

Cardiology

DAMA

Path of care of patients with Acute Coronary Syndrome

CABG

Clopidogrel

Inequalities by Aboriginality

Aspirin

Troponin

Dr Ben Scalley
A/Professor Marisa Gilles
A/Professor Judith Katzenellenbogen
Professor Sandra Thompson

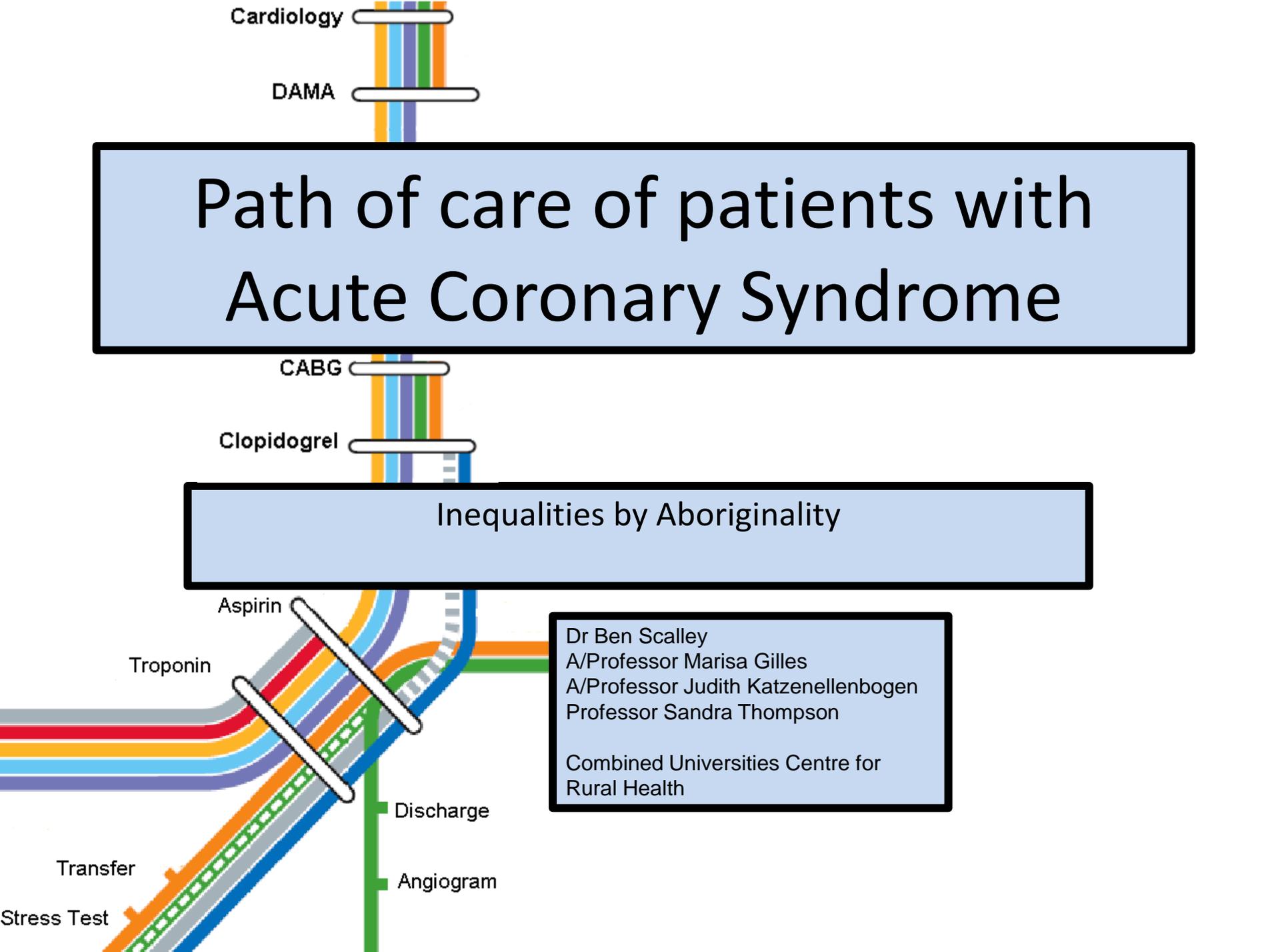
Combined Universities Centre for Rural Health

