Increasing the impact of telehealth for eye care in rural and remote Western Australia

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Executive summary

There is a gap in eye health in rural and remote Western Australia (WA) for both Indigenous and non-Indigenous Australians. The prevalence of eye disease in rural Australians is higher than their urban counterparts, but specialist eye services are up to 19 times less available in rural areas than the Australian average. Currently, demand for specialist eye services in WA is met by transferring 4,800 patients per year to urban ophthalmologists, and by providing periodic outreach services by visiting specialists to rural areas, at a total cost of over $3 million per year.

Telehealth could help to close this gap and improve patient outcomes at a reduced total cost to the health system. This report estimates that telehealth in WA could reduce the number of patient transfers to the city by 709 each year, saving $270,000 in transfer costs annually. It could also treat up to 786 rural clinic patients each year, saving $83 per patient. This would also create additional capacity for visiting specialists to perform more surgeries on their rural trips. In addition, wait times could be reduced by up to 43 hours for urgent patients, and up to 18 weeks for routine referrals.

To date, the current GP-led telehealth model in WA has performed at least 74% below target due to various barriers. This report analyses the structural and economic drivers of telehealth for eye care in WA, estimates the potential benefits of improving its uptake, and recommends that government and professional bodies expand their scope to better support optometrists and regional hospitals in leading telehealth for eye care.

There are four key reasons for these recommendations:

1. **Access**: improving equitable access to specialist eye services for rural patients
2. **Quality**: supporting best practice and better outcomes for patients
3. **Cost-effectiveness**: annual benefit of $159,000 at current referral levels
4. **Feasibility**: harnessing the existing best telehealth practice by optometry

To better support telehealth for eye care in WA, this report recommends the addition of an item number on the Medicare Benefit Schedule for optometry telehealth referrals, as well as four other key areas of reform: professional support, regulatory frameworks, coordination and training, and telehealth technology.

Increasing the impact of telehealth for eye care in rural and remote Western Australia

INTRODUCTION

This report looks at the current state of eye health services in rural and remote Western Australia (WA) and how telehealth can be best used to meet the demand for eye care in those areas. It was prepared by a team at the Lions Eye Institute with the input of two ophthalmologists and one optometrist, and was externally peer-reviewed. The analysis is based on publicly available information, an audit of urgent referrals from rural and remote areas to Royal Perth Hospital for eye patients from 2011-2013, and an audit of Lions Outback Vision clinics in 2013/2014.

The report has three sections:

1 **The challenge**: meeting the demand for eye care in rural and remote WA

2 **Telehealth**: potential to meet the challenge

3 **Recommendations**: expanding telehealth to support referrals from optometrists

1. THE CHALLENGE: MEETING THE DEMAND FOR EYE CARE IN RURAL AND REMOTE WA

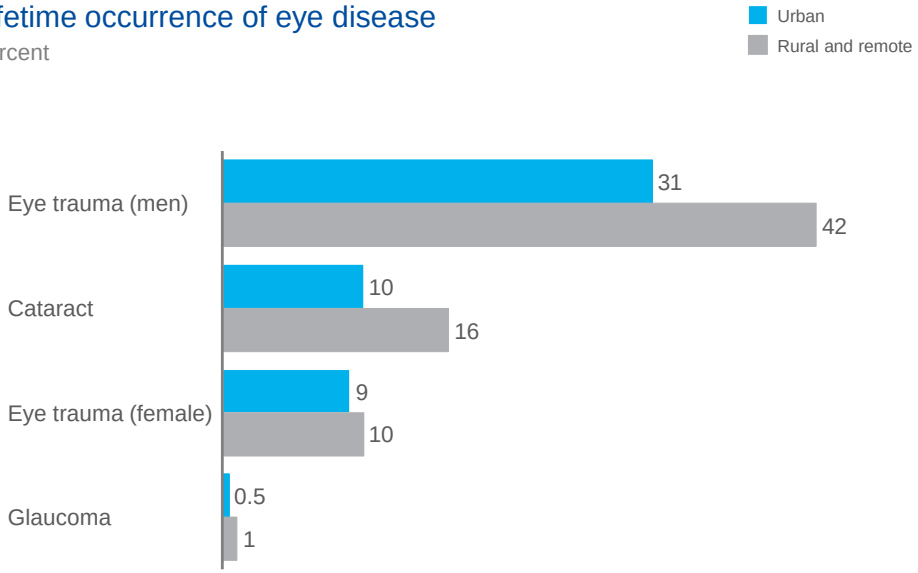
There is a gap in eye health for patients in rural and remote Western Australia (WA) compared to their counterparts in urban Australia. The disparity between the eye health of Indigenous Australians and non-Indigenous Australians has been well documented, particularly in remote Australia.[1] People in rural and remote Australia suffer higher rates of blinding eye disease, much of which is avoidable, including trauma, cataracts and glaucoma, as well as conditions that have gone undiagnosed due to a lack of eye care services[2,3] [EXHIBIT 1].

