Indigenous Health Workforce Development: challenges and successes of the Vision 20:20 programme

Dr Elana Taipapaki Curtis
Tōmaiora Seminar Tuesday 19th March
• **Indigenous health in Australia and New Zealand (Editorial)**
  Jonathan B. Koea

• **Indigenous inequalities in cancer: what role for health care?**
  Sarah Hill, Diana Sarfati, Bridget Robson and Tony Blakely

• **Cancer in Māori: lessons from prostate, colorectal and gastric cancer and progress in hereditary stomach cancer in New Zealand**
  Vanessa Blair, Arman Kahokehr and Tarik Sammour

• **Creating change: building the capacity of the medical workforce in Aboriginal health**
  David Paul
Background

• Background
• Methods
• Results
• Conclusion
• General Discussion
Background

- **Health workforce inequities:**

<table>
<thead>
<tr>
<th>Health professions</th>
<th>Māori</th>
<th>Pacific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of the New Zealand Population</td>
<td>15%</td>
<td>7%</td>
</tr>
<tr>
<td>Proportion of Health Professionals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td>2.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>&lt;1.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Nurses</td>
<td>7%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Dentists</td>
<td>2.1%</td>
<td>0.6%</td>
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</table>
Drivers

• Social, demographic, cultural, academic and financial barriers.

• Secondary education inequities (M:nM)
  – Māori ‘no formal qualification’ aged ≥ 15: 2/5 (2007)
  – Māori Y13 science subject: 23% vs 41% (2007)
  – Māori UE received: 29% vs 54% UE (2009)

• Tertiary education inequities (M:nM)
  – Lower participation 18-19yrs
  – Lower bachelor completion
  – Overrepresented in certificate level study
Impacts

• Reduces ‘cultural concordance’
  – Effects clinician bias/behaviour
  – Impacts healthcare and ethnic disparities
    Van Ryn et al 2011, van Ryn & Fu 2003
  – Needs

• Reduces indigenous potential
  – Treaty
  – Whānau, Hapū, Iwi aspirations/socio-economic benefits
  – Rights
Workforce Response: Vision 20:20

• Whakapiki Ake (WAP) – Māori recruitment
• CertHSc – bridging/foundation
• MAPAS – retention/completion

“10% health professionals to be Māori and Pacific by year 2020”
Improving Numbers

• Numbers:
  – 397 ‘official’ undergraduate MAPAS students in 2012
  • CertHSc: 69
  • BHSc: 101
  • BNurs: 26
  • BPharm: 13
  • MBChB: 192
Improving Pass Rates

FMHS – Undergraduate\(^1\) Degree Student Pass Rates\(^2\) by Ethnicity, 2005-2011.

![Line chart showing SPR % (EFTS Generated) for different ethnicities from 2005 to 2011. The chart illustrates the trends in pass rates over the years, with different lines representing Māori, Pacific, All others, and Total.](chart.png)
Successes To Date

1. Student selection and pathway planning
2. Foundation programme refinement
3. Academic and pastoral support
4. Redevelopment of the indigenous recruitment model
Student Selection and Pathway Planning

• Historically ‘culturally-based’
• Concerns highlighted in 2005
  – Low CertHSc SPR
  – Low CertHSc Māori pass rate
  – No specific academic entry criteria for CertHSc
  – Recruitment numbers focussed
  – ?Value-laden/variation in assessment
CertHSc Student Pass Rate¹ by Ethnicity, 2005-2011.
New MAPAS selection

• MAPAS eligibility
  – verification of whakapapa or ancestry

• Determine appropriate academic starting point
  – MMI, Maths Test, English Test, Academic Recommendation, Whānau Feedback

• Introduction of entry criteria for CertHSc

• Introduction of MAPAS Medical and Pharmacy Interviews
MAPAS Recommendation

• Best starting point (given career aspirations)
• 3 recommendation options
  – CertHSc
  – Bachelors
  – Non-FMHS
• Multiple recommendations provided/career
• Non-binding
Foundation Programme Refinement

