



Innovations for equity-oriented eye care in rural and remote areas

A case example from Lions Outback Vision, Australia





## Indigenous Australians: Eye Health Status

3x higher rates of vision impairment

**3-6x** higher rates of diabetes: **1 in 10** have late-stage diabetic eye disease

>90% of vision impairment cases are avoidable







# Australia & Teleophthalmology

65% of Indigenous Australians live in regional and remote areas

Eye care highly image driven profession

Great potential to **improve accessibility of services** in countries where geography, population or workforce distribution make it difficult to provide services outside major cities.





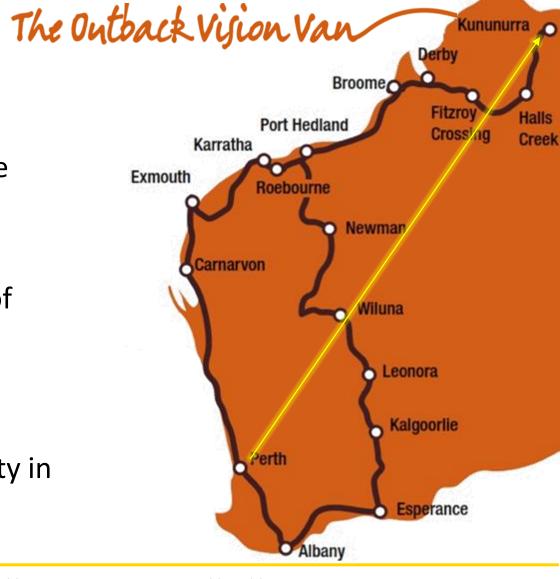


## Lions Outback Vision (LOV): A case example

Providing a **state-wide teleophthalmology** service since **2011**.

Links patients in **rural and remote communities** of Western Australia to consultant ophthalmologists based in the state capital city, Perth.

The distance from Perth to the furthest community in the service is **over 3000 km**.









## Overview of the Service: 1. Telemedicine service

The provision of both:

- Online booking system and
- ii. "On call" urgent assessment

Referrals originate from primary eye care workers in regional communities, rural hospital emergency departments, general practitioners

Minimal additional infrastructure costs





#### Overview of the Service: 2. Outreach services

- 1. Visiting primary eye care workers
- 2. Outreach specialist clinics in regional hospitals
- 3. Lions Outback Vision Van
  - i. 3 consulting rooms
  - ii. Comprehensive ophthalmology care for eye conditions (e.g. trachoma, glaucoma, and diabetic retinopathy)
  - iii. Completes numerous circuits per year



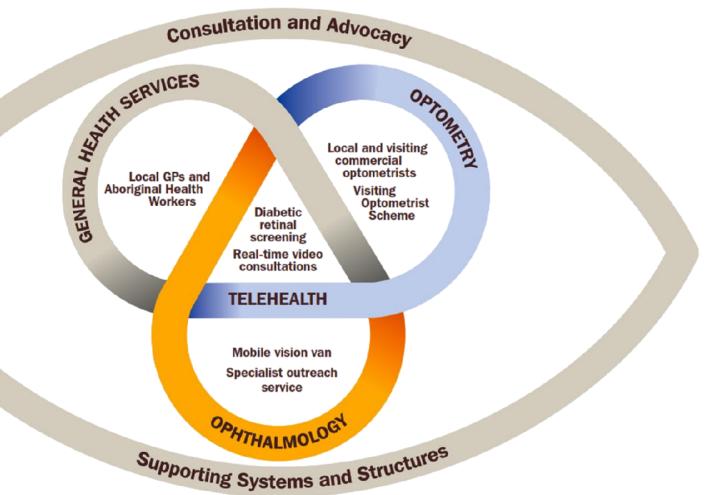




#### **LOV Eye Health Care**



**Workforce Coordination** 

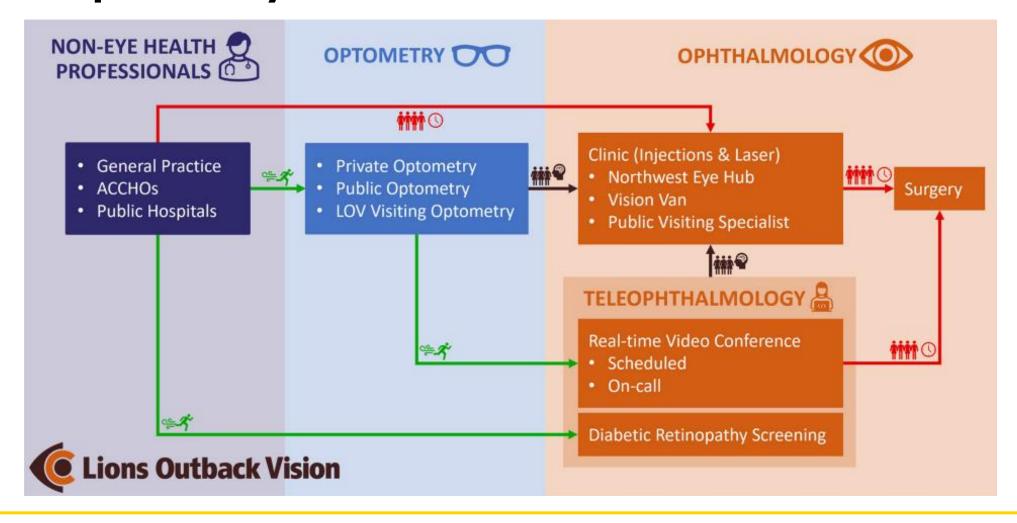


>90% of primary eye care workers in the regions participate in the telemedicine service





### Clinical pathway within LOV







### Key Outcomes of the LOV Telehealth Service



Non-attendance rate at outreach service visits has decreased from 50% to 3%.



On-call (real-time) service has **increased access for Indigenous population 10-fold.** 



Patients also demonstrated very high satisfaction with the telehealth service.





## Key Outcomes of the Videoconsultations for Surgery



Elimination of the "wait for the waiting list" where patients can wait for up to one year for public service outpatient appointment prior to being placed on surgery waiting list.



Improve significantly the **efficiency and impact of outreach ophthalmology** services:

- a higher proportion of primary eye care is being appropriately managed by optometry with less duplication of services,
- a marked increase in surgical management by LOV ophthalmologists





Acknowledgements

**Dr Angus Turner** 

WA Ophthalmologist Lions Eye Institute