Discharge

Angiogram

Transfer

Stress Test



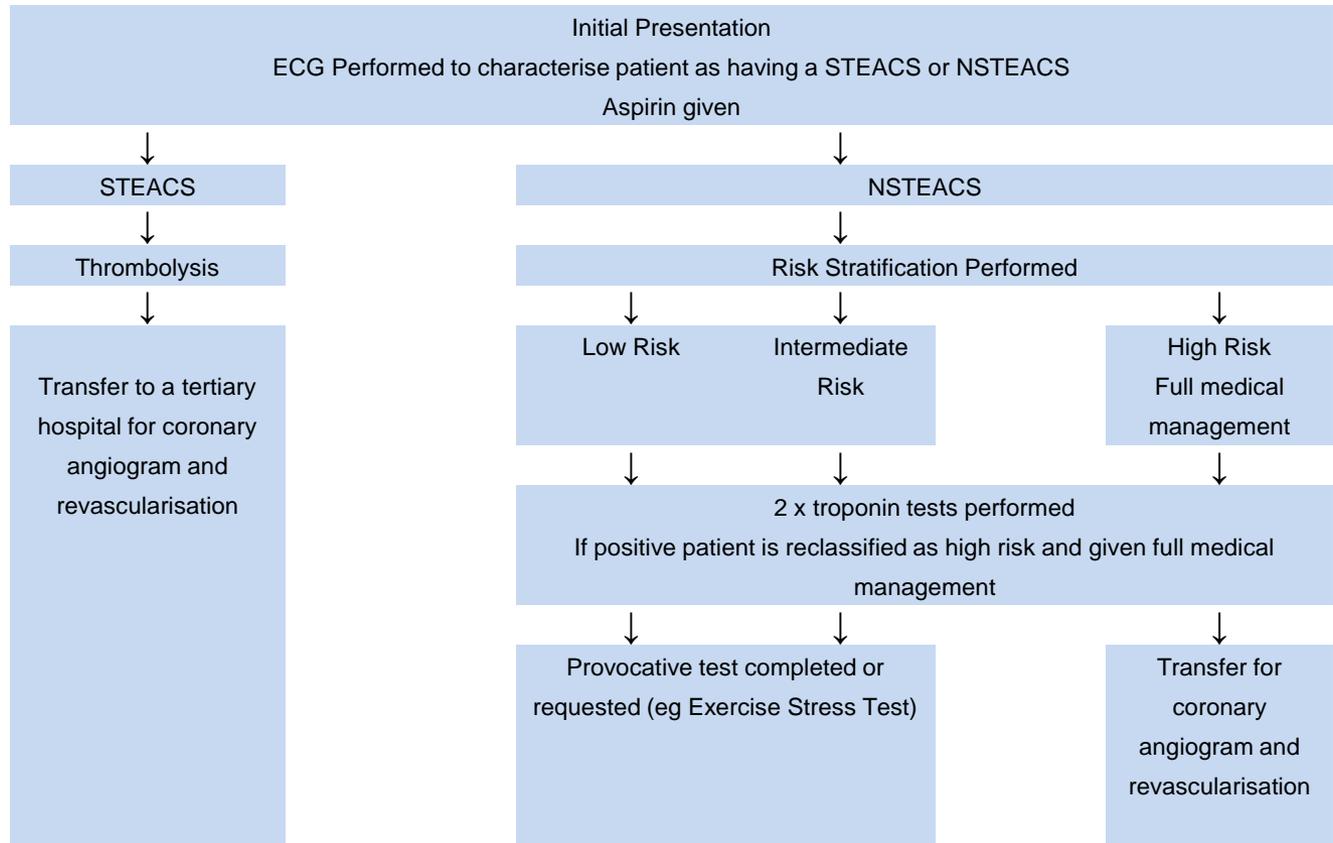


Background

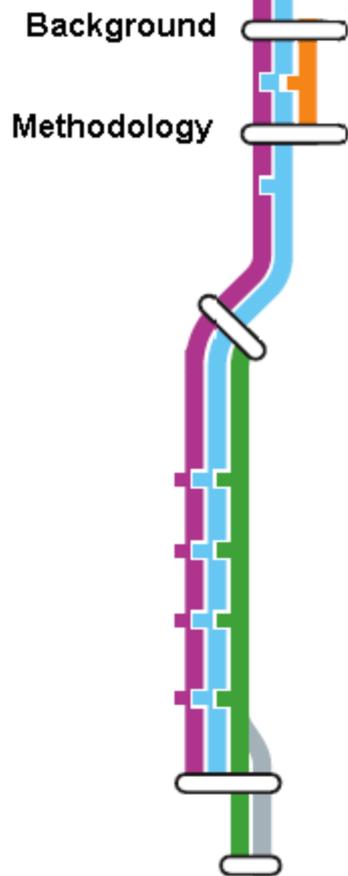
- Ischaemic Heart Disease accounts for 16.0 percent of all deaths.
- If the rates and outcomes in Aboriginal persons were improved to that of non-Aboriginal persons the life expectancy gap could be narrowed by 6.5 years.
- Two aims to the study: quality improvement and investigating inequities by Aboriginality.
- From ED presentation to transfer to discharge.
- Examined adherence to the National Heart Foundation guidelines.



Background

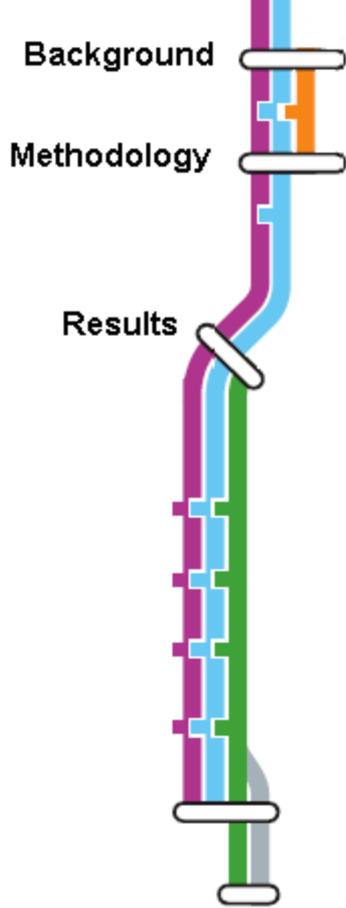


Summary of National Heart Foundation Guidelines



