

SUDI: Infant Sleeping Position is still not reliably reported

Queensland Paediatric Quality Council

Professor Jeanine Young, University of the Sunshine Coast, QPQC

Dr Julie McEniery, Chair, QPQC

Dr Diane Cruice, Principal Project Officer, IMSC, QPQC

Queensland Paediatric Quality Council

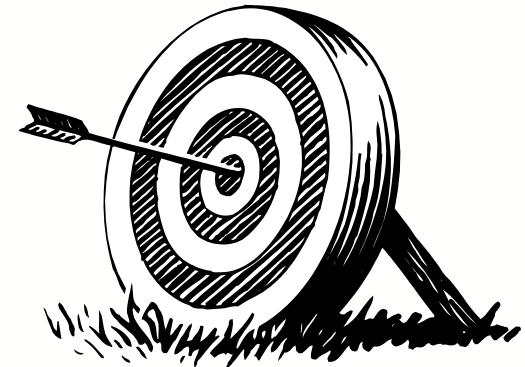
- Approved Quality Assurance Committee Part 6, Division 1 of the *Queensland Hospital and Health Boards Act 2011*

Purpose of QPQC

- Collect and analyse clinical information regarding paediatric mortality & morbidity to identify state-wide and facility-specific trends
- Make recommendations to Minister for Health on standards and quality indicators of paediatric clinical care to enable health providers to improve safety and quality
- Assist with adoption of standards in both public and private sectors

To investigate data quality of reported sleep position in death scene investigation

To examine documented sleep position in relation to witness consistency, lividity and infant developmental milestones