One of the challenges in addressing this gap is the lack of specialist coverage in rural and remote Australia. In remote WA, eye specialist coverage is up to 19 times lower than in urban Australia[4] [EXHIBIT 2]. Rural residents have been shown to be three times less likely to have seen an ophthalmologist.[5]

EXHIBIT 1

Lifetime occurrence of eye disease

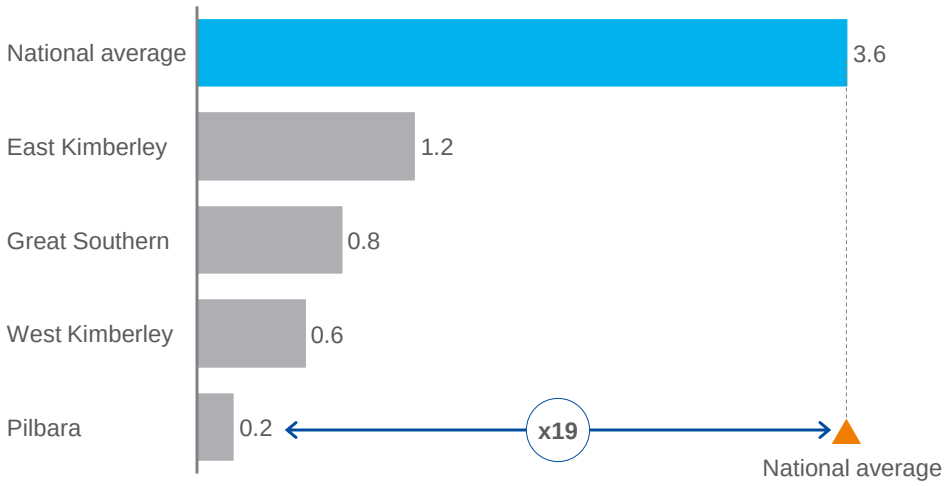
Percent



Source: Livingston PM, Carson CA, Stanislavsky YL, Lee SE, Guest CS, Taylor HR. Methods for a population based study of eye disease: the Melbourne Visual Impairment Project. Ophthalmic Epidemiology, 1994; 1: 139-148

EXHIBIT 2

Ophthalmologists per 100 000 population



Source: Turner and Mullholland 2009, ABS data, team analysis

In order to address the disparity in eye specialist numbers, patient demand for eye care in rural and remote areas is dealt with in one of two ways: through the Patient Assisted Transfer Scheme or through Outreach Services.

1.1 Patient Assisted Transfer Scheme (PATS)

Under this scheme, eligible rural and remote patients who require specialist medical services in Perth or regional centres are provided with a State-funded subsidy towards the cost of travel and accommodation for themselves and their approved escort(s). These 'PATS trips' typically occur for patients who have acute conditions and cannot wait for an outreach visit, or for patients who live in an area where there is no outreach coverage. In WA, an estimated 2,721 eye patients completed a total of 4,800 trips from rural and remote WA to urban ophthalmologists in 2013.[i] The PATS provides an essential service but at a significant cost: primary patient trips to eye specialists are currently estimated to cost $1.02 million each year, with follow up trips costing an additional $0.78 million. In order to travel to Perth, many patients take time off work, adding to the economic burden for society. The average PATS trip from the Kimberley costs over $810 and can also incur significant disruption for the patient and their family.

1.2 Outreach Services

Outreach services, including the Lions Outback Vision program,[6] visit regional areas to provide consultations and perform surgery, eliminating the need for some patients to travel to an urban centre. Lions Outback Vision performs an estimated 3,235 specialist eye consultations each year in its outreach program. Demand for these services is high, with up to 50 consultations performed each day. The outreach service is more expensive than treatment in an urban setting, costing an estimated $1.45 million for 23 weeks of services.[ii] The outreach specific on-costs for consultations (excluding surgical costs) are estimated to be approximately $0.64 million per year.[iii] The timing of outreach services means that patients typically face wait times of between two and six months between outreach visits. In addition, demand for outreach surgery exceeds service capacity, since there are insufficient eye specialists to visit frequently enough to meet the surgical backlog.

[i] Wheatbelt not included due to proximity to Perth; inclusion increases primary trips to 3,433 and total trips to 6,321. Numbers for Goldfields, Gascoyne and Southwest were extrapolated from PATS data available for the Midwest, Great Southern, Kimberley, and Pilbara.

[ii] 23 weeks of outreach services are provided by Lions Outback Vision per year, at an average cost of $63,095 per week, inclusive of surgical and salary costs.

[iii] This excludes costs that would also be incurred by an urban ophthalmologist (e.g. nursing support). It also excludes surgical costs. On-costs per patient consultation were calculated to be $196.46, with 3235 consultations.