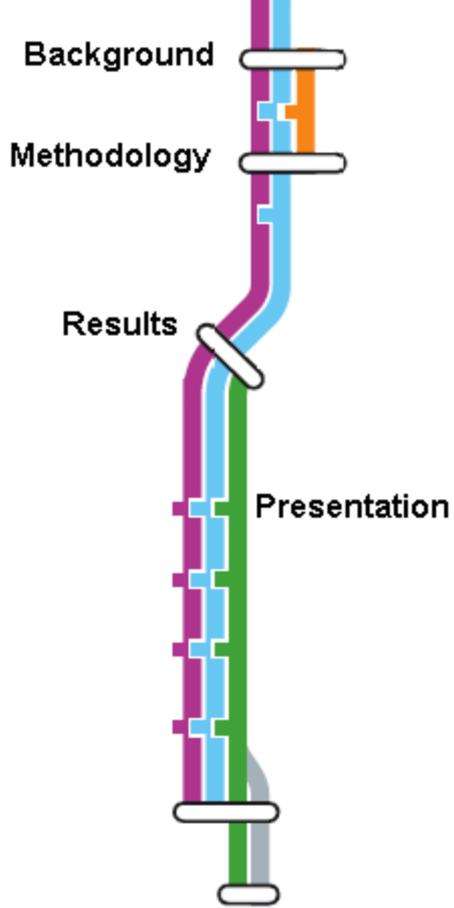
Methodology

- Presentations coded MDC 5 (Circulatory) from 1st July 2011 to 30th June 2012 were examined.
- All Aboriginal presentations and a random sample of 450 Non Aboriginal presentations.
- Presentations with symptoms of Acute Coronary Syndrome (ACS) were included.
 - Exclusion criteria: tachyarrhythmia, recent stimulant abuse, significant anaemia or in which an alternative diagnosis as a cause of their symptoms was confirmed.
- The patient's medical record were then examined to determine their baseline risk (as per the guidelines) what investigations they had undergone and what management they had received.



