



# HUNTER NEW ENGLAND NSW HEALTH

*Our vision: Healthier communities, Excellence in healthcare*

*Our values: Teamwork, Honesty, Respect, Ethics, Excellence, Caring, Commitment, Courage*

## Engagement & Gestational Age

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# The Multi-disciplinary Treatment Team

- John Hunter Hospital
  - 500+ bed teaching/referral hospital
- Antenatal high risk team
  - Home-visiting midwives
  - Obstetricians, Paediatrician
  - Social work/child protection
  - Addiction physician (0.2 FTE)
  - Drug and alcohol nurse practitioner (1FTE, 0.4 CNC)
- ~25-35 concurrent cases at any one time
  - ~50-60 deliveries per year
  - Support provided to 6 local hospitals

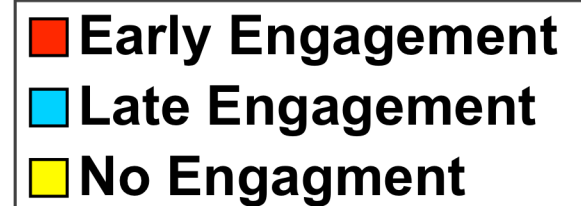
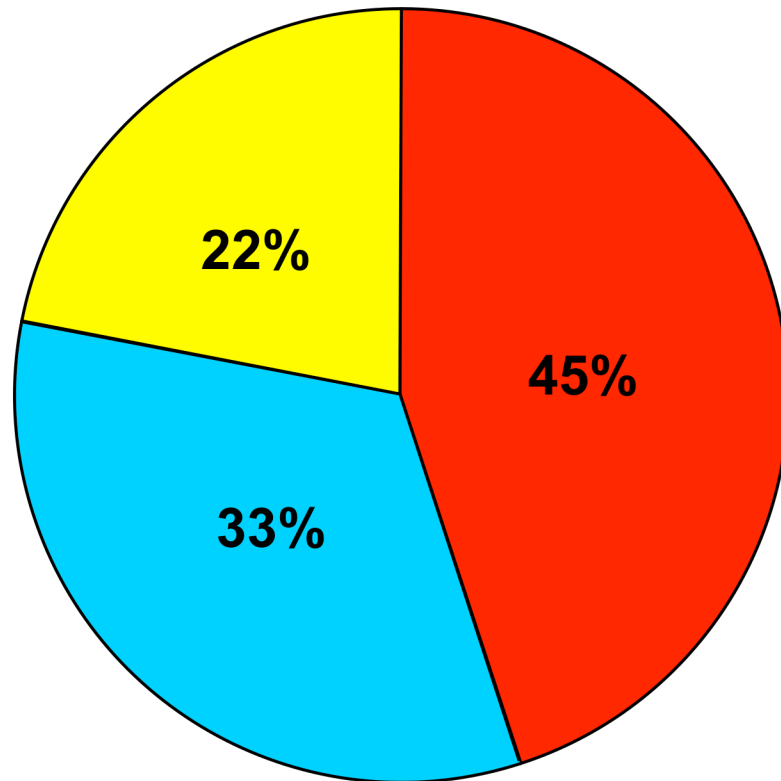
# Sample studied

- To understand engagement, locally
- Opiate dependent pregnant women
  - File audit
  - n=49
  - Self report/referral over a 12 month period
    - 1.3% of all deliveries
- Heroin & nicotine dependent
- Amphetamine abuse common
- Treatment
  - High dose methadone/buprenorphine

