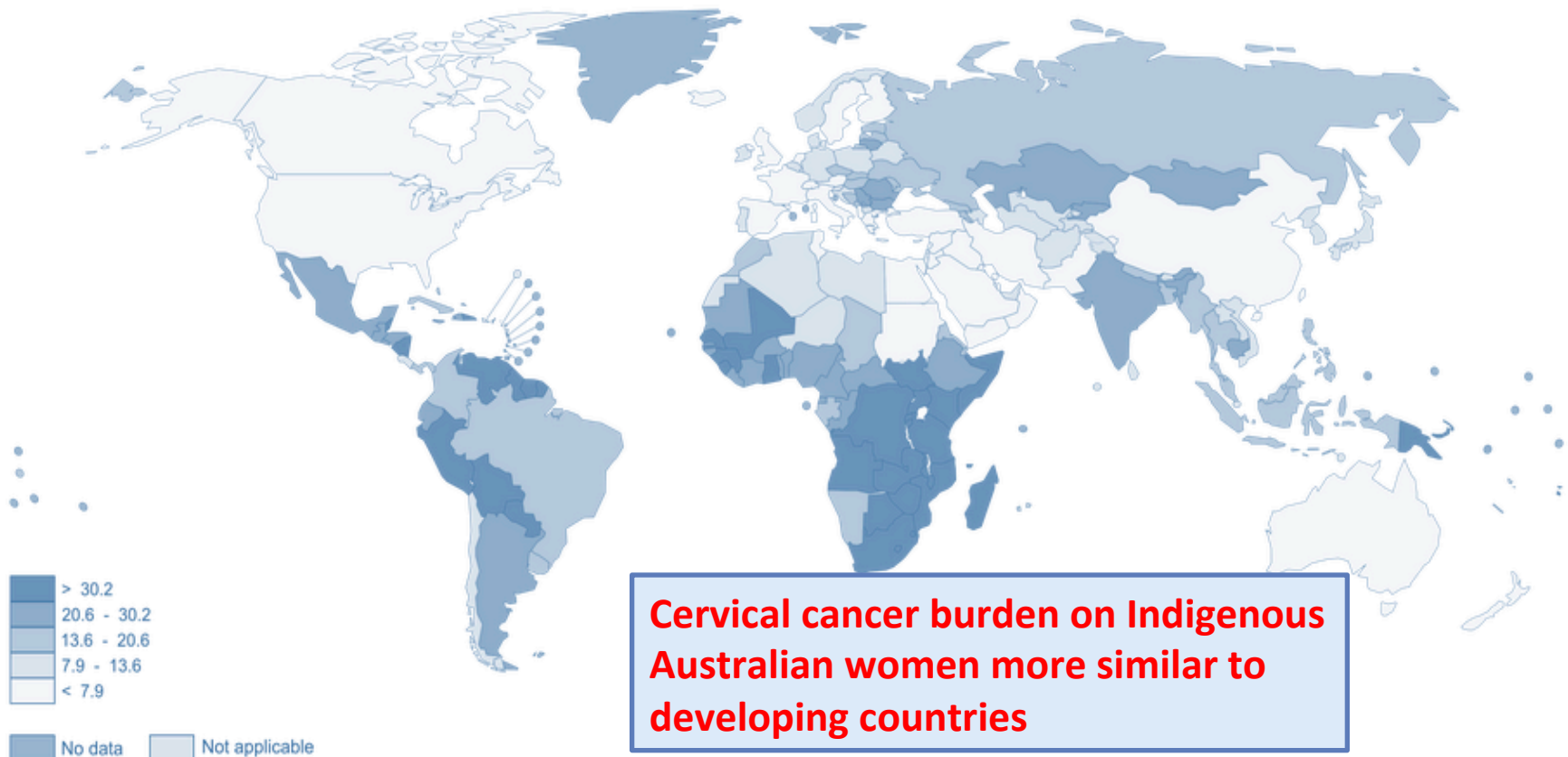


Reducing the cervical cancer burden among Aboriginal and Torres Strait Islander women

