

Training of Cardiologist and Cardiac Surgeons in South Africa

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Estimates of health worker needs-based shortages, by WHO region, 2013



Needs-based shortages (in millions)*



0 750 1500 3000 Kilometres

* Needs-based shortage is estimated as the difference between need and supply by country for those with current supply below the SDG threshold.

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Data Source: World Health Organization
Map production: Information Evidence and Research (IER)
World Health Organization

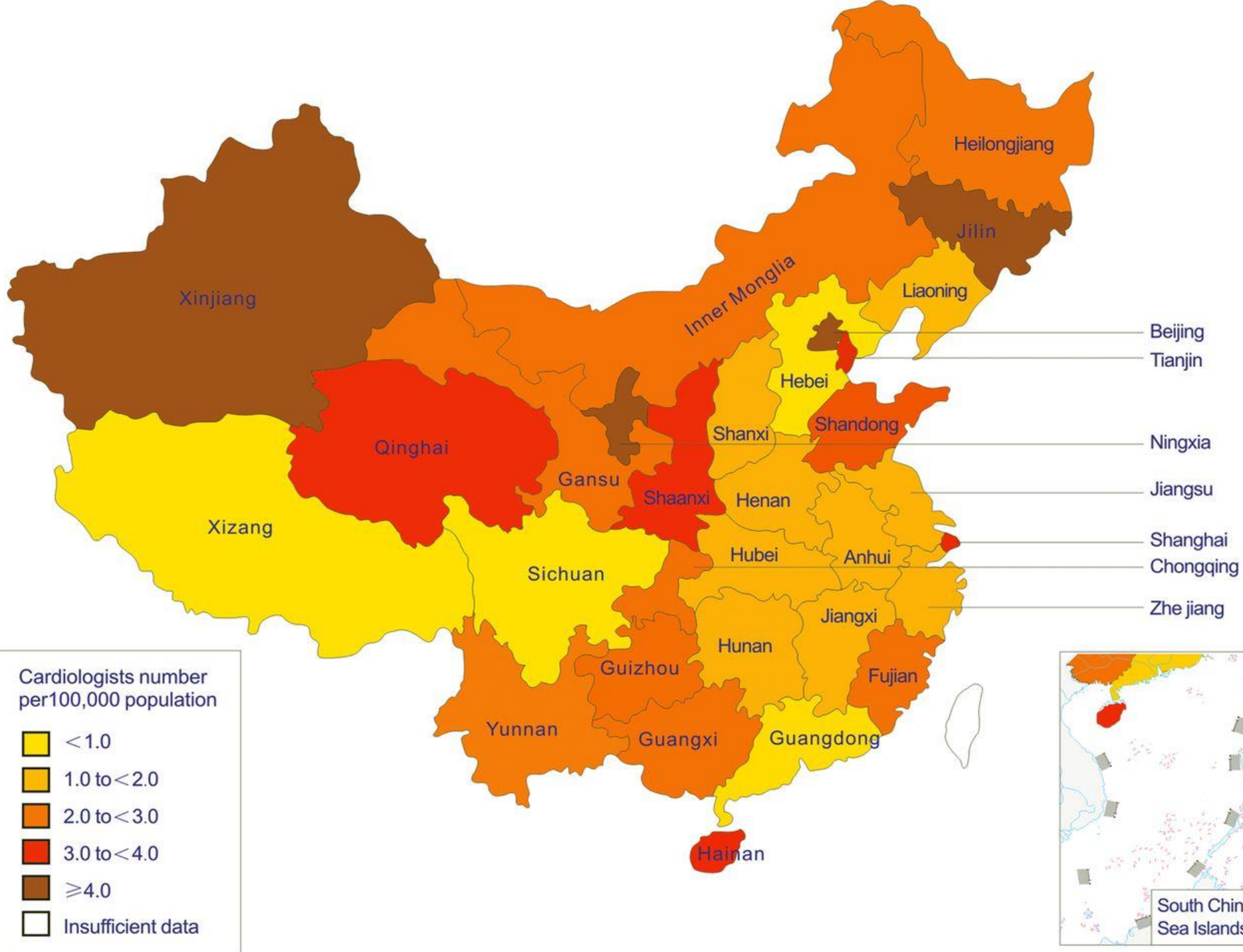


Cardiologist/Surgeon ratio per population

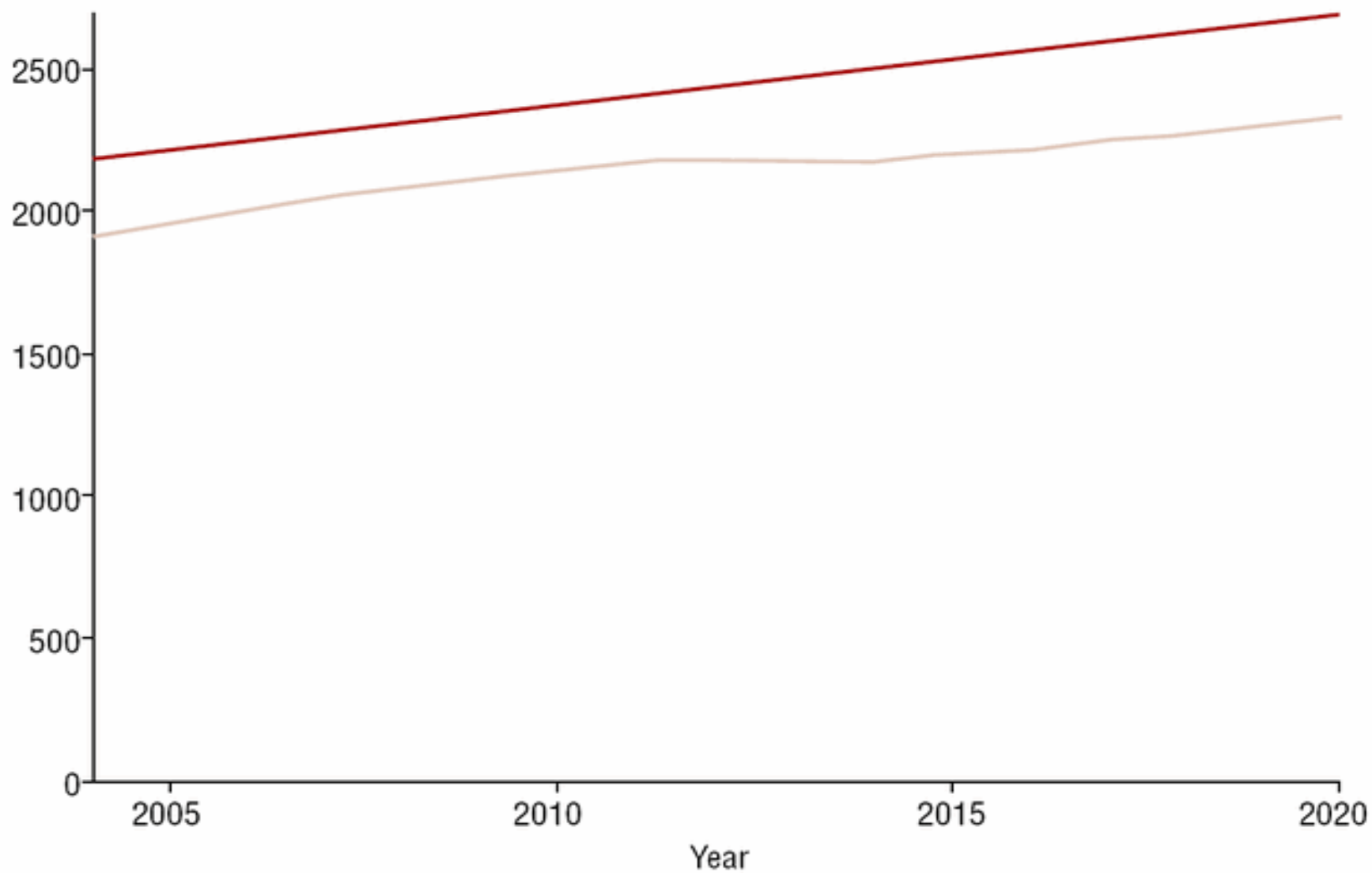
- ◆ **USA, 4.22 Adult Cardiologist, 0.2 Pediatric Cardiologist, < 2 Cardiac surgeons/100 000 population.**
- ◆ **In China the estimate is 1.9 Adults Cardiologists/ 100 000.**
- ◆ **In Brazil the estimate is 4.3 Cardiologists/ 100 000.**

