



# 10 YEAR RETROSPECTIVE AUDIT OF PALLIATIVE CARE PRACTICES IN A TERTIARY NEONATAL INTENSIVE CARE UNIT

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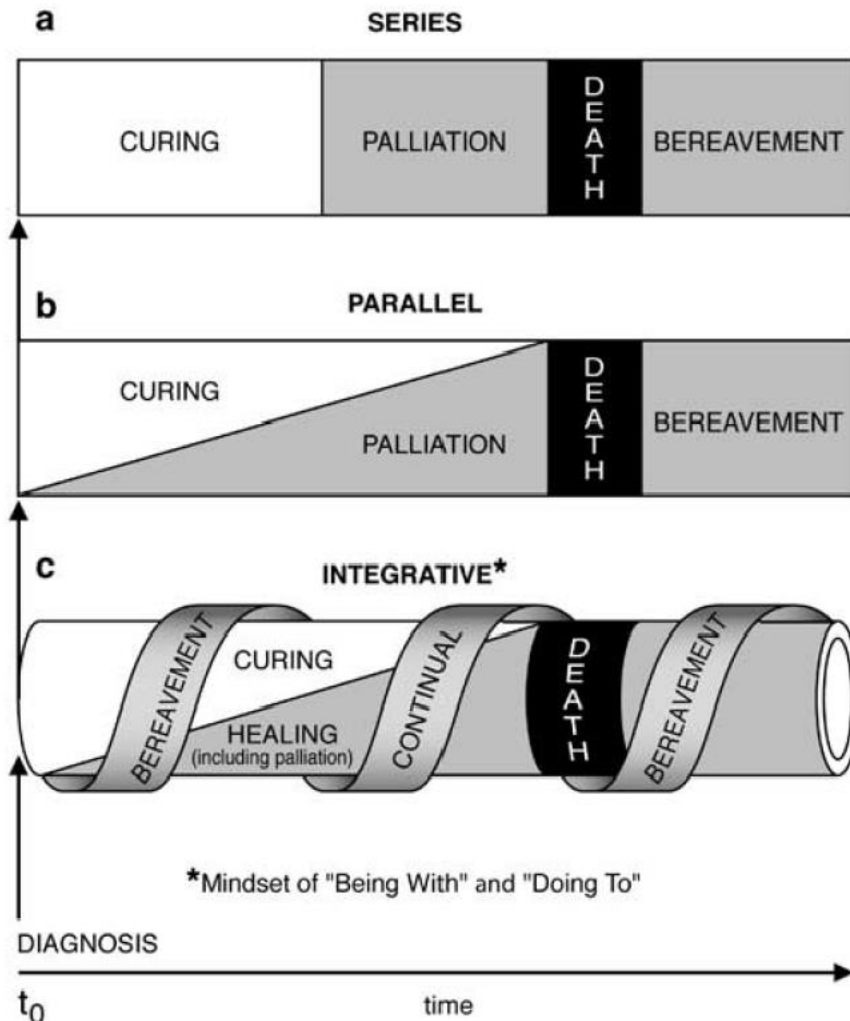
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# Perinatal Death

- NZ = 5.7 deaths in 1,000 live births\*
- Large proportion in hospital
- Distressing for families and staff alike
- Neonatal Palliation needs to begin in the NICU

\*PMMRC data 2004-2014

# Palliative Care



- Milstein 2005  
*“Loss is experienced even in the absence of death... Bereavement is a continual process throughout life and as new diseases*



# Neonatal Nurses College Aotearoa

- Palliative Care for New Zealand Neonatal Units 2015
  - Comfort as a Model of Care
    - Communication
    - Psychological Supports
    - Spiritual Supports
    - Cultural Supports
    - Social Supports