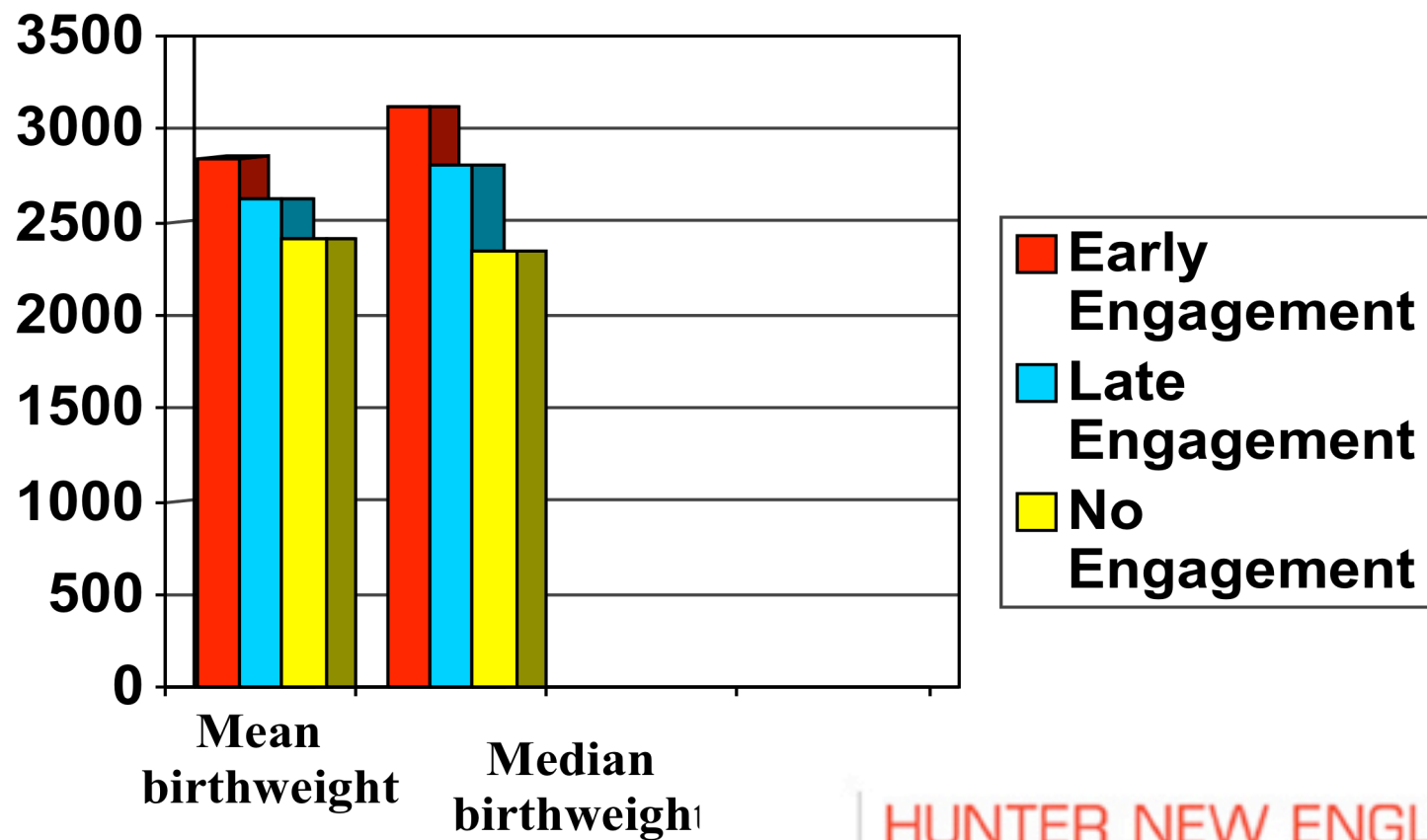
# Definitions - Engagement

- Defined as attending appointments with those team members who were actively offering treatment to this individual.
  - EARLY = 20/40 or earlier.
  - LATE = >20 WEEKS
  - No engagement.