TABLE 2. Number of Cardiologists in Europe, the United States of America, and Canada

| Country | Number in 2002 per 100 000 inhabitants | Percentage Increase in 1990-2002 |
|---------------------------|---|---|
| Ireland | 0.7 | |
| Turkey | 1.2 | 140% |
| Finland | 2.1 | 110% |
| United Kingdom | 3.1 | 158% |
| Slovakia | 3.6 | |
| Germany | 3.7 | |
| Czech Republic | 3.9 | 290% |
| Denmark | 4.1 | 86% |
| Netherlands | 4.2 | 5% |
| Switzerland | 5.5 | 57% |
| Latvia | 5.7 | 27% |
| United States of America* | 6 | |
| Portugal | 7 | 49% |
| Luxembourg | 7.4 | |
| Belgium | 8.6 | 91% |
| Iceland* | 8.6 | |
| France | 9.6 | 19% |
| Lithuania | 9.6 | 20% |
| Estonia | 9.8 | 72% |
| Bulgaria | 10.4 | |
| Cyprus* | 11.2 | |
| Greece* | 21.7 | |



- ◆ **Latest Stats SA census estimates RSA population at 55.7 million.**
- ◆ **200 Adults cardiologists; 35 Pediatrics cardiologist; and 103 Cardiac surgeons (≈ 0.4 ; 0.06 and 0.2 and per 100 000, respectively).**
- ◆ **Majority in 3/8 provinces, mainly in large Cities. The other provinces happened to be the rural & poor.**



— Demand for Cardiologists — Total Number of Cardiologists

Ingredients for proper training in Cardiology/Cardiac surgery

- ◆ **Need for the service (Patients).**
- ◆ **Appropriately trained Doctors & Nurses appropriately remunerated.**
- ◆ **Appropriately trained support staff, technologists, radiographer, clerical and IT.**
- ◆ **Appropriate building infra-structure, regularly refurbished and maintained.**
- ◆ **Appropriate Equipment, regularly updated and maintained.**

Our Reality/Challenges

- ◆ **The need is huge, patients are galore!**
- ◆ **We do have qualified doctors and nurses willing to do the training at tremendous financial sacrifices.**
- ◆ **We do have support staff to assist with training. However, IT support is poor.**
- ◆ **Our building infrastructure is dilapidated, poorly maintained and hardly inspires confidence to staff, trainees and patients alike.**

◆ We struggle to get appropriate equipment. It is not clear what informs budget allocation for equipment to tertiary centers. For example R50M/yr. for equipment's for Chris Hani Baragwanath Hospital is simply unrealistic.

Way forward

- **We need recalibration of the political mind-set.**
- **The nation 's health care needs must be made top priority, particularly given the epidemiological transition.**
- **The state urgently needs to establish targets based on international best-practice and put into place proper mechanisms to achieve the correct cardiovascular physician to population ratio.**

- **Professional bodies such as SAHA, SAMA and others need to join forces with other NGOs to intensify their advocacy role for more resources to be allocated to management of non-communicable conditions, particularly cardiovascular diseases.**
- **The contribution of corporate and industry in general, e.g. discovery fellowship program must be encouraged, formalized and strengthened.**