# Audit

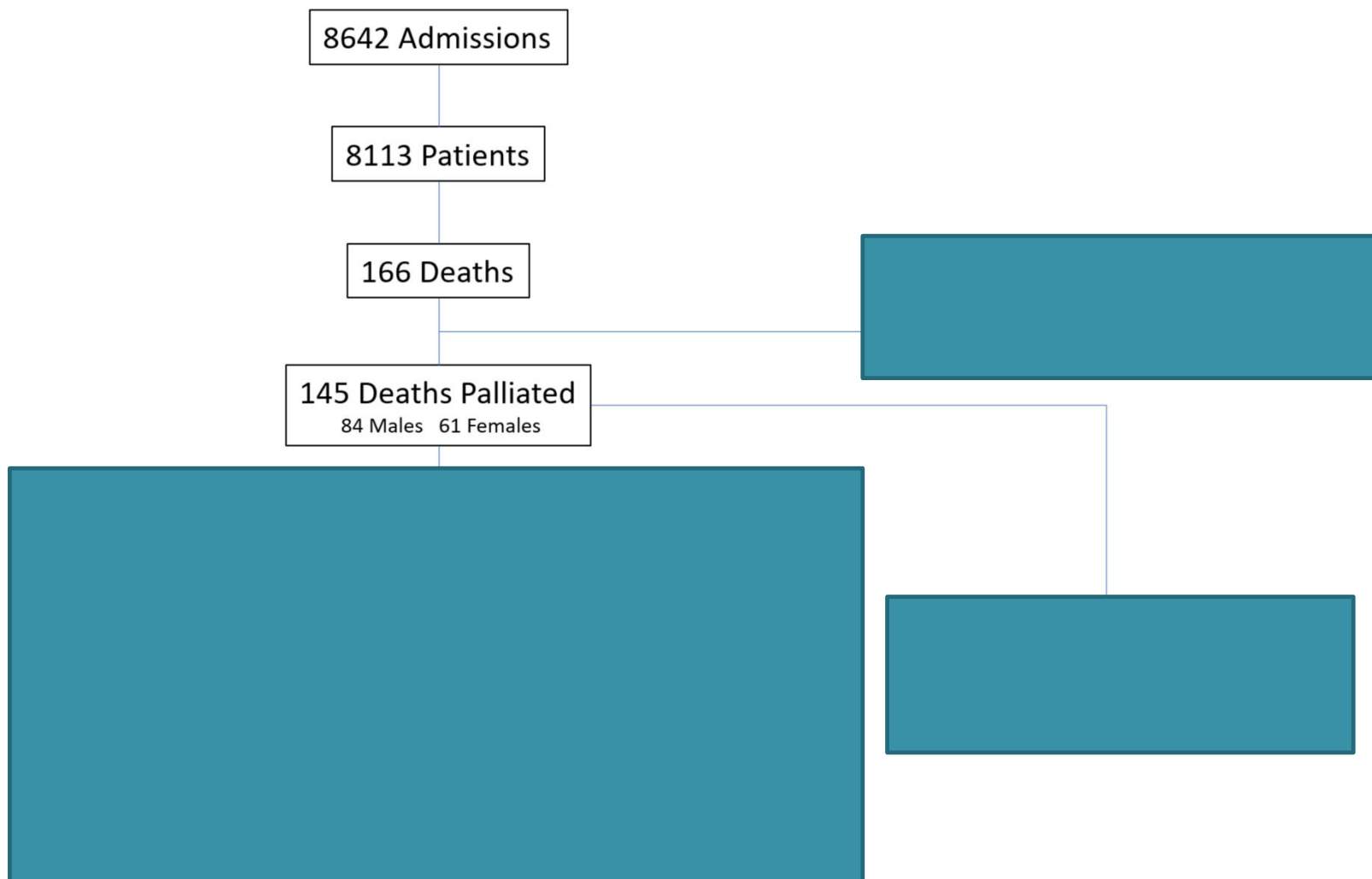
- Retrospective review of clinical notes
- Wellington Regional Hospital
- 10 year epoch
  - 1 Jan 2006 - 31 Dec 2015
- 3 investigators
  - Internally validated
- Data collection
  - June – September 2016

