This presentation

• Our research question and the bigger question
• How we are addressing our research question
• What we have found so far
• Why we need to address the bigger research question
Our research question

• What harms do patients experience due to their healthcare?
  – Types
  – Frequency
  – Preventability
  – Severity

• Do harms differ by rural/urban location and general practice size?
What do we know?

ACC data

• 6,007 ACC claims
  – 83% of primary care treatment injuries were assessed as minor,
  – 12% were major,
  – 4% were serious and
  – 1% sentinel.

• ACC treatment claims database may capture less than 1% of all treatment harms happening in New Zealand general practice

The bigger research question?
SHARP: The Safety, Harm and Risk Reduction Project
Dr Sharon Leitch, Dr Katharine Wallis, Prof Wayne Cunningham, Dr Martyn Williamson, Dr Steven Lillis, Prof Murray Tilyard, A/Prof David Reith, Dr Kyle Eggleton, Dr Ari Samaranayaka, Dr Andrew McMenamin, Dr Paul Bowie, Dr Carl de Wet

HOW WE ARE ADDRESSING OUR RESEARCH QUESTION
Mistake ≠ Harm

Errors, or mistakes in care, will not be studied in this research unless they are associated with patient harm.
Many harms result from standard, correct care and are not associated with errors.
Many errors are not associated with harm.
Relationship between patient safety terms.

Figure 1: Study design using PHO data from the July quarter, 2013

- **Small practices** (711 practices)
  - Total patients = 1,236,370
  - Average patients/practice = 1,739
  - 446 urban practices
    - 10 study practices
    - 150 study pts/practice = Records of 1500 patients
  - 265 rural practices
    - 10 study practices
    - 150 study pts/practice = Records of 1500 patients

- **Medium-sized practices** (189 practices)
  - Total patients = 1,234,157
  - Average patients/practice = 6,530
  - 155 urban practices
    - 10 study practices
    - 150 study pts/practice = Records of 1500 patients
  - 34 rural practices
    - 10 study practices
    - 150 study pts/practice = Records of 1500 patients

- **Large practices** (97 practices)
  - Total patients = 1,242,854
  - Average patients/practice = 12,813
  - 70 urban practices
    - 10 study practices
    - 150 study pts/practice = Records of 1500 patients
  - 27 rural practices
    - 10 study practices
    - 150 study pts/practice = Records of 1500 patients
Reviews and patients reviewed since April 2015
% of 1500 patients in study group reviewed

Study Group

- large rural
- medium rural
- small rural
- large urban
- medium urban
- small urban
WHAT WE HAVE FOUND SO FAR
45 SHARP Study general practices

Mean patients by study group
(all NZ, randomly selected, and final study practices)
Mostly no difference between Study Rural and urban practices, except ...
Harms arising from health care

- 3621 patients’ notes (3 years) reviewed (40.2%)
- Overall harm rate of 15.5%
1205 Harms

• Preventable or potentially preventable 47.7%

• Severity
  – Minor = 74.5%
  – Moderate = 21.7%
  – Severe = 3.4%
  – Death 0.4%
The bigger research question?

• Are our health services constructed to best serve our patients now and into the future?
Health System Under Siege
Increased Hospital Admission in Relation to Population Growth
Multi-Morbidity Increasing with age

Long term conditions in the SDHB area increasing with age
Polypharmacy in New Zealand
Policy induced distortions

Current Primary Care Model

The pharmacopeia driven 3 monthly review has no relation to patients’ physical and emotional status.
Public Health Expenditure vs GDP

% change since 1950

- Health: 412%
- GDP: 144%

Over the last 10 -15 years the health sector has seen:

- Significant ageing of the population
- Increasing long-term conditions
- Increasingly complex and intensive care requirements
- Care is more specialised and fragmented
- Unsustainable cost increases.
- Workforce crisis
### Organisational structure of New Zealand primary care: DHBs and PHOs

<table>
<thead>
<tr>
<th>DHB</th>
<th>Rank by population size</th>
<th>Population</th>
<th>Number of PHOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waitemata</td>
<td>1</td>
<td>574,495</td>
<td>2</td>
</tr>
<tr>
<td>Counties Manukau</td>
<td>2</td>
<td>525,120</td>
<td>5</td>
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<tr>
<td>Canterbury</td>
<td>3</td>
<td>514,028</td>
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<td>Auckland</td>
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<tr>
<td>Waikato</td>
<td>5</td>
<td>377,335</td>
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<tr>
<td>Southern</td>
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<td>311,085</td>
<td>1</td>
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<tr>
<td>Capital &amp; Coast</td>
<td>7</td>
<td>302,645</td>
<td>4</td>
</tr>
<tr>
<td>Bay of Plenty</td>
<td>8</td>
<td>218,020</td>
<td>3</td>
</tr>
</tbody>
</table>
The Triple (Quadruple) Aim

1. Improve the health of our population
2. Improve the care experience by our people
3. Improve the efficiency of our health system
4. Improve learning opportunities for current and future providers of health care
The area under the curve will reduce, with the care models fundamentally shifted, to enable resources to be redeployed more effectively.
Variation in Admission Rates by Southern GP Practice Over all Long Term Conditions in a six year period
Time for Change

“....If we want to make change in our sector or our practice, we need to have a much more holistic lens on how change could happen and also look beyond two things – what we have done in the past and what we know will be safe...”

Helen Bevin
Chief Transformation Officer,
National Health Service, UK
Time for Change

“...Disruption is the new norm ... questioning existing ideas and being open to new ones, from whatever walk of life, will actually help organisations and structures adapt and survive...”

Helen Bevin
Chief Transformation Officer,
National Health Service, UK
Thank You