Lisa Whop

Menzies School of Health Research

Cervical cancer incidence, worldwide

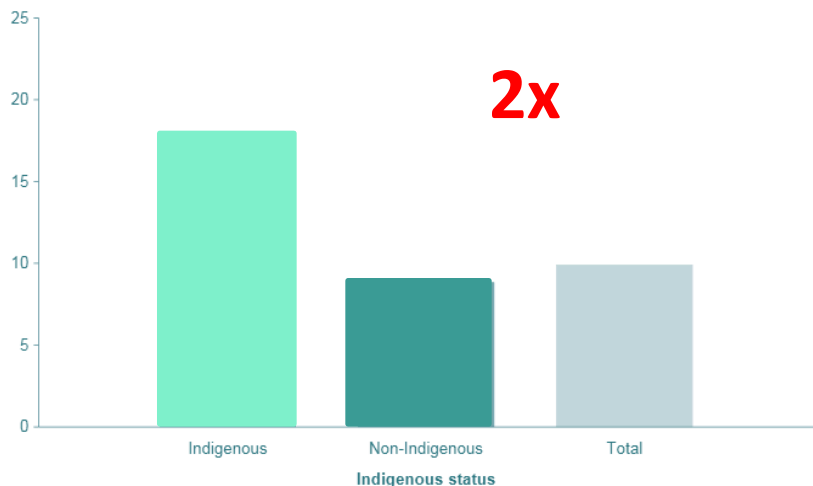


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: GLOBOCAN 2012
Map production: IARC
World Health Organization

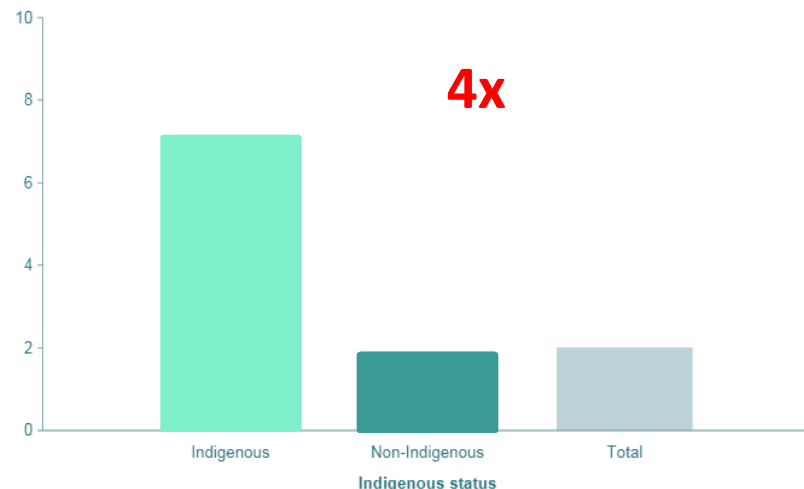
Incidence of cervical cancer in women aged 20 –69 (NSW, QLD, WA, NT), by Indigenous status, 2008 –2012

Number of new cases per 100,000 women



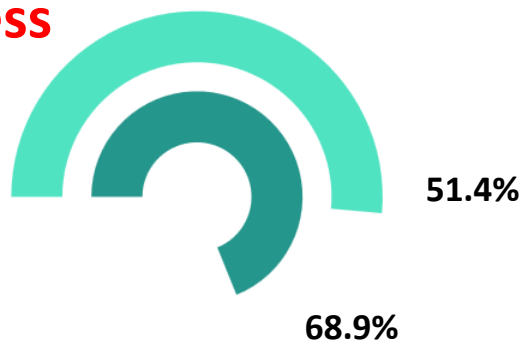
Mortality from cervical cancer in women aged 20 –69 (NSW, QLD, WA, SA, NT), by Indigenous status, 2010 –2014

Number of deaths per 100,000 women



Crude survival five years from cervical cancer diagnosis, by Indigenous status, 2009-2013