2. TELEHEALTH: POTENTIAL TO MEET THE CHALLENGE

One strategy to improve access to specialist eye care for rural and remote Australians is to better support the use of telehealth. This section will cover:

2.1 How telehealth for eye care operates

2.2 Benefits of telehealth for eye patients in rural and remote WA

2.3 Telehealth today and barriers to its uptake

2.1 How telehealth for eye care operates

Telehealth for eye patients involves a real-time video consultation between the patient and an ophthalmologist, on the referral of a healthcare provider. Consultations are typically carried out using videoconferencing equipment, consisting of computers or tablet devices, with broadband connections and built-in or attached audio-video devices. A telehealth appointment is made in advance by the referring provider, clerical staff, or in the case of a referring hospital, by a designated telehealth coordinator. Consultations typically last from 10 to 20 minutes in duration and, much like face-to-face consultations, involve introductions and a discussion between the ophthalmologist and patient. These are augmented by images of the eye and the results of diagnostic tests sent by the referring provider to aid the ophthalmologist in making clinical decisions. A diagnosis and management plan is made and follow-up is jointly arranged for a suitable time [EXHIBIT 3].

EXHIBIT 3

Mr Fintan is a 45 year old male truck driver in Karratha who visited the optometrist for a pair of reading glasses

- Due to a family history of glaucoma, a routine eye pressure test was performed. The test showed a raised measurement.
- A visual field test also demonstrated optic nerve damage in keeping with glaucoma

- The next ophthalmologist outreach visit to the region was not scheduled for over two months

- A telehealth consultation was held on the same day and the ophthalmologist prescribed medication to lower the eye pressure.
- Follow-up will include the next outreach visit and subsequent telehealth consultations

2.2 Benefits of telehealth for eye patients in regional WA

Telehealth for eye care has demonstrated significant benefits in countries such as the United Kingdom and Canada, including reduced outpatient appointments, non-attendance rates, and wait times.[7,8] As detailed below, the expansion of telehealth services for eye care in WA could confer similar key benefits:

2.2.1 Access: improving equitable access to specialist eye services

2.2.2 Quality: supporting best practice and better outcomes for patients

2.2.3 Cost-effectiveness: reducing PATS visits to urban ophthalmologists

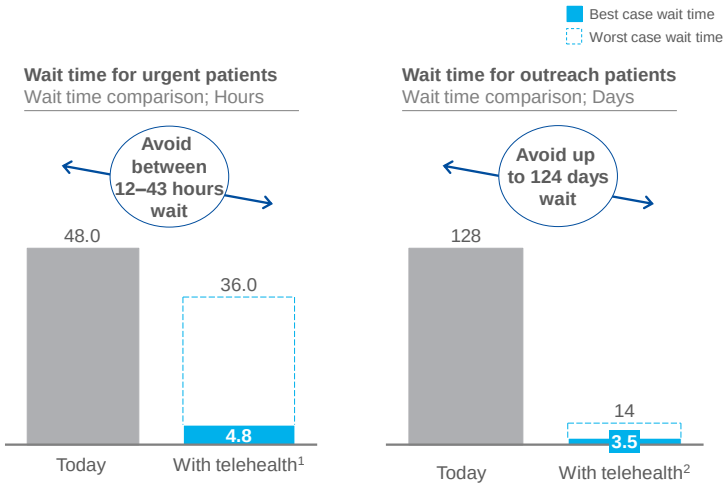
2.2.4 Productivity: optimising the output of outreach service visits

2.2.1 Access: improving equitable access to specialist eye services

Telehealth has proven well suited to providing services to rural, remote and Aboriginal populations.[8] Without telehealth, the combination of long distances, short duration of outreach trips, and the need for a referral can prevent access altogether for some eye patients to a specialist. On the other hand, rural residents are twice more likely to see an optometrist than urban residents.[5] This highlights optometry practices as a natural location from which to initiate telehealth consults for eye care, and improve access to urban ophthalmologists.

Another advantage of telehealth is to improve the timeliness of access to eye care. Telehealth has been shown to reduce the time required for the first consultation to between 4.8 and 35 hours, avoiding a wait of between 12 and 43 hours. For non-urgent patients, the saving is even greater, with wait times reduced to between 3.5 to 14 days, avoiding up to 124 days of wait time [EXHIBIT 4].

EXHIBIT 4



1 Reduction in wait times from 2 days to 0.2 days observed in 50% of GP-led telehealth consultations for acute conditions in Canada
2 In a 2011 study, the longest wait time for a telehealth ophthalmologist consultation was 14 days (4% of patients). 68% of patients had a same day appointment and 28% had a next day appointment
Source: Healthcare in Canada in 2012, A Focus on Wait times; Gartner Inc, Telehealth Benefits and Adoption: Connecting People and Providers across Canada, 2011; Kelly et al, Teleophthalmology with optical coherence tomography imaging in community optometry, 2011

2.2.2 Quality: supporting best practice and better outcomes for patients

Telehealth has been demonstrated to improve patient outcomes both through improved diagnosis and through better treatment and follow-up care. Having access to highly specialized expertise allows for conditions to be diagnosed accurately, treatment to be delivered in a timely way and appropriate follow-up to be made to ensure successful recovery and rehabilitation.[8]

