Colorectal cancer
New Zealand’s place in the world.
Inequities in outcomes?

Assoc Prof Diana Sarfati
Today’s talk...

• Mortality
  – Internationally
  – In New Zealand

• Incidence
  – Trends in New Zealand
  – Primary prevention

• Survival
  – Internationally
  – Unequal outcomes?

• Screening pilot
NZ has high death rates from colorectal cancer

Source: OECD Health Data 2011.
NZ has high death rates from colorectal cancer

Source: OECD Health Data 2011.
In New Zealand...

- Around 3000 CRC every year of which about a third are rectal cancers in New Zealand
- Colorectal cancer is the second highest cause of cancer death in New Zealand
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- Screening pilot
Incidence rates of CRC are coming down

Number of cases of CRC are going up

Colorectal cancer: incidence is lower for Maori... But increasing...

Primary prevention of CRC

- Strong cohort effects
  - Early life exposures?
- Dietary factors
- Physical inactivity
- Overweight/obesity
- Smoking
- Alcohol
- Daily aspirin
Today’s talk...

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  - Internationally
  - In New Zealand

- **Incidence**
  - Trends in New Zealand
  - Primary prevention

- **Survival**
  - Internationally
  - Unequal outcomes?

- **Screening pilot**
International comparison:
Five-year relative survival in OECD countries
Survival rates are improving over time...

Excess mortality rate has been reducing by 27% each 10 years since early 1990’s for those diagnosed with colorectal cancer

Percentage difference in cancer mortality between Māori compared to non-Māori, patients diagnosed 1991-2004

Non-Māori have poorer survival

- Oesophagus
- Testis
- Cervix
- Uterus
- Kidney
- Melanoma
- Prostate
- Head, neck and larynx
- Breast (female)
- Colorectum

Māori have poorer survival

- POOLED ESTIMATE
- Non-Hodgkin's lymphoma
- Liver
- Lung
- Stomach
- Leukaemia
- Hodgkin's lymphoma
- Pancreas
- Ovary
- Bladder
- Brain
- Thyroid gland
Why ethnic inequities in cancer survival?

More aggressive/advanced tumours?

Patient comorbidity?

Health care quality and/or access?
Ethnic inequities in colon cancer survival

Comorbidity and treatment/health service factors each accounted for a third of the survival difference.

Ethnic inequities in colon cancer survival

Not just colon cancer...

“Māori were four times less likely to receive curative rather than palliative anticancer treatment for nonmetastatic disease compared with Europeans

even after adjusting for age, gender, NZDep, CCI [comorbidity], tumor type, stage and patient declining management. “

Bowel cancer mortality: What’s happening over time?

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• Survival
  – Internationally
  – Unequal outcomes?

• Screening pilot
Screening

• Waitemata DHB
• 2 yearly iFOBT for those aged 50-74 years.
How is the pilot programme going?

Participation:

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Participation Rate</th>
</tr>
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<tbody>
<tr>
<td>Maori</td>
<td>40%</td>
</tr>
<tr>
<td>Pacific</td>
<td>20%</td>
</tr>
<tr>
<td>Asian</td>
<td>50%</td>
</tr>
<tr>
<td>Other</td>
<td>60%</td>
</tr>
</tbody>
</table>

Desirable rate: 60%
How is the pilot programme going?

- Around 130 cancers detected to Sept last year
- High detection of advanced adenomas
- Very high acceptance of colonoscopy
How is the pilot programme going?

Screened diagnoses
Colon Cancer study

TNM Stage at diagnosis
Where to from here for bowel cancer?

- Primary prevention
- Screening programme
- Minimum treatment standards
- Data availability