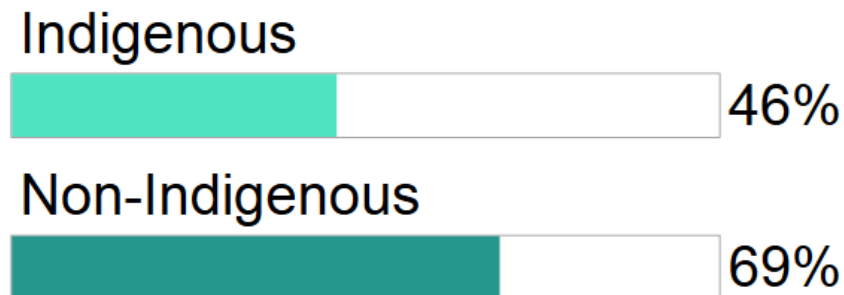
17.5% less



Indigenous Non-Indigenous

Lower proportion of localised cancers

23% less

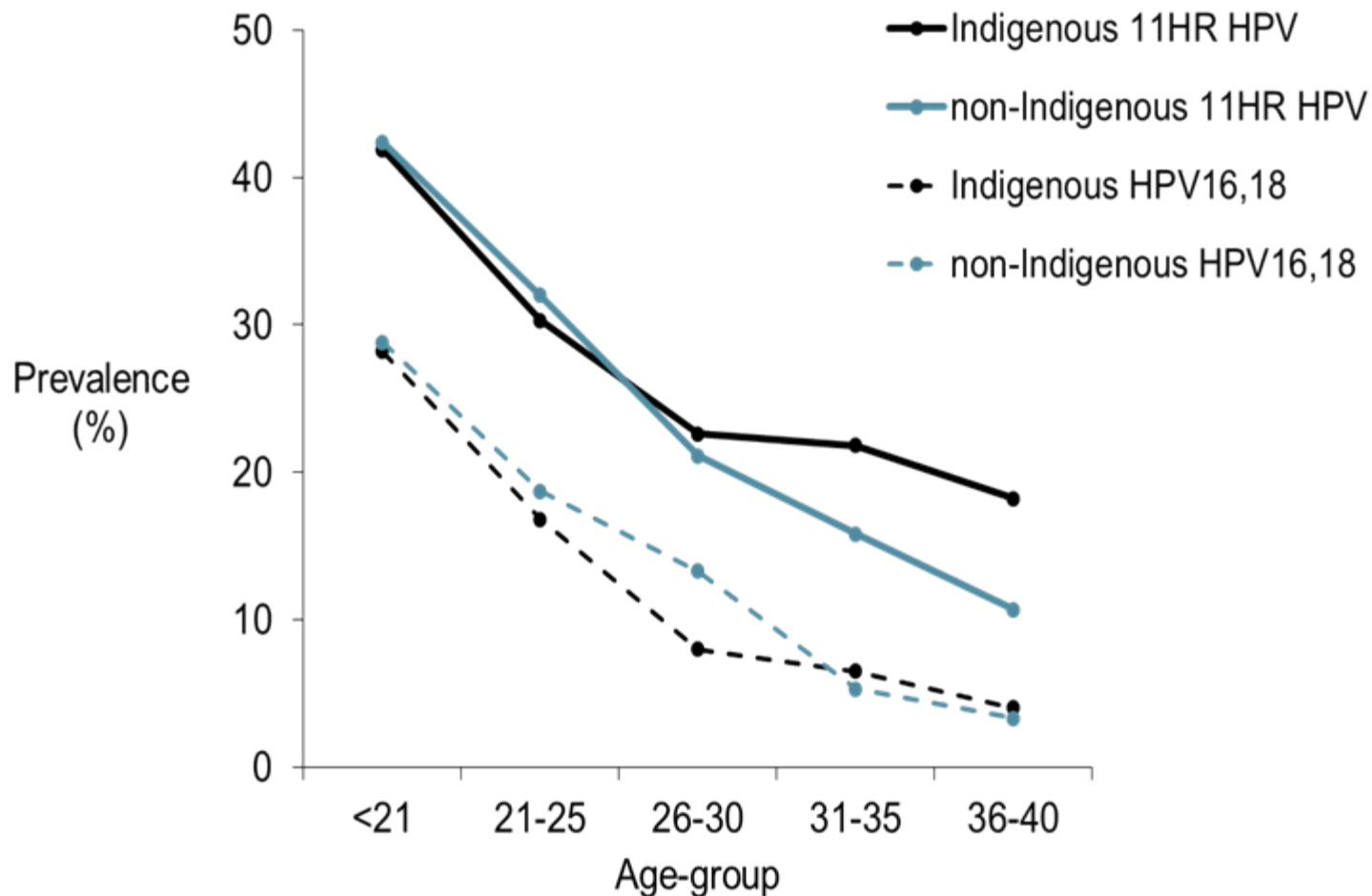


Why is the burden of cervical cancer greater among Indigenous women?



