Minum Barreng
Indigenous Eye Health Unit

Diabetic Retinopathy Screening The Population Impact

25th July 2016

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Melbourne School of Population Health

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Diabetic Eye Disease

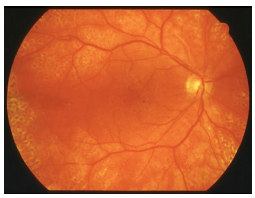
- Diabetes is a huge and growing global problem
- Everyone with diabetes is at risk of developing retinopathy
- Good control is critical but regular screening is important
- Appropriately timed treatment can prevent most blindness
- The demand will continue to increase




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Management of Diabetic Eye Disease

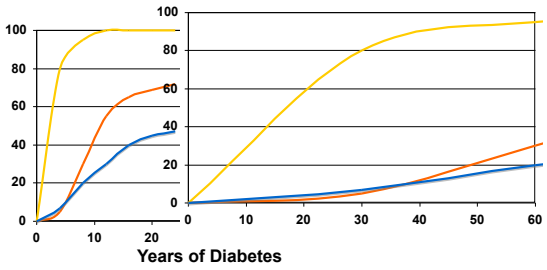
- Treat the person first – Primary Care
  - Control of diabetes, hypertension, lipids
- Screen for eye disease – Primary Care
  - Vision and retinal exam
- Treat the eye
  - Refraction
  - Cataract
  - Glaucoma
- Treat the retinopathy
  - Clinical practice guidelines
  - Thorough treatment
  - Appropriate follow up



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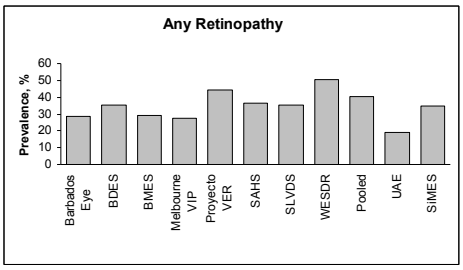
Good Control is Important

It reduces Annual Incidence and lengthens Life, BUT does not necessarily alter Lifetime Risk



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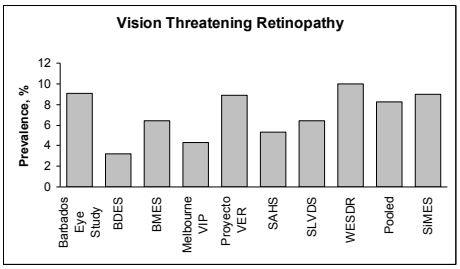
Prevalence of Diabetic Retinopathy ~30%



BDES, Beaver Dam Eye Study; BMES, Blue Mountains Eye Study; VIP, Visual Impairment Project; VER, Vision Evaluation Research; SAHS, San Antonio Heart Study; SLVDS, San Luis Valley Diabetes Study; WESDR, Wisconsin Epidemiologic Study of Diabetic Retinopathy;

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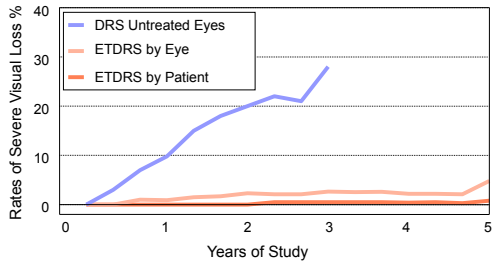
Vision Threatening Retinopathy ~8%



BDES, Beaver Dam Eye Study; BMES, Blue Mountains Eye Study; VIP, Visual Impairment Project; VER, Vision Evaluation Research; SAHS, San Antonio Heart Study; SLVDS, San Luis Valley Diabetes Study; WESDR, Wisconsin Epidemiologic Study of Diabetic Retinopathy;

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Timely Laser Treatment can Prevent 98% of Blindness



So Regular Eye Exams are Essential

Ferris JAMA 1993

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Our Challenge



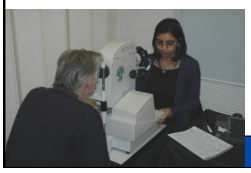
50% 30% 30%

Whole population | All diabetes | Diagnosed diabetes | Retinopathy | Need to treat

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Diabetes

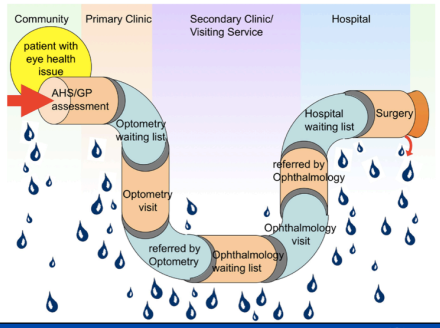
- Diabetic eye disease is the equal third cause of blindness
- Indigenous people with diabetes:
  - 36% have diabetic eye disease
  - Only 20% have had a recent eye examination
  - Only 37% have received the laser surgery they need
- Regular screening and accessible laser facilities are required





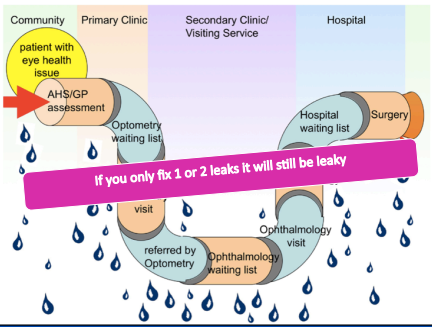
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The Patient Journey is like a Leaky Pipe… …there are multiple leaks



