How do we challenge the Covid-19?

Jun Wang

Content ➡

The situation all over the world

Still increasing!

Dashboard from WHO webside
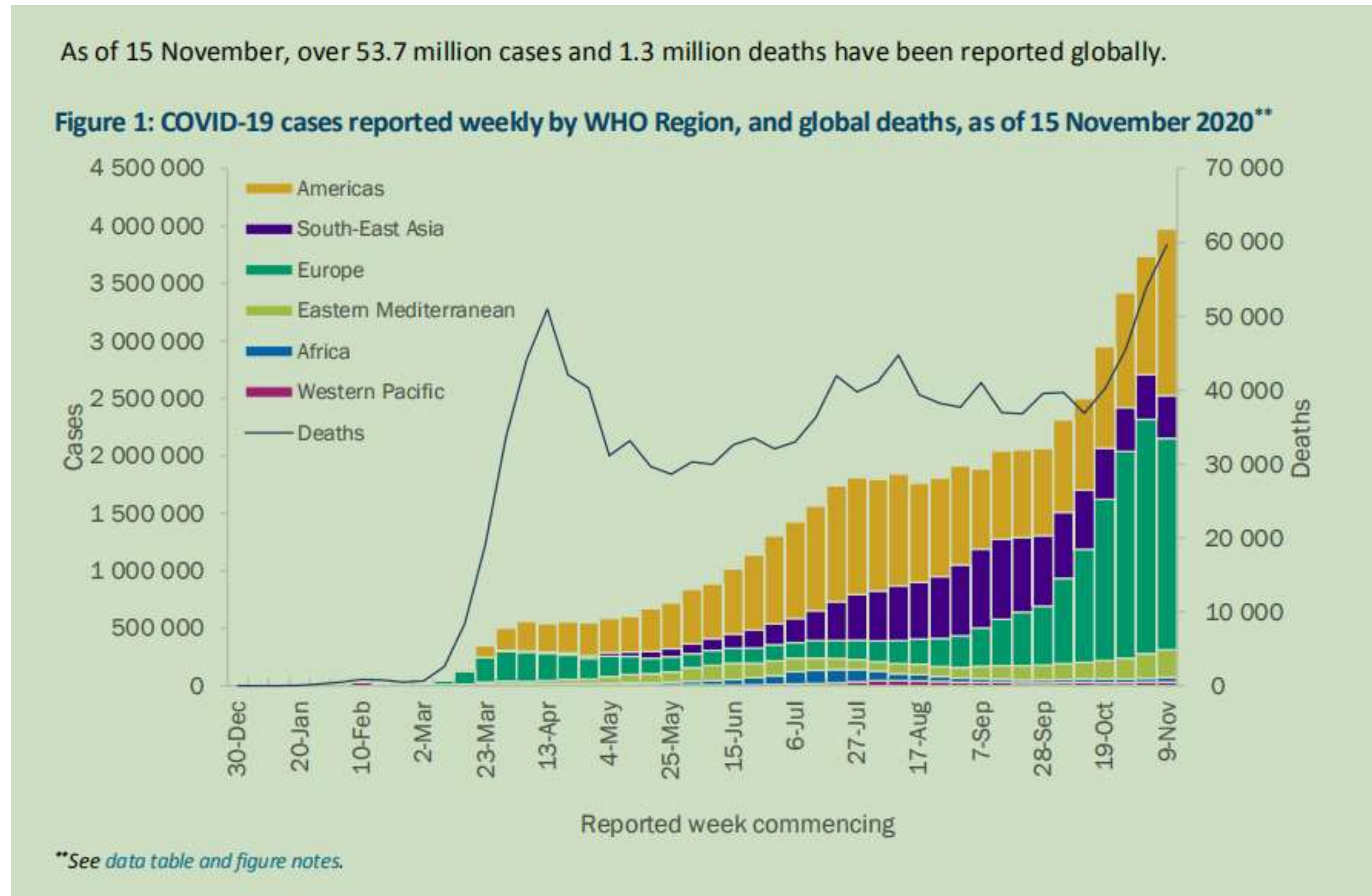
COVID-19 Weekly Epidemiological Update
Data as received by WHO from national authorities, as of 15 November 2020, 10 am CEST

The experience all over the world

Germany

Permanent Establishment: Permanent Working Group (STAKOB) on "Competence and Treatment Centre for Severe Infectious Diseases ", Robert Koch Institute

Uniform distribution: 7 treatment centres are evenly distributed throughout Germany

Unified management: regular training of personnel, uniform quality standards

Figure from the Robert Koch Institute (RKI) official website

The experience all over the world

America

Led by the Department of health and public services, the **army and the people are integrated**

U.S. public health service officer corps: more than 200 years' history, 6800 staff.

**Rapid response:** Level 1 rapid deployment troops, in place in 12 hours

美国卫生与公众服务部(HHS)
(医疗和科学研究、防止传染病爆发)

美国疾病控制和预防中心（CDC）

美国公共卫生服务军官团（PHSCC）

The experience all over the world

Japan

Attach importance to legislation: Basic Law on Disaster Response, Basic Plan for Disaster Prevention and other complete legal system guarantee

Education for All: Self-help, co-help and public assistance with the participation of individuals, communities, businesses, non-profit organizations and Governments

