



CRCOS PROVIDER 00123M

David BANHAM
with grateful acknowledgement of the CanDAD Aboriginal Reference Group

Realising Indigenous Australians capacity to benefit from cancer care: Developing person-centred performance measures in cancer control

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seek LIGHT

Acknowledgement of Country

We acknowledge the Turrbal and Yuggera peoples as the traditional custodians of the Brisbane region.

We also pay respect to their Elders past and present.

Acknowledgement

SAHMRI:

Aboriginal Community Reference Group
(CanDAD)
Wardliparingga colleagues
Prof Alex Brown
Prof David Roder

Supervision by:

Prof John Lynch
Prof Jon Karnon

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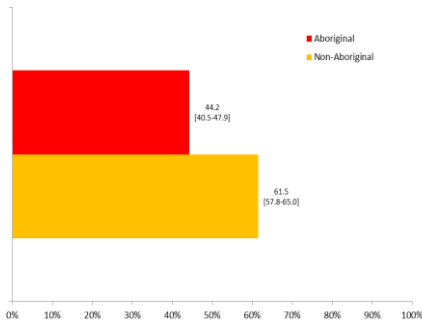
Prof John Lynch
Prof Jon Karnon

“Who are we being compared to?”

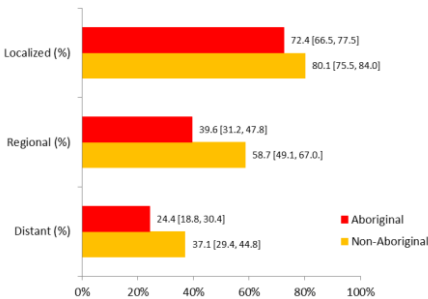
-Aunty Roslyn Weetra

Background

Five-year crude, disease survival for all cancers Aboriginal and matched, non-Aboriginal contemporaries



Five-year crude, disease survival for all cancers by stage for Aboriginal and matched, non-Aboriginal contemporaries



Background

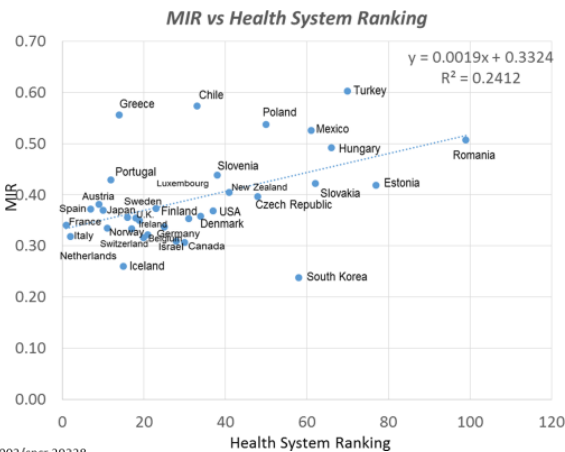
Monitor & evaluate system performance

Mortality : Incidence Ratio (MIR)

$$\frac{\text{Mortality Rate}_{\text{(cancer)}}}{\text{Incidence Rate}}$$

Background

The colorectal cancer mortality-to-incidence ratio as an indicator of global cancer screening and care



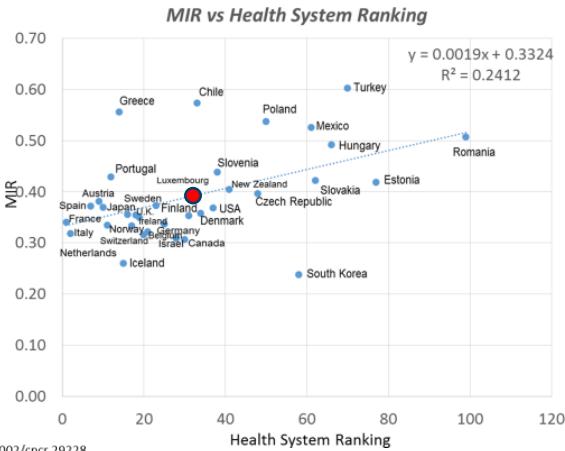
Cancer
Volume 121, Issue 10, pages 1563-1569, 8 JAN 2015 DOI: 10.1002/cncr.29228
<http://onlinelibrary.wiley.com/doi/10.1002/cncr.29228/full#ncr29228-fig-0001>

