

# A landscape analysis of Paediatric & Congenital Heart Disease services in Africa

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## Introduction

There is significant geographic and regional disparity in providing Paediatric and Congenital Heart Disease (PCHD) services.

Recently, PCHD training and service provision in Africa has increased.

As such, we conducted a cross-sectional electronic survey to evaluate PCHD services in Africa.

## Methods

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- A cross-sectional electronic survey
- Purposive sampling:
  - 1) Extensive literature review to identify local African authors.
  - 2) Extensive online search for PCHD practitioners and institutions.
  - 3) Utilization of Author's professional networks.
- Period: 01/06 – 31/12/2023

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- Comprehensive survey questions.
- Respondent-level: Profession, specialisation, & institution.
- Institution-level: Staffing, infrastructure & provision of PCHD services. Screening programmes, cardiac imaging, EHR's & databases, fellowship training, and financial organization.
- National-level: Provision of PCHD services. Fellowship training.

## Results

**119** respondents, from **92** institutions and **43** countries in Africa.

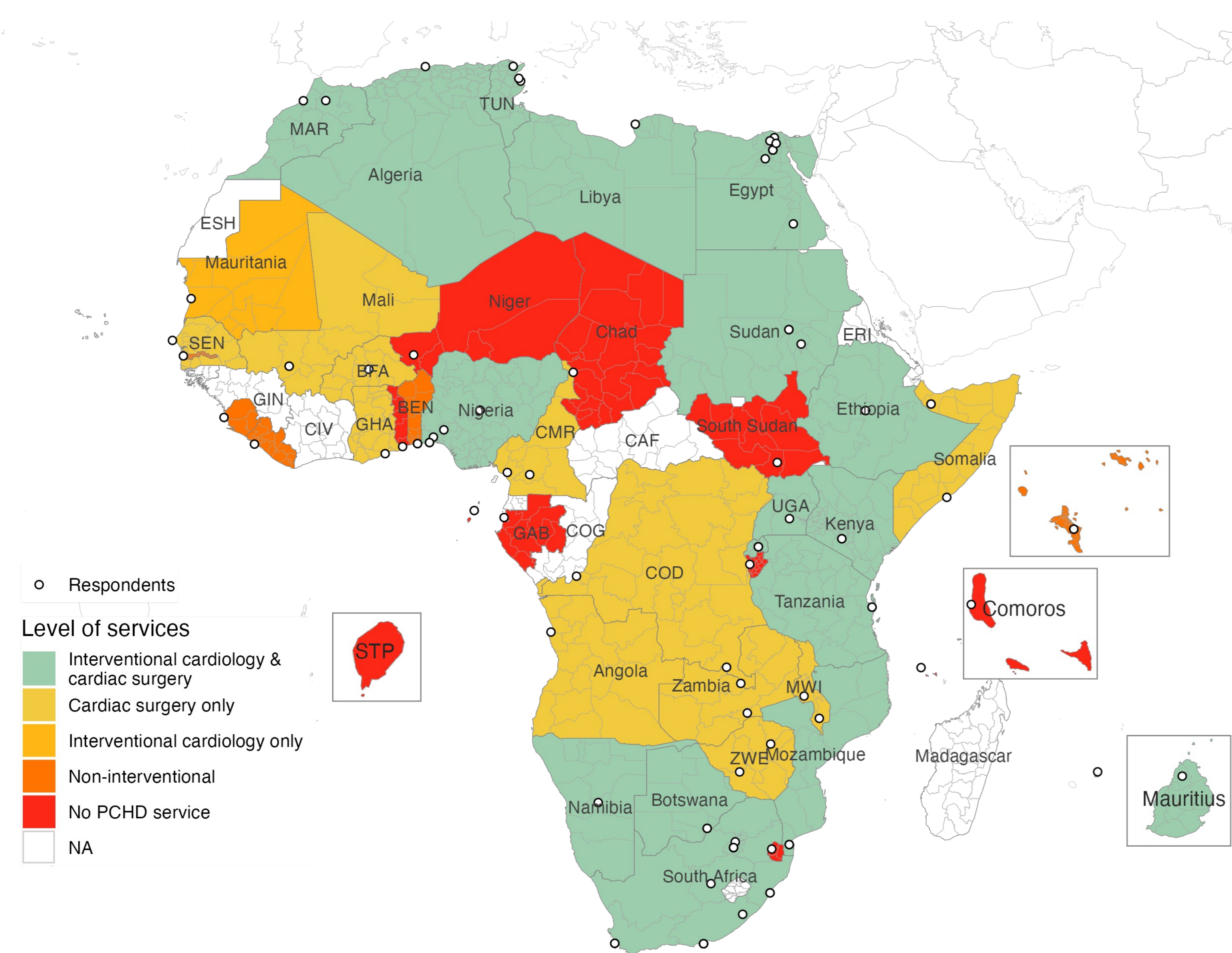


Figure 1: National availability of cardiac services at the national level.