Results

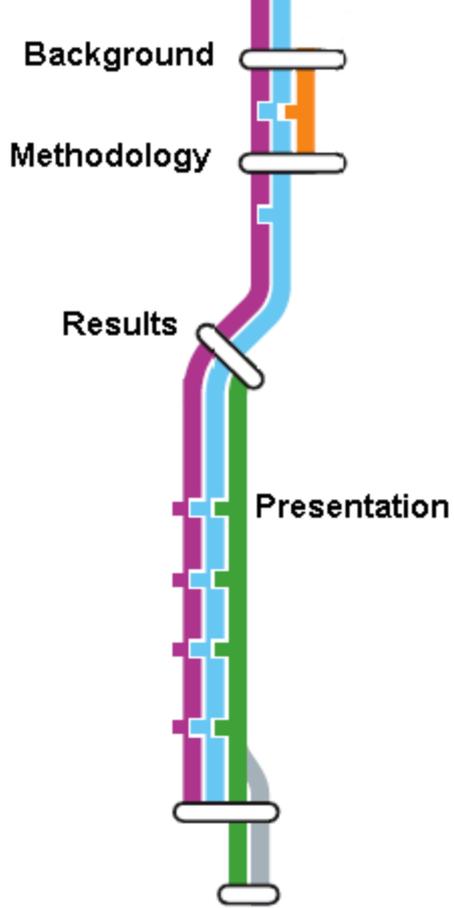
- The audited notes resulted in:
 - 117 Aboriginal presentations consistent with ACS
 - 204 non Aboriginal presentations consistent with ACS



Presentation

	Aboriginal People	Non Aboriginal (weighted) sample
Low risk	26.5% (n=31)	34.2%
Intermediate risk	33.3%(n=39)	33.7%
High risk	34.2% (n=40)	28.6%
STEACS	6.0% (n=7)	3.5%

Table: Level of risk of presentations

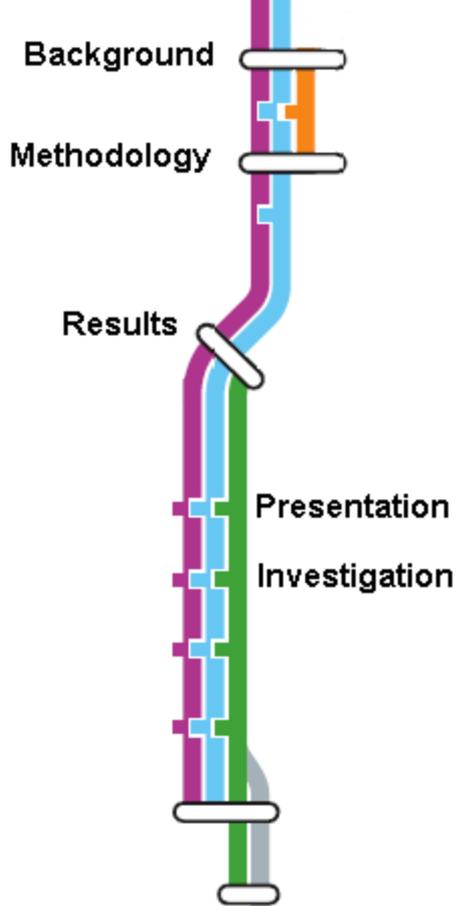


Presentation

	Aboriginal People	Non Aboriginal (weighted) sample
Pathway started	47.0% (n=55)	45.4%
Risk stratified	22.2% (n=26)	13.6%
Correctly stratified	17.1% (n=20)	10.7%
Pathway finished	The pathway was completed twice in the sample audited.	