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7

Background

The colorectal cancer mortality-to-incidence ratio as an indicator of global cancer screening and care



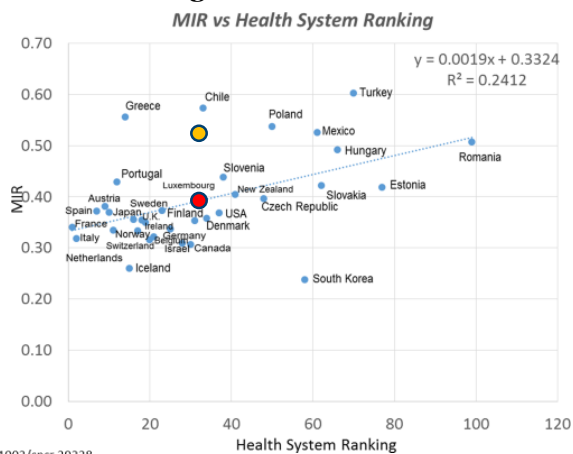
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8

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Cancer

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9

Background

MIR

- Age as....
 - Statistical adjuster?
 - Weighting factor?
 - Both?

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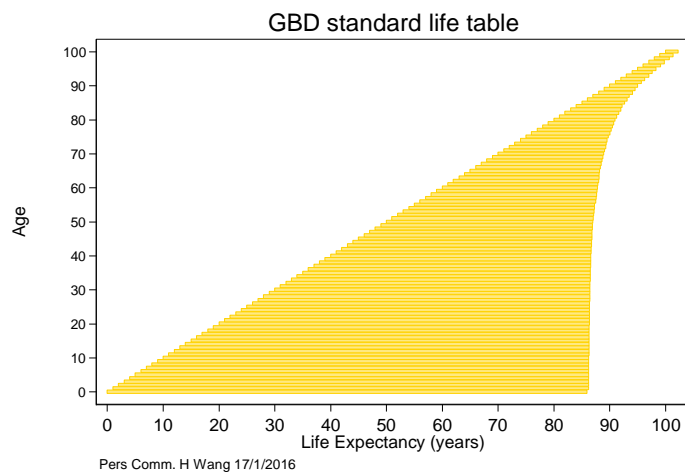
10

Aim

- Expand MIR into PMIR, a premature mortality to incidence ratio;
- Illustrate PMIR's use in cancer care reporting at person, service and population levels.
 - PREmature Mortality IncidenceE Ratio (PREMIER)

