Rural Health and Research Congress #RHRC2019

A review of Horse-Related Injuries from a Regional NSW Hospital

The Stockman's Plight

Dr Saksham Gupta
Surgical Resident
Wagga Wagga Base Hospital

NSW GOVERNMENT | HETI HEALTH EDUCATION & TRAINING

1

RURAL HEALTH AND RESEARCH CONGRESS 2019

NSW GOVERNMENT | Health Murrumbidgee Local Health District
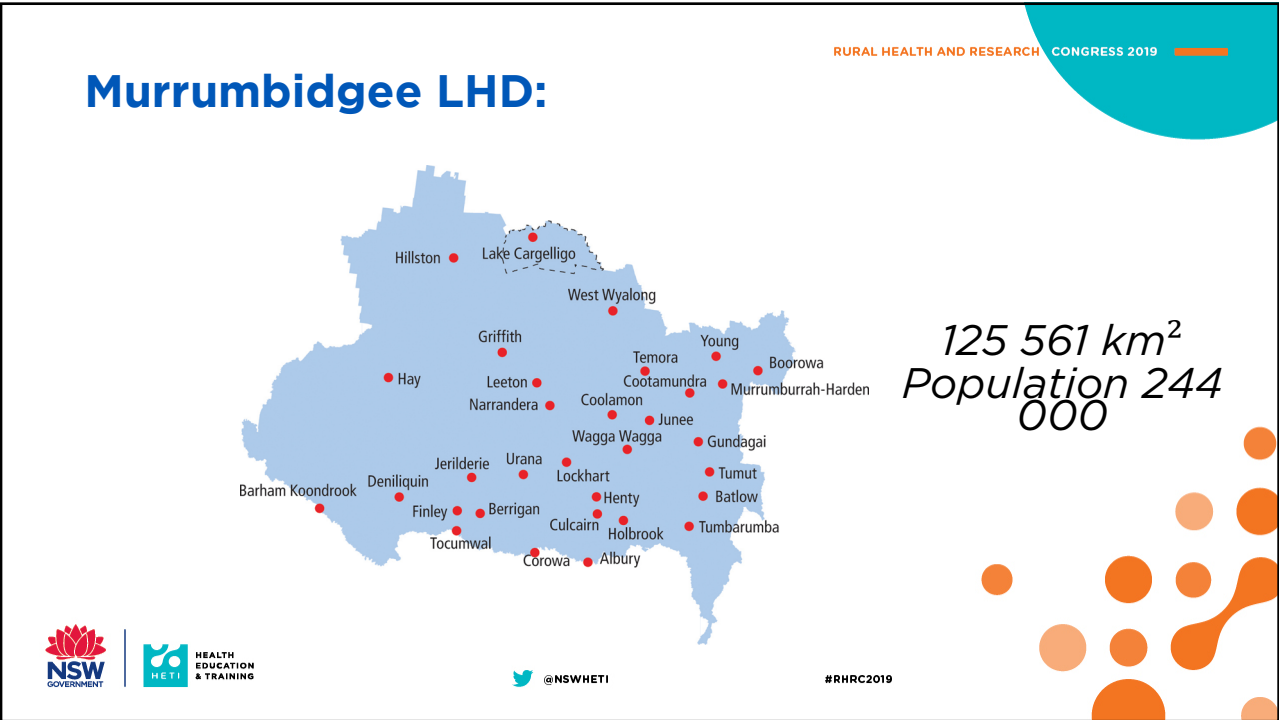
NSW GOVERNMENT | HETI HEALTH EDUCATION & TRAINING
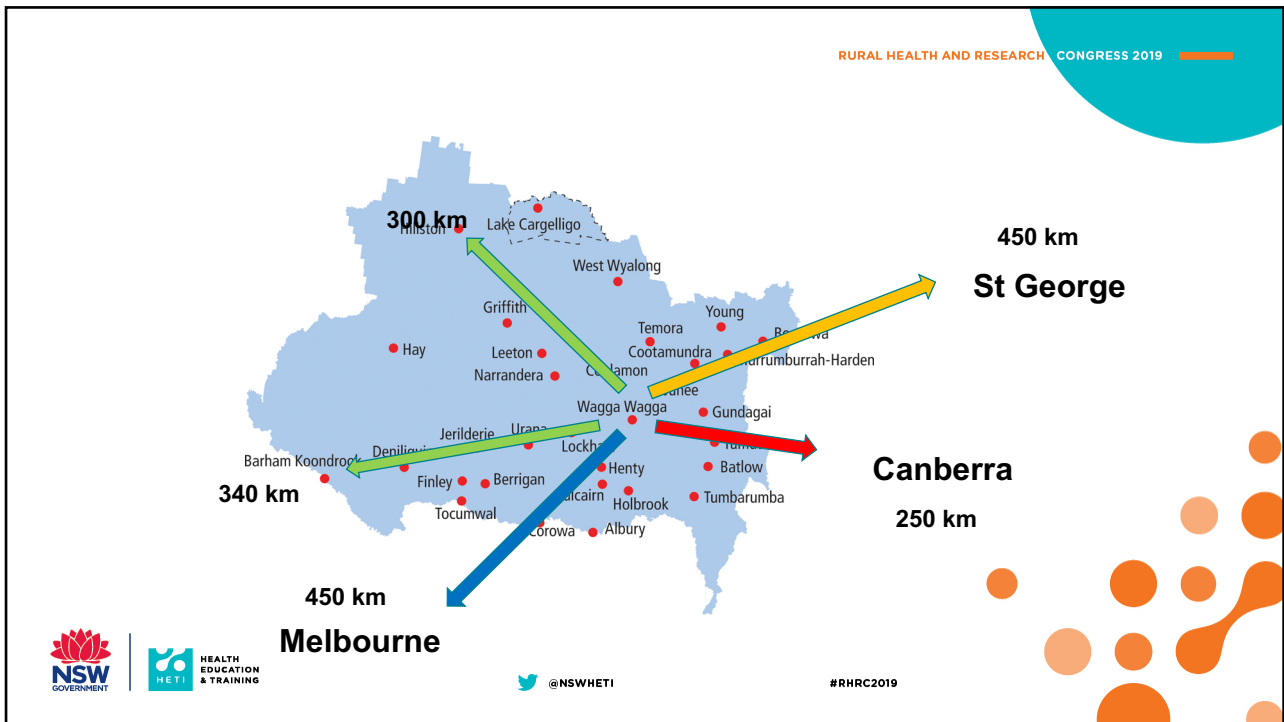
@NSWHETI