For many eye patients, reducing wait times can also lead to improved outcomes. Some ocular problems present acutely and the prognosis improves with early diagnosis and treatment; others such as glaucoma, are insidious or 'silent' diseases, which can blind patients over a longer period of time. The majority of this morbidity is avoidable if treated early enough.[2] Additionally, minimising wait times also results in higher overall patient satisfaction.[9]

2.2.3 Cost-effectiveness: reducing PATS visits to urban ophthalmologists and cost to serve outreach patients

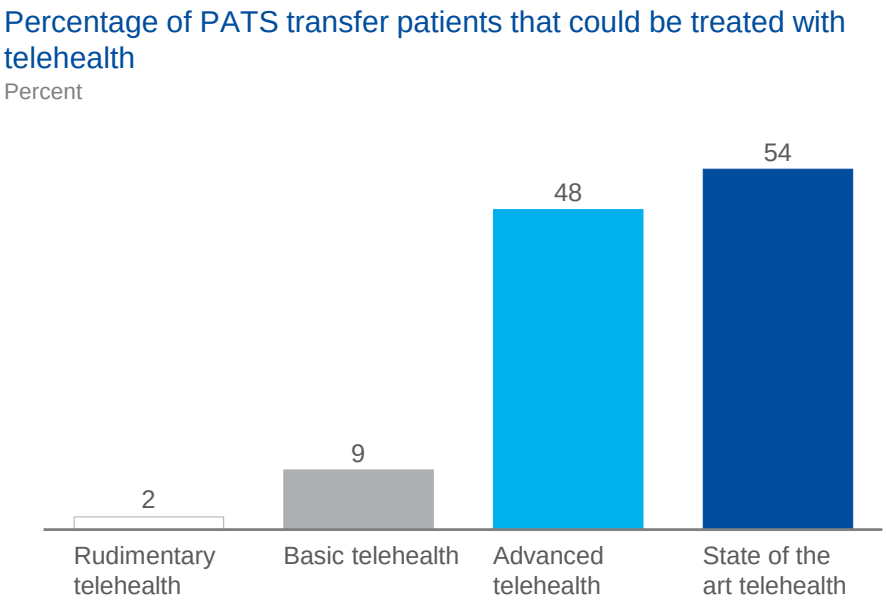
Telehealth for eye care could reduce the number of PATS visits to Perth for patients from rural or remote areas through enabling local treatment from their optometrist or hospital doctor together with telehealth advice from an ophthalmologist. In more urgent cases requiring prompt transfer to Perth, a telehealth consultation could help with coordinating the transfer logistics and initiating emergency eye treatment for the patient.

In order to determine the extent to which telehealth could reduce patient visits to Perth, the Lions Eye Institute conducted an audit of all urgent eye referrals made to Royal Perth Hospital from rural and remote areas between 2011-13 (n=272). Two ophthalmologists and an optometrist jointly reviewed clinical notes to determine whether the patients' conditions could have been managed locally through telehealth alone. The level of telehealth sophistication required for local management was categorised as follows:

a. Rudimentary: only teleconferencing equipment
b. Basic: (a) plus slit lamp, tonometer and anterior segment camera
c. Advanced: (b) plus retinal camera and visual field machine
d. State of the art: (c) plus an ocular coherence tomography (OCT) machine

This audit showed that if the referrer had state of the art equipment, up to 54% of patients could have been managed locally via telehealth, rather than travelling to Perth [EXHIBIT 5]. The PATS sub-analysis showed that, with the existing levels of telehealth technology available in WA, effective utilisation could reduce the number of patients transferred by 709 per year, or 15% of all PATS visits for eye patients [EXHIBIT 6].

EXHIBIT 5



Source: Audit of Royal Perth Hospital urgent transfers 2012-3

Under existing conditions and as a conservative estimate, telehealth for eye care could save approximately $270,000 each year in avoided PATS costs[i].

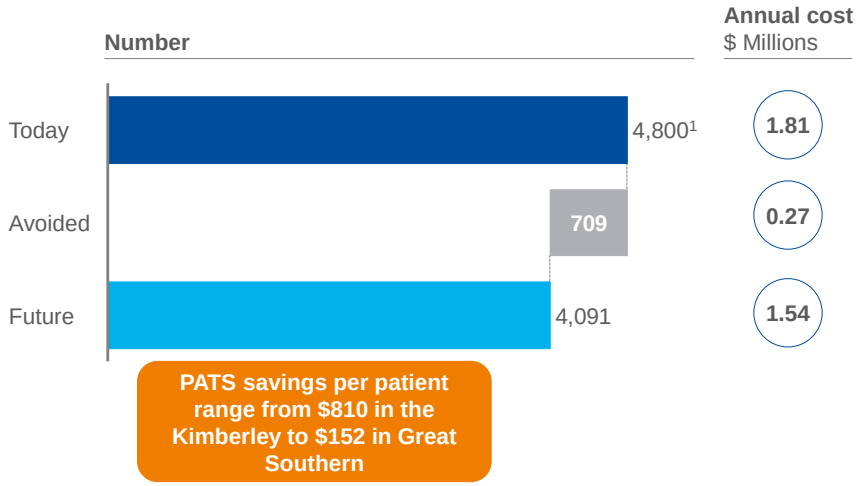
In addition, a proportion of face-to-face outreach visit consultations can be more cost-effectively managed by telehealth. In March 2014, an audit of a one-week outreach visit to the Pilbara region showed that an estimated 66% of face-to-face consultations could have been performed through telehealth, without compromising patient care [EXHIBIT 7]. This would translate in up to 787 outreach clinic patients per year being managed remotely by telehealth in WA, saving $83 per patient in on-costs net of telehealth costs.[ii]