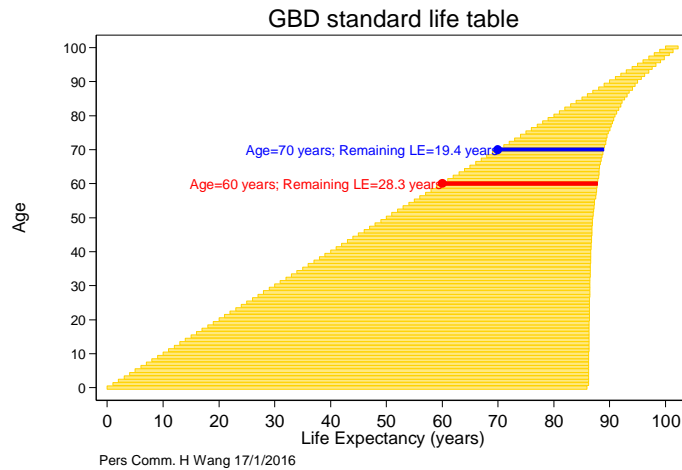
Method

A global life expectancy standard



Method

A global life expectancy standard

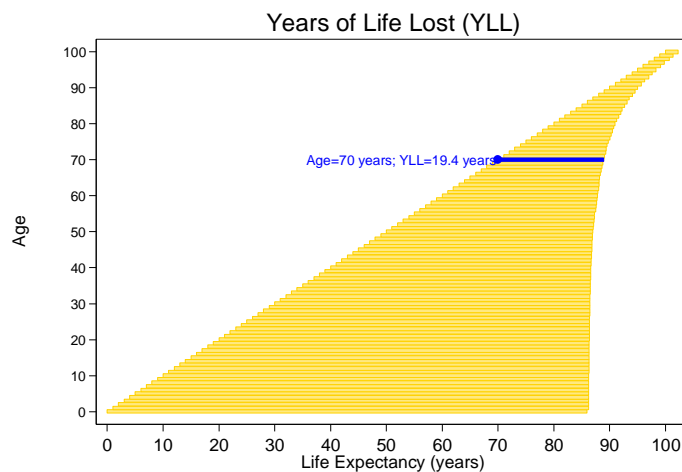


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13

Method

Premature mortality = life expectancy lost =

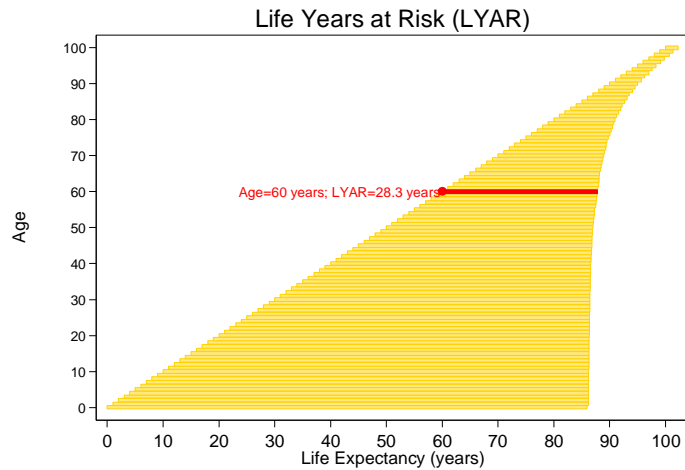


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14

Method

Life expectancy at risk =



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15

Method

Premature Mortality : Incident Risk (PMIR)

$$\frac{\text{Premature Mortality Rate}_{(\text{cancer})}}{\text{Life at Risk}} = \frac{\text{YLL}_{(\text{cancer})}}{\text{LYAR}}$$

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16

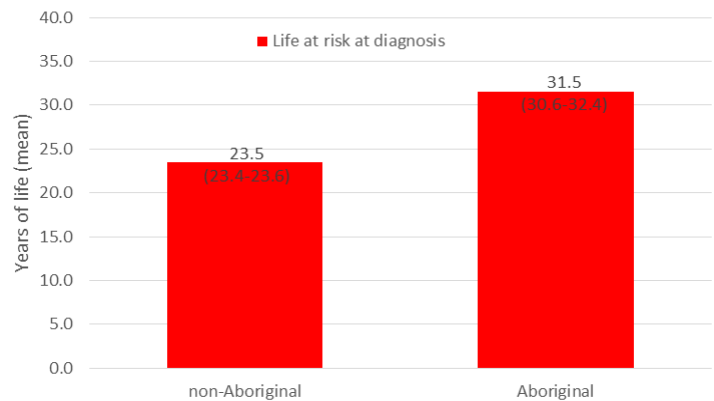
Method

Premature Mortality : Incident Risk (PMIR)

$$\frac{\text{YLL}_{\text{(cancer)}}}{\text{LYAR}} = \frac{19.4 \text{ YLL}_{\text{(cancer)}}}{28.3 \text{ LYAR}} = 0.68$$

