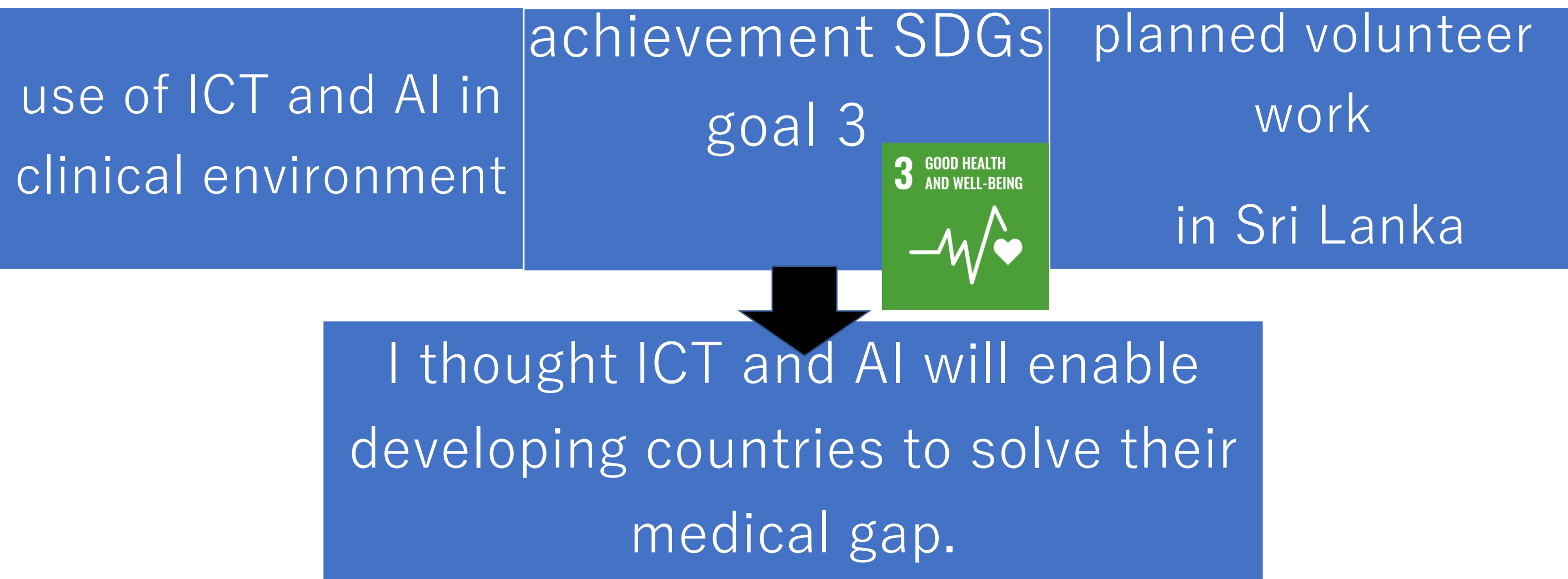# Telemedicine as a Solution for the Problem of Medical Gaps
~A case study of Sri Lanka as a developing country~

