# Early findings from the national rheumatic fever audit of recurrent and 'unexpected' hospitalisations

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**February 2016**

# Outline

- Background: Better Public Services
- Audit / Stocktake of Practice
- Audited Hospitalisations
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- Early Themes
- Where to From Here

# Background

Better Public Services: DHB Rheumatic Fever Prevention Plans

- Minister's expectations for DHBs on the *minimum actions for effective follow up activities* include
  - case notification within 7 days of hospital admission/suspicion
  - ensure bicillin prophylaxis is provided not > 5 days after due date
  - identification and follow-up known risk factors and system failure points in cases of rheumatic fever

Areas of concern

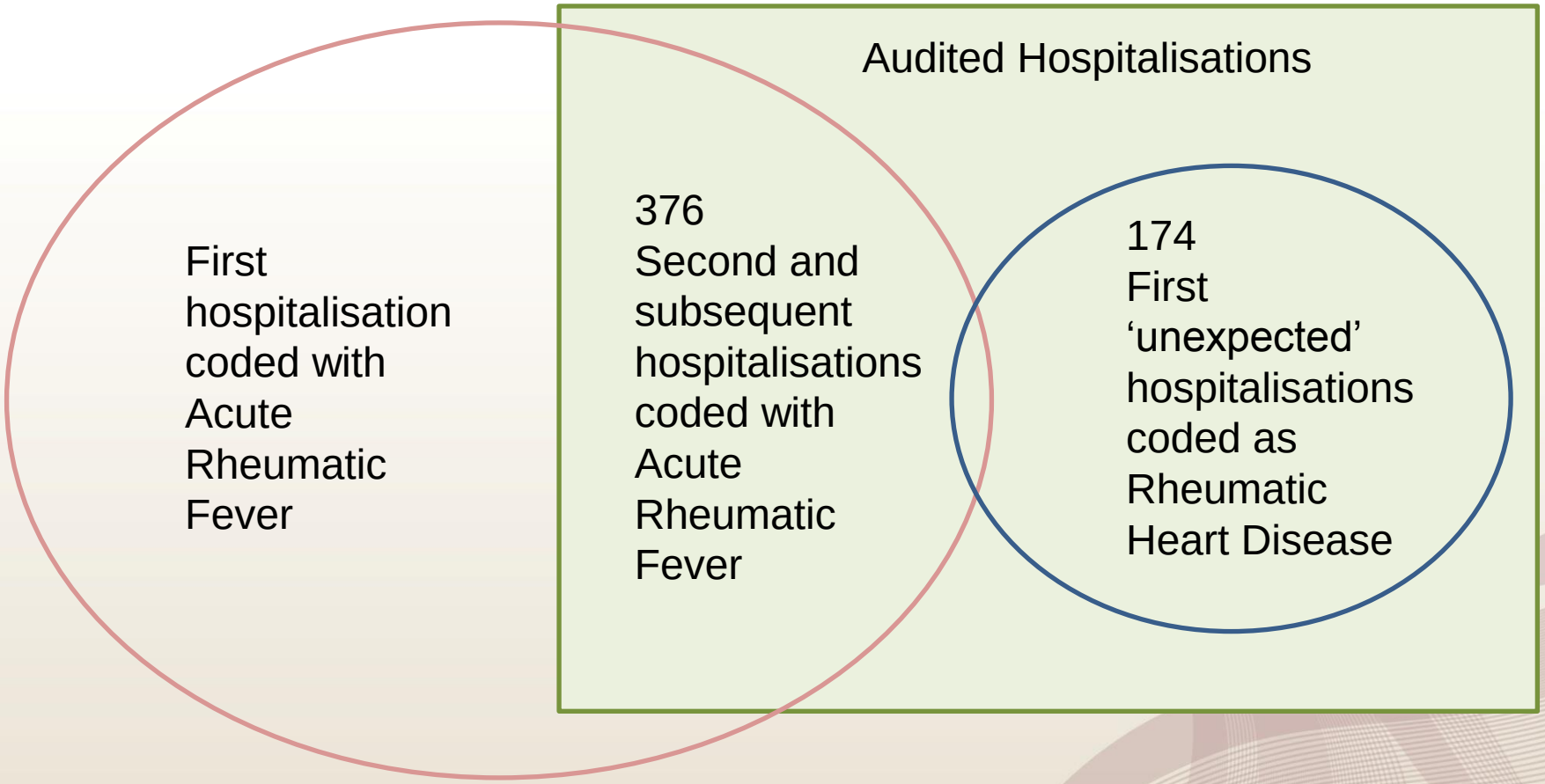
- Case notification – particularly for cases with recurrence
- Primary hospitalisation with rheumatic heart disease