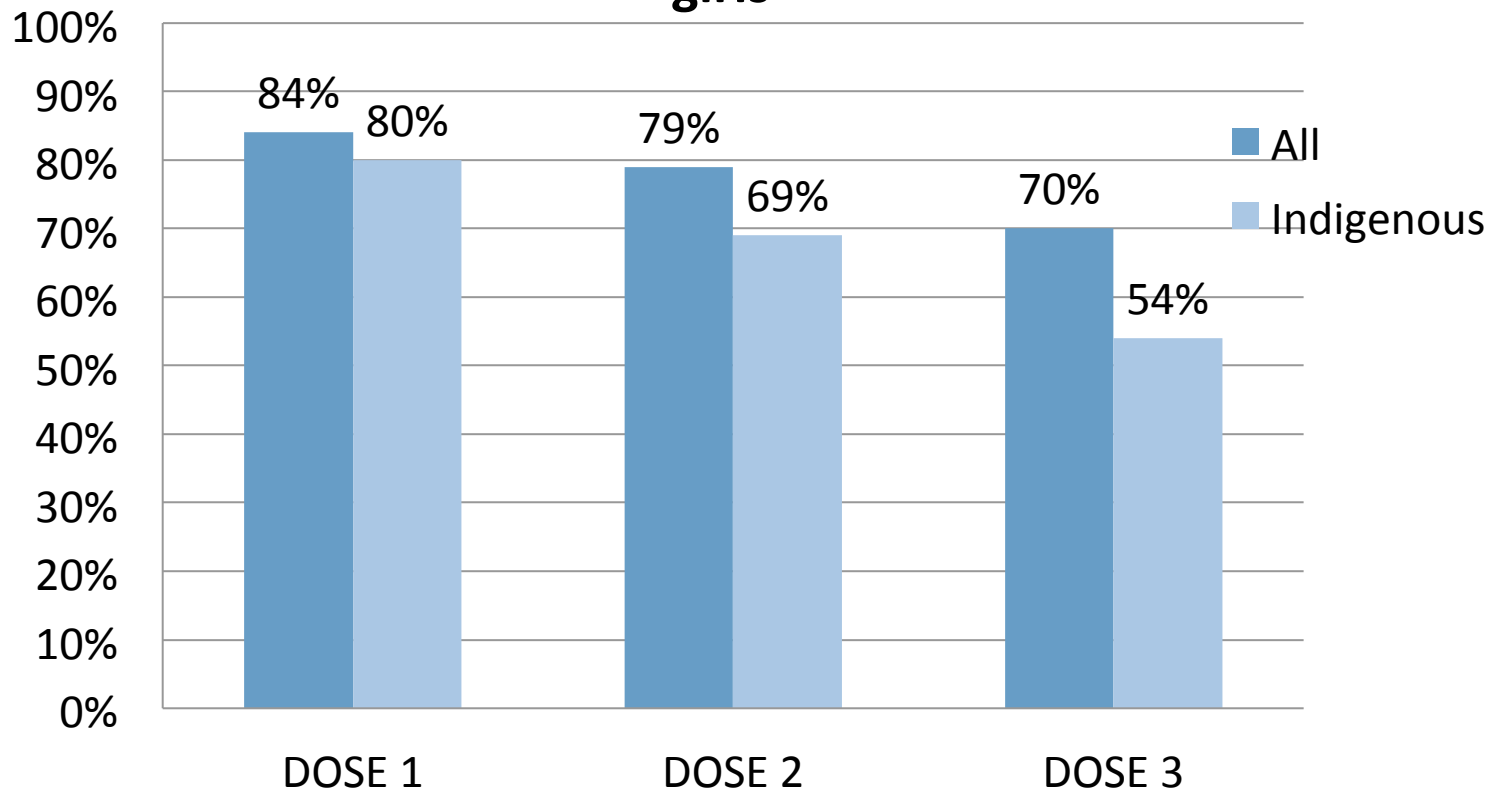
- Higher prevalence of high-risk HPV infection?
- Lower participation in cervical screening?
- Difference in cervical abnormalities?
- Difference in treatment after an abnormal Pap test?
- Something else?

Prevalence of HPV cervical infection, high risk genotypes



HPV vaccine coverage among 12-17 year old girls in Queensland, whole population verse Indigenous girls

National coverage data not available



Australian National Cervical Screening Program - current



- Program introduced in 1991
- 2-yearly Pap test for women 18-69 years
- Pap Smear Register's responsible for data collection & reminder function
- 50% reduction in incidence and mortality since the introduction
- Indigenous status is not collected (pathology does not collect)
- 57.7% of Australian women participated in 2012-2013

- 1980s and 1990s
 - Low participation reported from individual communities (mostly remote)
- 2006 Northern Territory
 - Remote only, ~75% of the Indigenous pop'n
 - Indigenous participation levels indirectly estimated
- National screening program
 - Nothing.

Aims

- Participation
- Prevalence of abnormalities
- Time to follow-up
- Survival following a cancer diagnosis
- Effect of comorbidity on screening
- Effect of comorbidity on survival

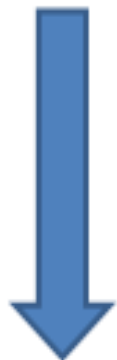


*Pap Test Register
(all registered women)

Cancer Register
(cervical cancer cases)