Tokyo Metropolitan Minamitama Secondary Education School
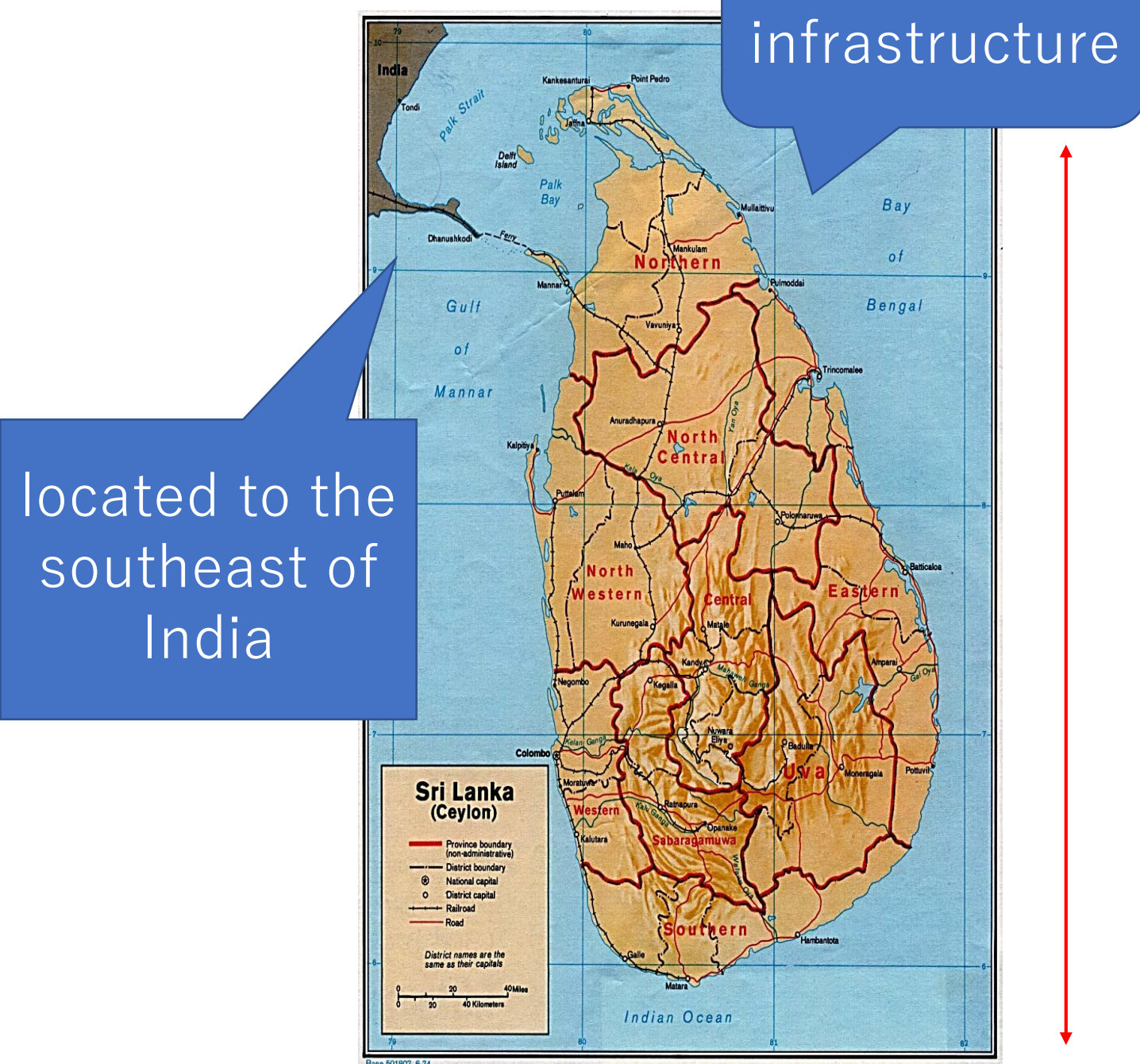
1.Background and Research Question

use of ICT and AI in clinical environment	achievement SDGs goal 3 3 GOOD HEALTH AND WELL-BEING	planned volunteer work in Sri Lanka

I thought ICT and AI will enable developing countries to solve their medical gap.

