Eye Care for Indigenous Australians

6th Rural & Remote Health Symposium
Canberra, 11th April 2018

Hugh R Taylor AC
Harold Mitchell Chair of Indigenous Eye Health
Melbourne School of Population and Global Health
Disclosure Statement of Financial Interest

I, Hugh Taylor DO NOT have a financial interest/arrangement or affiliation with one or more organisations which could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.
Established in 2008

With 14 staff


Our goal…

to Close the Gap for Vision for Indigenous Australians
National Indigenous Eye Health Survey, 2008

30 randomly selected sites
5-15yr old and 40yr and older
2883 people examined (79%)
Vision Loss in Children
One fifth as common as in mainstream

Vision Loss in Adults
Blindness is 6 times more common
Low Vision is nearly 3 times more common

Causes of Blindness in Adults
32% Cataract
14% Refractive Error, and Optic Atrophy
9% Trachoma and Diabetic Eye Disease

Overall 94% of Vision Impairment is avoidable
…and 35% have never had an eye exam
We know the main causes of vision loss and we know what to do…

Cataract provide access to surgery

Diabetes eye exams and laser treatment

Refractive Error provide the right glasses

Trachoma eliminate with SAFE Strategy

It is not rocket science
Most of it can be fixed overnight!

With glasses
you see right away

After cataract surgery
you see the next day
Vision loss causes 11% of the health Gap and will double in 20 years

- No coherent plans
- Incomplete programs
- Status quo

2010
15,000

- Commitment and leadership
- Roadmap fully implemented
- Coherent, sustainable

2030
30,000

2,000
Trachoma

- Is an ancient blinding disease
- Occurs with crowding and poor hygiene
- Clean faces is key
Trachoma

Is an ancient blinding disease
Occurs with crowding and poor hygiene
Clean faces are key
Infection is spread from eye to eye by infected secretions
Repeated episodes of reinfection occur
150-200 infections needed to cause blindness
In children occur 2 to 3 times per month!
Follicles

Inflammation

Scarring

Trichiasis

AO 2014
Global Distribution of Trachoma – 2017
185 million people at risk
The SAFE Strategy for Trachoma

- Surgery for the in-turned lashes
- Antibiotic treatment to reduce infection
- Facial Cleanliness to stop transmission
- Environmental improvement to help hygiene

- Health promotion material developed with extensive community involvement
“A” Antibiotic distribution, but it is not enough

- Azithromycin is given once a year
- But only eliminates about 95% of infection
Houses usually start with good facilities…

…but they are not properly maintained
“Clean Faces, Safe Bathrooms”

“Every child with a dirty face is a health hazard!”

Transmission is stopped by keeping every face clean
Health Promotion Activities

- Trachoma Story Kits
- Songs and videos online and DVDs
- Link with other hygiene programs
- Activities in schools, preschools and football
- Safety mirrors and hygiene packs
- Children’s TV shows, TV and radio CSAs
- Community Roadshows
Community Events
Education, Housing and Environmental Health

- Safe and functional “bathrooms”
- Emphasis on “clean faces” in
  - Schools
  - Preschools
  - Childcare
Trachoma has reduced but has plateaued. More work urgently required on hygiene.

<table>
<thead>
<tr>
<th>Progress Indicators</th>
<th>2008</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of hotspots (&gt;20%)</td>
<td>54</td>
<td>16</td>
</tr>
<tr>
<td>Number of communities without trachoma</td>
<td>27</td>
<td>75</td>
</tr>
</tbody>
</table>

“Clean Faces, Safe Bathrooms”
The Unmet Need for eye care in Fitzroy is...

...the same as in Fitzroy Crossing!
The Patient Journey is like a Leaky Pipe and there are multiple leaks

If you only fix 1 or 2 leaks it is still leaky
You have to fix each leak

- 42 recommendations
  - 9 domains
- Multi-layered
  - National oversight
  - Statewide support
  - Regional implementation
Steps for Regional Implementation

1. Define region, population and identify regional hub for cataract surgery
2. Establish regional collaboration network
3. Population-based needs and gap analysis for service requirements
4. Develop regional directory and referral protocols
5. Identify co-ordination and case-management staff roles
6. Establish regional data collection and monitoring system
7. Ensure regional accountability and oversight
## Delivery and Co-ordination of Eye Care Services for 10,000 people