Combined Dataset



link to



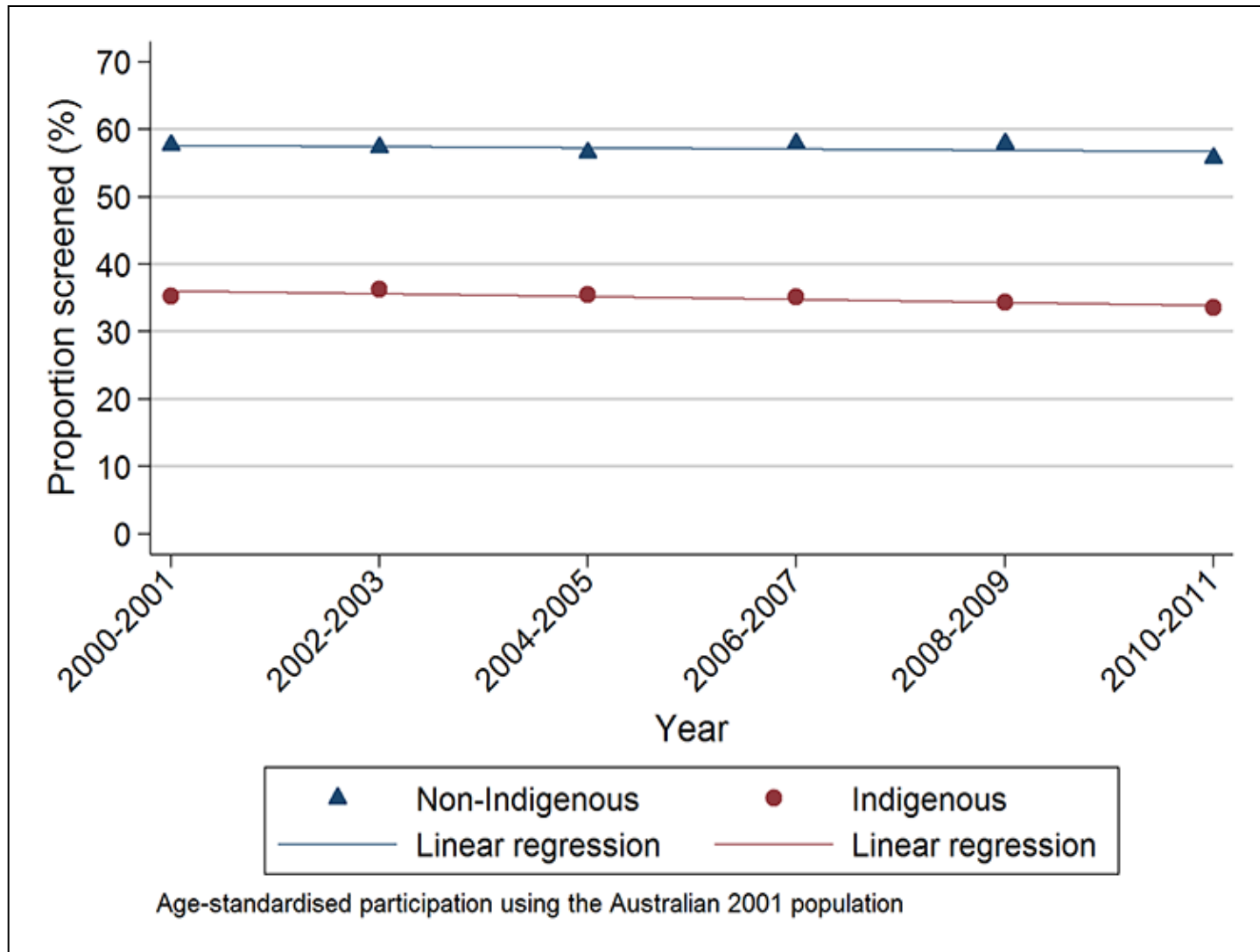
Hospital Inpatients

Combined Dataset for analysis
(Indigenous status and co-morbidity data)