# Audit

- All clinical data reviewed
  - Demographics (including causes of death)
  - Documented discussions with family
  - Documented actions of palliation
  - Documented advanced care plans
  - Psychosocial supports offered
  - Post-mortem discussed/declined

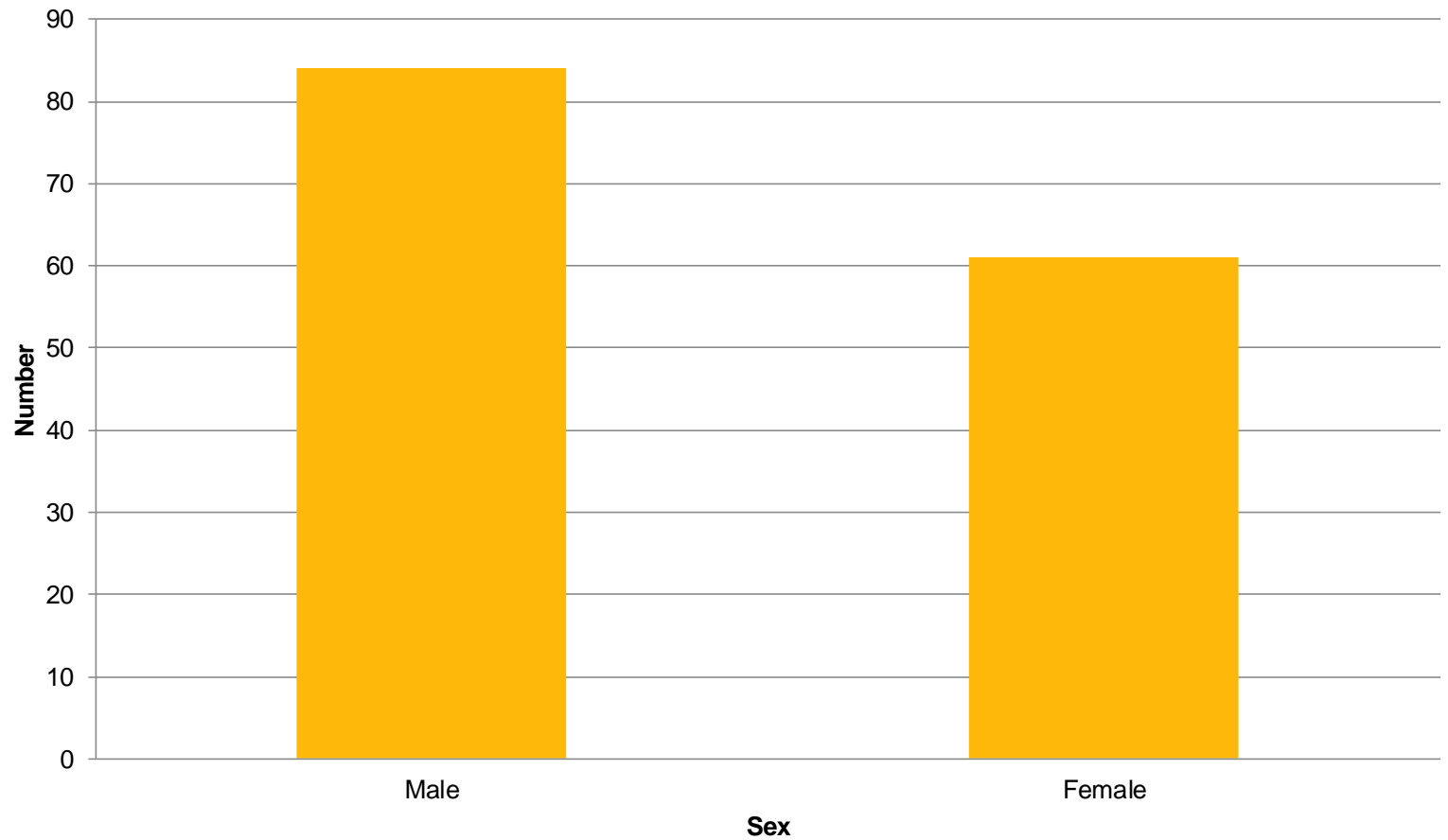
# Results

01 January 2006 – 31 December 2015



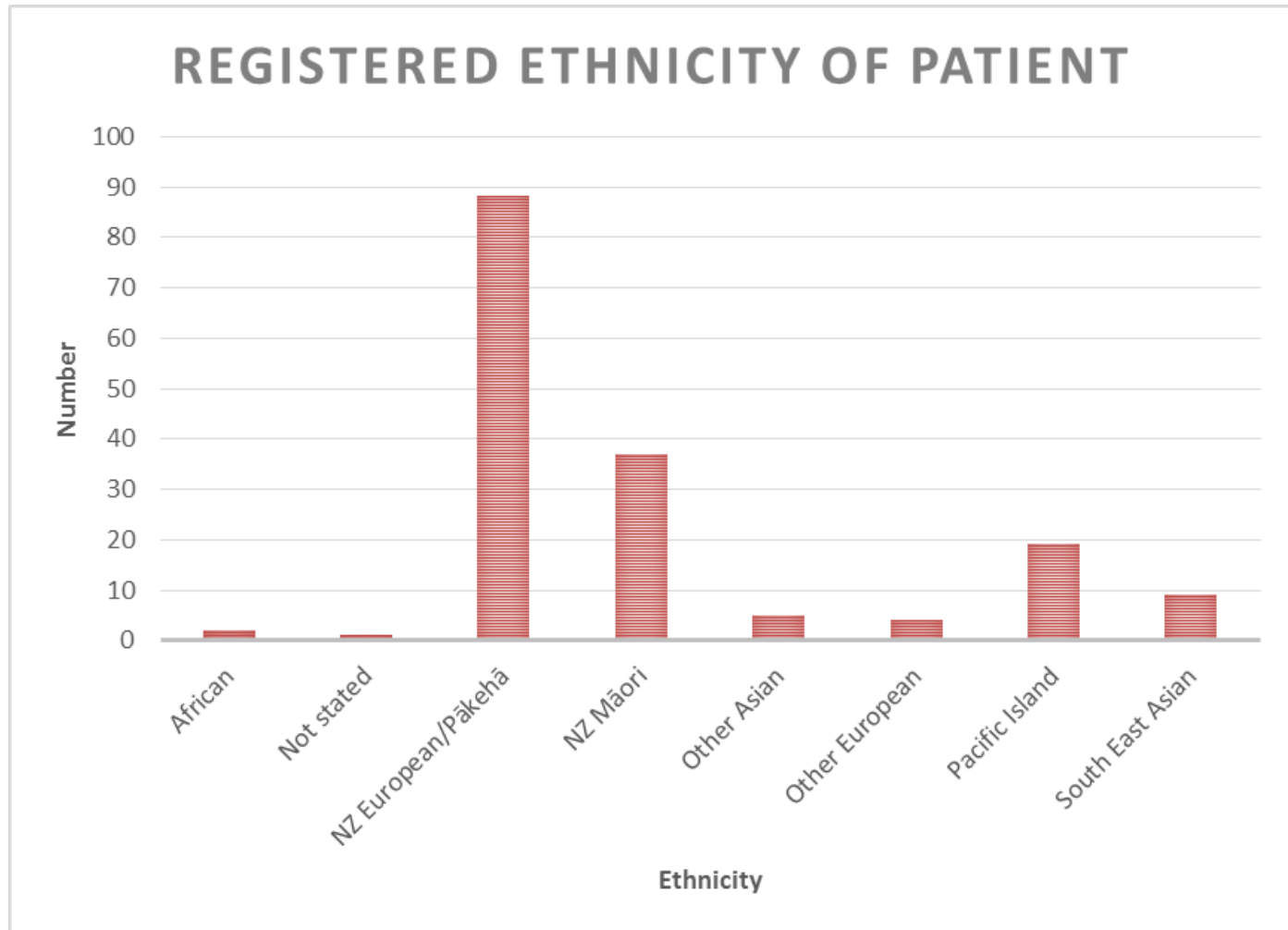
# Demographics (n = 145)