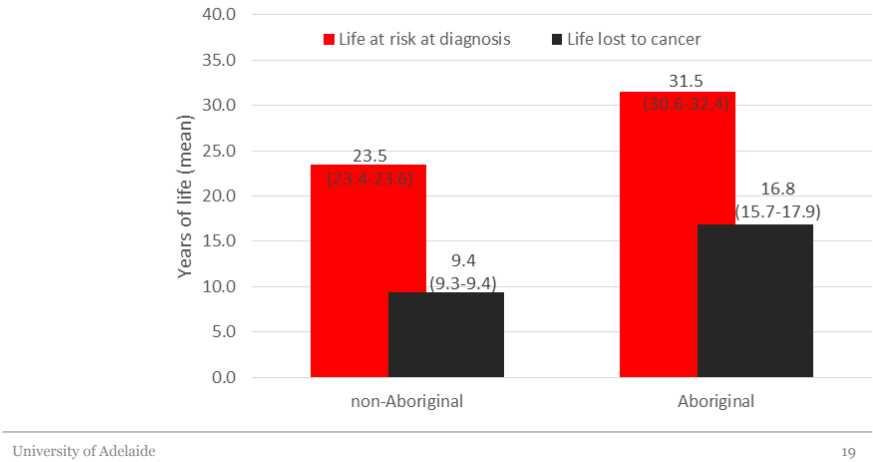
Example 1

Mean amount of life at risk (LYAR) and life lost (YLL) per person diagnosed with cancer, South Australia 1990-2010



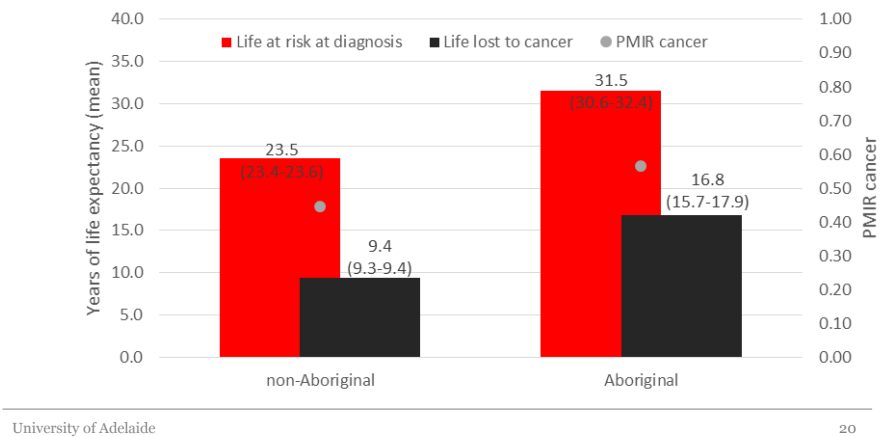
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Mean amount of life at risk and life lost per person diagnosed with cancer, South Australia 1990-2010



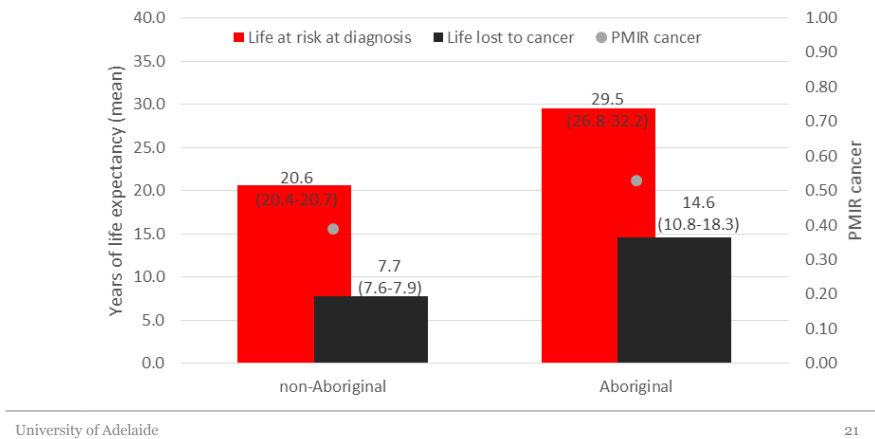
Example 1

Mean amount of life at risk and life lost per person diagnosed with cancer, South Australia 1990-2010



