

Exploring the patient's experience of receiving clinical care which incorporates the use of mobile technology at the bedside

Lily Pho, Nurse Manager, Leadership, Culture and Practice Development, Sydney Local Health District.

Jennifer Warrilow, Roster and Allocation Manager, The Canterbury Hospital.

Carla Murley, E-Clinician, Health Informatics, Royal Prince Alfred Hospital and Balmain Hospital.

April 2022



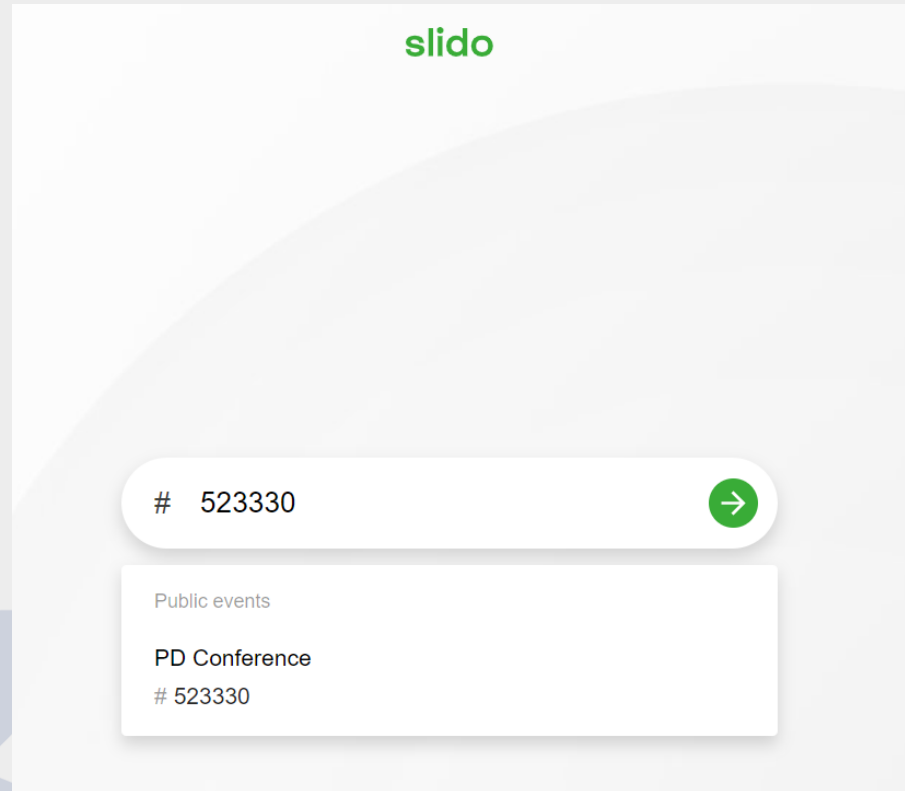
Health
Sydney
Local Health District

The Patient Experience



Health
Sydney
Local Health District

Slido



Slido

Are we implementing technology and leaving our patients behind?

What are your thoughts?

What's happening around us?

- World wide gap in research literature
- Limited research around patient experience
- Rapid increased use of technology
- Patient satisfaction is linked with improved health outcomes



Canterbury Hospital



Health
Sydney
Local Health District

Study Approach

1. Questionnaires



2. Patient Interviews



Study Criteria

- 3 wards; medical, surgical and maternity
- LOS > 48 hours
- Willing to participate



The Questionnaire



The Interview

Did you notice the presence of technology at your bedside?

How has bedside mobile technology enhanced the care you received?

Can you talk about the level of communication you have with clinical staff?

Q: Can you talk about anything you've noticed regarding how bedside mobile technology has impacted on staff?

Q: Do you feel that the use of bedside mobile technology has in any way de-personalised your experience/hospital stay?

Can you say how the use of bedside mobile technology affected your care?

How has bedside mobile technology hindered the care you received?