**Sex of Infant**

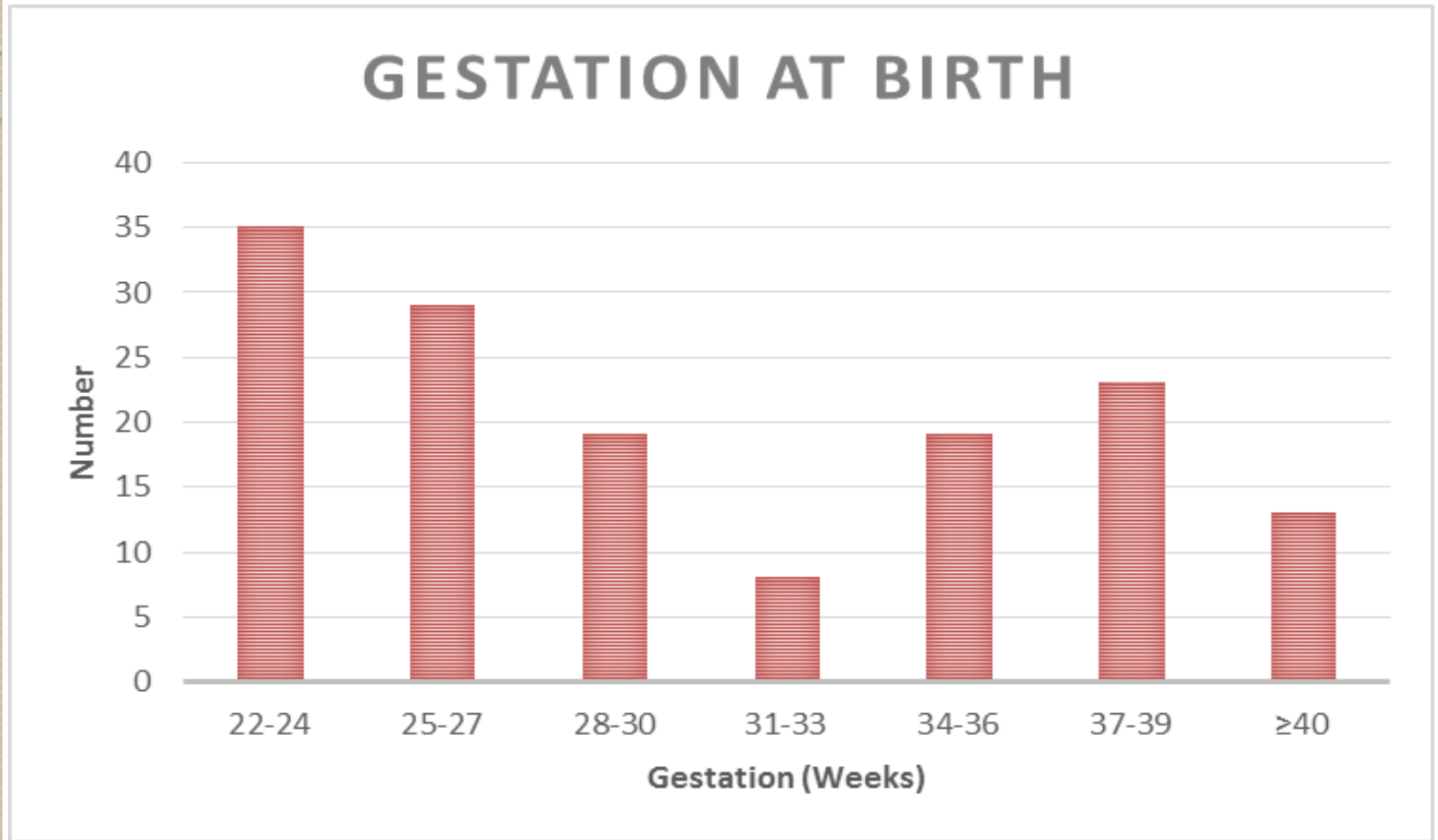