→I set up the hypothesis that advanced technology can solve some of the medical problems which are happening in developing countries.
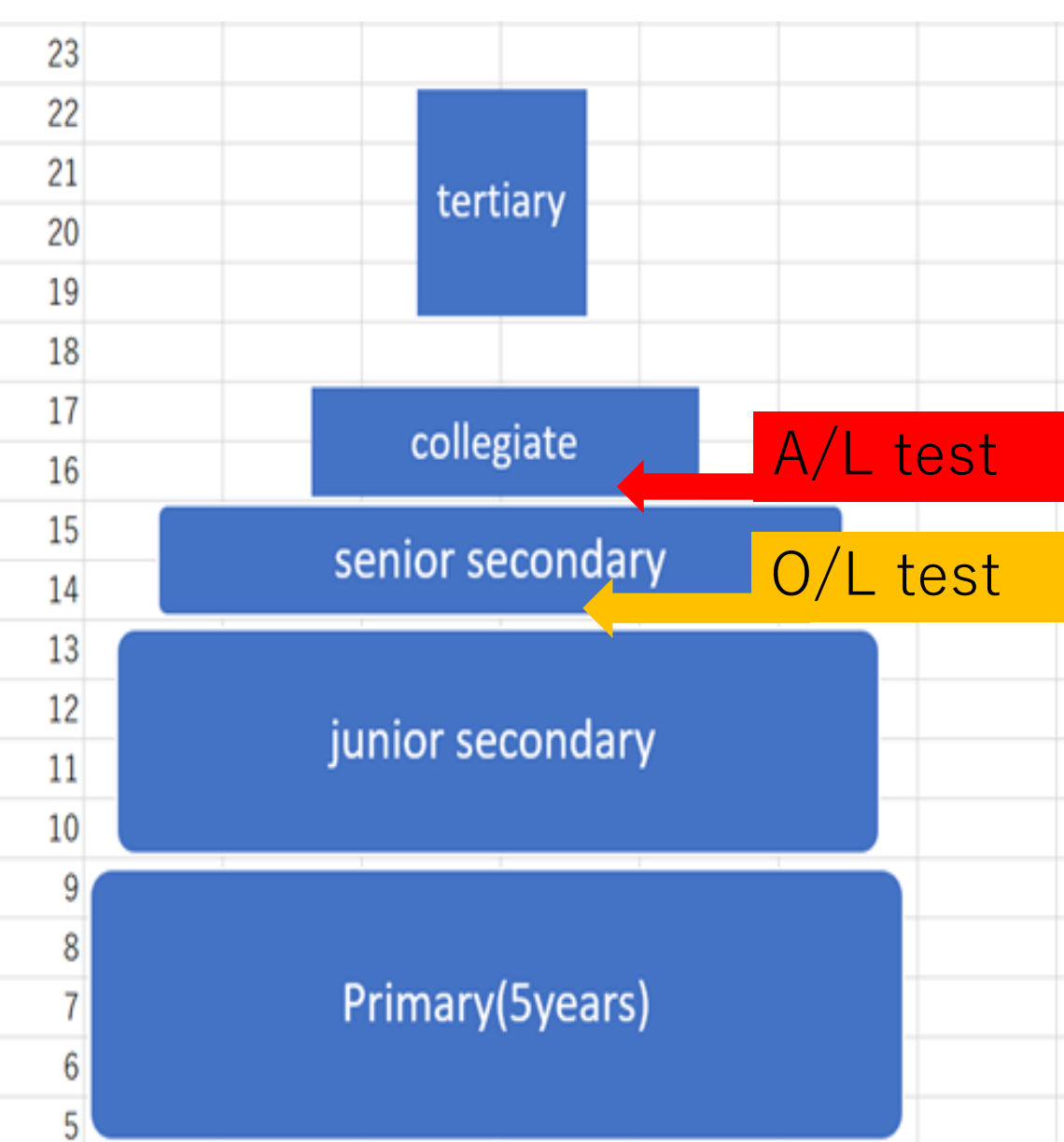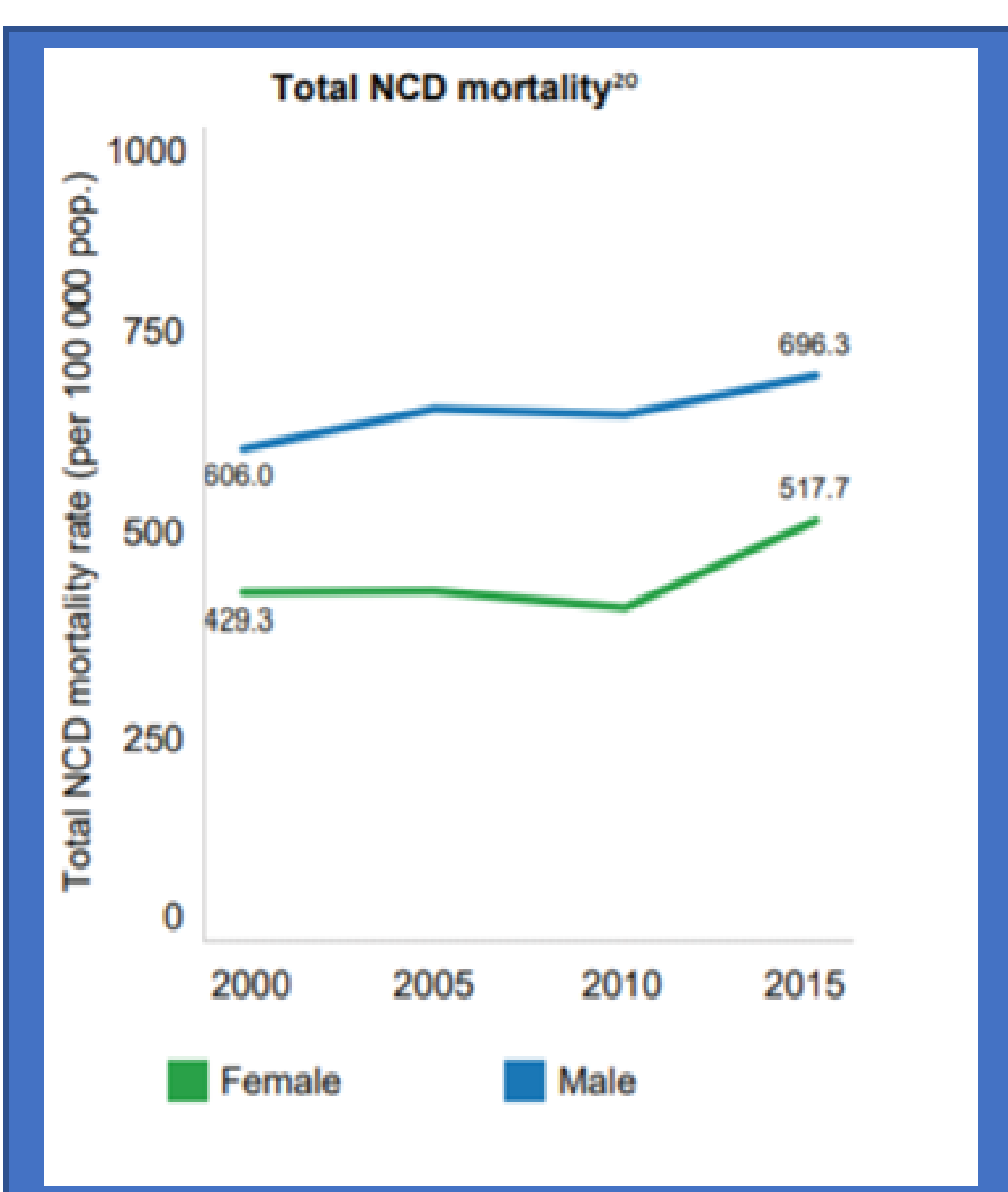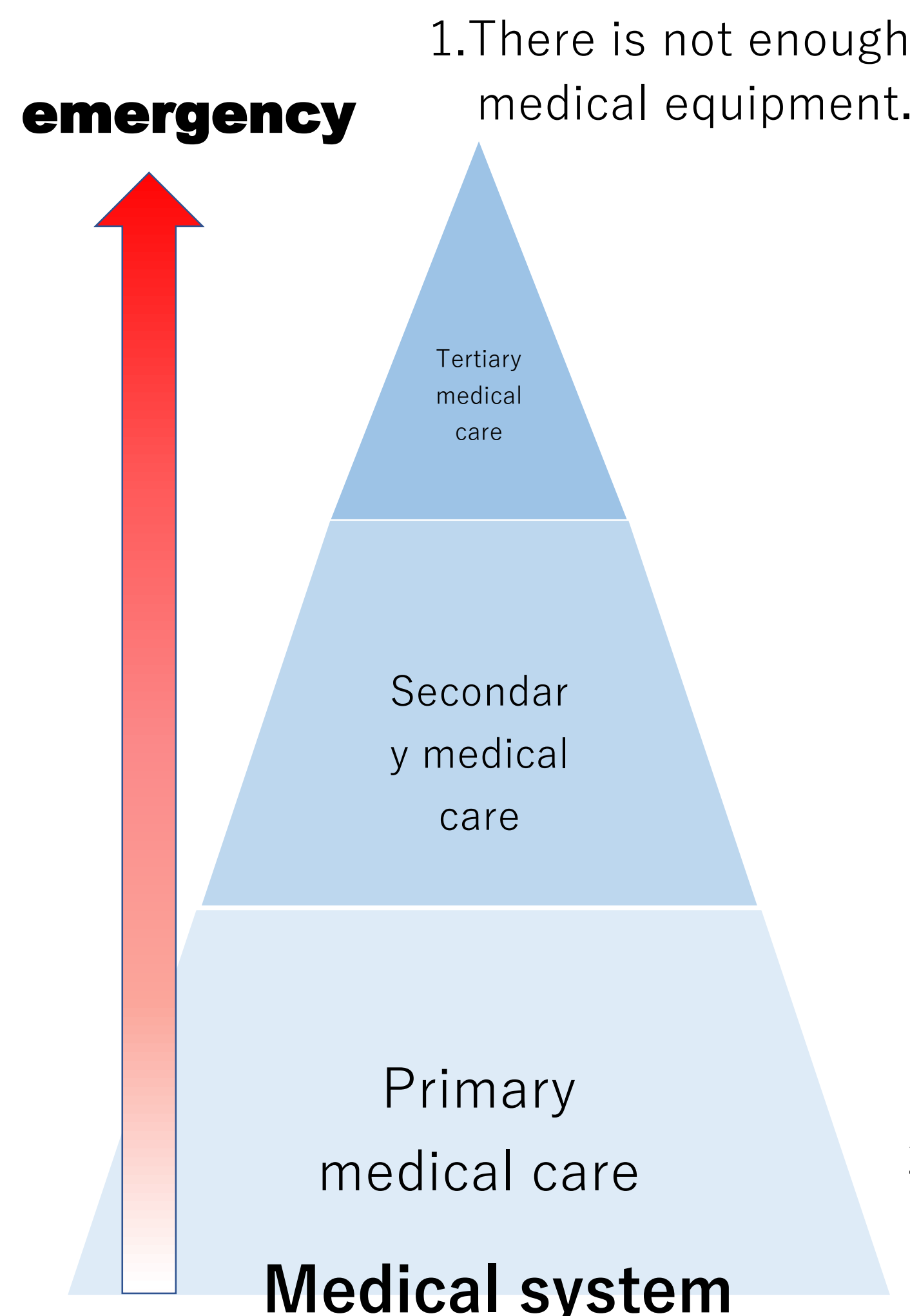
2.About Sri Lanka