Table: Characteristics of pathway use

Investigation

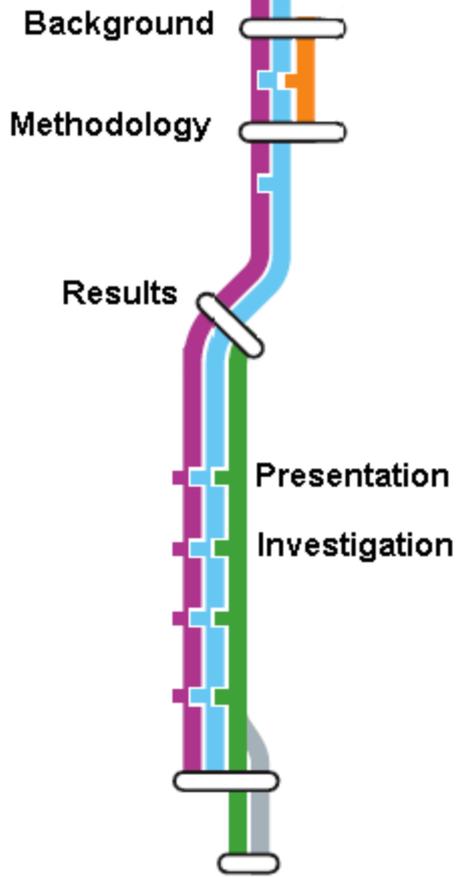


	Aboriginal People	Non Aboriginal (weighted) sample
Low risk	51.9% (n=14)	57.4%
Intermediate risk	75.0% (n=27)	76.9%
High risk	81.1% (n=30)	84.8%

Table: Proportion who received two troponin measurements

Excluding those who discharged against medical advice and including those who had a single troponin measurement more than 8 hours after the onset of pain or who had a positive first result.

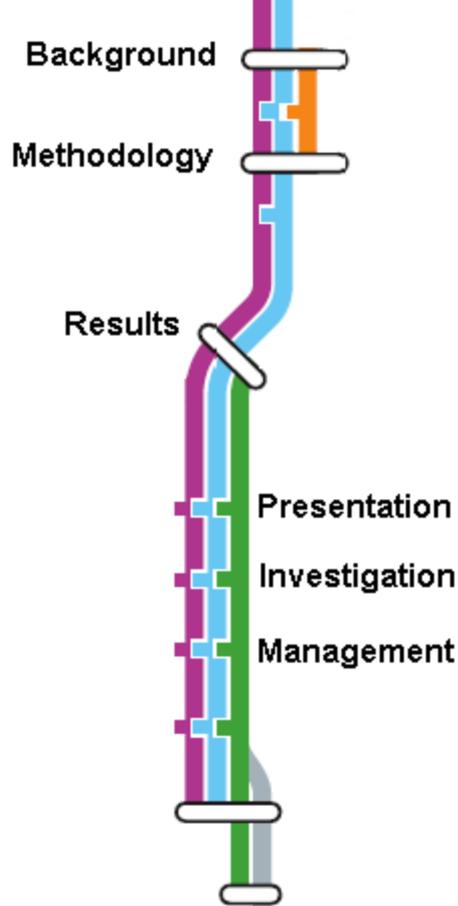
Investigation



	Aboriginal People	Non Aboriginal (weighted) sample
Low risk	34.6%(n=9)	44.4%
Intermediate risk	46.7%(n=14)	47.3%
High risk	26.7%(n=8)	34.6%

Table: Proportion offered a provocative test

Excluding those who discharged against medical advice, who had a positive troponin or were referred for an angiogram.