[i] Average PATS visit in WA from any region costed at $376 from available PATS data, inclusive of an assumed administrative cost of $50 per patient.

[ii] Based on Lions Outback Vision data. See 3.1.3.

EXHIBIT 6

Potential transfers to ophthalmologists avoided through use of telehealth



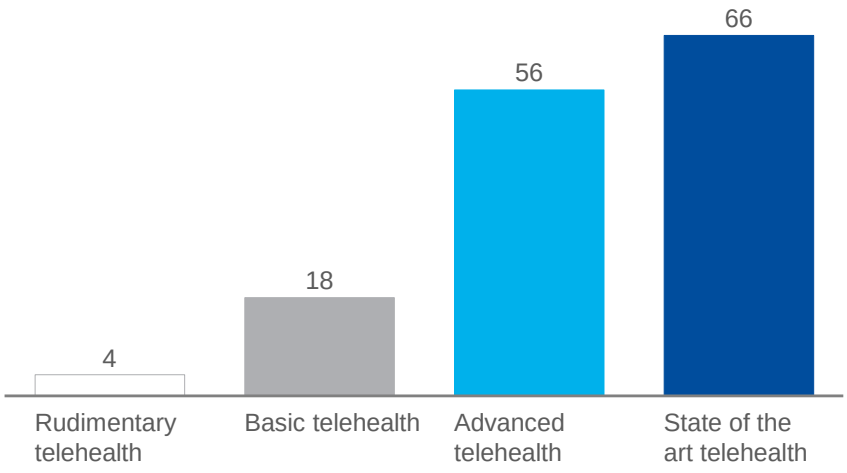
1 Does not include Wheatbelt PATS transfers due to proximity to Perth. Numbers for Goldfields Esperance, Gascoyne and Southwest were extrapolated based on population from PATS data available for Midwest, Great Southern, Kimberley, and Pilbara

Source: WA Country Health Service PATS Office data; Audit of Royal Perth Hospital urgent transfers 2012–3

EXHIBIT 7

Percentage of outreach patients that could be treated with telehealth

Percent



Source: Audit of Outback Vision outreach service 2014

2.2.4 Productivity: optimising the output of outreach service visits

By diverting a proportion of patients into a telehealth pathway, extra time would be made available to perform more eye surgery on outreach visits. A typical five-day outreach visit has two days and one ophthalmologist dedicated to performing eye surgery, with the other three days dedicated to outpatient clinic. Better utilisation of telehealth could augment this clinical-surgical balance so that, for example, three days could be spent operating instead.

Over time, this increased surgical capacity would help with clearing the surgical backlog in country areas, reduce surgical waiting times, reduce the number of 'cataract blind' patients, and reduce the number of patients travelling to Perth for more expeditious surgery.

2.3 Telehealth today and barriers to its uptake

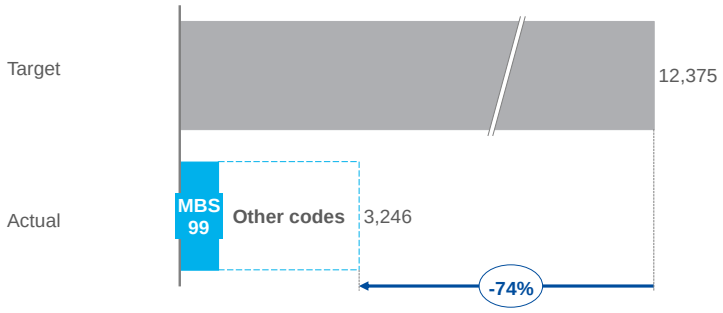
Despite significant upfront and ongoing incentives, uptake of telehealth between GPs and specialists in WA has been low. In 2011, an upfront incentive payment of up to $6,000, since ceased, was made available to GPs to encourage telehealth. The Medicare Benefits Schedule (MBS) also includes a range of items for specialist consultation via video conferencing for patients located in rural or remote areas.

In 2011, the Commonwealth Government set a target of 495,000 telehealth consultations with specialists over four years, or 123,750 consultations per year. Proportionate to population, WA should account for 10% of that target, or 12,375 telehealth consultations per year. In fact, the actual number of number of GP-led telehealth consultations with specialists in WA has been 74% below target, or 3,246 per year. Of these, 700 per year have been MBS 99 codes (used by ophthalmologists to bill telehealth consultations) which are not itemised separately on the MBS database due to the insignificant proportion of billing they have generated [EXHIBIT 8].