Information-sharing: Establishment of disaster information centres, information-sharing between central and local governments, private enterprises and organizations
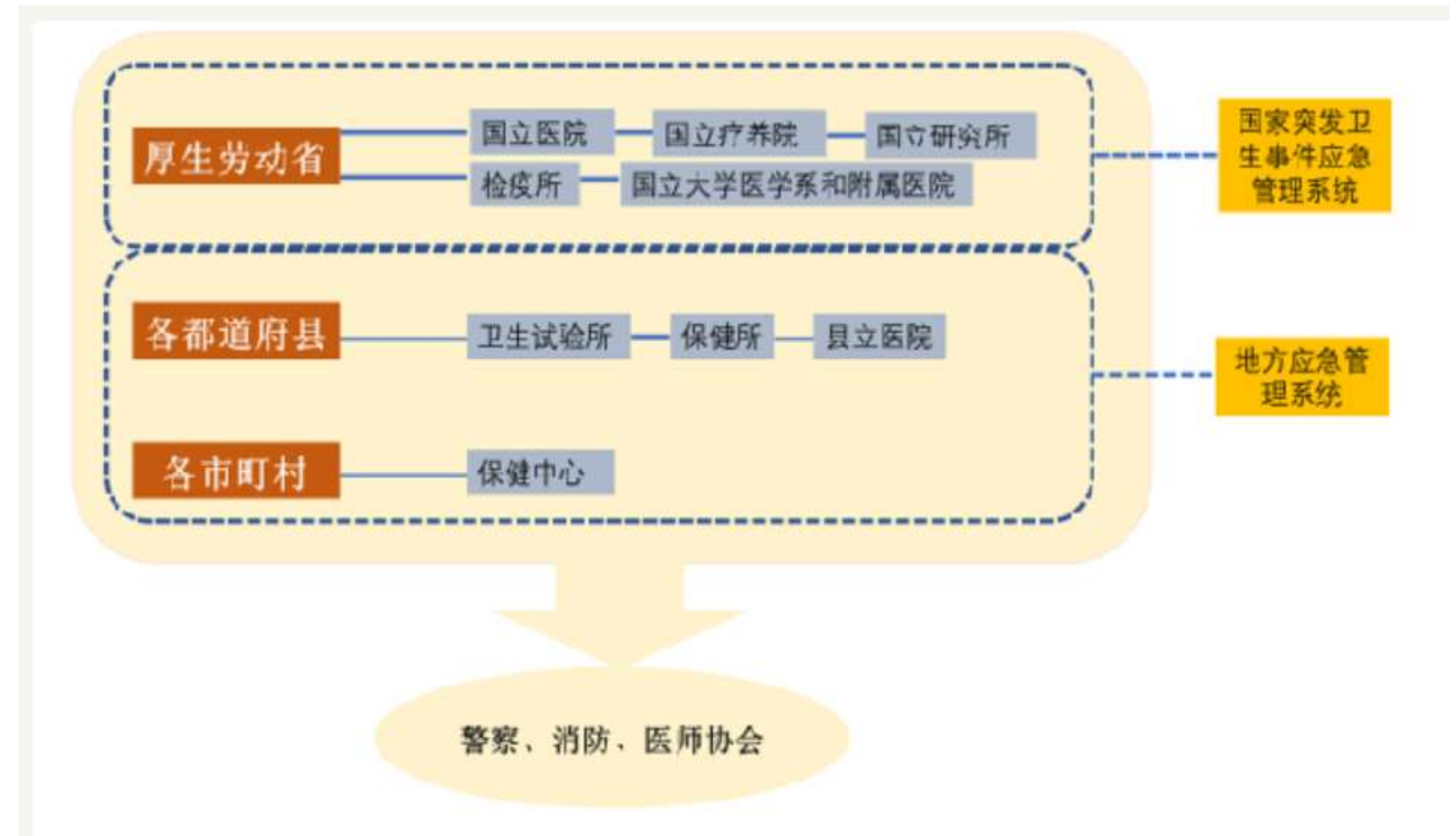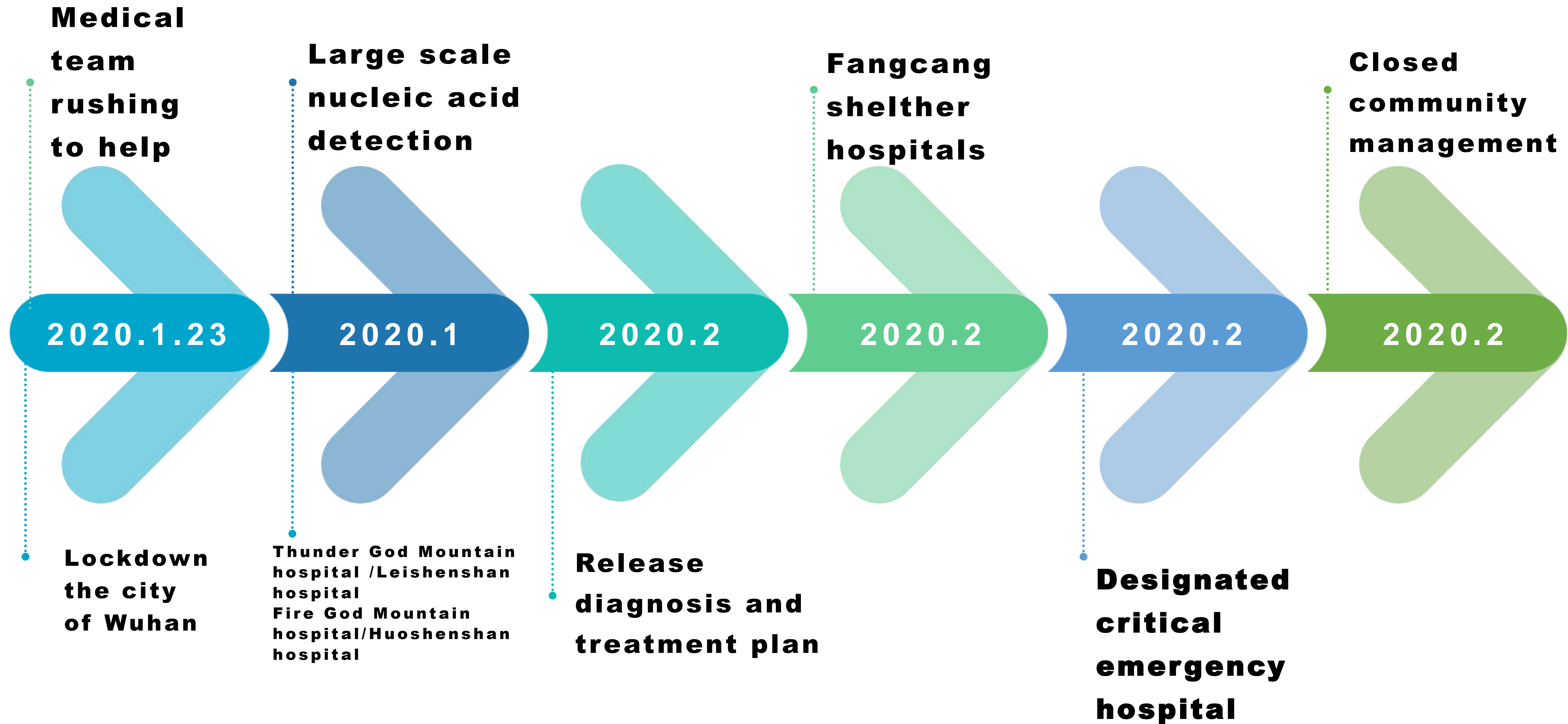