#RHRC2019

2

3

Murrumbidgee LHD:

125 561 km^2
Population 244 000

@NSWHETI   #RHRC2019

4

300 km

Lake Cargelligo

Hillston

450 km

St George

West Wyalong

Griffith

Temora

Young

Cootamundra

Murrumburrah-Harden

Hay

Leeton

Narrandera

Wagga Wagga

Gundagai

Jerilderie

Urana

Lockhart

Canberra

Barham Koondrook

Deniliquin

Batlow

250 km

340 km

Finley

Berrigan

Henty

Holbrook

Tumbarumba

Tocumwal

Corowa

Albury

450 km

Melbourne

@NSWHETI

#RHRC2019

5

Horse trauma within the Murrumbidgee

Racing and recreational use are the main activities within the city

In rural area, greater role of field and farm work

The Rodeo!

Issues with distance and accessibility

Fundamentally our injury patterns and demographics are different and need a different approach

@NSWHETI

#RHRC2019

6

Inclusion criteria

All horse-related trauma presentations from January 2018 till December 2018.

- *Includes adults, children and pregnant individuals*
- *Includes recreational and professionals*

Excluded if the horse was not the primary source of injury
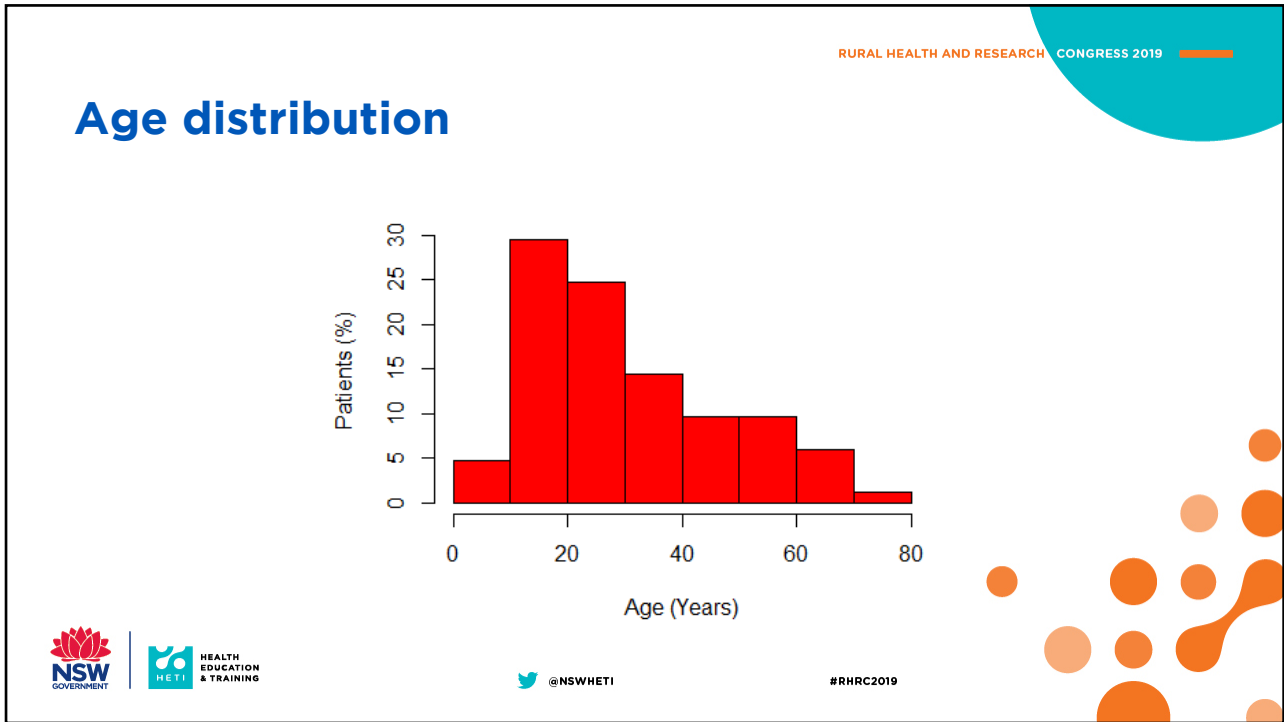*e.g. car ran into a horse, we would not include the car participants.*

NSW GOVERNMENT | HEALTH EDUCATION & TRAINING

@NSWHETI   #RHRC2019

7

Patient demographics

	166 presentations
Mean Age (SD)	30.55 ± 17.2
Female (%)	111 (67%)
Adult (%)	131 (79%)
Experienced (%)	58 (79%)
Rider (%)	126 (78%)
Helmet (%)	47 (59%)

NSW GOVERNMENT | HEALTH EDUCATION & TRAINING

@NSWHETI   #RHRC2019

8

Age distribution

9

Body regions affected

p<0.05

10

Who needed surgery?