20% (9/43) had no PCHD service while 84% (36/43) had neither Adult CHD nor cardio-obstetric services.

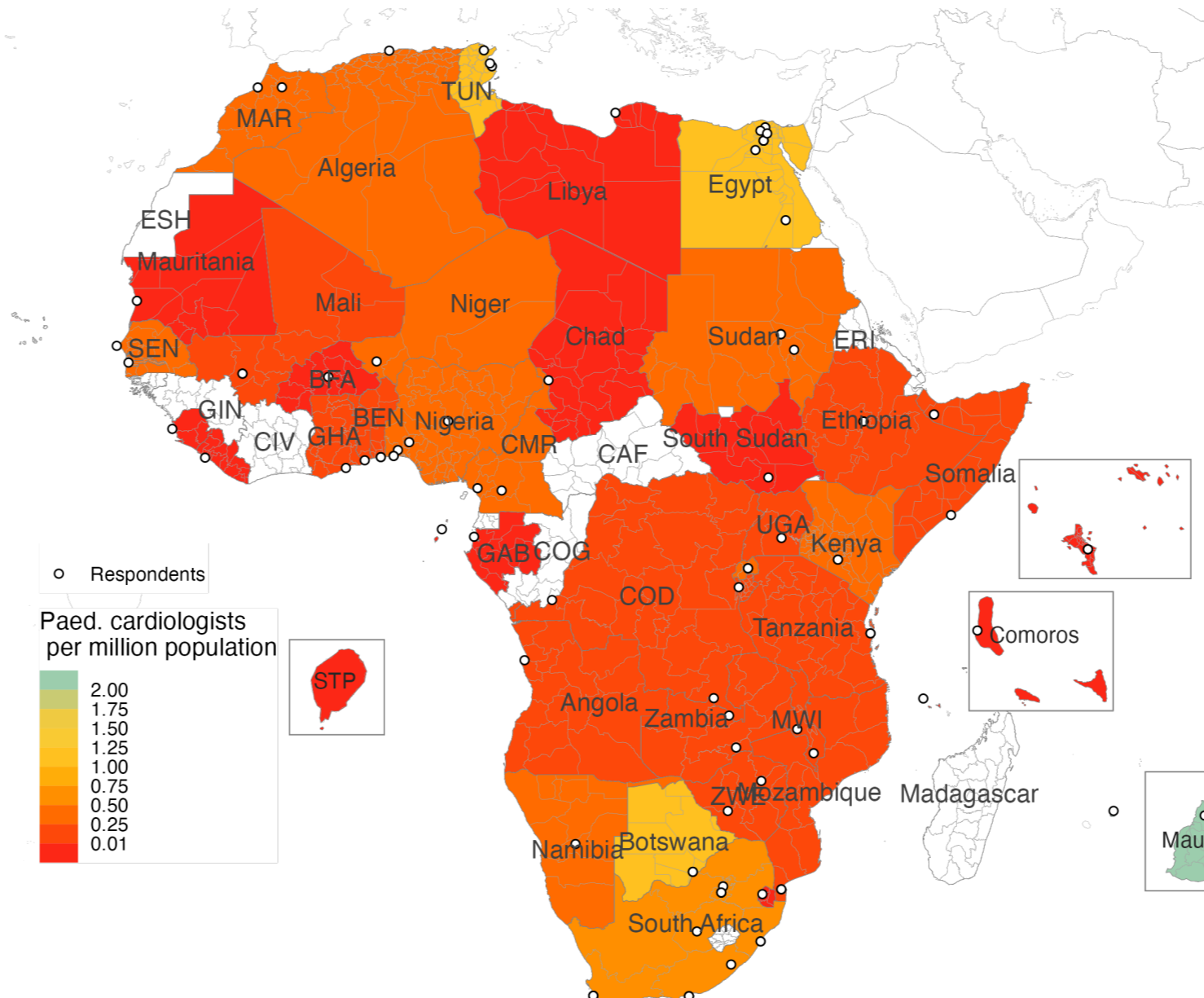


Figure 2: The number of paediatric cardiologists per million population.