Japanese public health emergency network

Challenge

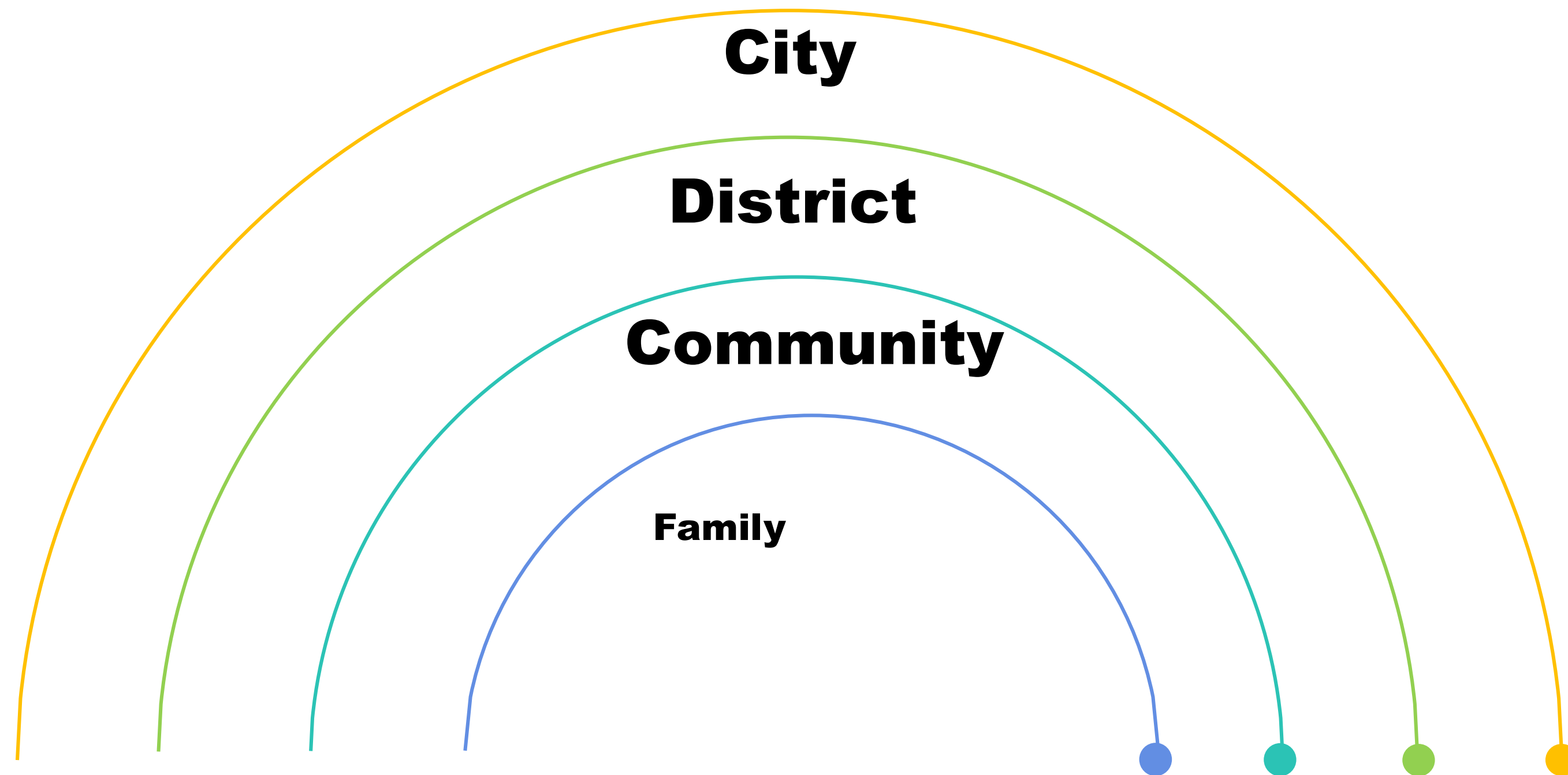At the beginning......

1 We don't have enough medical supplies.

2 We don't have enough doctors and nurses.

3 We don't have enough beds.

4 We don't know exactly the therapeutic method.

Challenge 01

Challenge 02

Challenge

Challenge 03

Challenge 04

Policy Node

Medical team rushing to help

2020.1.23

Lockdown the city of Wuhan

Large scale nucleic acid detection

2020.1

Thunder God Mountain hospital /Leishenshan hospital
Fire God Mountain hospital/Huoshenshan hospital