EXHIBIT 8

Number of GP-led specialist telehealth consultations in WA

Specialist telehealth consulations/year



1 Includes MBS codes 2100, 2122, 2125, 2126, 2137, 2138, 2143, 2147, 2179, 2195, 2199 and 2220.
2 Based on Australia target of 495,000 specialist consultations over 4 years, assumed to be 123,750 per annum Australia-wide and 12,375 or 10% of total per annum for WA based on relative population
3 Includes specialist MBS codes 99, 112, 113, 114, 149, 288, 384, 389, 2799, 2820, 3003, 3015, 6004 and 6016

Source: Medicare item reports, Medicare benefits schedule, Australian Government Department of Broadband, Communications and the Digital Economy

There are four potential reasons for the low uptake of GP-led telehealth, identified from the results of a Department of Health and Aging survey assessing the readiness of GPs to utilise electronic health:[10]

- Lack of clinical appropriateness: 56% of GPs deemed less than 5% of their caseload acceptable for telehealth consultation.
- Technology: 58% of surveyed GPs agreed or strongly agreed that malfunction or downtime is a major barrier to the adoption of eHealth solutions in general.
- Lack of administrative support: an average full-time GP already spends at least five hours per week on administrative tasks.
- Legal and regulatory: GPs were concerned that the quality of consultations, including privacy and informed consent, could be compromised, increasing the risk of medical liability.

Despite significant Commonwealth investment, the GP-led utilisation of telehealth has not met its potential, particularly in the area of eye care. This presents the opportunity for a more feasible, cost-effective model of telehealth, with optometrists and regional hospitals acting as more prominent drivers of service.

3. RECOMMENDATIONS: EXPANDING TELEHEALTH TO INCLUDE REFERRALS FROM OPTOMETRY

The impact of telehealth in eye care could be dramatically increased by expanding telehealth beyond GPs to formally support optometrists for referral and co-management, and support use by regional hospitals.

This section has two parts:

3.1 Rationale: The reasons to expand telehealth to include optometry and support use by regional hospitals

3.2 Implementation: action needed to enact these proposals

3.1 Rationale: The reasons to expand telehealth to include optometry and support use by regional hospitals

There are four main reasons why telehealth for eye care should be expanded to include optometrists and support use by regional hospitals.

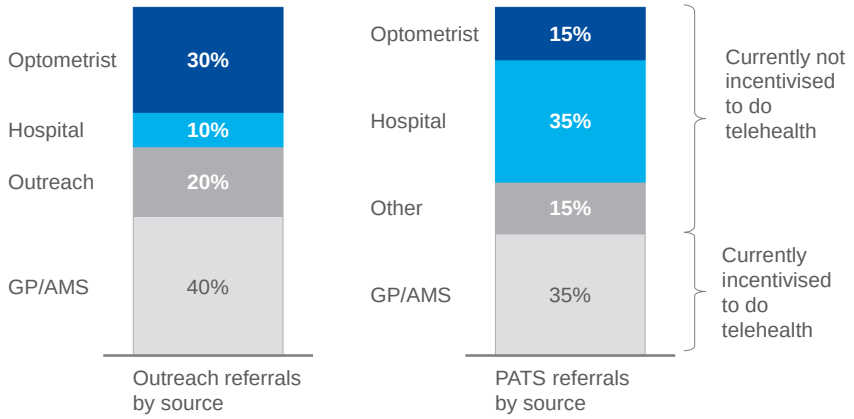
3.1.1: Access: extending equitable access to more patients

At present, 35% of PATS referrals and 40% of outreach clinic referrals originate from GPs and Aboriginal Medical Services (AMS). Through MBS coding, these providers are financially supported for using telehealth but, as previously noted, seldom do so.

Meanwhile, 50% of PATS and 40% of outreach clinic referrals originate from optometrists and hospitals, who receive no financial support for telehealth, despite utilising it more frequently. Supporting their use of telehealth would expand the population of patients with access to specialist eye care, with the consequent benefits of reduced wait times outlined in section 2.2.1 [EXHIBIT 9].

EXHIBIT 9

Percentage of referrals to ophthalmologists by referral source



Source: PATS transfer referrals - Audit of Royal Perth Hospital urgent transfers 2012-3; Outreach referrals - Audit of Outback Vision outreach service 2014

3.1.2: Quality: supporting best practice and better outcomes for patients

Optometry already works synergistically with ophthalmology to provide the best possible eye care. By professional mandate as primary eye care providers, optometrists are trained in co-managing chronic ocular diseases such as glaucoma and diabetic retinopathy. Optometry practice is also well-suited to frequent testing and thorough monitoring, resulting in better patient education and immediate reinforcement.[11]