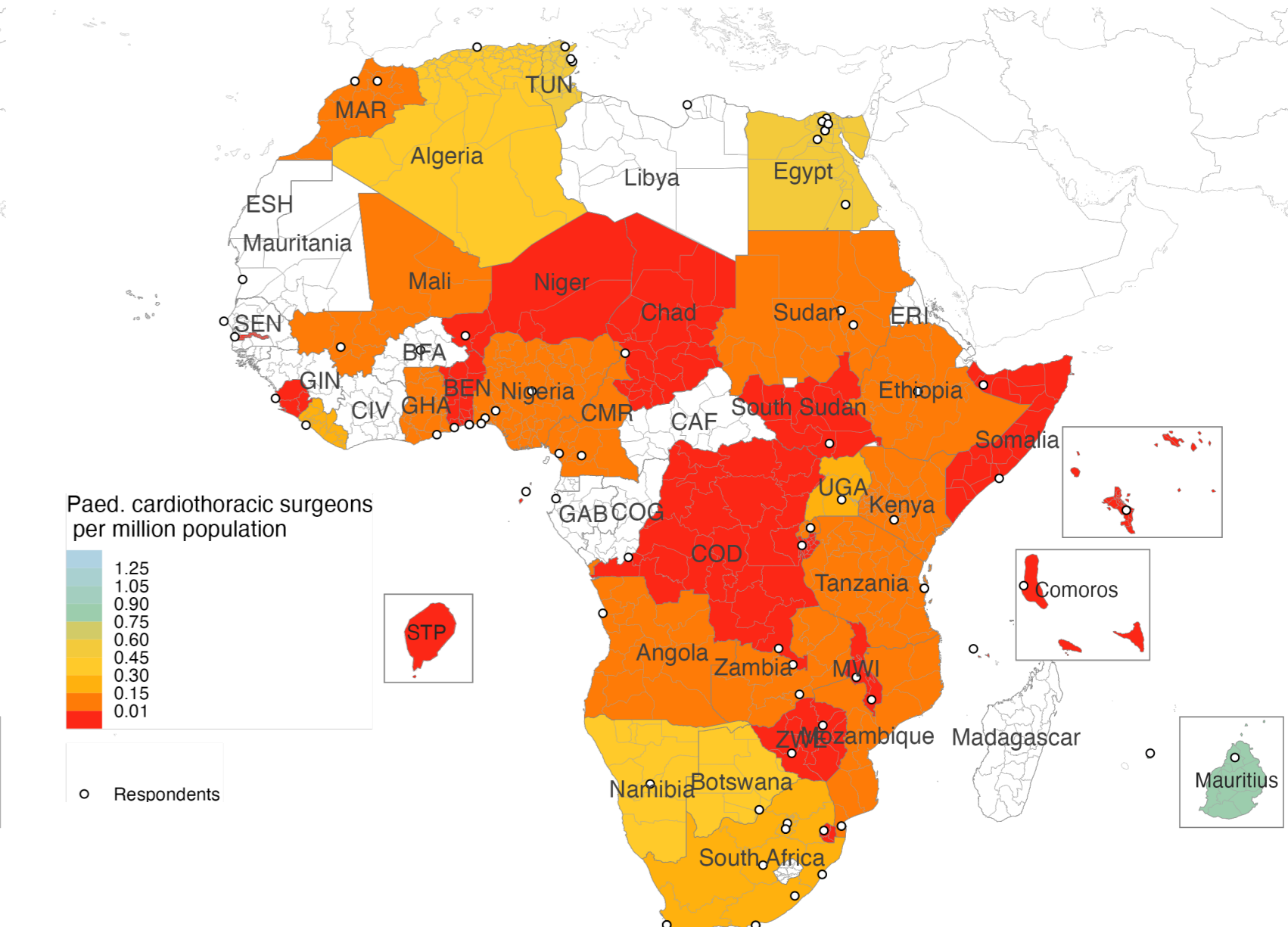
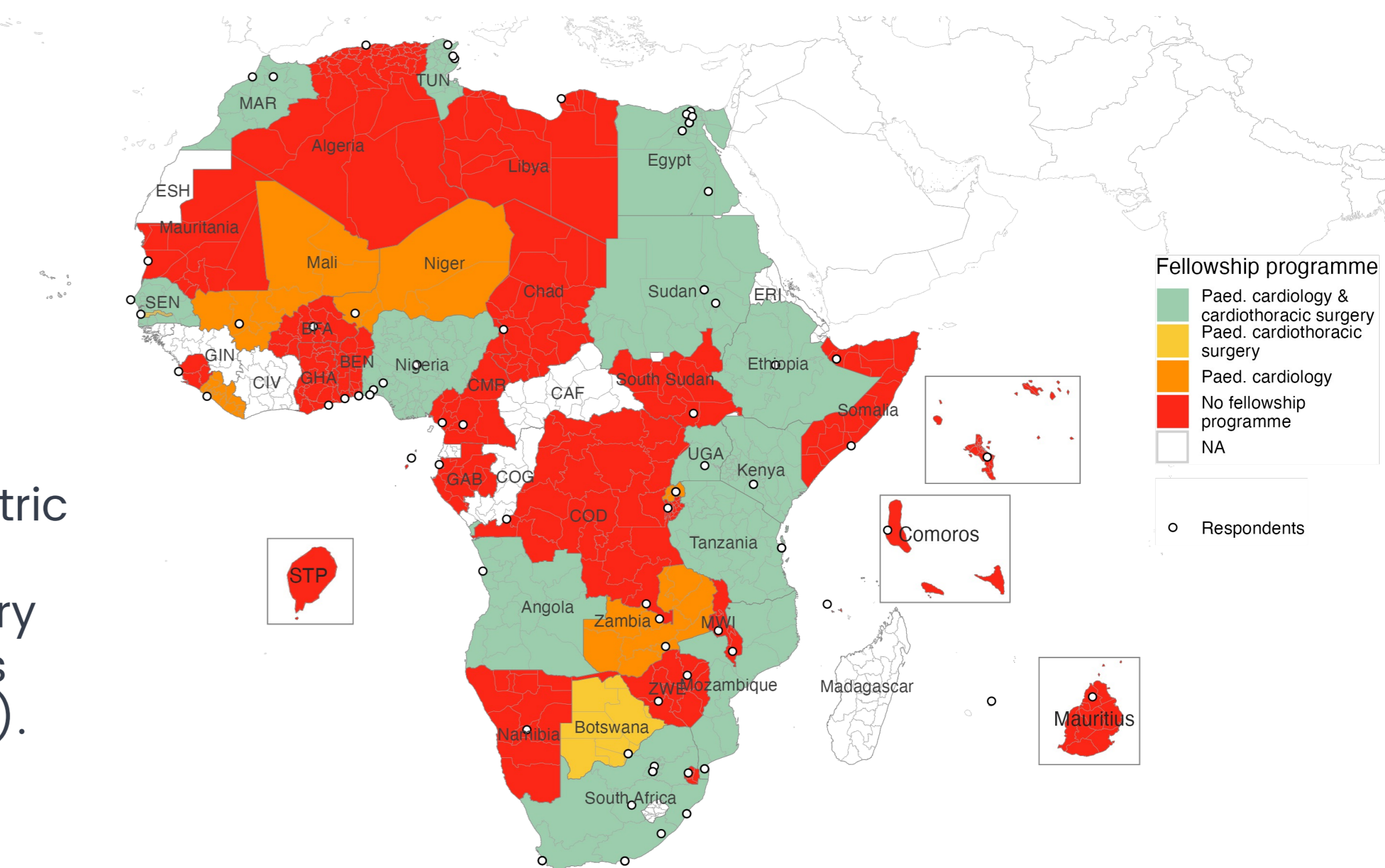


Figure 3: The number of paediatric cardiothoracic surgeons per million population.

**0.04** (IQR:0.00–0.13) paediatric cardiothoracic surgeons per million population – recommended: **1.25** per million population.  
**0.18** (IQR:0.03–0.35) paediatric cardiologists per million population, – recommended: **2** per million population.

Figure 4: National availability of paediatric cardiology and cardiothoracic surgery training programmes (domestic or foreign).



## Discussion

Only 17(40%) countries were able to provide a full PCHD service. A further 12 countries provided some form of cardiac intervention, making a total of 29(67%) countries providing interventional cardiac services.

The ratio of paediatric cardiologists & cardiothoracic services are well below international recommendations & no country has sufficient paediatric cardiologists & cardiothoracic surgeons to meet the recommended ratio per million population.

Less than half of respondent countries had fellowship training programmes to address this lack.

## Participate

Thank you to our colleagues, the 119 respondents from:

<sup>9</sup>Respondent countries: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Comoros, Democratic Republic of the Congo, Egypt, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Kenya, Libya, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

Want to be part of the follow-up study? Scan the QR-code.