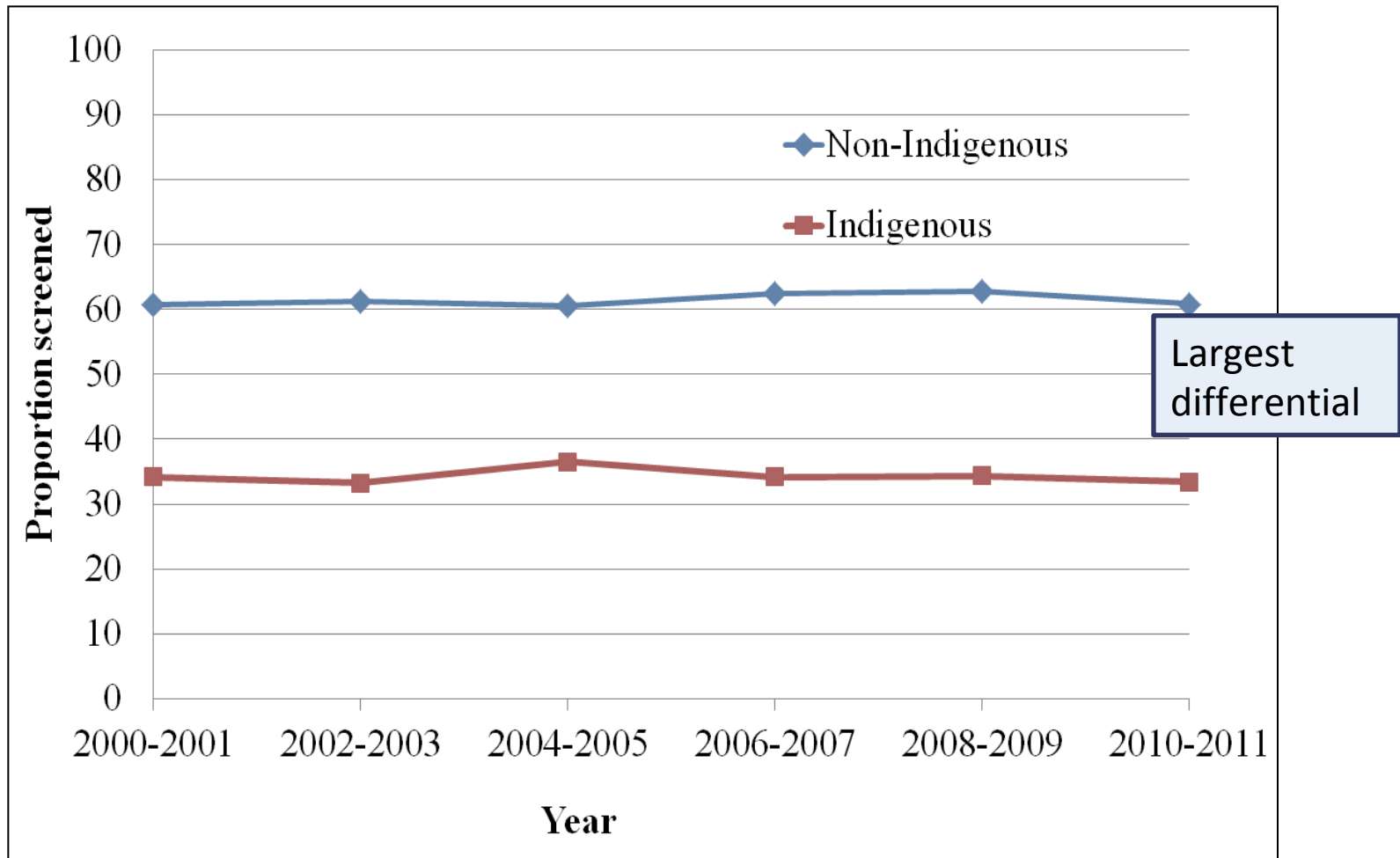
Final Study Cohort:

- 1.4 million women
- 5 million records
- +26 000 women identified as Indigenous through linkage to hospital records