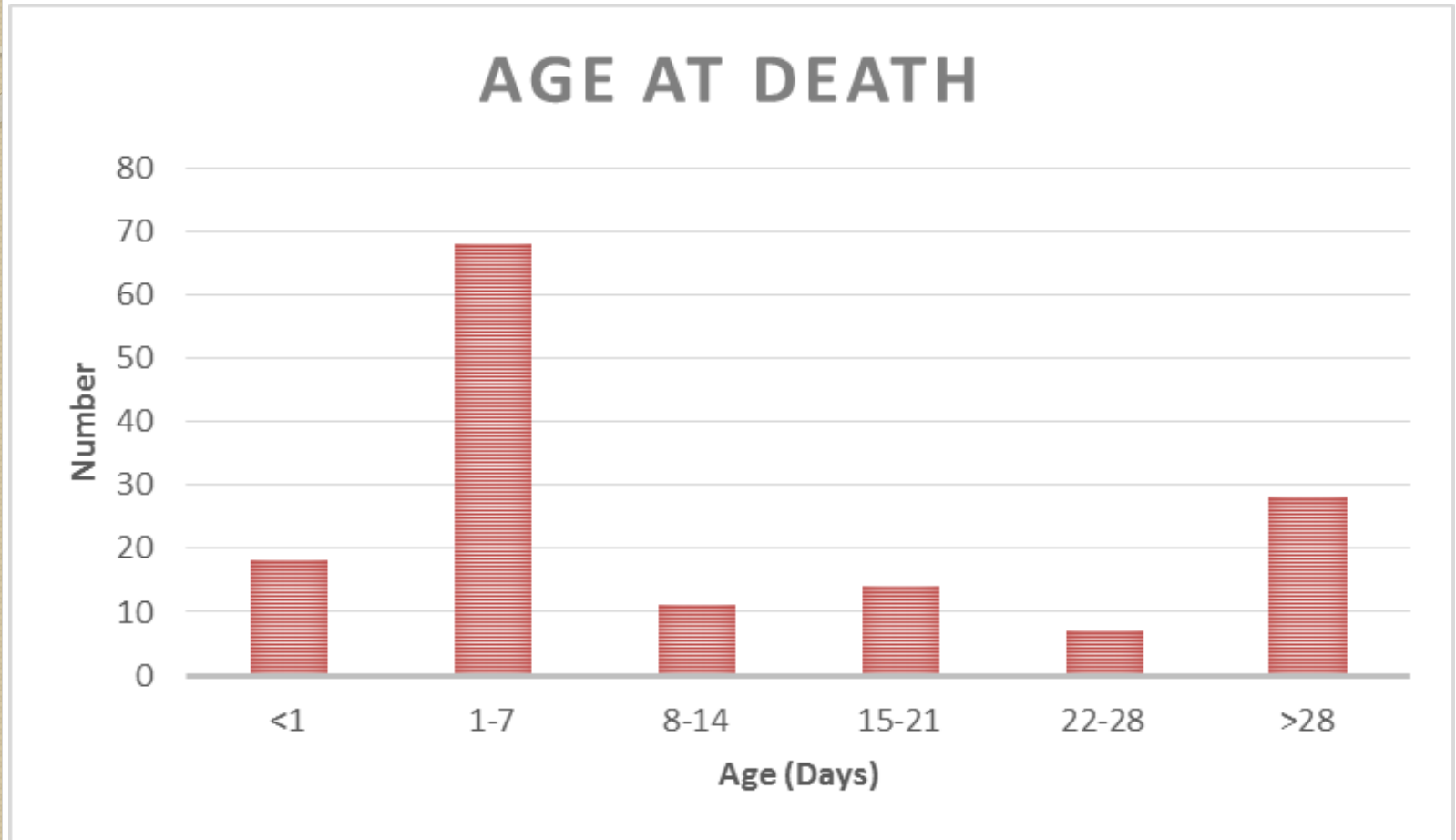
# Demographics (n = 145)