2020.2

Release diagnosis and treatment plan

Fangcang shelther hospitals

2020.2

2020.2

Designated critical emergency hospital

Closed community management

2020.2

Isolate and block the infection chain

City

District

Community

Family

Lockdown City--Wuhan
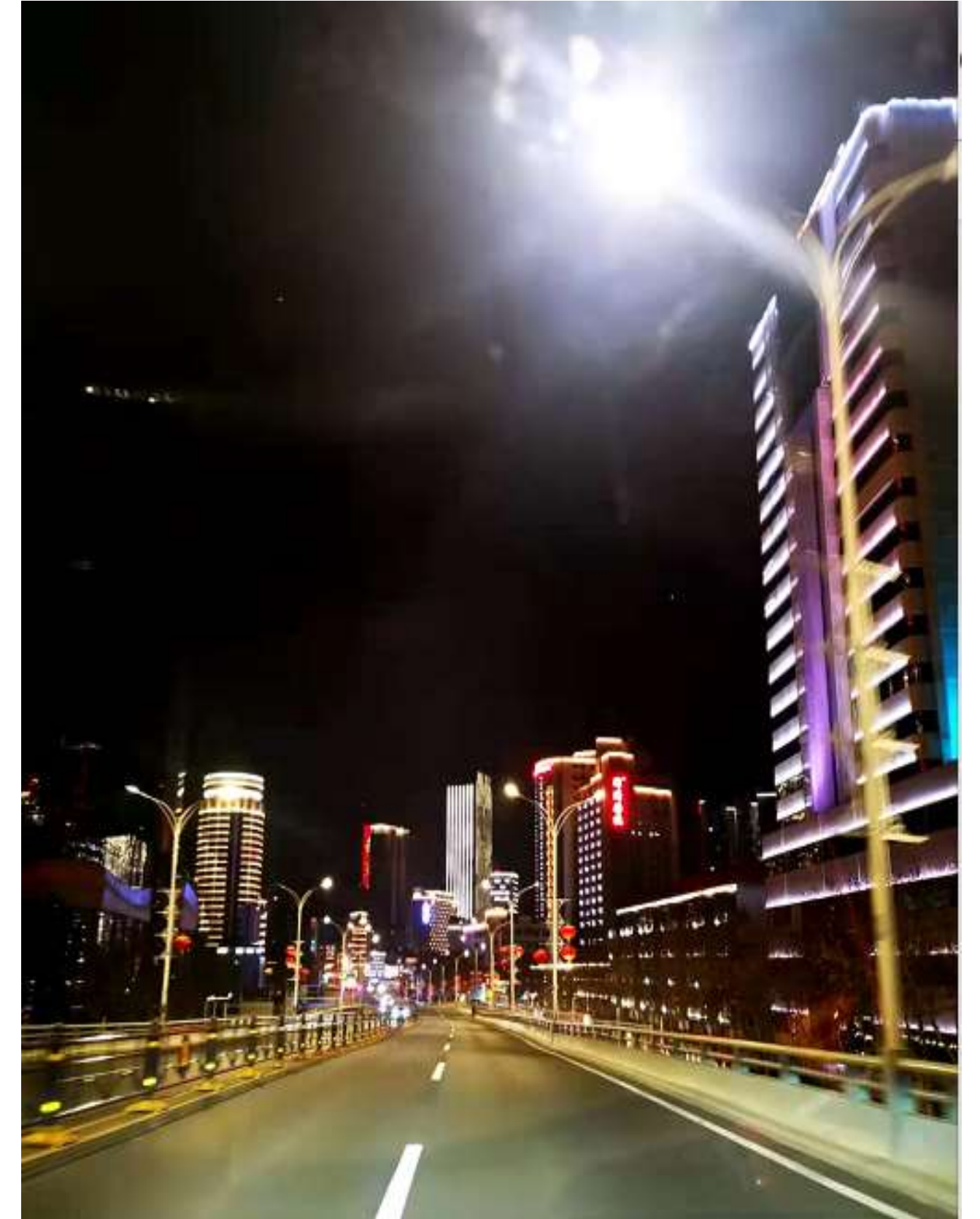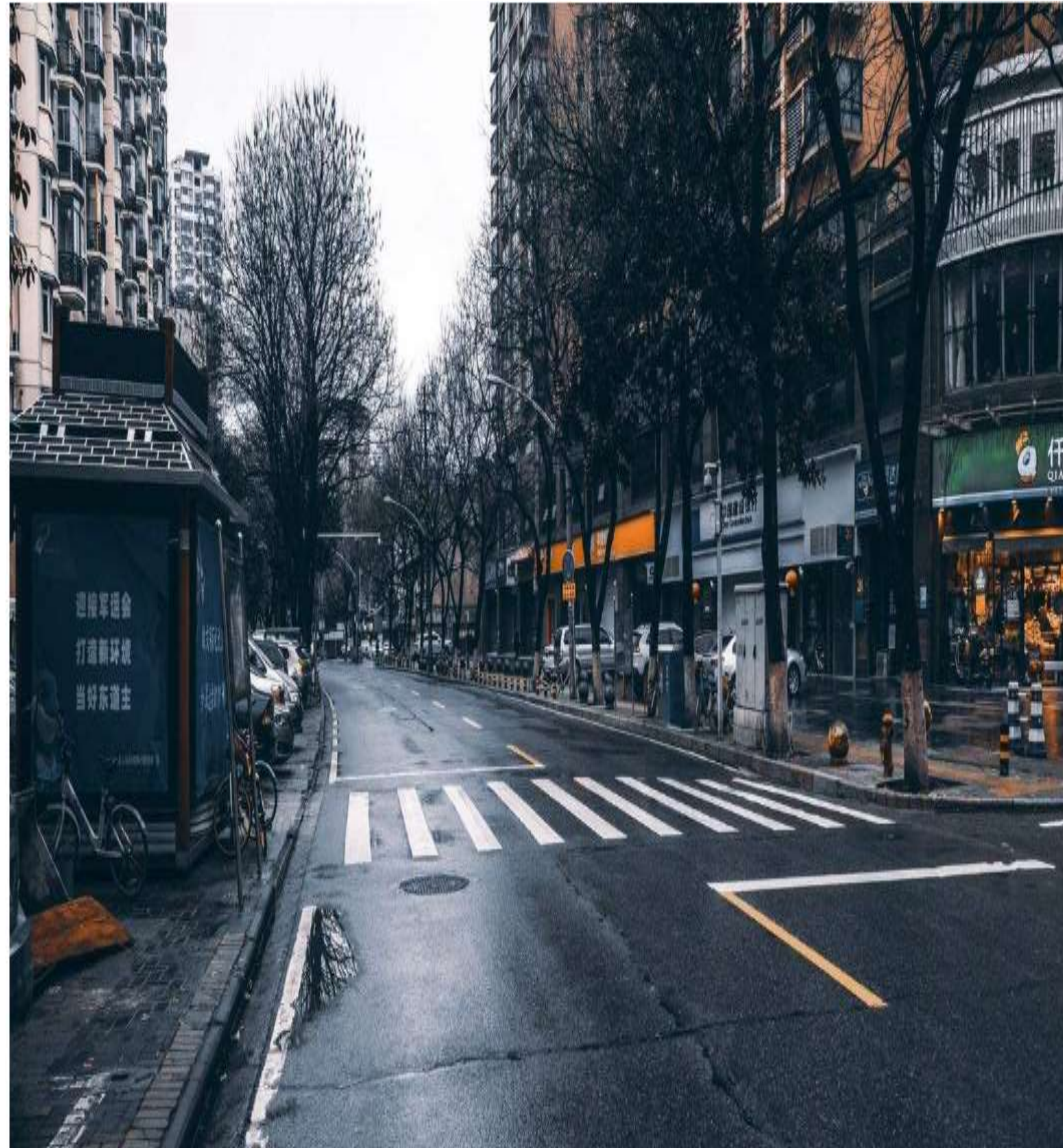
Closed community management

Medical team rushing to help

Fangcang shelter hospitals

Fangcang shelther hospitals

THE LANCET

HEALTH POLICY | ONLINE FIRST

Fangcang shelter hospitals: a novel concept for responding to public health emergencies