<table>
<thead>
<tr>
<th>Optometry</th>
<th>Full Time Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number requiring glasses exam</td>
<td>640</td>
</tr>
<tr>
<td>Number requiring diabetic exam</td>
<td>962</td>
</tr>
<tr>
<td>Number for other eye exams</td>
<td>98</td>
</tr>
<tr>
<td><strong>Total Optometry exams</strong></td>
<td><strong>1,700</strong></td>
</tr>
<tr>
<td><strong>Ophthalmology</strong></td>
<td><strong>0.3</strong></td>
</tr>
<tr>
<td>Number requiring diabetic laser</td>
<td>112</td>
</tr>
<tr>
<td>Number of Cataract surgeries</td>
<td>95</td>
</tr>
<tr>
<td>Number of trichiasis surgeries*</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total Ophthalmology referrals</strong></td>
<td><strong>243</strong></td>
</tr>
<tr>
<td><strong>Co-ordination</strong></td>
<td><strong>8.3</strong></td>
</tr>
<tr>
<td>Patient liaison (appointments etc.)</td>
<td>3.7</td>
</tr>
<tr>
<td>Patient transport</td>
<td>1.8</td>
</tr>
<tr>
<td>Organising eye clinics</td>
<td>1.3</td>
</tr>
<tr>
<td>Organising hospital</td>
<td>0.1</td>
</tr>
<tr>
<td>Eye clinic support (excludes surgery)</td>
<td>1.5</td>
</tr>
</tbody>
</table>
Development of Eye Care Pathways

- Focus on eye care for those with diabetes
- 72% of those who need an annual eye exam are those with diabetes
  - Many will need referral for diabetic retinopathy
  - But others need cataract surgery or glasses
  - So build referral pathways for all to use
  - New MBS for retinal photography
- Health promotion crucial
The Importance of Eye Care

Community
- Those needing eye exam each year
- Those with Diabetes 76%

Consultation Ophthalmologist
- Cataract 26%
- Diabetic Retinopathy 21%
- Refractive Error 44%
- Trichiasis 3%
- Refractive Error 49%
- Glasses prescribed
- Refer requires treatment

Eye Examination Optometrist/Ophthalmologist
- Review in 12 months
- Camera/Visual Acuity
- Referral
  - Eye Examination
  - Optometrist/Ophthalmologist
  - Review in annual health check
  - Glasses prescribed
  - Cataract surgery
  - Trichiasis surgery
  - Laser treatment

Hospital
Resource Development
Iterative, engaging, community-driven approach

“I don’t wanna be milliago”

“I didn’t listen, I never realised that diabetes can affect your eyes”
‘Check Today, See Tomorrow’ Resource Kit supports the key diabetes eye care messages for the community and clinic staff.
Overview

This module aims to provide health professionals working in Indigenous* communities with an overview of the eye care for people with diabetes and will draw on findings from the Roadmap to Close the Gap for Vision. Care treatment such as laser therapy, when used in a timely fashion, is effective in preventing severe vision loss in cases, however it will not restore lost sight. During an eye examination of people with diabetes, other causes of be detected, particularly refractive error and cataract. The management of these conditions are also presented prevention of blindness and vision loss from diabetic retinopathy is early detection through regular examination.

*For the purposes of this module ‘Indigenous’ refers to all Aboriginal and Torres Strait Islander peoples and a diversity of language and culture.

Learning Outcomes

www.iehu.unimelb.edu.au
We are making good progress
Progress in all 42 recommendations
16 have been fully implemented

November 2017 www.iehu.unimelb.edu.au
Roadmap Progress

Roadmap implementation started in all jurisdictions with eye health groups commenced in 6 of 8 jurisdictions.

Activity in 37 regions covering 60% of the Indigenous population

Regional Progress
- Ongoing Activities
- Commencing Activities
- No Known Activity
Actually, we are making really good progress

- The rate of blindness in Indigenous Australians has gone from 6x (2008) to 3x (2016) the rate seen in non-Indigenous Australians.
What is Needed Now

- Fundholders to have adequate resources and fully utilise Outreach funds to meet population-based needs
- ITC to be fully funded and utilised to meet population-based needs
- Regional stakeholder co-ordination groups to be established and maintained
- Nationally consistent subsidised spectacles
- Interdepartmental cooperation for safe and functional washing facilities.
Key Lessons

- Population-based need assessment
- Monitor and report
  - not counted, not done
  - not measured, can’t be managed
- Strategic framework for rural health and reassess
- Service access
Summary

• Fixing Indigenous eye health;
  – is clearly feasible
  – is evidence based
  – is cost effective

• Focussing regional coordination
  and diabetic eye care are key

• There is still work to do,
  but we are well on the way
  to Close the Gap for Vision by 2020