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# Demographics (n = 145)



# Documentation (n = 120/145)

Documentation Regarding Decision and Actions to Redirect Care = 83%

Antenatal Discussions	6	Non-Escalation Plans	25
Documented Discussions on Redirection (Postnatal)	114	Incomplete Documentation of Discussions	25

# Documentation (n = 145)

## Timing Between Documented Discussions, Actions & Death

	<i>Time between Decision &amp; Action (112/145)</i>	<i>Time between Action &amp; Death (136/145)</i>
<b>Range</b>	0 to 15 days 5 minutes	0 to 22 days 41 minutes
<b>Median (Mean) in minutes</b>	80 (1445)	60 (1599)
<b>% taking ≤60 minutes</b>	45%	51%
<b>% taking ≤180 minutes</b>	64%	71%
<b>% taking ≤360 minutes</b>	75%	80%

# Palliative Care (n = 18/145)

## Cases with Palliative Care Referrals

<b>Palliative Care Involved</b>	18
<b>Documented discussions &amp; actions</b>	12
<b>Non-Escalation Plan</b>	9
<b>Minutes taken from Discussion until Action – Median (Mean)</b>	1170 (4254)
<b>Minutes taken from Action until Death – Median (Mean)</b>	682 (4137)

# Comfort Cares (n = 128/145)

## Cases with Symptom Control or Comfort Cares

<b>None prescribed</b>	<b>17</b>	Endocrine	11
Analgesia or Sedation	94	Haematological	24
Anticonvulsant	8	Muscle Relaxants	2
Infection	18	Respiratory	9
Gastrointestinal	17	Renal or Electrolytes	9
Cardiovascular	18	Procedures/Manoeuvres	5

# Psychosocial Supports (n=98/145)

<u>Psychosocial Supports Utilised</u>	<u>N (%)</u>		
<b>Not Documented</b>	<b>47 (32%)</b>	<b>Religious Services</b>	<b>44 (30%)</b>
<b>Other Health Care Professionals</b>	<b>90 (62%)</b>	- Chaplain (not specified)	38
- Palliative Care	18	- Māori/Pacific Chaplain	5
- Social Work	57	- Provided by Family	1
- Other Health Professionals	15	<b>Keepsakes/Memory Making</b>	<b>94 (65%)</b>
<b>Cultural Services</b>	<b>17 (12%)</b>		
- Whanāu Care Services	7		
- Pacific Health Unit	2		
- Interpreters	2		
- Whenua/Placenta Kept	1		
- Māori/Pacific Chaplain	5		



# Post-mortems (n=145)

<u>Post-mortems By Ethnicity</u>	Performed	Declined	Not Required	Not Documented & Not Performed
African	1	0	0	1
Not stated	1	0	0	0
NZ European/Pākehā	47	14	18	9
NZ Māori	15	14	7	2
Other Asian	3	1	1	0
Other European	4	0	1	0
Pacific Island	7	7	4	1
South East Asian	6	0	2	1

# Discussion

- 83% discussions with families documented
- Sensitive and flexible environments
- Common to have inconsistent and incomplete documentation
  - 26% had complete documentation of all aspects of the redirection pathway.
  - Clinical & medicolegal risks

# Limitations

- Retrospective
  - Limited to documentation in clinical notes
  - Does not reflect point-of-care handovers

# Strengths

- Highlighted gaps in documentation
- Population reflects findings of PMMRC
  - Need for cultural supports?