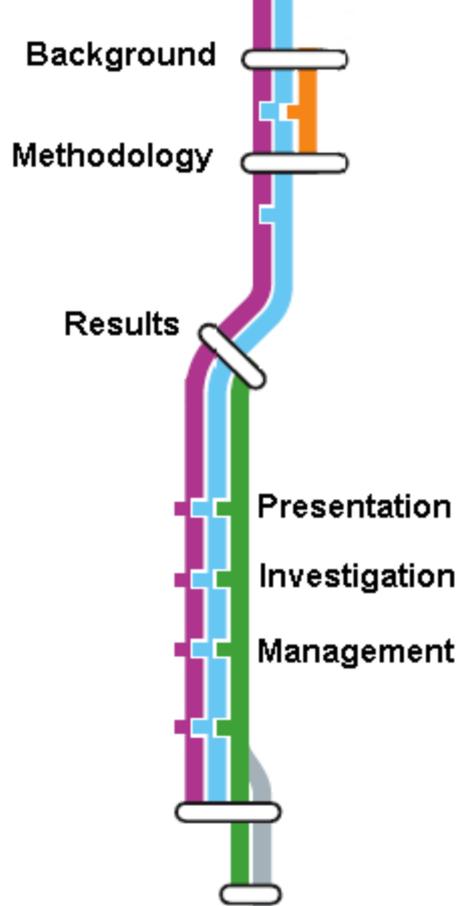


Management

	Aboriginal People	Non Aboriginal (weighted) sample
Emergency presentations admitted		
Low risk	51.9% (n=14)	52.2%
Intermediate risk	55.6% (n=20)	69.9%
High risk	75.7% (n=28)	88.8%
STEACS	100%(n=5)	100%
All presentations	63.8% (n=67)	70.5%
Patients transferred		
High risk	16.2% (n=6)	29.0%
STEACS	100% (n=5)	100%

Table: Patients admitted or transferred.

Excluding those who discharged against medical advice.

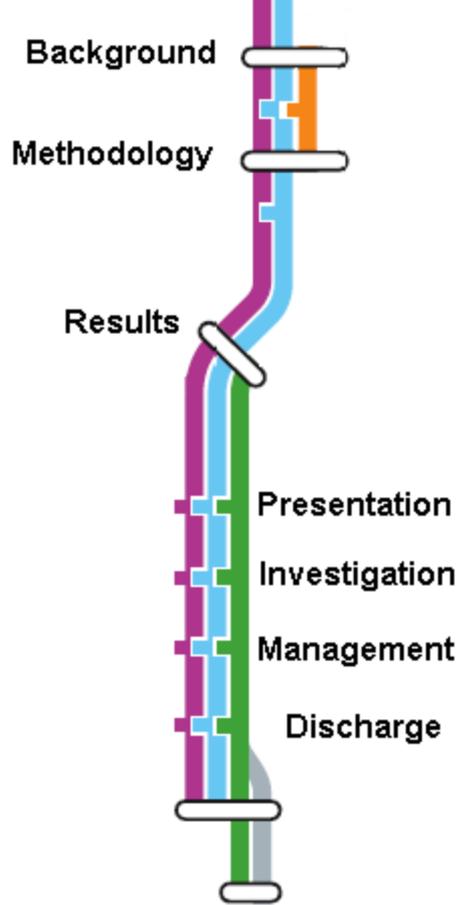


Management

	Aboriginal People	Non Aboriginal (weighted) sample
Receiving full medical management		
High risk	35.1% (n=13)	42.8%
Undergoing an angiogram		
High risk	13.5% (n=5)	21.3%
Troponin positive	42.9% (n=6)	53.8%

Table: High risks patients receiving full medical management and an angiogram.

Excluding those who discharged against medical advice. Full medical management included Aspirin, Clopidogrel and an anticoagulant. Beta blockers were not included due to contraindications being reported.