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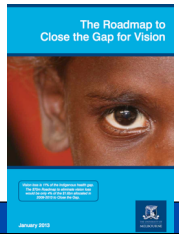
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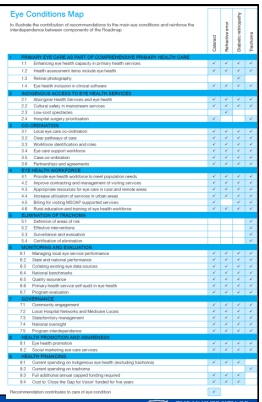


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You have to fix each leak

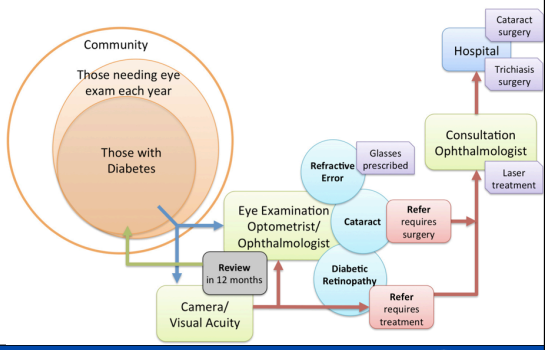
42 recommendations
Cataract – 35
Diabetic retinopathy – 35
Refractive error – 34
Trachoma – 37



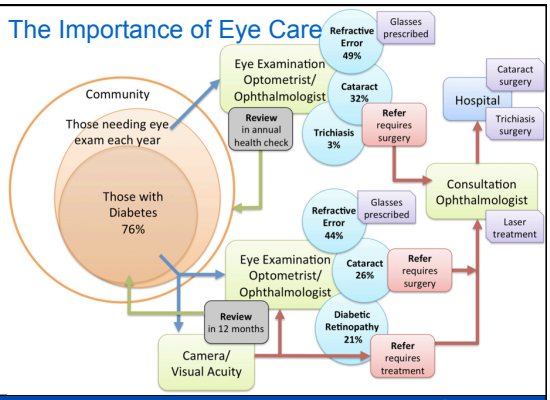


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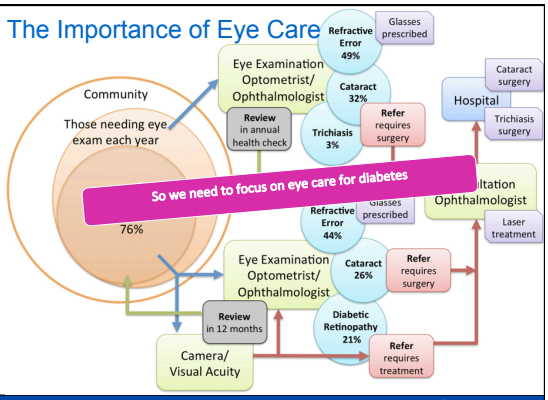
The Importance of Eye Care in Diabetes



The Importance of Eye Care



The Importance of Eye Care



Best Practice for Indigenous Eye Health

- NHMRC guidelines recommend annual retinal examinations for Aboriginal and Torres Strait Islander people with diabetes

  "no Indigenous person with diabetes should be allowed to go for more than 12 months without and eye exam"

- Eye checks now mandatory in MBS Item 715;
  - Adult Health Assessment
- But reminders are overlooked in management plans;
  - Patient Incentive Program (PIP)
  - Team care arrangements and
  - GP management plans
- Need to co-ordinate eye services and support patient access

What is needed…

- Promote annual eye checks for those with diabetes
- Build on community involvement and ownership
- Develop appropriate health promotion materials and strategies

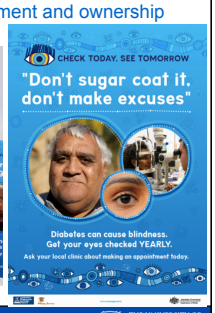




Diabetes Eye Health Promotion Material

- Need to promote annual eye exams for those with diabetes
- Developed with community involvement and ownership





www.iehu.unimlb.edu.au

Diabetic Retinopathy
Referral for further Examination

- Any change in vision
- Vision less than 6/12
- Abnormalities other than microaneurysms
- Cannot examine

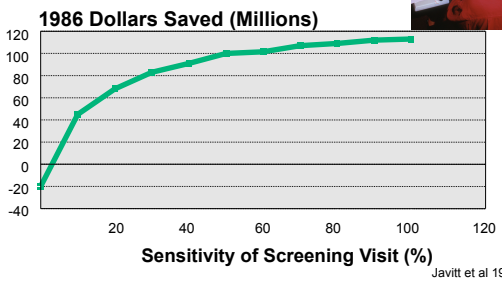
- Screening in 2012
  - Australia as a whole 50%
  - Indigenous Australians 20%



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Screening with Retinal Photography
Sensitivity 84.6%, Specificity 96.4%





Javitt et al 1989

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Medicare Item Number
Non-Mydriatic Photography for Diabetic Retinopathy

- 1994 - request to RACO to submit an application
- 1998 - request supported by Health Minister; rejected by Cabinet
- 2000 - full MSAC application; rejected

- Nov 2008 start a new submission –CCRE,
- Sep 2009 start rewriting - new process,
- Oct 2010 draft submitted, Jun 2011 re-submitted,
- Sep 2011 rejection – another new process,
- Aug 2012 high level meetings with DoHA and MBD start to assist,
- Dec 2012 application submitted; Mar 2013 PASC review,
- Jan 2014 economic evaluation; Oct 2014 review by ESC,
- Nov 2014 MSAC approval,
- May 2016 Budget approval,
- Nov 2016 Implementation!

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Summary

- Diabetic eye disease is a huge and growing problem that we must work together to address
- We can stop almost all the vision loss with regular screening
- The new MBS Item number is a real game changer
- We need to work out how to incorporate this into the pathways of care.

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