Location

lack of infrastructure

located to the southeast of India

Source : https://mapcruzin.com/free-sri-lanka-maps.htm

remarkable gap between rural and urban infrastructure due to the civil war

Education

· high literacy rate
· high primary education enrollment rate

tertiary

collegiate ← A/L test

senior secondary ← O/L test

junior secondary

Primary(5years)

3.Two Problems in the Medical Field

1.There is not enough medical equipment.

emergency

Tertiary medical care

Secondary medical care

Primary medical care

Medical system

Total NCD mortality[20]

696.3
606.0
517.7
429.3

2000 2005 2010 2015

Female Male

Source : https://apps.who.int/iris/bitstream/handle/10665/327765/SDG%20Profile_Sri%20Lanka-eng.pdf?sequence=1&isAllowed=y

2 .Cases of non-communicable diseases (NCDs) are increasing.

The shortage of medical equipment

· Using of ICT and AI in order to control medical devices
· Effective use of telemedicine

Non-communicable diseases

· Information support by AI
· Sharing information by using ICT
· Effective use of telemedicine

4.Telemedicine in Japan

Difference between ICT and AI

ICT (Information and Communication Technology)

· Electronic health record
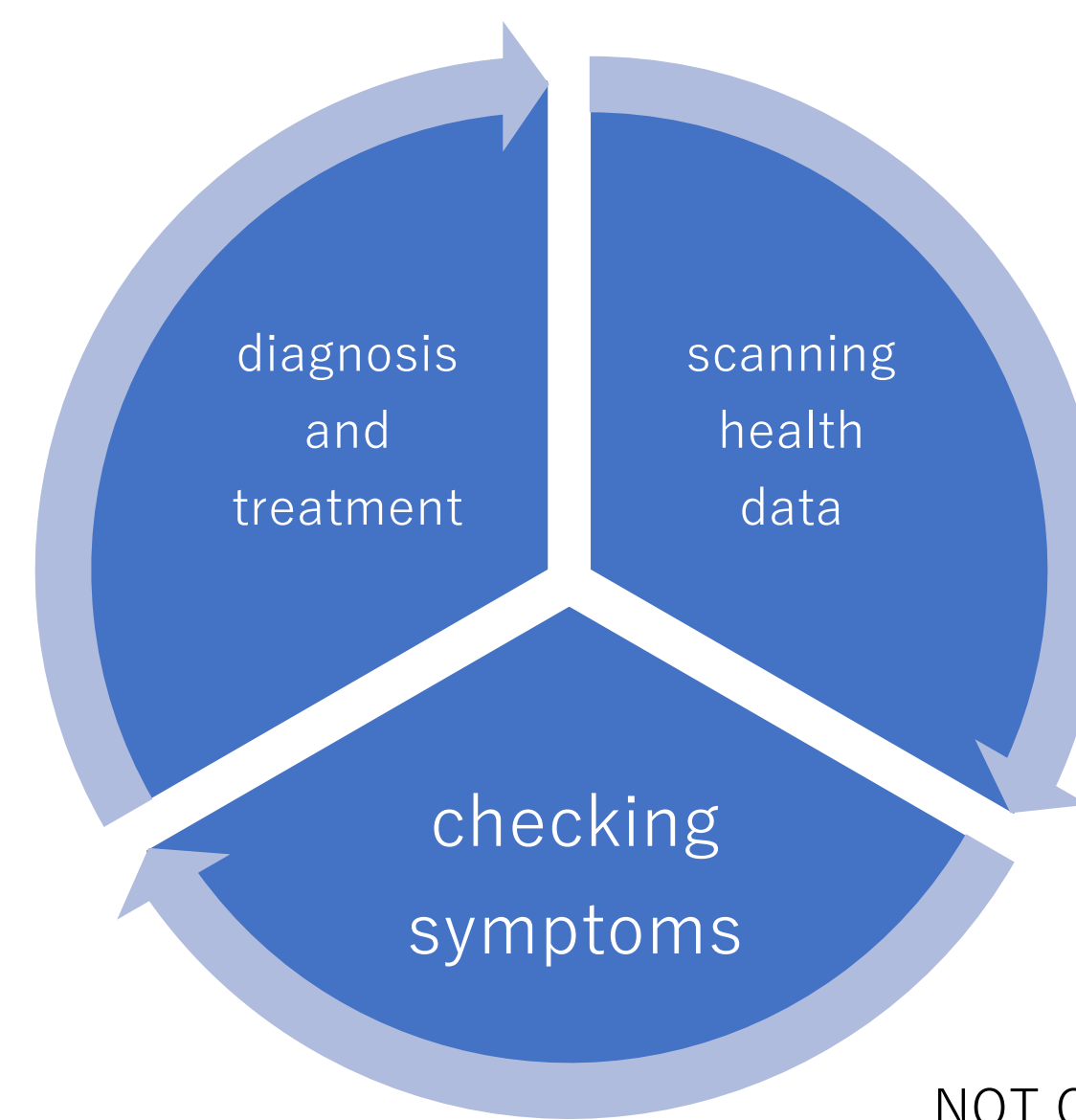· CT scan
· MRI
· mammography

AI(Artificial Intelligence)

· IBM「Watson」
· Jichi Medical University「White Jack」

Some people are worried about the quality of medical care.

strictly limited COVID-19 more popular

5.Telemedicine in Bangladesh

"miup" is supporting the medical field in Bangladesh by making good use of ICT and AI.