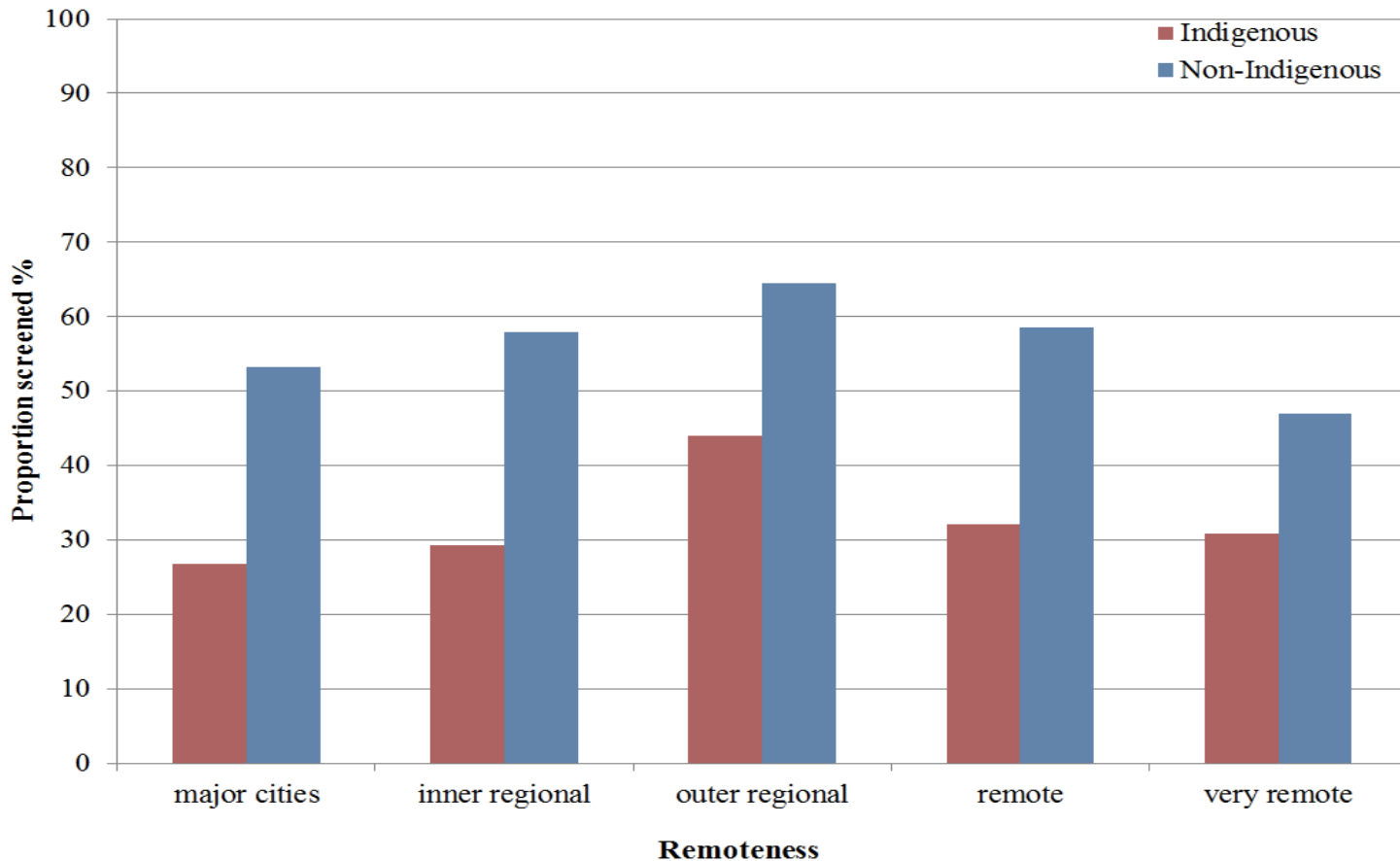
Two-year participation rates of women aged 20 to 69 years for cervical screening by Indigenous status



Age-specific 2-year participation rates of 45-49yrs, by Indigenous status, 2000-2001 to 2010-2011



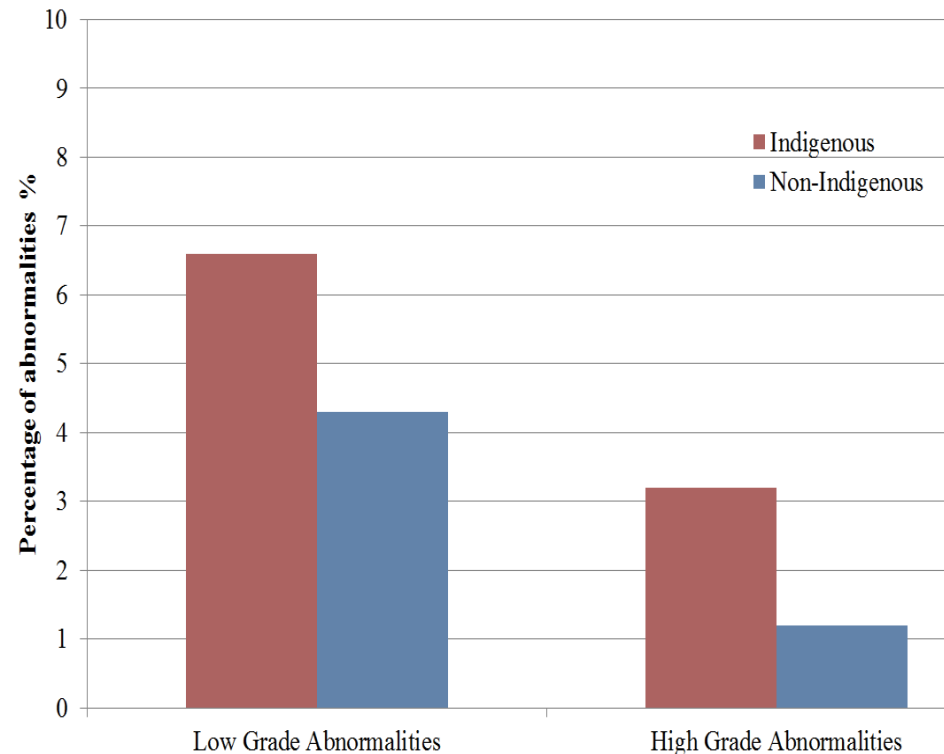
Participation by geographical remoteness category