• 200 beds
● 800 beds
⬤ 1600 beds

Distribution of shelter hospitals in Wuhan
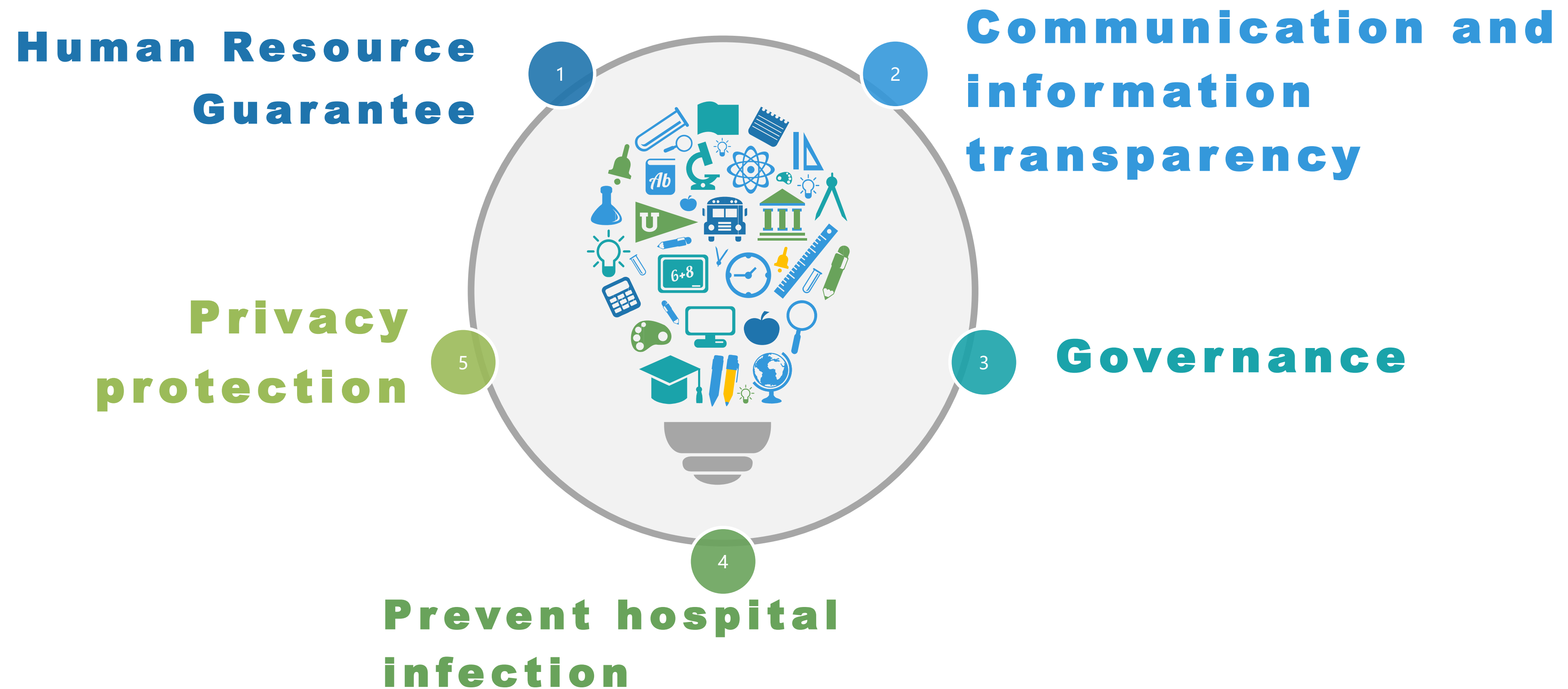
Basic function 1: isolation

Basic function 2: triage

Basic function 3: basic medical care

Basic function 4: condition monitoring and rapid referral

Basic function 5: guarantee basic life

and social participation

Fangcang shelther hospitals

Key to the healthy operation of shelter hospital

Human Resource Guarantee

1

Communication and information transparency

2

Privacy protection

5

3

Governance

4

Prevent hospital infection

Then we have...

Experiences of hospitals

A **Fever Clinic**

B **Medical Treatment**

C **Cloud Medical Services**
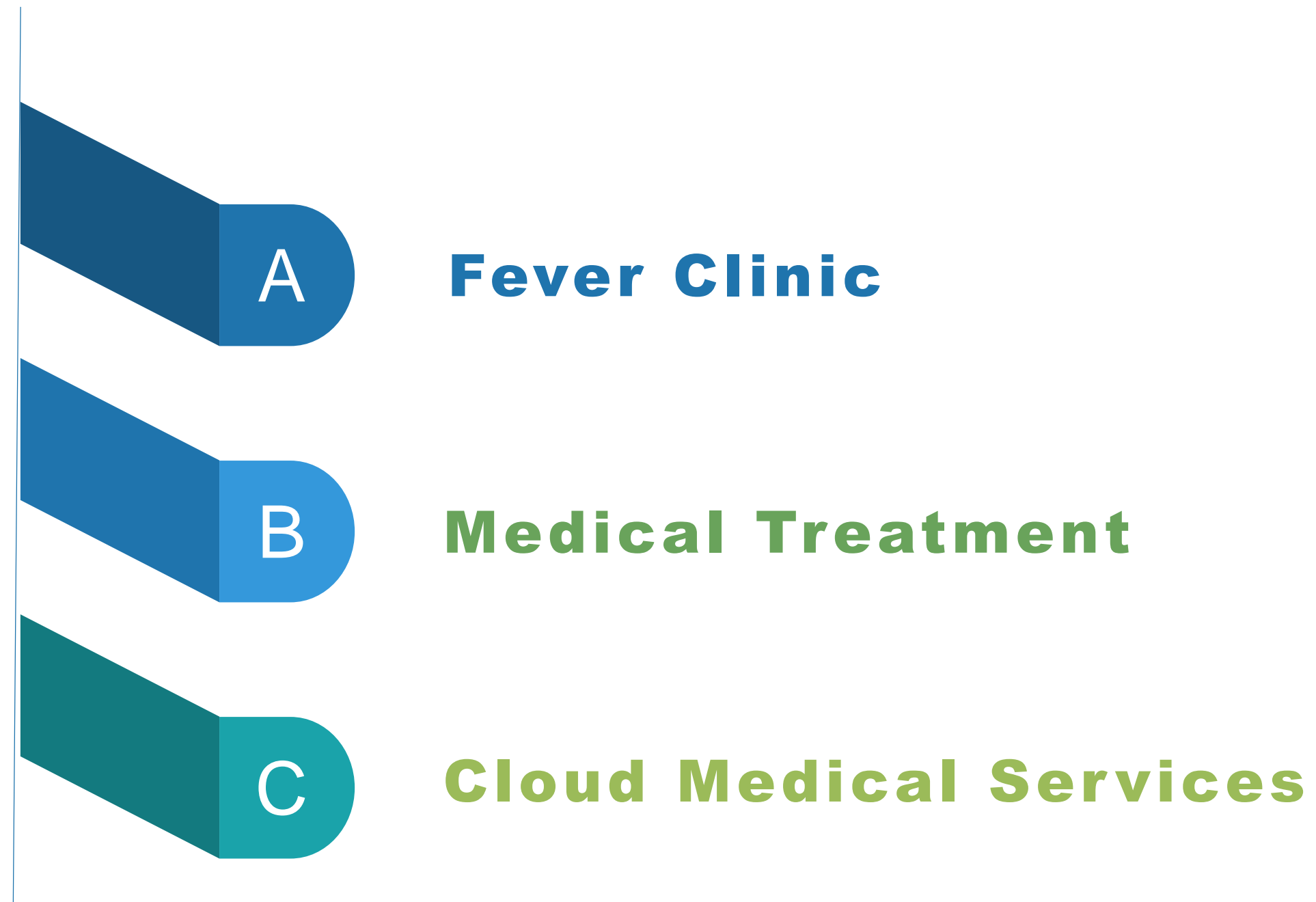
Fever Clinic--Three zones and two accesses