Many optometrists have therapeutic prescribing rights for eye medications, allowing them to manage an episode of care on-site, with appropriate telehealth support. Optometrists share the same leading practice guidelines for many ocular conditions as ophthalmologists, conferring a natural advantage for best practice. Additionally, telehealth has been shown to improve coordination between ophthalmology and optometry, which has been identified as a major priority in Australian eye care.[12]

3.1.3: Cost effectiveness: existing technology and net financial benefit

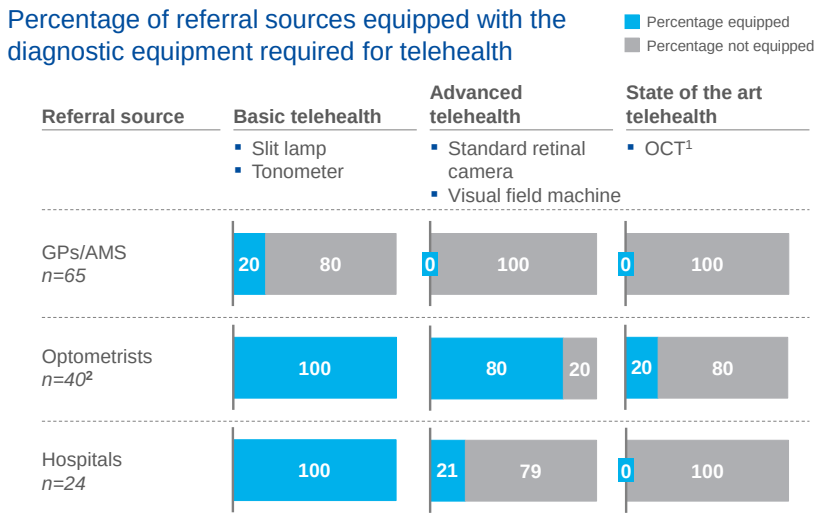
Most optometrists and hospitals in rural and remote WA already have much of the diagnostic equipment required for basic telehealth, and the majority of optometrists possess that required for advanced telehealth. This means that only limited capital expenditure is required in order to support basic telehealth referrals from these providers. In contrast, few GPs possess basic telehealth equipment, and none possess that required for advanced or state of the art telehealth [EXHIBIT 10].

Optometrists and regional hospital staff are also more skilled at using this equipment. Optometrists are at a distinct advantage since, like ophthalmologists, the operation of eye-specific technology is an integral part of their practice. Regional hospital staff are

well placed to acquire these skills, since many are visited regularly by outreach ophthalmologists, who provide them with on-the-job training for eye-specific equipment.

In comparison, most GPs are not visited by ophthalmologists or diagnostic technicians, and would need allocated time for intensive training in the use of equipment that, in most cases, is not present in their practices.

EXHIBIT 10



1 The 2 OCTs currently on loan to hospitals in WA from the Lions Eye Institute have not been included.
2 Does not include VOS
Source: State-wide audit of GP, AMS, optometrist and hospital practices in all regions of WA outside Perth metropolitan area

The upfront capital cost for equipping rural optometrists and regional hospitals in WA with any telehealth technology which they are missing is $84,000, comprising:

- Anterior segment cameras for each hospital at a cost of $1,500 per hospital;
- Videoconferencing and computer equipment for optometrists at a cost of $1,200 per practice. It has been conservatively assumed that no optometrist practice currently owns this equipment.

Extending telehealth support to these providers will deliver a net financial benefit to the health system of $159,000 annually, calculated on the basis of:

- 635 PATS visits to Perth avoided at an average saving of $261 per patient ($376 net of additional telehealth costs);
- 715 additional outreach consultations conducted via telehealth, at an average saving of $83 per patient (net of additional telehealth costs) [EXHIBIT 11].

The savings per patient are net of costs, which include:

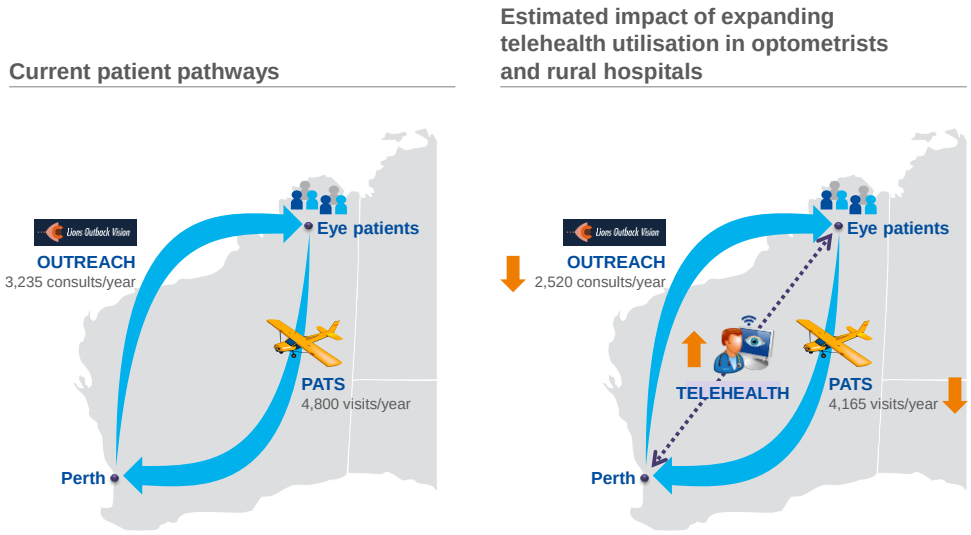
- Cost to the referrer, based on hourly salary, for a 30-minute telehealth consult;

- The specialist's fee (MBS 99) for a telehealth consult;
- Further costs for telehealth consultations that do not avoid a PATS transfer or an outreach clinic consultation.

