

eyeConnect

Bringing the Eye and Ear to You

Improving quality of life through caring for the senses

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Content

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- eyeConnect telemedicine device
- eyeConnect rollout
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- Outcomes – the story so far
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Background

Location: Victoria, Australia

Only eye and ENT speciality hospital in Australia

Busy Emergency Department

- 2016-2017:
 - >40,000 presentations
 - 27,436 'eye' problems
 - 7% from regional & rural areas



eyeConnect

- An asynchronous telemedicine device that collects information about a patient's eye condition and sends it to the Eye and Ear Emergency Department for review
- Aim:
 - Support rural and regional areas that lack ophthalmology services
 - Reduce unnecessary patient presentations at the Eye and Ear ED

Asynchronous = 'Store and Forward'
=no clinician to patient contact

Background – Data Review

Corneal Foreign Body
Corneal abrasion
Viral conjunctivitis
Acute & sub-acute iridocyclitis
Posterior vitreous detachment
Blepharitis
Dry eyes
No abnormality detected
Chalazion
Sub-conjunctival haemorrhage
Sub-tarsal foreign body
Allergic conjunctivitis
Non specific post operative problem
Bacterial keratitis
Chemical eye injury
Recurrent erosion syndrome
Contact lens related
Retinal detachment
Cataract
Herpes Simplex - Eye involvement

Top 20
Primary Diagnoses
at Eye and Ear ED
July 2010 – July 2011

Majority are ‘front of
eye’ problems

eyeConnect

- For use by non ophthalmic trained clinicians
- Captures patient information
 - Patient history
 - Visual acuity – 6m Snellen Chart
 - Visual field – Amsler Grid
 - Bright light and slit light photos
 - Fluorescein photos
 - Records IOP using eyePressure tonometer
- Sends securely to Eye and Ear ED
- Not diagnostic – informs the discussion

Patient Suitability

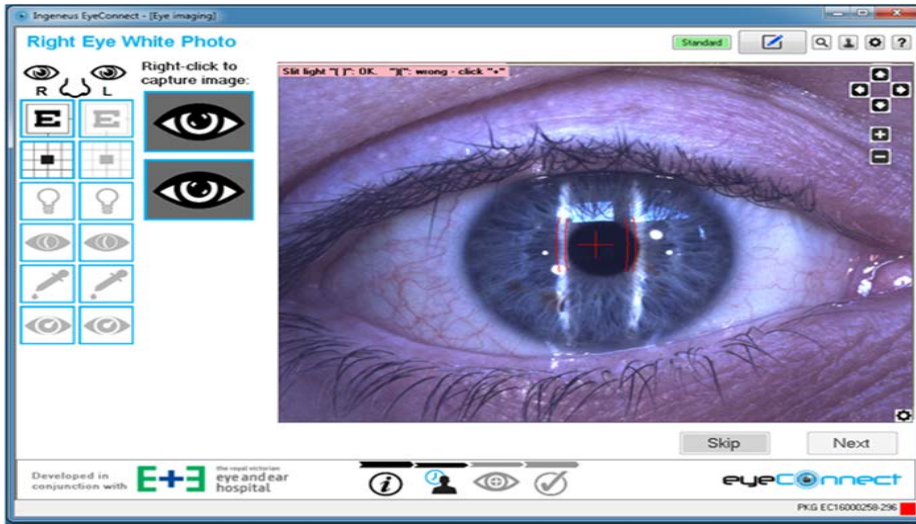
- **Use when:**
 - There is sufficient concern to consider specialist referral/transfer
 - The condition is acute or sub acute
- **Don't use when:**
 - Diagnosis can be made without it
 - There is no value in delay and specialist referral is required
 - Urgent care is delayed e.g. chemical burns
 - The patient refuses

Eye and Ear ED Process



- eyeConnect program flags arrival of new package
- ED Clerk advises AO who determines timeframe for reviewing package (KPI 30')
- ED Clerk advises initiating hospital
- Initiating hospital faxes patient information for ED Clerk to create patient history
- E&E Doctor reviews package via a desktop app, contacts hospital to discuss
- Telehealth Consultation Record completed and copy faxed to initiating hospital.

