

## **Box 6.2 Engaging rural and remote communities through telehealth: a case example from Lions Outback Vision, Australia**

Teleophthalmology, particularly real-time video consultations, holds great potential to improve the accessibility of services in countries where geography, population and workforce distribution make it difficult to provide specialist eye services outside of major cities. Ophthalmology is particularly suited to telemedicine due to its high reliance on imaging for the diagnosis and management of ocular disease.

### *Overview of the service*

Since 2011, Lions Outback Vision (LOV) – part of the Lions Eye Institute – has provided a state-wide teleophthalmology service, linking 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. Referrals to the service originate from optometrists working within regional communities, with rural hospital emergency departments and general practitioners often referring patients for optometric review. The service provides a combination of “store-and-forward” and “real-time” telemedicine links, with results of ophthalmic investigations being sent to the treating ophthalmologist prior to a real-time video consultation. Patients who require ophthalmological clinical assessment or surgical management are provided with an appointment at an upcoming LOV outreach visit.

Following advocacy and a demonstrated evidence base, government health insurance rebates were introduced for optometrists and general practitioners to support telehealth in 2015. There are minimal additional infrastructure costs, given that ubiquitous platforms such as Skype or FaceTime are used for video-consultations. Currently, 94% of all optometrists in the regions visited by LOV actively participate in the telehealth service. The provision of both an online booking system and availability for “on call” urgent assessment reduces barriers for uptake.

### *Key outcomes*

Following implementation of the LOV telehealth service, the non-attendance rate at outreach service visits has decreased from approximately 50% to 3%. Patients also demonstrated very high satisfaction with the telehealth service.

The provision of video consultations that include patient consent, and booking, for surgery has resulted in several key outcomes. Firstly, it has eliminated the “wait for the waiting list”, where patients can wait for up to one year for a public service outpatient appointment prior to being placed on the waiting list for surgery. In addition, the efficiency and impact of outreach ophthalmology services has improved significantly – a higher proportion of primary eye care is being appropriately managed by optometry with less duplication of services, and a marked increase in surgical management by LOV ophthalmologists.