Computerisation of perinatal data entry: Is the data accurate?

Alison Craswell
Prof Lorna Moxham
Dr Marc Broadbent
School of Nursing, Midwifery and Indigenous Health
University of Wollongong

HIC2013
Wed 17 July
Digital Health Service Delivery - The future is now!
What is perinatal data?
Why is it collected?
How is it collected
What significance does it have?
Perinatal data is collected on all mothers and their babies born in Queensland
(& all states Australia wide)

Perinatal data is collected to monitor mortality and morbidity of mothers and their babies

Collected historically via a paper form
Now entered into a computer form or extracted from other records
Perinatal data is collected on all mothers and their babies born in Queensland.

Perinatal data is collected to monitor mortality and morbidity of mothers and their babies.

Collected historically via a paper form. Now entered into a computer form or extracted from health information systems. Midwives enter the data.
Babies born in Queensland

Fetal data is collected to monitor mortality and morbidity of mothers and their babies.

Collected historically via a paper form.
Now entered into a computer form or extracted from health information systems.
Midwives enter the data.

Significant for obstetric and midwifery patterns of research, education, funding.
Collected historically via a paper form
Now entered into a computer form or extracted into health information systems
Midwives enter the data

Significant for obstetric and midwifery patterns of care, research, education, funding
History of perinatal data collection in Queensland

Began in 1986
Paper forms
Moved to computer in 2009
Began in 1986
Paper forms
Moved to computer in 2009
How do midwives use computers in their work?

- Technology moving into healthcare rapidly
- Midwives attitude to ICT or eHealth in the workplace
computers in their work

• Technology moving into healthcare rapidly
• Midwives attitude to ICT or eHealth in the workplace favourable
• Reality often different
Research Design:

- Grounded theory qualitative methodology
- In-depth interviews with participants
Emergent findings:
Emergent findings:

- Perceived data accuracy
- Data standards
- Accuracy of PD records
- Computer records
- Written records
- Obstetric
- Computer system
Accuracy in computer records

- computerisation increased data accuracy
  - via validation
  - decrease in returning errors
  - improved turnaround times
Accuracy in written records

- Memory
- Transcribing
- Shared data entry
- Lack of trust in written records

Data standards - obstetric

- Lack of standard in private sector
- Field definitions between obstetric records and computer fields inconsistent
Data Standards - Computer systems

• Field definitions - multiple meanings
  • between midwives
  • across units
  • throughout software systems
Point of care documentation

- relationship to data accuracy
- nature of birthing
- clash with workflow
- staffing
Incongruence between mandatory use software and clinical workflow processes.
Consequences of inaccurate perinatal data

- Research
- Education
- Funding
Irony that midwives accuracy of perinatal data entry affects the very mothers and babies they desire to optimise services for.
Recommendations

- improvement to data standards
- consistency across field definitions across maternity units
- education and training
Thanks for listening