

# POMRC 5<sup>TH</sup> REPORT KEY FINDINGS

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# 5<sup>th</sup> Report

- New Reporting 2009 - 2013
- Follow up Reporting 2009 – 2014
- Recommendations

# New Reporting 2009 - 2013

- 30 day mortality after procedure under GA
- Day of the Week mortality

# 30 Day Mortality

- After a procedure under GA
  - 6755 deaths
  - Cumulative mortality 0.56%
- Risk Factors:
  - Increasing age
  - Co-morbidities
  - Increased CCI and ASA
  - Emergency admission

# Day of Week Mortality

- 'Weekend Effect'
  - Present after adjusting for socio-demographic and clinical factors
    - Acute admissions
    - Elective admissions
  - More pronounced for elective procedures

# Follow up reporting: 2009 - 2014

- Cholecystectomy
- GA
- Hip arthroplasty
- Knee arthroplasty
- Colorectal resection
- CABG
- PTCA
- ASA 4 & 5
- ASA 1 & 2

# Cholecystectomy

- 146 deaths
- Cumulative mortality – 0.37%
- Risk factors:
  - Open procedures
  - Acute procedures

# General Anaesthesia

- Same or next day mortality
  - 1805 deaths
  - Mortality 0.11% - 0.15% per year
  - Cumulative mortality 0.12%
  - Risk Factors:
    - Acute admission/emergency procedure
- ASA recording
  - 2009 - 63.7%
  - 2014 – 71.6%



# Arthroplasty

- Hip
  - 792 deaths (51 elective)
  - Cumulative mortality 1.53%
    - 7.11% acute
    - 0.12% elective
- Knee
  - 61 elective deaths
  - Cumulative mortality 0.17%

# Colorectal Resection

- 816 deaths
- Cumulative mortality 3.92%
  - Acute 8.45%
  - Elective 2.03%
- Risk factors:
  - Acute admission

# Coronary Artery Bypass Graft

- 337 deaths
- Cumulative mortality - 2.47%
  - Acute 4.89%
- Risk factors:
  - Acute admission

# Percutaneous Transluminal Coronary Angioplasty

- 572 deaths
- Cumulative mortality - 1.77%
  - Acute 2.43%
- Risk factors:
  - Acute admission

# ASA 4 & 5

- 3262 deaths
  - 489 – 538 per annum
- Cumulative mortality – 12.6%
  - ASA5 48.14%
- Risk factors:
  - Acute
  - ASA5

# ASA 1 & 2

- 320 deaths
  - 38 – 75 per annum
- Cumulative mortality - 0.05%

# Maori Mortality

- CABG - higher
- Cholecystectomy- higher
- GA - higher for same or next day mortality

# Common themes

- ASA score remains a strong predictor
- Risk factors:
  - Increasing age
  - Co-morbidities
  - Emergency admissions
- Causes of death:
  - Cardiovascular
  - Neoplasms
  - GI causes



# International Comparisons

- Day of the Week
- 30 day Mortality
- Operative procedures

# WHO Metrics

- Day of surgery mortality rate
  - 0.12%

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- Day of surgery mortality rate
  - 0.12%
- Inpatient mortality rate
  - 0.40%

# 5<sup>th</sup> Report Recommendations

- Improvements to Care
  - Non operative
  - Risk of perioperative death
  - Weekend elective deaths

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  - Maori
- Maori Caucus
  - Impact of age
  - Use of CCI in analysis