Health
Sydney
Local Health District

The Intervention- eMeds and PCM

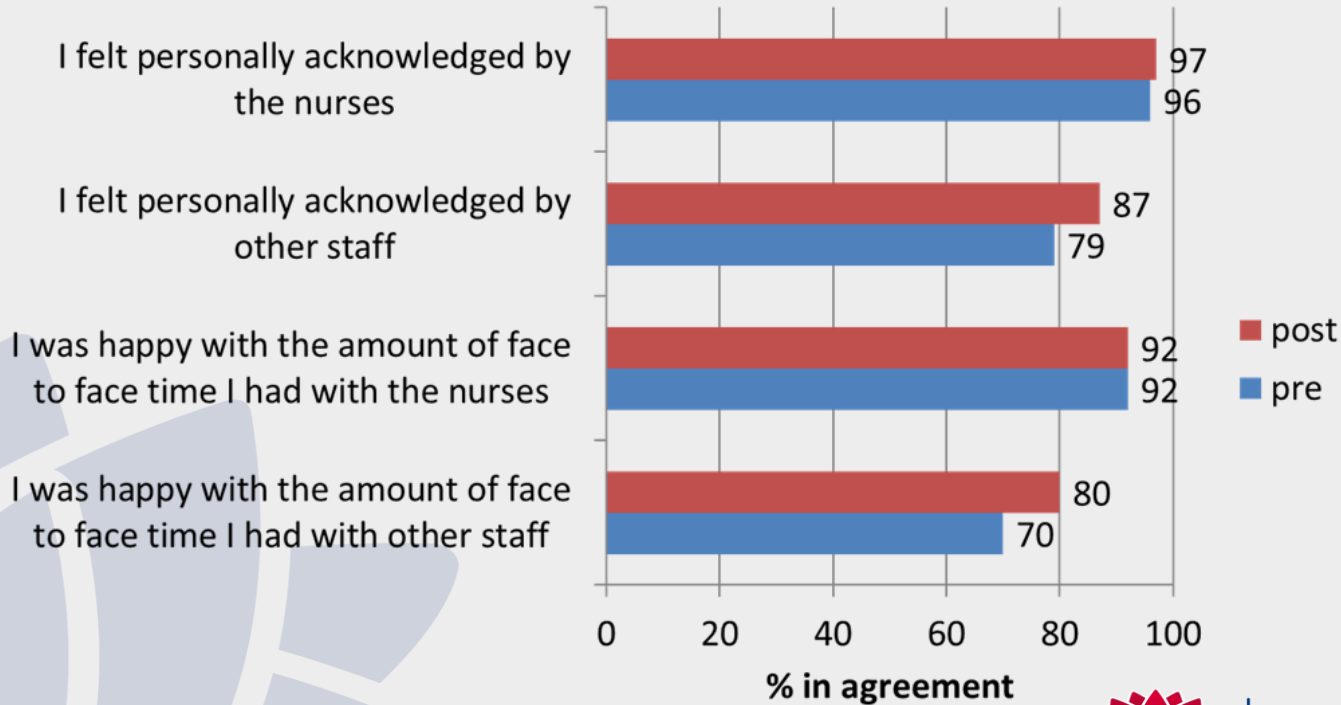
- The Electronic Medication Management (eMeds) system ensures that the delivery of medications to patients is electronically supported and provides access to patient information and clinical decision support in real time.
- PowerChart Maternity (PCM) is a single point of entry for clinicians to document a mother's pregnancy from their first antenatal visit through to their postpartum follow-up visit.