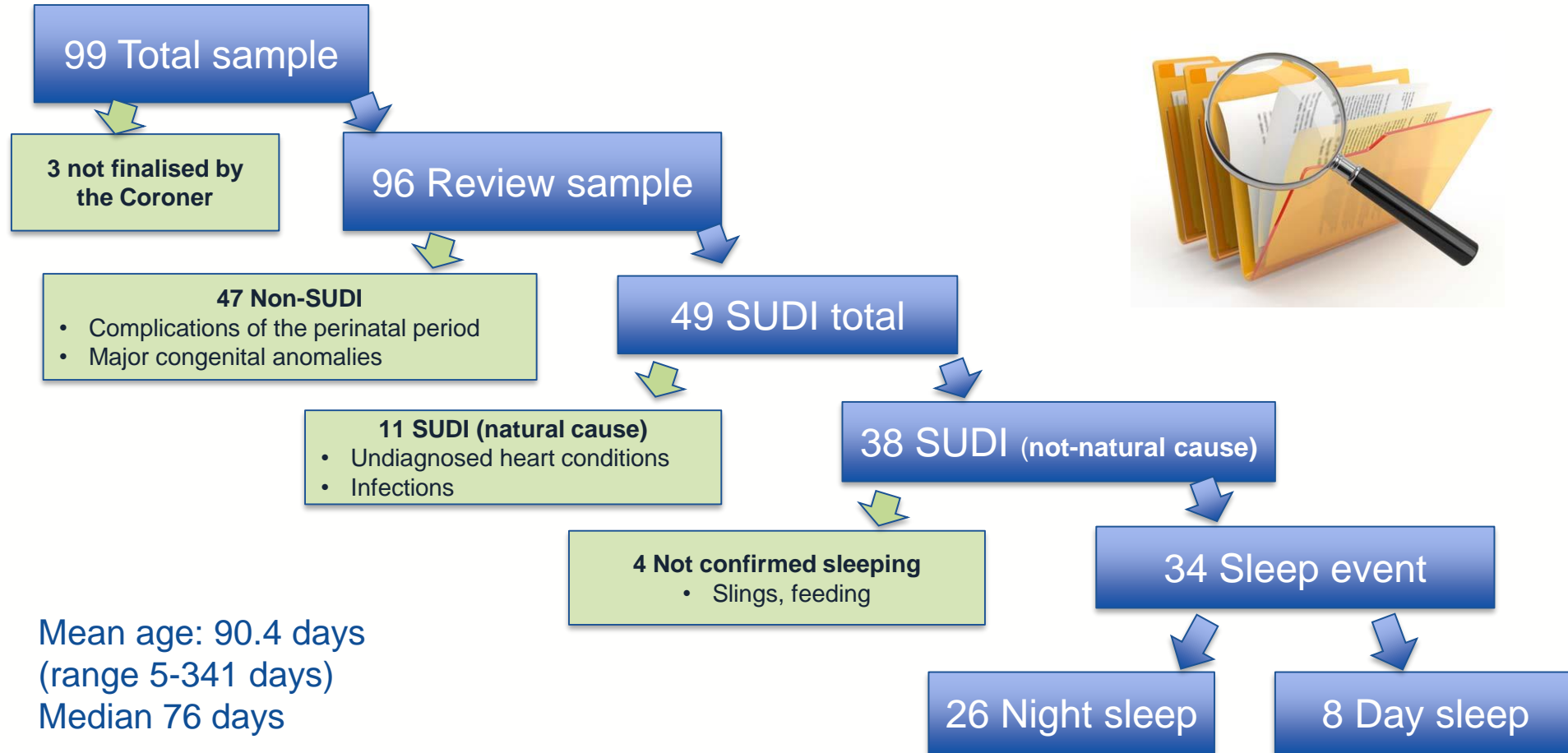


Design and Methods



- Retrospective Records Review:
 - 2013: All post-neonatal deaths + 9 sudden unexpected neonatal deaths occurring out of hospital
- Expert review committee established: Monthly case reviews
- Data: Police form, witness statements, pathology report, coronial records, hospital & MCH records (maternal & infant), PDC
- Review forms completed on secure online database (2 people)
- Infant Sleep Position
- Total n= 99 (90 post-neonatal infant deaths, 9 SUDI neonates)

Final Sample size n=34



Sleep position: variables of interest

- Position **placed to sleep** and **position found** were assessed from:
 - Police Form 1 checklist

Position of child when put down

Supine/On back Prone/Stomach Head to right side Side

Other (specify)

Position of child when found

Supine/On back Prone/Stomach Head to right side Side

Other (specify)

- Detailed committee review of documents including police narrative, witness statements and Coronial documents

Initial Investigation n = 34

Position of Infant	Placed to Sleep				Position found			
	Police Form 1		Review		Police Form 1		Review	
Supine	17	50%	14	41.2%	9	26.5%	9	26.5%
Prone	6	17.6%	6	17.6%	9	26.5%	12	35.3%
Side	2	5.9%	2	5.9%	7	20.6%	7	20.7%
Other	0		3	8.8%	1	2.9%	1	2.9%
Unknown	1	2.9%	9	26.5%	1	2.9%	5	14.7%
Not ticked	4	11.8%	N/A		3	8.8%	N/A	
Not a SUDI form	4	11.8%	N/A		4	11.8%	N/A	
TOTAL	34	100%	34	100%	34	100%	34	100%

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Detailed review

- Committee recorded placed to sleep or found position differently to police check box in 16 cases
- Reasons for this
 - Committee determined a position from narrative or other records but a police checkbox was not ticked (n=5)
 - Committee determined a different position to police checkbox based on narrative and other records (n=5)
 - Committee determined insufficient information in narrative or other records to determine how baby was placed or found but a police check box was ticked (n=6)

Detailed review

- **Position placed to sleep was more difficult** to determine i.e. Unchecked or marked unknown
 - Police Form 1 checkbox (n=9)
 - Committee review of narrative (n=9)
 - Not necessarily the same nine infants
- **Position found** was slightly better recorded in the narrative i.e. Unchecked or marked unknown
 - Police Form 1 checkbox (n=9)
 - Committee review of narrative (n=5)

Key areas of difference

- Mothers and/or infants falling asleep whilst breastfeeding/ cuddling caused the most discrepancies in reporting (n=4)
 - E.g. *'infant found on mother's chest'* after mother and infant fell asleep while the infant was feeding, checked as SUPINE.
- Inconsistencies in witness reports of how the infant was placed to sleep (n=5)
 - E.g. changing report from supine to prone at different interviews with one witness, or different witnesses reporting different events/sleep conditions
- Inconsistencies in witness reports of how the infant was found (n=5)

Other reporting issues

- Lividity inconsistent
 - 2 cases assessment of lividity at post mortem indicated that **position found** may have been different from that reported in police form/other records, e.g. infant reported to have been found supine but lividity very clearly indicated that baby had not been on his/her back
- Age of infant would usually preclude self-rolling
 - 4 infants aged <3 months (includes one neonate) reported to be placed to sleep supine; but found prone. N.B. Committee noted potential association of propping in some of these cases.

Take Home Messages

- ‘Safe Sleep, Every Sleep’ (18% of babies placed non-supine)
- Support required for better quality data at time of death
 - Police support to be part of DSI
- Improvement in police form
 - Recording ‘in parent arms’
 - Propping
 - Location relevant to position
- Other data important in validating sleep position (narrative, lividity, developmental milestones)



http://www.momjunction.com/articles/safe-sleeping-positions-for-babies-and-newborns_0094200/#gref

Acknowledgments

- QPQC acknowledges each infant death is a tragic loss for family and community
- Reducing deaths by addressing modifiable risk factors is the motivation for this work
- Acknowledgements
 - Queensland State Coroner's Office
 - Children's Health Queensland Hospital and Health Service
 - QPQC clinician volunteer expert panel
 - Queensland Health Statistics Unit
 - Forensic and Scientific Services
 - Hospital and Health Services
 - Clinical Excellence Division of Queensland Health

Questions



<https://www.childrens.health.qld.gov.au/chq/health-professionals/qpqc/>