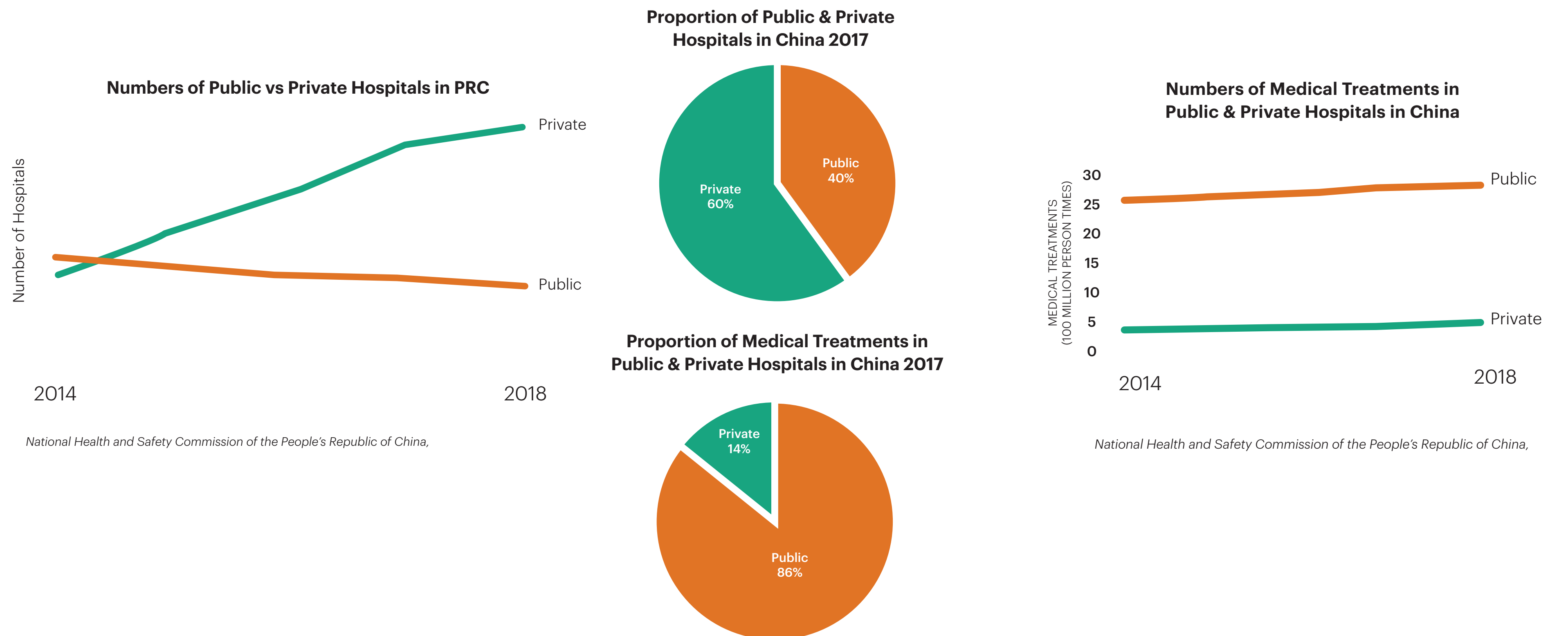


# How are existing outpatient waiting areas in China used, occupied and functioning? A pilot study.

## WHAT IS THE AIM

### Challenge

Only by gaining a better understanding of people's behaviours in healthcare spaces can we hope to design environments that meet their needs. China's healthcare market is booming, particularly in the private sector which saw a 20% increase in institutions nationally between 2015-2017 and shows no signs of slowing down. In this market of rapid production, it is critical that designers are entering the field armed with information that enables them to design the best possible facilities for the user groups. Currently there is a dearth of information regarding healthcare facility design and use in China, this pilot study is one step on the way to filling that gap.



## WHAT WE DID

### Approach

The research involved field study of the environments of and the behaviours within Outpatient clinics in two hospitals in the centre of Shanghai. The work was conducted by a sole researcher using a mixed methods approach across the two sites as a pilot study for future research.



### Method

The researcher collected sound level measurements at two hour intervals, mapped the locations of occupants at hourly intervals, closely observed random individuals for the duration of their stay in the department waiting areas and photographed points of interest. Over two days, 25 people were closely observed while the wider group of visitors' activities were more generally observed. Insights were gained both in terms of the behaviours witnessed and the limitations of the study.