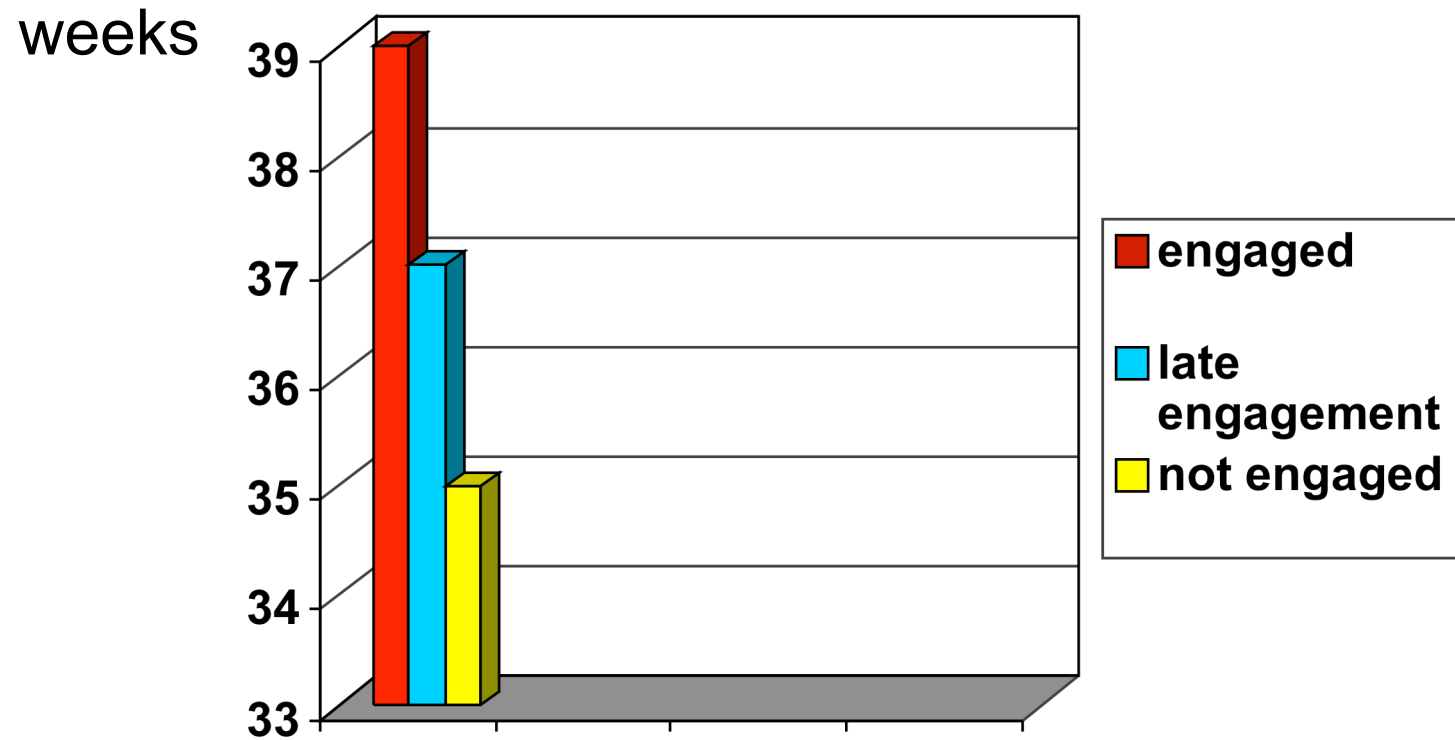
# Engagement in Treatment.