# What next?

- Palliative Care Template
  - Standardise documentation
  - Prompts for medical + psychosocial supports
  - Individualise care
  - Aligns expectations between staff/families
  - Timed for reassessment
  - In conjunction with “Death Pack”

REDIRECTION OF CAREPalliative Care Referral - Yes  (Call #6567) No 

Plan needs to be reviewed on: \_\_\_\_\_

<b>Patient's Key Issues:</b>			
<b>Family Meeting Outcomes:</b>		<b>Participants:</b>	
<b>Redirection Plan/Non-Escalation Plan:</b> (consider appropriateness of mechanical ventilation, chest compression, vascular access)			
<b>Symptom Control:</b> (tick where applicable then prescribe as appropriate, or add specific interventions as required)			
<b>Analgesia/Sedation</b>		<b>Nutrition/Fluid Balance</b>	
Morphine buccal/oral/IV bolus/infusion* <input type="checkbox"/>	Enteral Feeds BF/Bottle/Tube <input type="checkbox"/>	<b>Haematological</b>	
Midazolam buccal/oral/IV bolus/infusion <input type="checkbox"/>	Total Parenteral Nutrition <input type="checkbox"/>	20% Albumin <input type="checkbox"/>	Fresh Frozen Plasma <input type="checkbox"/>
Chloral Hydrate <input type="checkbox"/>	Intravenous Fluids <input type="checkbox"/>	Platelets <input type="checkbox"/>	Red Blood Cells <input type="checkbox"/>
Paracetamol oral/IV/rectal <input type="checkbox"/>	Diuretics <input type="checkbox"/>		
Sucrose <input type="checkbox"/>	<small>*Consider use of basal rate</small>		
<b>Respiration</b>		<b>Anticoagulation</b>	
Nebulised adrenaline <input type="checkbox"/>	Omeprazole/Ranitidine <input type="checkbox"/>	Phenobarbitone <input type="checkbox"/>	
Nebulised hypertonic NaCl <input type="checkbox"/>	Domperidone <input type="checkbox"/>	Phenytoin <input type="checkbox"/>	
Inhaled Nitric Oxide <input type="checkbox"/>	Lactulose <input type="checkbox"/>	Midazolam buccal/IV bolus/infusion <input type="checkbox"/>	
Chest Physiotherapy <input type="checkbox"/>	Glycerine Suppository <input type="checkbox"/>		
Hyoscine Hydrobromide patch/infusion <input type="checkbox"/>	Antiemetic <input type="checkbox"/>		
<b>Other:</b> (consider stopping or adding medications, venous/arterial access, feeding tubes, dressings, haemal reduction, positioning, etc.)			
<b>Psycho-social Supports:</b> (tick where applicable then make referrals or add specific supports as required)			
<b>Home Services</b>		<b>Other:</b>	
Social work <input type="checkbox"/>	<b>Cultural Supports</b>	<b>Creative Memories</b>	
Maternal Mental Health <input type="checkbox"/>	Whānau Support <input type="checkbox"/>	Active parenting opportunities <input type="checkbox"/>	
Chaplaincy <input type="checkbox"/>	Pacific Health <input type="checkbox"/>	Photographer <input type="checkbox"/>	
	Interpreter <input type="checkbox"/>	Keepsakes <input type="checkbox"/>	
<b>Post-mortem:</b> (tick one)			
Consent - Yes <input type="checkbox"/> No <input type="checkbox"/>		To be discussed with - Family <input type="checkbox"/> Coroner <input type="checkbox"/>	
To be revisited with family <input type="checkbox"/>			
<b>Debrief Meeting/Bereavement Care:</b>			
SMD Appointment: _____		Nursing Follow-up: _____	
Notification of LMC/GP/Home DHB <input type="checkbox"/>			
Signed: _____ (Name: _____, Designation: _____)			

# Acknowledgements

- Dr Max Berry
- Dr Sophie Swart
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- Wellington Hospital – Palliative Care Services
- Wellington Hospital – Paediatric Community Nurses