Discharge

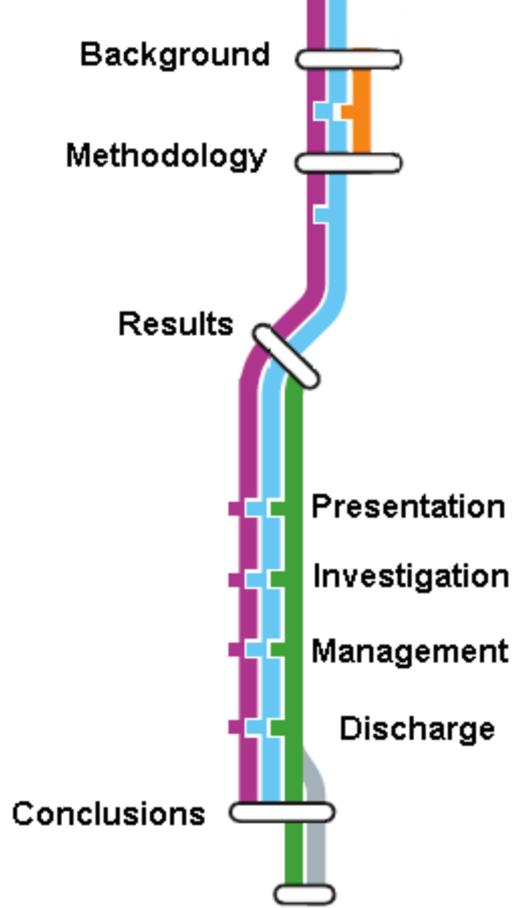
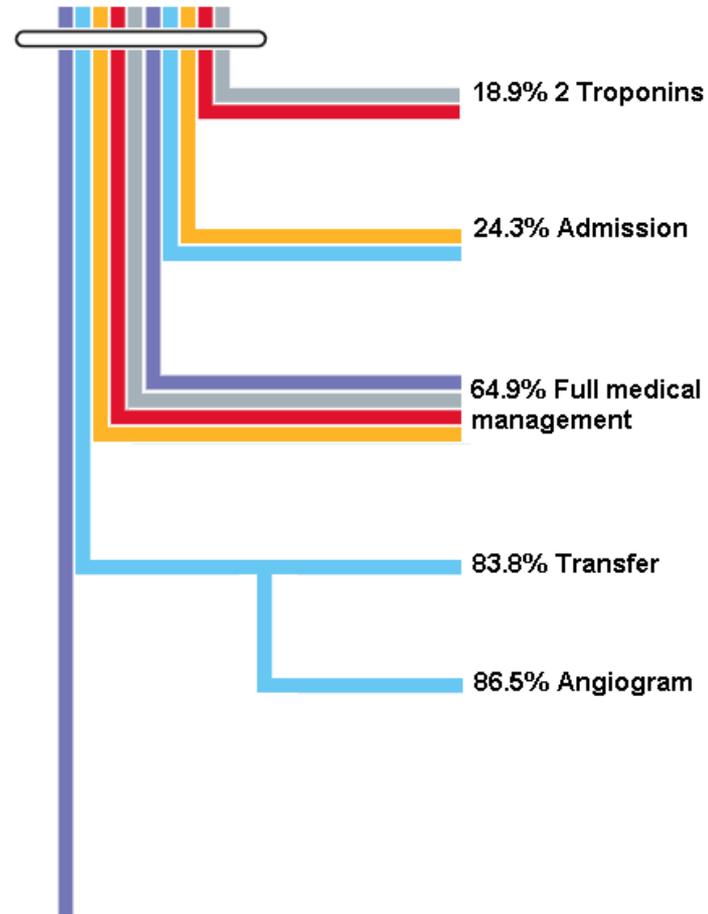
	Aboriginal People	Non Aboriginal (weighted) sample
Discharged against medical advice		
All presentations	10.3% (n=12)	5.4%
Discharged on an anti-platelet medication [^]		
All presentations	62.9% (n=66)	49.3%
Follow up offered [^]		
Cardiology	14.3% (n=15)	17.3%
General practice	60.0%(n=63)	56.1%

Table: Discharge characteristics and follow up offered.

[^]Excluding those who discharged against medical advice.

Conclusions

High risk Aboriginal presentations and components not being achieved.





Conclusions

- There is non-adherence to the pathway
- Risk stratification is currently being done poorly.
- Stress tests are frequently not being ordered and the services do not exist to cope with demand within an appropriate time period.
- In most areas Aboriginal people are less likely to receive appropriate management. These moderate differences may compound to create large differences in care.
- Positive signs
 - Anti-platelet use may be a sign of positive change from the local AMS using APCC.
 - Accessibility of AMS leads to higher rates of referral from ED.