Variable	Odds Ratio	P-value
Non-Rider	3.47	0.005
Male	2.74	0.027

@NSWHETI   #RHRC2019

11

Factors predicting severity

Those with an Injury Severity Score >12
Definition for major trauma

From 166 presentations, there were 8
- *7 were riders*
- *Average age of 49 (Range 21 – 72)*
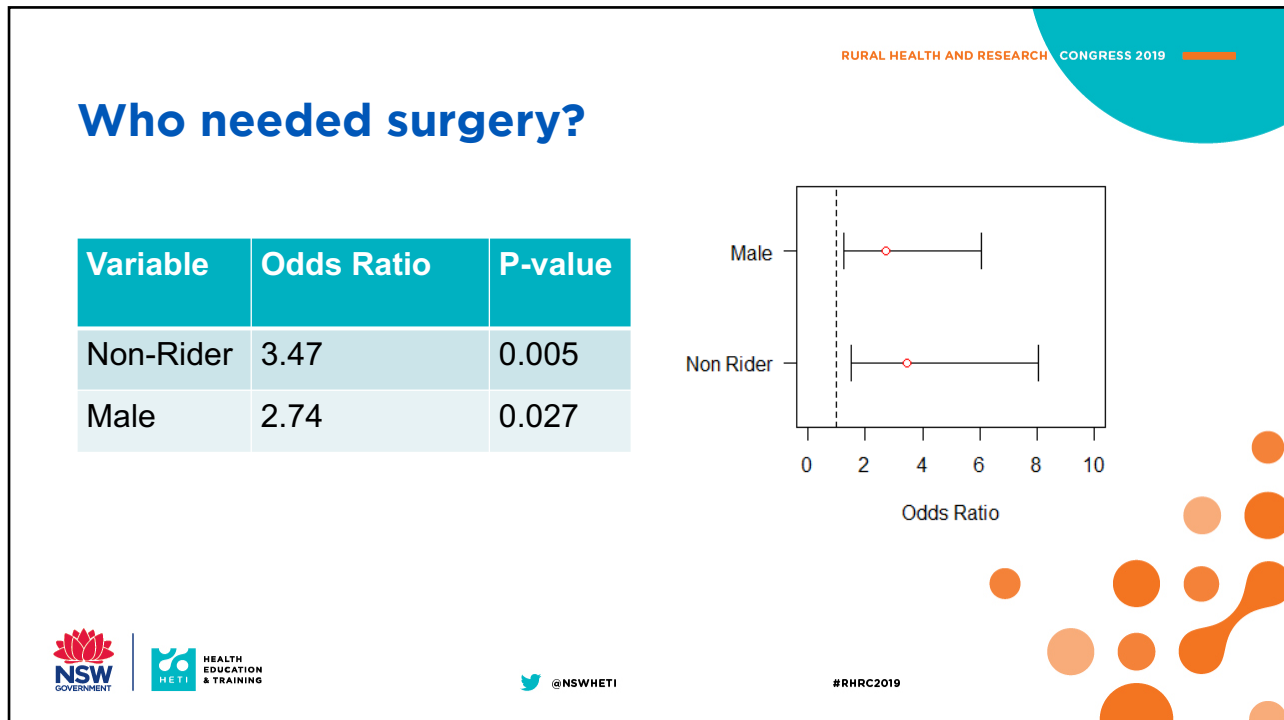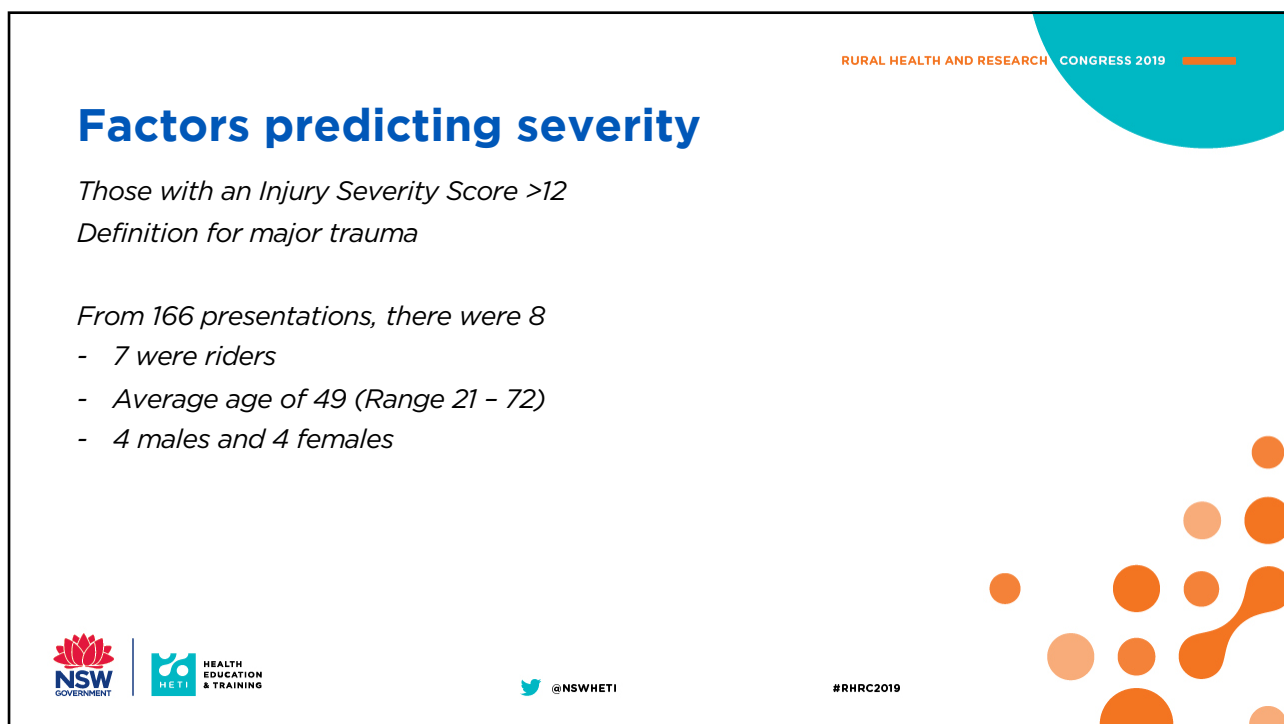- *4 males and 4 females*

@NSWHETI   #RHRC2019

12

Summary points

Rural horse trauma needs a different approach to urban horse trauma

Most injuries involved the limbs, and most operations were orthopaedic

Non-riders and males were more likely to require surgery

More severe injury was experienced in the older age group

We need encourage better use of personal protective equipment

@NSWHETI   #RHRC2019

13

Acknowledgements

Mr David Buckley – Statistician

Ms Stacey Casley – Trauma CNC

@NSWHETI   #RHRC2019

14