Based on these estimates, it would take the health system six months to recoup the initial capital expenditure from this net financial benefit, beyond which the improved telehealth network for eyes would consistently deliver savings.

EXHIBIT 11

Impact of telehealth on patient pathways



Source: Includes only impact from expansion of telehealth in optometrists and rural hospitals (does not include impact of GP referrals)

3.1.4 Feasibility: harnessing existing telehealth practice by optometry

There is evidence that non-incentivised optometrists and regional hospitals already use telehealth for eye care more frequently than GPs. In an audit of 100 telehealth consultations between rural and remote WA patients and a Perth-based ophthalmologist, 59% were led by optometrists and 38% by hospital doctors.[13] Significantly, despite the MBS financial incentive scheme, GPs only conducted 3% of the telehealth consultations.

Optometrists also show a desire to utilise telehealth services more frequently in the future. In a survey conducted by the Lions Eye Institute of rural and remote optometrists[i], 90% stated that, were services available, they would use telehealth regularly, 75% were confident that it would be clinically effective, and only one respondent raised legal or regulatory issues as a barrier to adoption.

[i] Survey of rural and remote optometrists conducted by the Lions Eye Institute in 2014 (n=20)

3.2 Implementation: what is required to enact these proposals

To implement optometrist and hospital-led telehealth, five areas need to be addressed: funding, support from professional bodies, coordination and training, regulatory framework and telehealth technology.

3.2.1 Funding

An ongoing reimbursement mechanism is vital for the sustainability of telehealth services. This could be facilitated by the Commonwealth Government changing the MBS schedule to include telehealth referrals from optometrists to ophthalmologists. In order to incentivise optometrists to purchase telehealth equipment, an upfront 'on-board' incentive could be considered by the Commonwealth or WA State Governments. For regional hospitals, the Government health departments should consider providing grants to purchase appropriate anterior camera attachments to existing slit lamps.

3.2.2 Support from professional bodies

In order to facilitate awareness of telehealth led by optometrists and hospitals, support from professional bodies is required. The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) and Optometrists Association Australia (OAA) should consider co-facilitating a group of interested ophthalmologists to participate in an optometrist and hospital-led telehealth pilot. Specific guidelines for the use of telehealth by optometrists will also be required. The OAA in collaboration with the RANZCO should consider drafting and promoting these guidelines.

3.2.3 Coordination and training

As has been observed in general telehealth, centralised coordination will be required to act as the link between patients, referring practitioners and specialists. The WA State Government should consider supporting a state-wide telehealth coordinator for eye care. This role should include training for practitioners on how to use telehealth, apprising them of guidelines, and providing technical support where necessary.

3.2.4 Regulatory framework

Regulations that provide for practitioner indemnity will be required to facilitate the uptake of telehealth. Professional indemnity organisations will need to acknowledge changes in scope of practice to reflect those which exist for GP-led telehealth. In addition, privacy provisions should be extended to cover the transfer of patient information by optometrists and hospital practitioners. The OAA and the RANZCO should consider developing guidelines for telehealth modelled on GP equivalent parameters.

3.2.5 Telehealth technology

Optometrists and hospitals will require some upfront investment in equipment required for telehealth. If incentive payments are in place, optometrists could purchase telehealth equipment themselves. To ensure functionality, a telehealth coordinator could assist with suitable technology and an appropriate broadband internet connection.

□ □ □

CONCLUSION

With its vast geography and diverse communities, coupled with access to technology and broadband internet, Western Australia is uniquely placed to develop a world-leading telehealth network for eye care. Doing so will improve access and quality of care for rural and remote patients, at a cost saving to the health system. Optometrists and regional hospitals are better resourced, more skilled and already demonstrate higher utilisation of telehealth than GPs. Building on their existing practice appears to be the most feasible way to advance telehealth for eye care in WA.

Based on these analyses, we recommend MBS changes to include optometry in telehealth rebates, as well as a designated coordinator to ensure the logistical and technical success of telehealth consultations for eye patients.

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Telehealth at Jigalong Clinic, June 2014. Photo courtesy of Alan McDonald

Front cover: Sunrise in Karijini National Park. Weekend in between Gascoyne and Pilbara outreach visits, June 2014
Photograph courtesy of Alan McDonald

Back cover: Twilight in Karinjini National Park. Weekend after Pilbara outreach visit, June 2013
Photograph courtesy of Dr Angus Turner