diagnosis and treatment | scanning health data | checking symptoms

BUT ALSO

· miup can yield larger profits in Bangladesh

· accumulated data improves AI

· it can be applied to more strictly regulated countries

NOT ONLY

· for people who have non-communicable disease

· to solve the shortage of medical equipment

6.Conclusion and Suggestion

Result of study

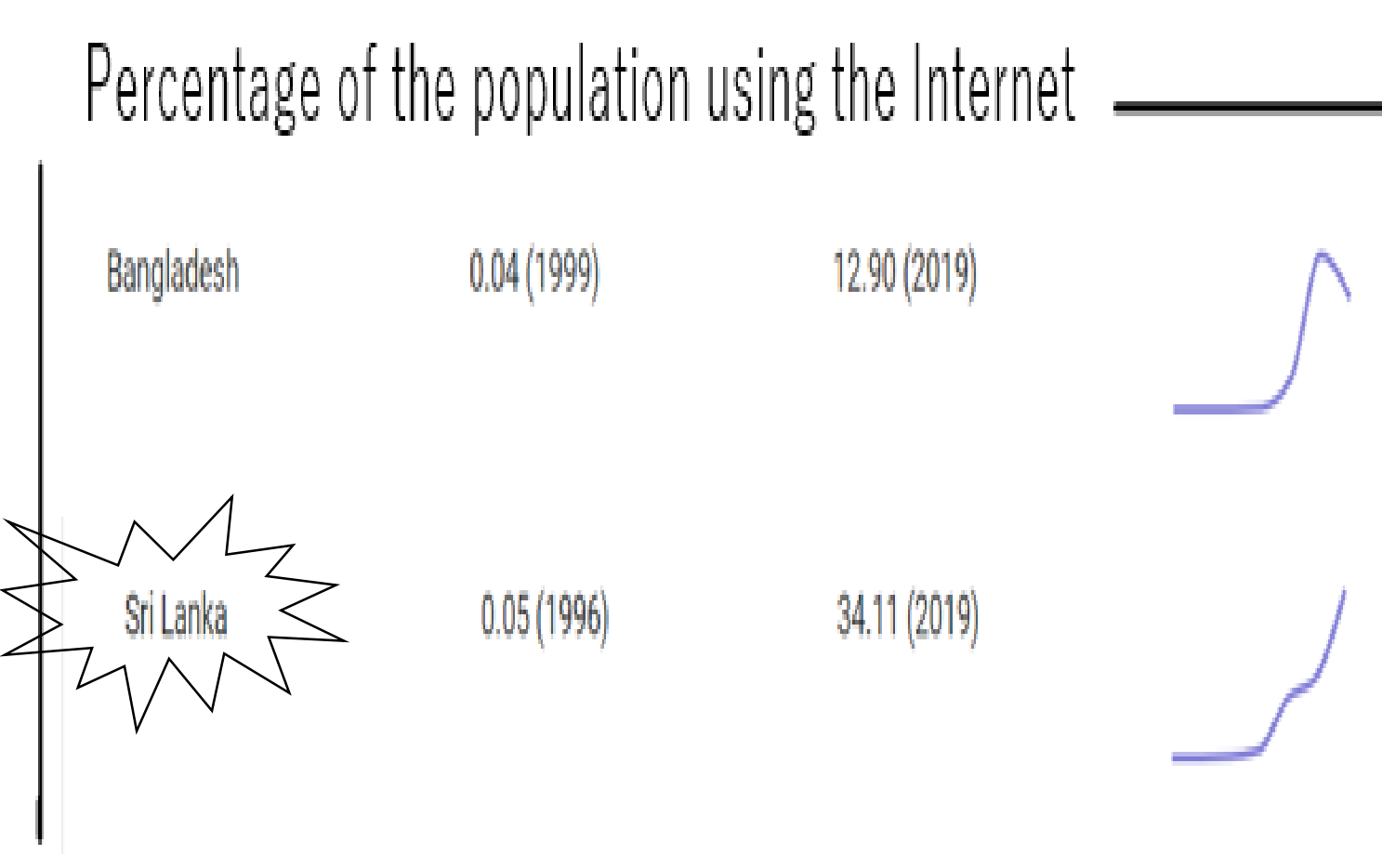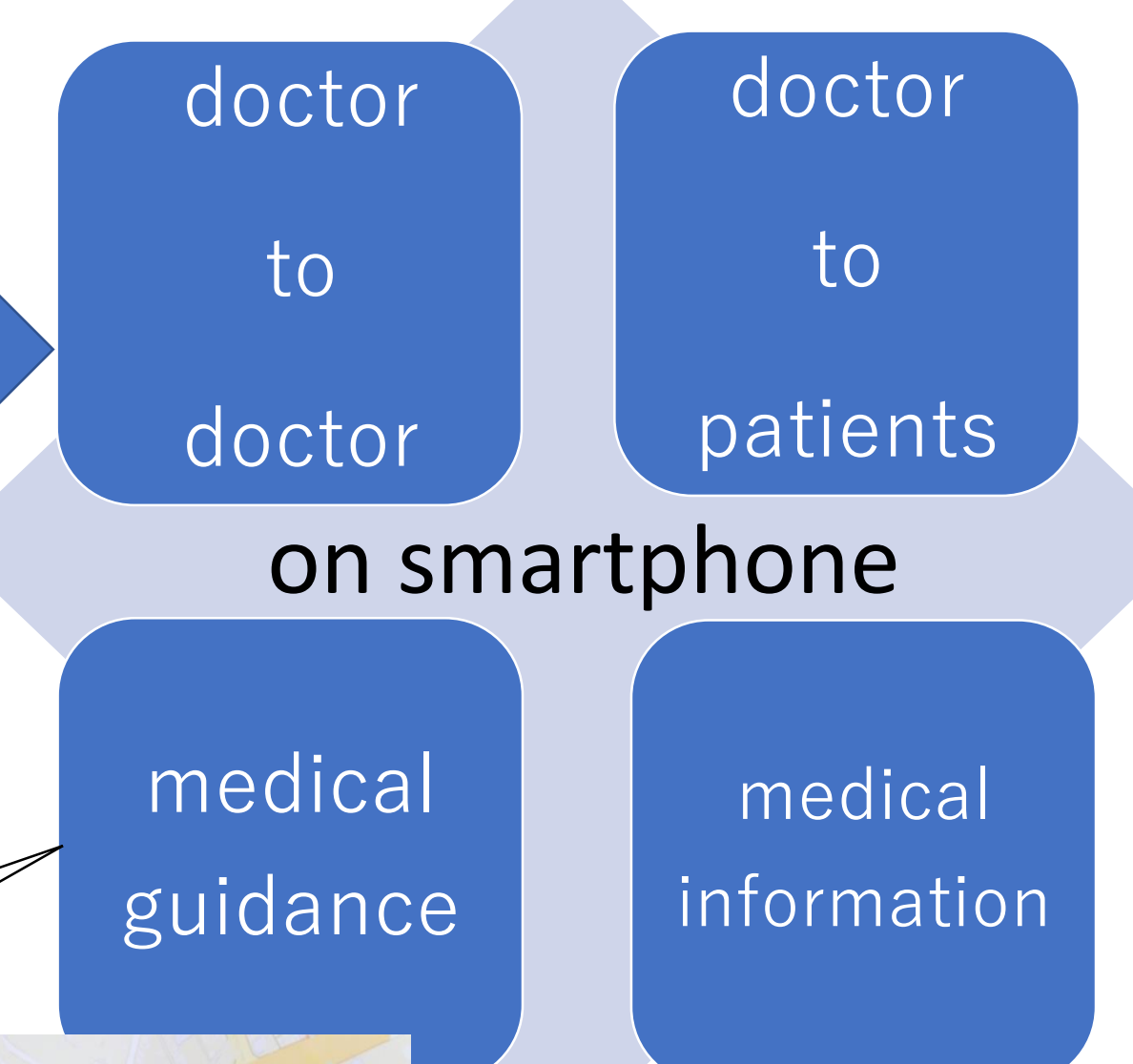**Implementation of telemedicine in Sri Lanka** will be useful.