Example 2

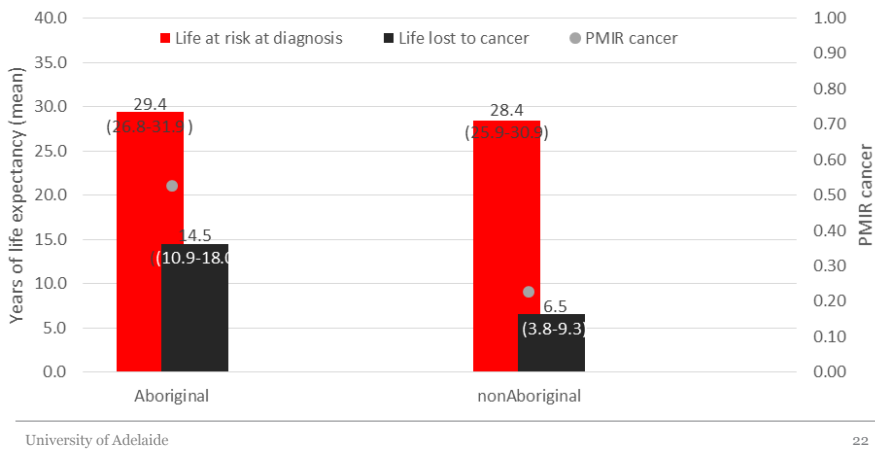
Mean population colorectal PMIR, South Australia 1990-2010



21

Example 2

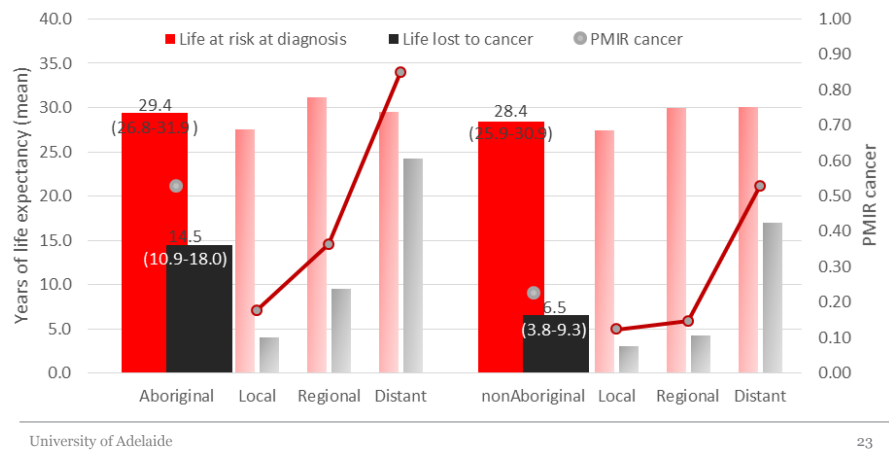
Mean cohort colorectal PMIR, South Australia 1990-2010



22

Example 2

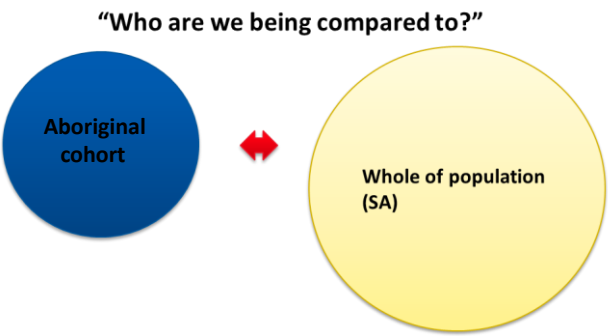
Mean cohort colorectal PMIR, South Australia 1990-2010



