

# ***Designing and implementing an electronic clinical handover system: An integrated approach***

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# ***Presentation Aims***

- Describe our integrated approach to developing an electronic clinical handover support tool
- Highlight the problems encountered with this approach and how we overcame those problems
- The electronic clinical handover support tool
- Lessons learnt



# ***What we wanted to achieve....***

- Understand clinical handover
- Design and implement an electronic clinical handover support tool
- Evaluate the electronic clinical handover support tool based from the perspective of the end user



# *An integrated approach*

- **User-Centred**
  - Takes into account the needs, wants and limitations of the end user
- **Socio-Cultural**
  - Understand diverse individuals
  - Establish links between demographic, social and cultural characteristics
  - Highlight differences between segments
- **Socio-Technical**
  - People who work in the organization
  - The required technology
  - The environment



# ***Understanding Clinical Handover***

- Qualitative Research Methodology
- Data Collection Techniques
  - Observation Sessions
  - Semi-structured interviews
  - Analysis of handwritten clinical handover notes



# ***Understanding Clinical Handover***

- Serves multiple functions → Not just information transfer
- Multiple interrelated factors affect handover eg. Social, cultural, organisational factors
- Complex dynamic interaction affects the efficiency and effectiveness of handover

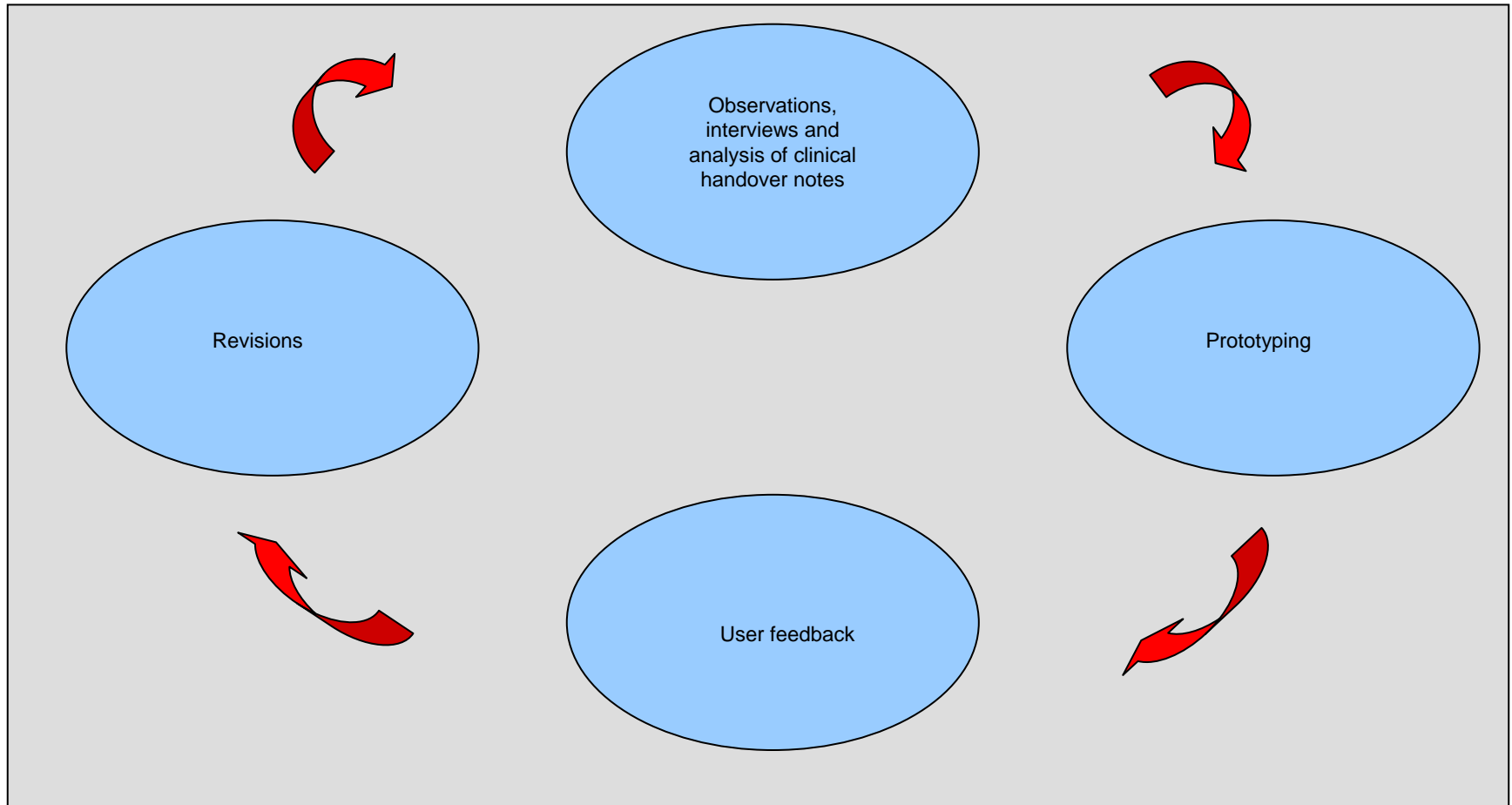


# ***Problems encountered and issues raised***

- Scope of handover remains unclear
- Theoretical vs Actual (what they say happens vs what actually happens)
- Clinicians are not aware of many factors



# ***Building the electronic clinical handover support tool***



# ***Building the electronic clinical handover support tool***

- Workshops drawing on the principles of participatory design to determine initial prototype
- Five cycles of iterative feedback loop



# ***Building the electronic clinical handover support tool***

- Clinical scenarios
- Ask the participants
  - What are the problems?
  - How do you think these problems can be solved?
  - What do you need?



# ***Problems encountered and issues raised***

- Users did not really know what they want
- Users could not communicate their needs properly without a prototype to work on
- There are varying degrees of needs and wants amongst users



# ***The Electronic Clinical Handover Support Tool***





# Royal Hobart Hospital

## Department of General Internal Medicine

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# *Lessons Learnt*



# ***Lessons learnt.....***

- Qualitative research is a valuable method in trying to understand clinical handover
- Trying to obtain system requirements is a challenging process
- Multiple revisions and adjustments are required
- It should be an ongoing process
- Involve the end users