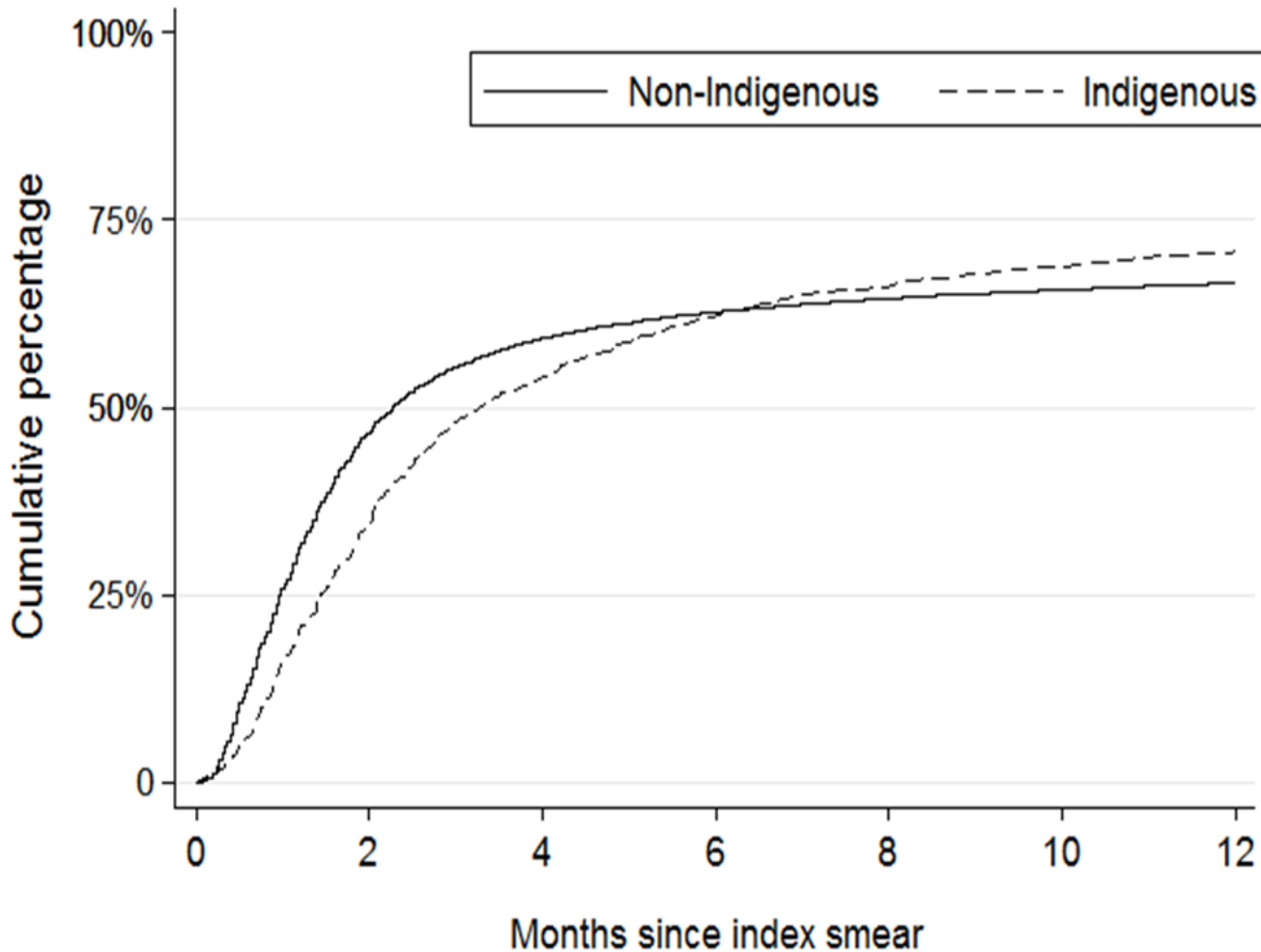
Age-standardised proportions of screened women aged 20 to 69 years by remoteness category and Indigenous status, 2010-2011, in Queensland, Australia

Cervical abnormalities are more common among Indigenous than other Australian women, in Queensland

- % Low and high grade abnormal pap tests **higher** among Indigenous women
- **16.6** verse **7.5 per 1,000** histologically confirmed high grade abnormalities
- Higher prevalence of risk factors partly responsible



Time from high grade Pap test to histological confirmation (biopsy)



Concluding Remarks

- You cannot improve what you cannot see
- There are examples of screening success for Indigenous communities
- The Renewal presents a unique opportunity to get it right
- **Critical to improvements is the involvement and consultation with Indigenous Australians**

- Survival by screening status
- Under-screened Indigenous women
- HPV vaccination coverage Indigenous adolescents
- Health literacy
- Comorbidities & screening
- Comorbidities & Survival

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