Three Zones

1 Clean Zone

2 Potentially contaminated zone

3 Contaminated zone

Two accesses

1 Staff access

1 Patient access

Three level pre-examination and triage system

Clinic Entry

Specialty Triage

Consultation Room
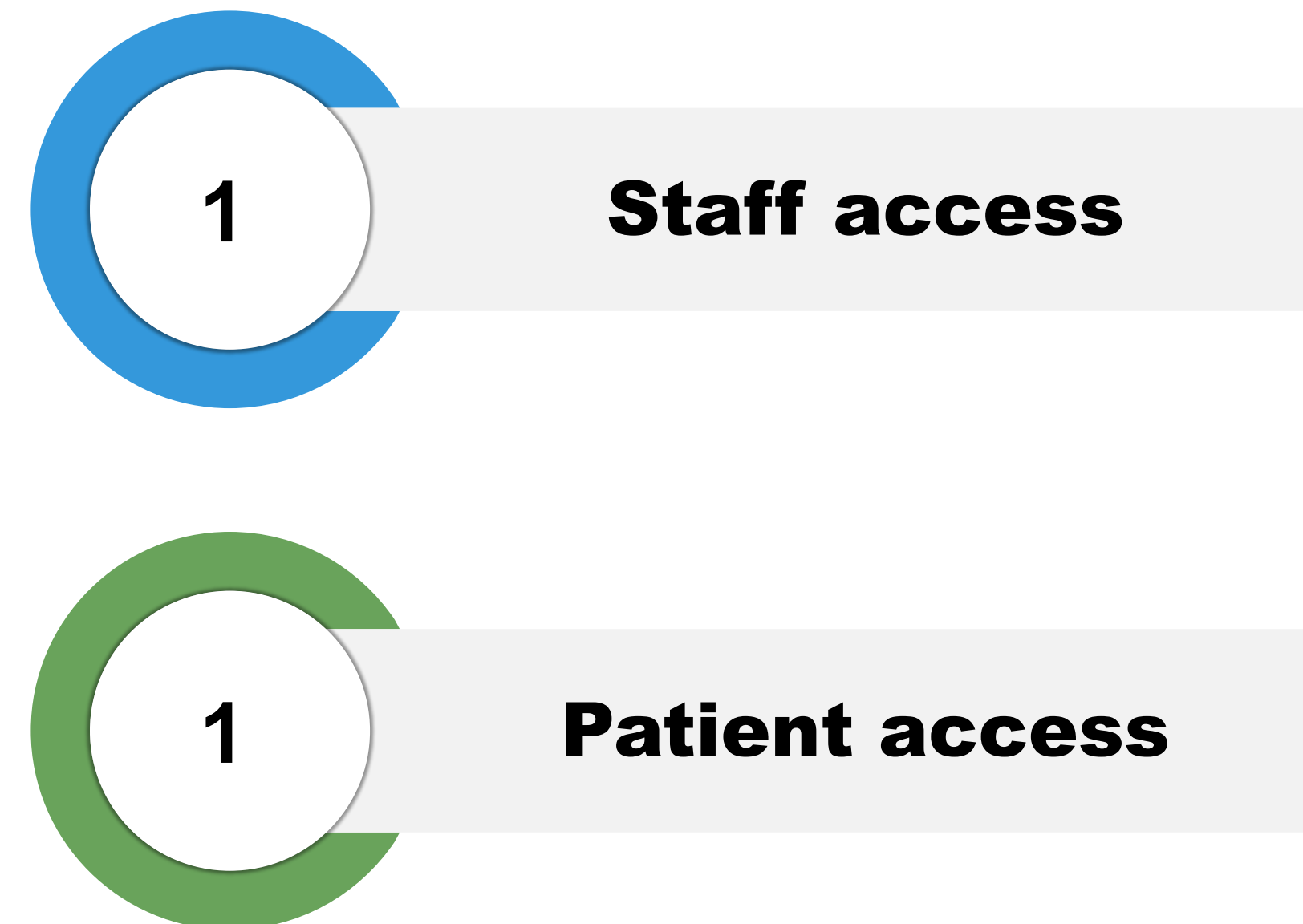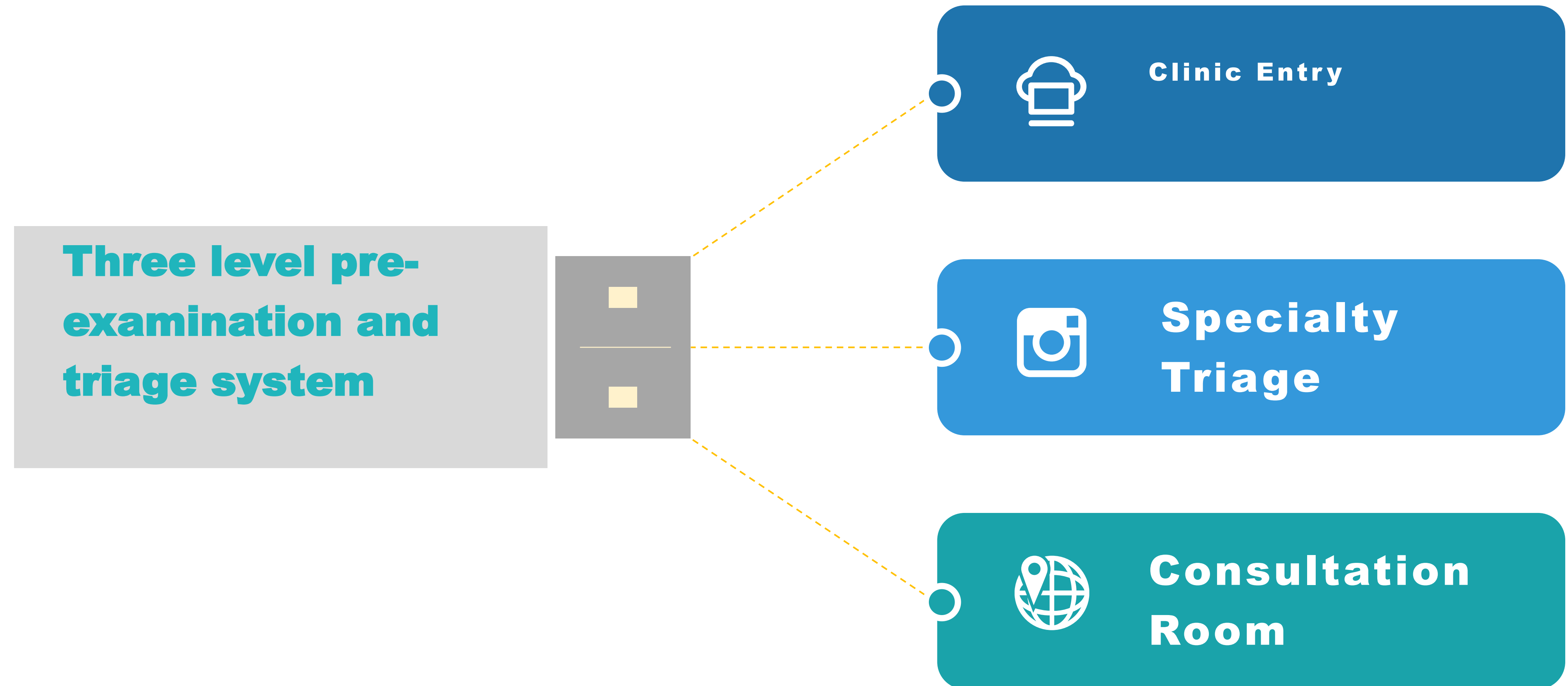
Medical Treatment --Precise strategy