In what way ?
· What is the feature of Sri Lanka?
· How to encourage people to use it?
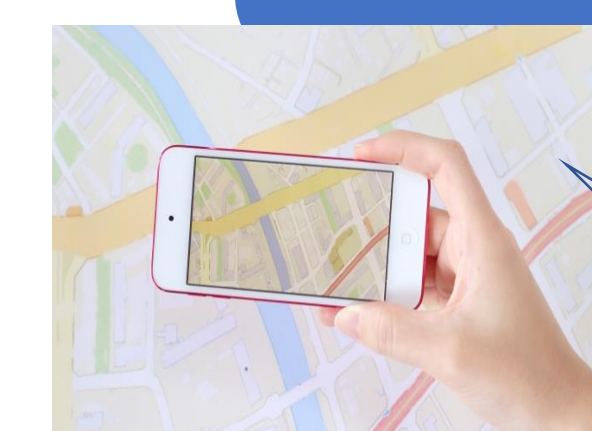· How to eliminate a medical gap?

Percentage of the population using the Internet

Bangladesh 0.04 (1999) 12.90 (2019)

Sri Lanka 0.05 (1996) 34.11 (2019)

Source : https://www.itu.int/net4/ITU-D/icteye/#/topics/2001

suggestion

doctor to doctor | doctor to patients

on smartphone

medical guidance | medical information

People can read and understand their own health information.

Which hospital should we go?