• Success For All (TLRI)
  – 2 year qualitative research project (28 participants)
  – Helpful/hindering teaching & learning (non-lecture context)
  – Highlighted ‘spoon-feeding’; need for independent learning; inclusion of Māori/Pacific curriculum; importance of tutorials; innovation; change in educator behaviour
Learning Community Table
Academic and Pastoral Support

• Increased structural equity
• Provision of indigenous academic leadership
• Provision of culturally safe learning spaces
• Provision of academic support
• Fostering of student cohesiveness/whakawhanaungatanga
• Alignment of support model to foster independent learning
• Celebrating success
• Data management
Redevelopment of WAP

• Began 2003
• Met original aim (increase Māori numbers)
• But concerning outcomes (low Māori completion)

• So:
  – Broadened recruitment to all Y13 Māori
  – Aligned entry criteria
  – Early exposure development
## Early Exposure

<table>
<thead>
<tr>
<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
<th>Year 12</th>
<th>Year 13</th>
<th>Year 14</th>
<th>Year 15</th>
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<tbody>
<tr>
<td>Te Whē Potential</td>
<td>Te Kune Developmental</td>
<td>Wao Nui Choices</td>
<td>Te Rea Growth</td>
<td>Te Aka To reach out</td>
<td>Te Weu Take root</td>
<td>Te More Embed</td>
</tr>
<tr>
<td>Year 9</td>
<td>Year 10</td>
<td>Year 11</td>
<td>Year 12</td>
<td>Year 13</td>
<td>Year 14</td>
<td>Year 15</td>
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### Secondary School

- Raising awareness
- Exposure to health
- Clear and accessible information about career choices and school subjects
- Subject choice is key applied sciences, Maths and English
- Aim for excellence in academic, social and cultural growth
- The decision to move into tertiary requires support
- School visits and expos
- In development
- WAP collaborations with other recruitment providers
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- WAP collaborations with other recruitment providers
- WAP transitioning intervention to be developed
- MAPAS interviews
- MAPAS supports all WAP students

### Tertiary

- Preparation for successful study and career pathway
- Financial support
- Whānau handover dinner
- WAP check-in Semester One
- MAPAS supports all WAP students
- MAPAS supports all WAP students
CertHSc - Number of Māori and Pacific Enrolments\(^2\) versus Completions \(^3\), 2005-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Māori Enrolments</th>
<th>Māori Completions</th>
<th>Pacific Enrolments</th>
<th>Pacific Completions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>49.</td>
<td>9</td>
<td>34.</td>
<td>10</td>
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<tr>
<td>2006</td>
<td>52.</td>
<td>17</td>
<td>40.</td>
<td>26</td>
</tr>
<tr>
<td>2007</td>
<td>45.</td>
<td>7</td>
<td>27.</td>
<td>17</td>
</tr>
<tr>
<td>2008</td>
<td>20.</td>
<td>16</td>
<td>25.</td>
<td>16</td>
</tr>
<tr>
<td>2009</td>
<td>22.</td>
<td>17</td>
<td>29.</td>
<td>26</td>
</tr>
<tr>
<td>2010</td>
<td>20.</td>
<td>16</td>
<td>41.</td>
<td>27</td>
</tr>
<tr>
<td>2011</td>
<td>21.</td>
<td>16</td>
<td>43.</td>
<td>32</td>
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</tbody>
</table>
Remaining Challenges

- Secondary school feeder issues
- Equity funding
- Programme evaluation (Te Hā underway)
- Post-tertiary
- Retention in Aotearoa
Discussion ?
Ngā mihi

- AP Papaarangi Reid (Co-Author)
- Vision 20:20 staff and students (TKHM)
- Success For All (Airini et al) research team
- Tātou Tātou (Curtis et al) research team
- Jonathon Koea (ANZJS Indigenous Editor)
- Lynley Pritchard/Mark Barrow (FMHS)
- Equity office and TECEF funding