Medical treatment

03 Critical Case and death case Discussion

01 Continuous updating of diagnosis and treatment programmes

04 Multi-disciplinaryteam

02 Consultations of the National Group of Experts on Severe Diseases

Multi-disciplinary cooperation

Endotracheal intubation team — 01

02 — Heart protection team (ECMO, external balloon counterpulsation)

Kidney protection team (CRRT) — 03

04 — Liver protection team

Brain protection and mental psychology team — 05

06 — Nutrition team

Traditional Chinese Medicine team — 07

08 — Rehabilitation team
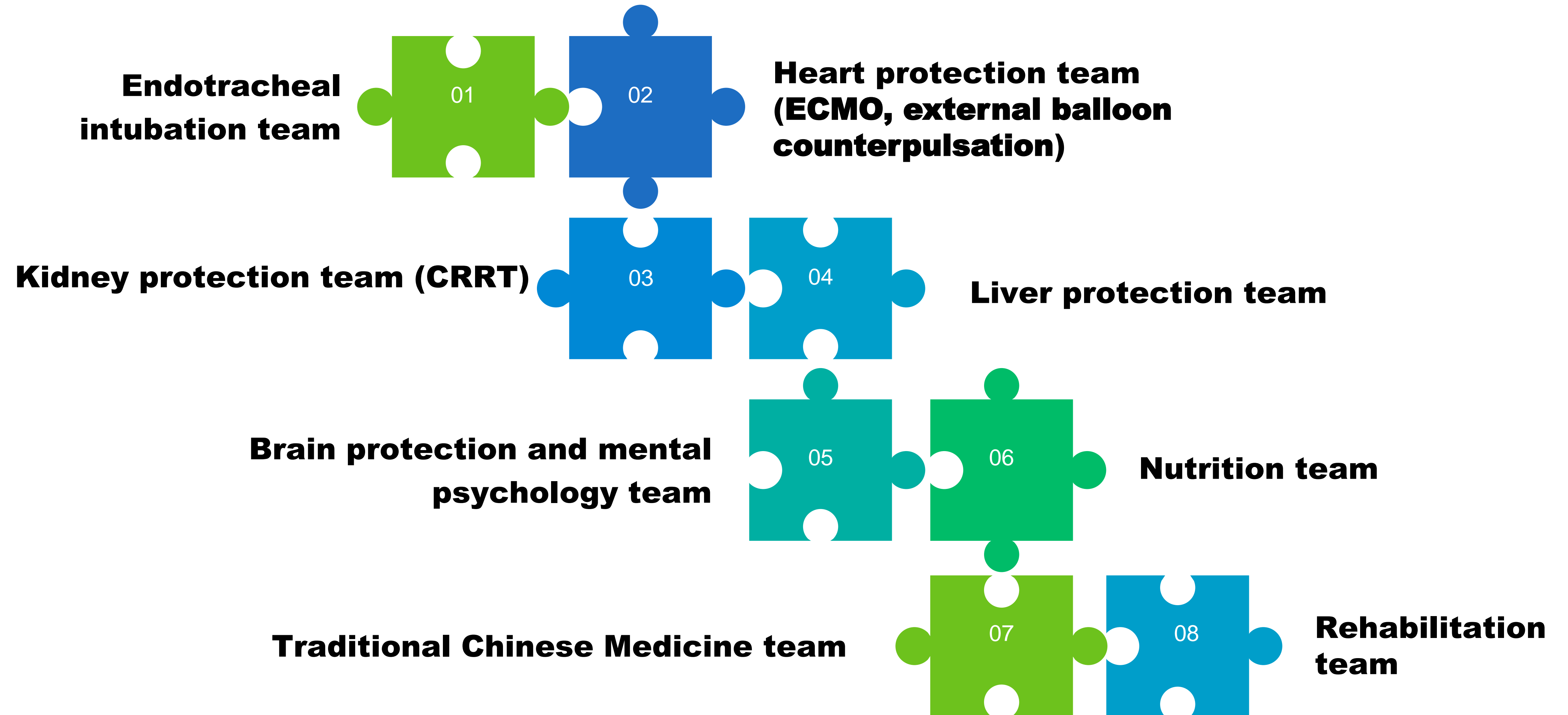
Medical Treatment --Standard

- **Diagnosis and protection standard**
- **Quality control standard and management process**

BY

Department of infection management

Department of respiratory and critical care medicine

Department of critical care medicine

Department of pathology

Department of blood transfusion

Department of clinical nutrition

...

Innovative services--Cloud Medical Services

By means of the Internet, AI, Internet of Objects and other technological innovation applications, hospitals provide online consultation, online health assessment, psychological counseling, medical guidance and other cloud medical and health services for people during the period of epidemic prevention and control.