### Hospital A



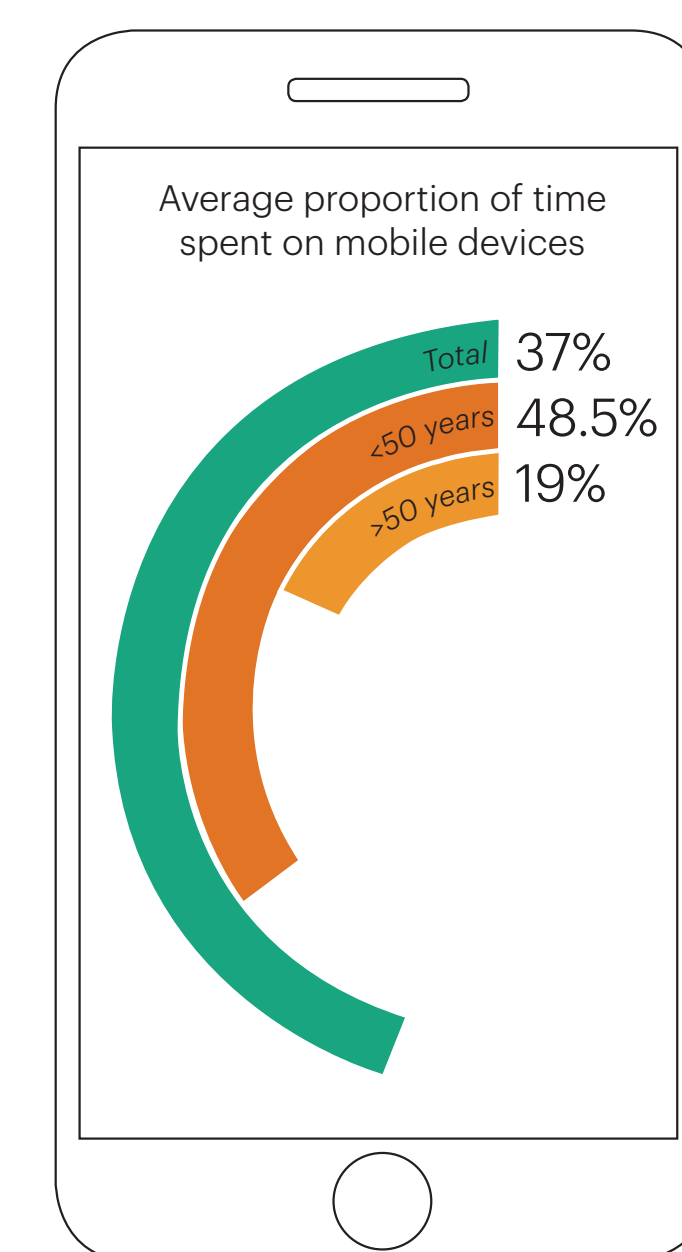
## WHAT WE FOUND

### Results

The study perceived four key activities, from which four design recommendations were extracted;

- i) high levels of mobile phone usage, particularly among younger users require phone charging points and quiet spaces to make calls.
- ii) Visitors and staff were frequently observed running to catch an elevator and building users often resorted to using fire stairs for circulation, this points to a need to anticipate a large volume of users and to possibly divide patient and staff circulation.

- iii) Food and drink were frequently consumed during the wait, often brought in by the visitor but also commonly delivered to the department; greater food and drink provision on site would benefit all users and reduce additional footfall of deliverymen.
- iv) Elderly visitors in particular were often seen getting up to read waiting time displays and there was frequent misdirection upon arrival to the department; improved wayfinding and information dissemination with special consideration for the vision and hearing impaired is required.



## WHAT THE FINDINGS MEAN

### Future

It is strongly felt that this study should be viewed as a trial run and that much more data should be collected in different hospitals, in different cities around China enabling intra country comparisons as well as inter country comparisons. This feels critical in a country the scale of China. This research is intended to form a provisional structure for future investigations with new knowledge regarding how to improve the methods for future studies. The researcher feels strongly that this work must be continued and expanded if the new hospitals being built in China are to truly suit the needs of the populations they serve.

### Proportion of Medical Treatments in Public & Private Hospitals in China 2017