# Audit / Stock take of Practice

- Undertaken by Central Region's Technical Advisory Services
- The audit is taking a quality improvement approach with recommendations for DHBs and the Ministry of Health
- Gain a better understanding of:
  - coding accuracy
  - factors leading to hospitalisation
  - recurrent rheumatic fever case notification
    - occurrence and completeness
  - management planning for active clinical follow-up, and
  - how effectively clinical follow up has been applied
  - DHB-specific and national areas for improvement

# Audited Hospitalisations

- Over the 2010-2014 calendar years



# Progress to Date

- Auditors visited 12 DHBs, covering 26% of the audit cases, during Sept–Dec 2015
- 6 remaining DHBs will be visited January – May 2016
- 2 DHBs did not have patients reported within the hospitalisation timeframe (2010-2014)

| DHB | Recurrent Hospitalisation ARF | Primary Diagnosis RHD | Total |
|---|---|---|---|
| Northland | 42 | 9 | 51 |
| Waitemata | 38 | 12 | 50 |
| Auckland | 26 | 20 | 46 |
| Counties Manukau | 151 | 63 | 214 |
| Waikato | 23 | 15 | 38 |
| Bay of Plenty | 22 | 9 | 31 |
| Lakes | 10 | 3 | 13 |
| Tairawhiti | 10 | 7 | 17 |
| Hawke's Bay | 12 | 3 | 15 |
| Taranaki | 1 | 1 | 2 |
| MidCentral | 4 | 4 | 8 |
| Whanganui | 5 | 1 | 6 |
| Wairarapa | 0 | 1 | 1 |
| Hutt Valley | 10 | 6 | 16 |
| Capital & Coast | 14 | 8 | 22 |
| Nelson Marlborough | 2 | 3 | 5 |
| West Coast | 0 | 0 | 0 |
| Canterbury | 4 | 6 | 10 |
| South Canterbury | 0 | 0 | 0 |
| Southern | 2 | 3 | 5 |
| Total | 376 | 174 | 550 |

# Early Findings - Coding

- Acute Rheumatic Fever with carditis - coded as RHD
  - Case 1: 8 yo Māori patient – seen by ED 8 months earlier with ankle pain – Xray normal – discharged home. Re-presented with ankle pain & other diagnostic features including carditis (mild MV, and trace AV regurgitation). Notified to medical officer of health.

- Heart Disease with no evidence of RHD – coded as RHD
  - Case 2: 19 yo Māori patient – murmur found on routine exam, L ventricular hypertrophy on ECG, "*cannot remember having rheumatic fever as a child*", severe aortic insufficiency, referred for aortic valve replacement, assessed following year with "*no evidence of past RHD*", meds: warfarin, metoprolol, alazapril, no bicillin.

- Issues raised
  - Coding of ARF as RHD
  - Unclear diagnoses

# Early Findings – Notification & Management Plan

Case 3: Stopped bicillin prophylaxis aged 21 years, represented 7 months later with recurrence of acute rheumatic fever, mild AV and MV regurgitation. No notification to medical officer of health. Discharge summary recommends bicillin every 28 days till 30 years, no record of plans for physician review. No record of specialist outpatient appointments post discharge. Became inactive on bicillin register a few months after discharge.

- Issues raised
  - Notification
    - Delay or absence of action by medical practitioner
    - Incomplete case notification information
  - Discharge Summary
    - Incomplete patient management plan
    - Concerns about clarity of language for families

# Where to from here

- Completion of DHB audits January – May 2016
- Staggered provision of audit reports to DHBs
- National report due late June 2016
- Further local and national action to follow-up on identified points for system improvement
- October 2016 - DHB 2016/2017 Quarter 1 report will confirm identified areas for improvement that the DHB is progressing
- July 2017 – DHB 2016/2017 Quarter 4 report will advise results of the DHBs annual audit of secondary prophylaxis coverage

# Summary

- Better Public Services expectations for effective follow-up of patients with rheumatic fever and action to address any identifiable system failure points
- DHB audit of practice is currently underway
- Early quality improvement themes in audit:
  - Coding inaccuracies
  - Incomplete case notification
  - Incomplete patient management plans in discharge summaries
- National report due for completion late June 2016