Cloud Clinic

Picture consultation
Video consultation
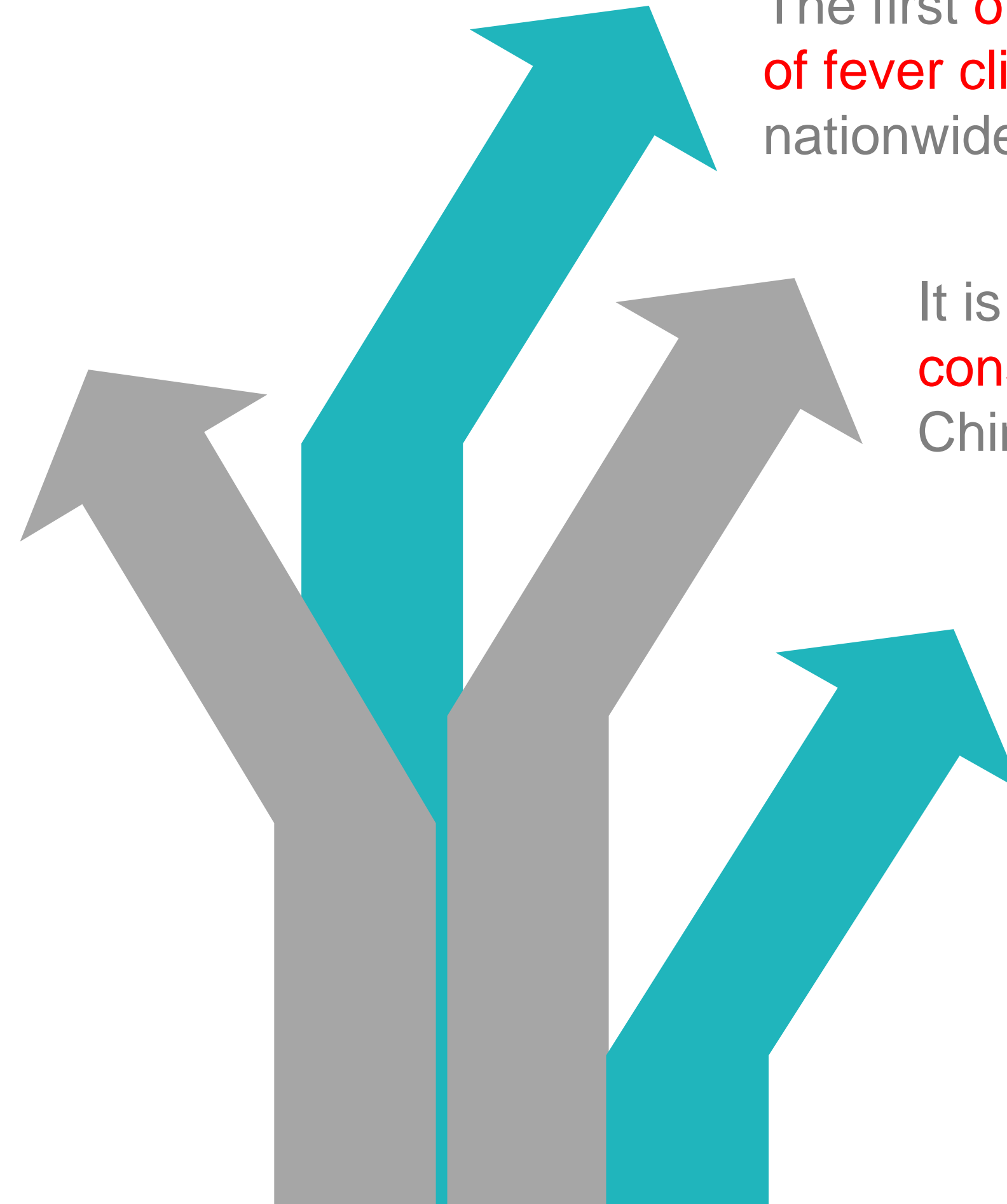
Medicine mailing

Check document online

Cloud Medical Services

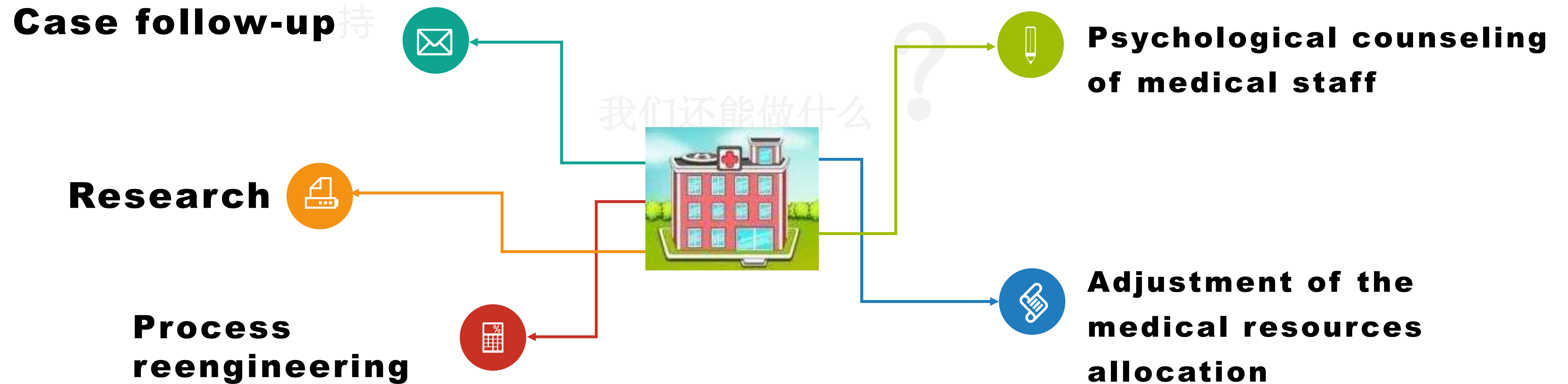Hospital cloud medical services have served nearly 240,000 people for free, including nearly 90,000 fever patients.

The first online inquiry and consultation of fever clinic has been opened nationwide(Jan.24th,2020)

It is the first to open online video consultation in China(Feb.14th,2020)

Take the lead in spreading cloud Science Popularization: The science popularization expert group compiled 12 pieces of science popularization with pictures and texts, which became the reassurance of the general public.

Thoughts on the post epidemic Era

Case follow-up

Research

Process reengineering

Psychological counseling of medical staff

Adjustment of the medical resources allocation

我们还能做什么？

Thoughts on the post epidemic Era

GOVERNMENT

01 Establish early warning and feedback mechanism of public health in peacetime and wartime

02 Establish medical emergency supply security system

03 Set up a compound public health emergency team (strengthen the team of general practitioners)

04 Strengthen public health education and training

05 Establish National Public Health Event Data Network and Monitoring Indicators System

Time for Change

THANK YOU

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