eyeConnect and eyePressure



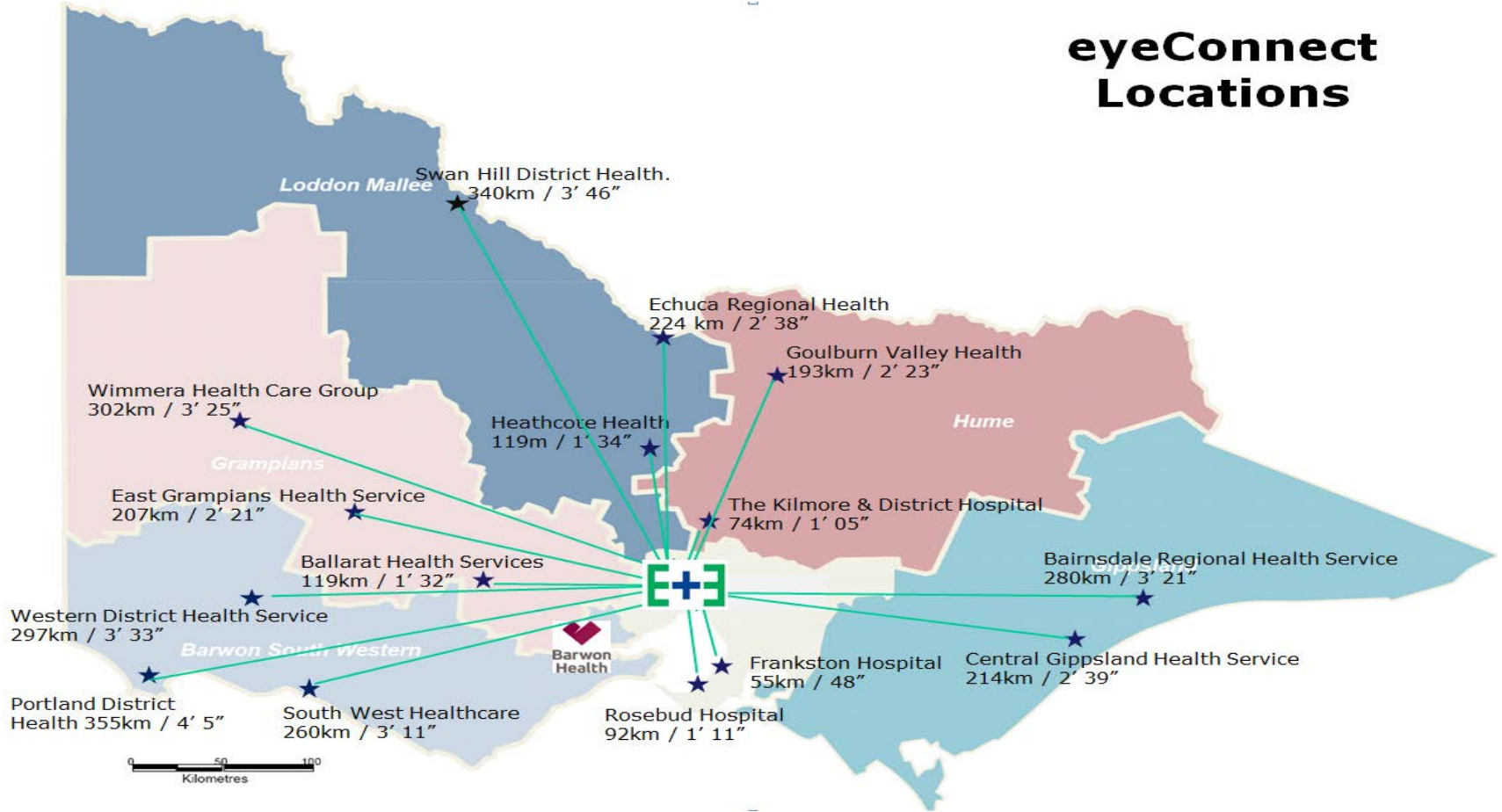
EyeConnect rollout

- First site: Frankston Hospital (Peninsula Health)
- Large, busy, outer metropolitan hospital servicing Mornington Peninsula
- 2015 /2016: 767 eye presentations
- 'Go Live' June 2016
- Refine processes for both Frankston and Eye and Ear

Outcomes – First 50 patients

- 50 presentations over 6 month period
- 42% (21) managed locally
 - 14% (3) presented to Eye and Ear subsequently due to worsening condition
 - 85% (25) of presentations to Eye and Ear required further follow-up
- Quicker and more effective response than traditional phone call
- Patients appreciated avoiding travel

eyeConnect Locations



Getting the Message Out



Regional Response

- Very positive
- Current situation
 - Lack of confidence
 - managing eye presentations
 - using slit lamp, tonometer
 - Very old or no equipment
 - Complex local reasons to not travel to E&E
 - Patients fall through cracks/don't seek follow-up
 - Exploring alternative approaches to use



Sustainability

- Resourcing
 - Current service 0700-2130hrs
 - Ongoing oversight/business as usual
- Funding
 - Currently receiving block funding as an “availability payment”
 - May be difficult to sustain using activity based funding
- Training
 - ‘Train the Trainer’ model ?sustainable

Recent Statistics (5 Oct 2017)

Health Service	Department Type	Presentations	Managed Locally	%Managed Locally
Frankston	ED	88	44	50%
Rosebud	ED	18	16	89%
Swan Hill DH	ED	1	1	100%
Echuca RH	ED	4	4	100%
Heathcote Health	UCC	10	7	70%

Outcomes (to 5th October)

- 8 sites live (progressive implementation)
- 61% of patients managed locally
- Savings:
 - 15,300 kilometres
 - 199.5 hours of travel
 - \$10,098.00 (@66c/km)

Opportunities

- Use of eyeConnect in other areas
 - Currently limited to ED
 - Programmable e.g. Review appointments, Post op, OPD,
- Add on retinal imaging device, refraction device
- Connectivity with GPs (use of eyeCloud)
- Almost every other state in Australia is bigger than Victoria
 - Aboriginal eye health assessment
 - Nursing home – aged person assessment
 - Terrain that is impassable in wet season

Resources

Ingeneus Pty Ltd

Axxess Corporate Park
Unit 131, 45 Gilby Rd
Mount Waverley Victoria Australia 3149
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enquiries@ingeneus.com.au

eyeConnect Video

<https://vimeo.com/173704457>

eyePressure Training Video

<https://vimeo.com/169774844>

eyeConnect information

<http://www.ingeneus.com.au/cms-product/eyeconnect.phps>