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23

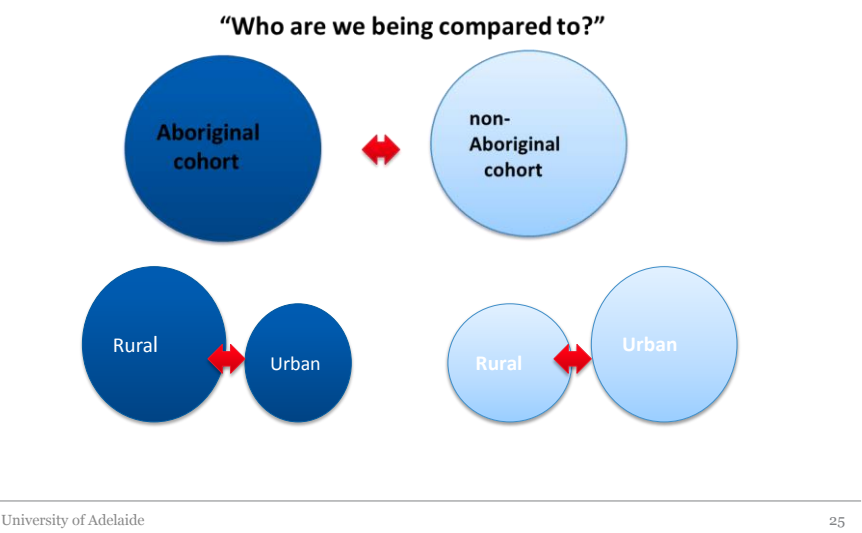
Discussion



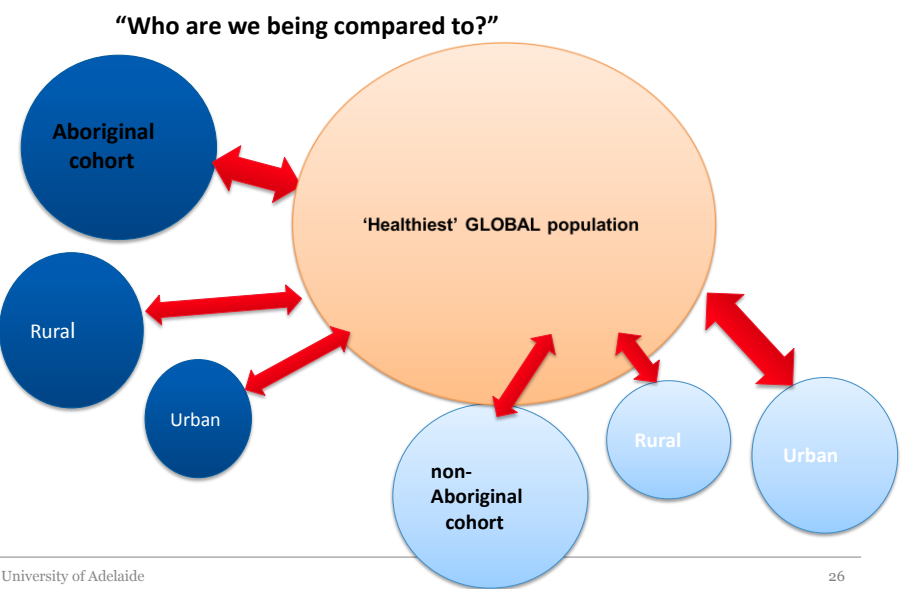
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24



Discussion



Discussion



Discussion

- PMIR
 - Expandable  morbidity
 - Comparison  across conditions

Conclusion

- Large life expectancy gains are on offer....
 - Wide-ranging comparisons are possible now
 - Person centred health care needs person centred performance assessment