

# EasyOne Pro LAB in a Clinic-on-Wheels

## 1 Introduction

**Heart of Australia** is an organization that delivers monthly specialist medical investigation and treatment clinics to regional, rural and remote-area communities across Queensland, Australia. Its customized road trains – specialist medical clinic-on-wheels – each travels more than 100,000 km per year on the road, covering an area of more than 450,000 square kilometers. Heart of Australia is breaking the grip of distance that denies rural and remote-area Australians access to regular cardiac, endocrine and respiratory services when and where they are needed most.

The first mobile clinic for Heart of Australia, called Heart 1, was launched in October 2014 after six years of planning and construction. The second even bigger truck saw its first patient in September 2018 and is now part of a growing fleet of state of the art, custom designed and constructed high-tech mobile medical clinics offering a wide variety of specialist services to outback and rural Queensland communities. The third truck, which is smaller, was introduced in March 2019, and one more is planned to hit the road in 2020.



*First medical clinic-on-wheels called Heart 1*

ndd is proud that all three trucks are equipped with an EasyOne Pro LAB to deliver reliable and accurate pulmonary diagnosis right at the **point of care** to people visiting the mobile hospital.

## 2 Interview with Dr. Rolf Gomes

In the following interview, the founder of Heart of Australia, cardiologist Dr. Rolf Gomes, tells us more about the project, his work and why he decided to equip the trucks with EasyOne Pro LABs.



Dr. Rolf Gomes

### What made you start Heart of Australia (HOA)?

It was a problem that has existed in Australia for a long time. Because Australia is such a large nation, as junior doctor they send you to some regional areas as part of the training. The problems with access to healthcare were obvious. After finishing the training I wanted to be involved, yet not just by doing more research, but doing something that made a difference. Before studying medicine (cardiology) I had done electrical engineering, so my engineering background mixed with medicine have resulted in these trucks.

### What is the main purpose of HOA?

In remote areas, you are almost twice as likely to die of a heart disease, and this is not because we don't have the medicine or the treatment to help those people. It's simply because, to a large extent, we haven't found a way to deliver the same diagnostics and treatments which people

in the cities have access to and take for granted.

There is a huge gap in the outcomes for people who live in the cities compared to people who live in the country. About 20% of that gap in health outcomes is attributed to a lack of access to services.



Dr. Rolf Gomes with a patient

When I was out on the truck not long ago, one of the patients said it was fantastic that he only had to travel 170 km to get to the truck. That was still a lot more convenient for him than travelling to Brisbane, staying at a hotel, leaving family behind, etc. It makes a great difference to those people, such as farmers and miners. Some are just too old or don't have the money to travel.

### How much time do you and all the other specialists spend on the road with one of the trucks?

I spend approx. 4 days a month on the truck myself. The specialists "only" work a

few days a month on the truck because they have their own practices in the city. The trucks never come back to the city, we fly the specialists to the truck.

**How many people did you have in your team when you started?**

3 specialists, 8 people in total

**How many people are working for HOA now?**

All together 12 full time staff and 25-30 specialists (gastroenterologists, neurologists, endocrinologists, urologists and contractors)

**In what diagnoses/treatments are the trucks specialized?**

We started off with cardiac and respiratory services. In the most recently built trucks, we added gynecological services. Now we have got new specialists coming on board, like neurologists, urologists, gastroenterologists and immunologists, and we provide sleep apnea testing which takes place on the trucks.

We also offer tele-health consultations with pulmonologists when patients visit the truck, and we have pulmonologists who remotely report the respiratory function tests.

Basically, as we get new specialists on the trucks, we have to provide them with the equipment they need.

**How many km does a truck drive per year?**

Each of the bigger trucks drives about 100,000 km a year and covers a dedicated area.

The newest truck, which is smaller than the first two, is not on a dedicated route. It goes to community events. However, it is equipped the same way as the other two trucks. With only two rooms it is smaller in size (the big trucks have four rooms) but it has the added bonus of being specialized for our new gynecological services.



*Inside view of the truck*

**How many patients are treated each month?**

In the last 5 years, 7,000 **new** patients were treated. We have 4,000-5,000 appointments per year with old and new patients.

**What ndd equipment is used in the trucks?**

The EasyOne Pro LAB is used in all three trucks. Another one is planned for the fourth truck, which will be introduced in 2020.

**What makes the ndd devices particularly suitable for your needs?**

It's the overlap between breathlessness and cardiac function: there's a lot of overlap between cardiac and respiratory issues. So, if we were to investigate patients who are breathless, it made a lot of sense for us to try and find a way of

assessing their respiratory function as well as their cardiac function.

Being on a truck we really like equipment that can be mobilized. It has to be small, it has to be able to be moved around without breaking, it has to be reliable.



*Patient performing a test with the EasyOne Pro LAB in the truck*

When I did the research, the EasyOne Pro was being used in that capacity for other outreach clinics and I thought we should invest in that for our trucks. It has been a great decision actually. It's very easy to use, reliable and accurate.

### **How many tests have you performed with the EasyOne Pro LAB so far?**

Approx. 1,000 per year (20 / week)

## **3 Facts and Figures**

3 trucks (one more is planned for 2020)  
 Approx. 5,000 patients per year  
 100,000 km per year per truck  
 250 saved lives since the beginning  
 5,000 tests performed with EasyOne Pro LAB  
 Each truck spends 310 days per year on the road

For more information about the Heart of Australia project visit their website at [www.heartofaustralia.com](http://www.heartofaustralia.com).

### **How is this project funded?**

I first started with my own money to build the truck and then got corporate sponsors. Recently, we also have obtained some federal government funding for the next 3 years.

### **What are your plans for the future with Heart of Australia?**

We are building a 4<sup>th</sup> truck for Queensland, looking to maybe extend into the states of Western Australia and New South Wales. There would certainly be a need for similar service there and, given we've had such a good response in Queensland, we are looking seriously at those other areas.

We had a lot of international interest as well from places like Canada, Brazil, Durban in South Africa and Pennsylvania in the US.

We also get a lot of international medical students asking if they can spend some time on the trucks.