# Neonatal birth-weights



# Median Gestational Age at Delivery



Engaged vs. no engagement

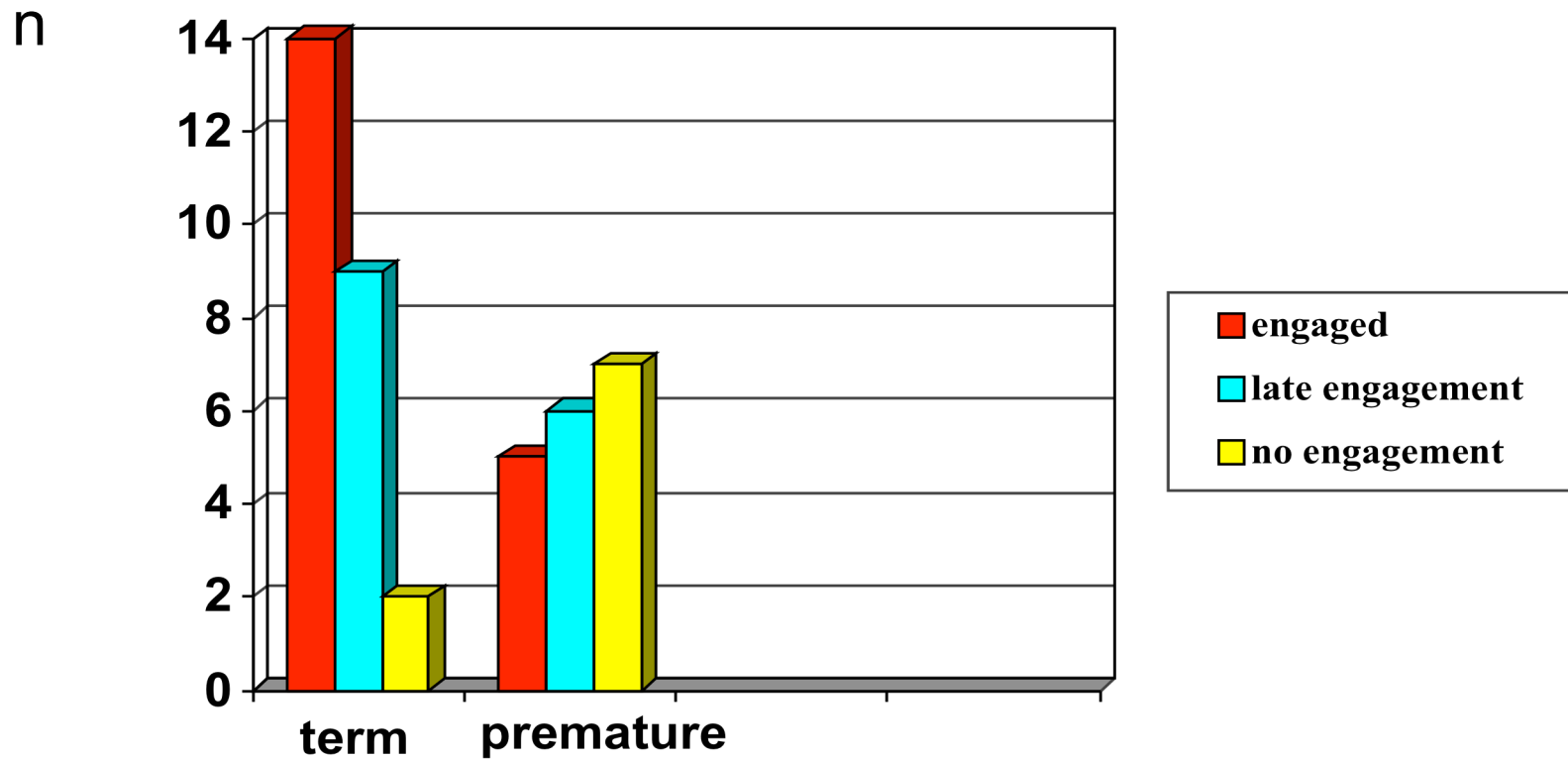
$p = 0.036$  Mann – Whitney Test.

# Prematurity and engagement

	Engaged	Late engagement	No engagement
premature	5	6	7
term	14	9	2



# Prematurity and engagement II



# Conclusion

- Early engagement c.f. no engagement and risk of prematurity
  - Significant ( $p = 0.017$ , Fisher exact test)
  - Odds ratio 0.1 (CI 95% 0.02-0.67)
  - Of this sample, with no maternal engagement in ANC compared to early engagement, neonates are more likely to be born premature
- Consistent with other studies
- Role of antenatal care?
  - Hoddnett 2006