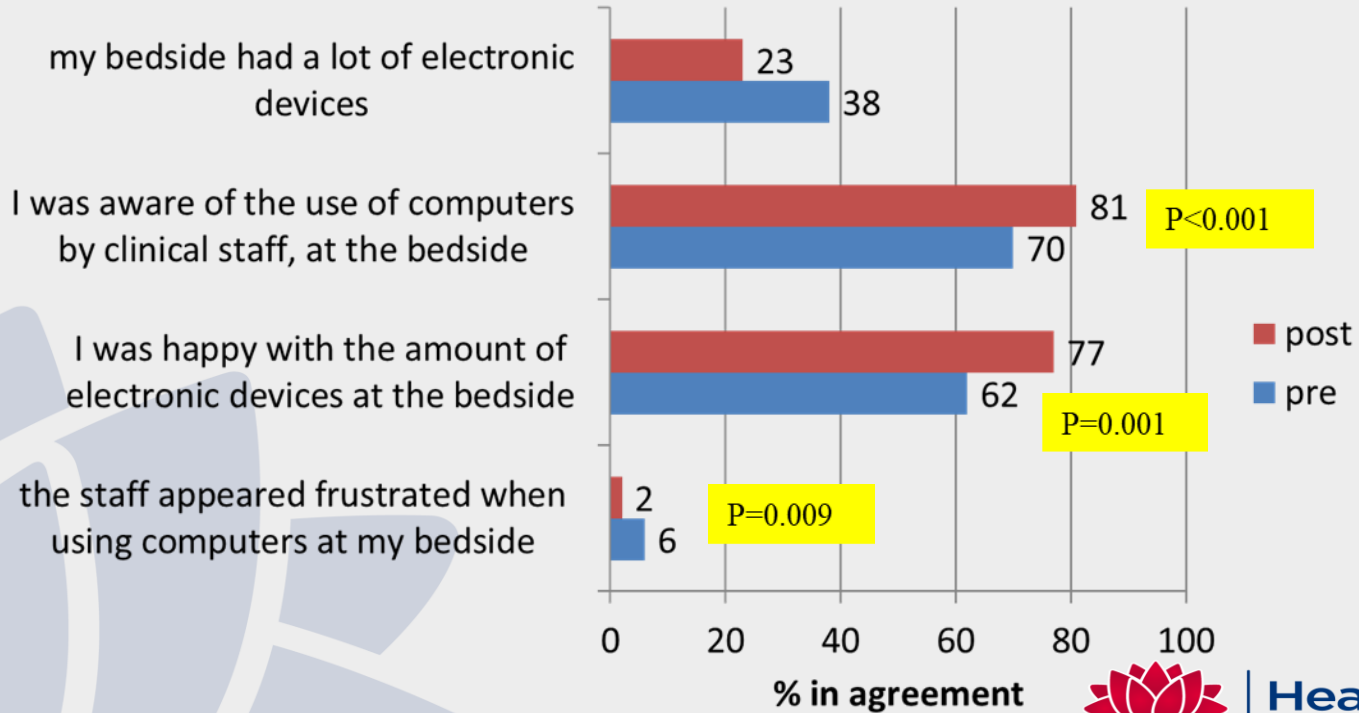
The Patients

	Pre (n=82) %	Post (n=98) %	Difference χ^2	P
Gender	F: 67.1	F: 54.2	2.8	0.10
Age range	<30: 35.8 30-49: 14.8 50-69: 34.6 >69: 14.8	<30: 35.7 30-49: 18.4 50-69: 35.7 >69: 10.2	2.4	0.79
CALD	Y: 35.4	Y: 44.9	1.7	0.19

Domain: Personal Contact with Clinical Staff



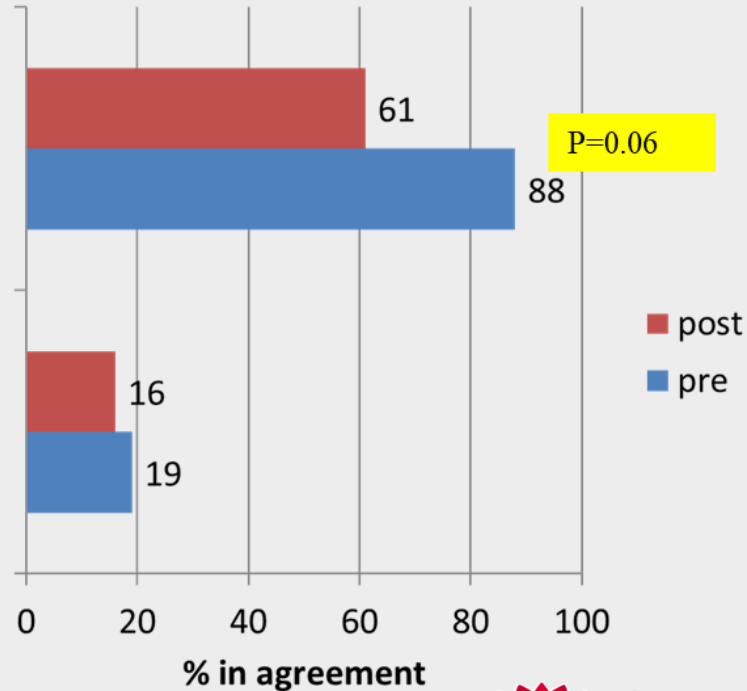
Domain: Computers and Electronic Devices at the Bedside



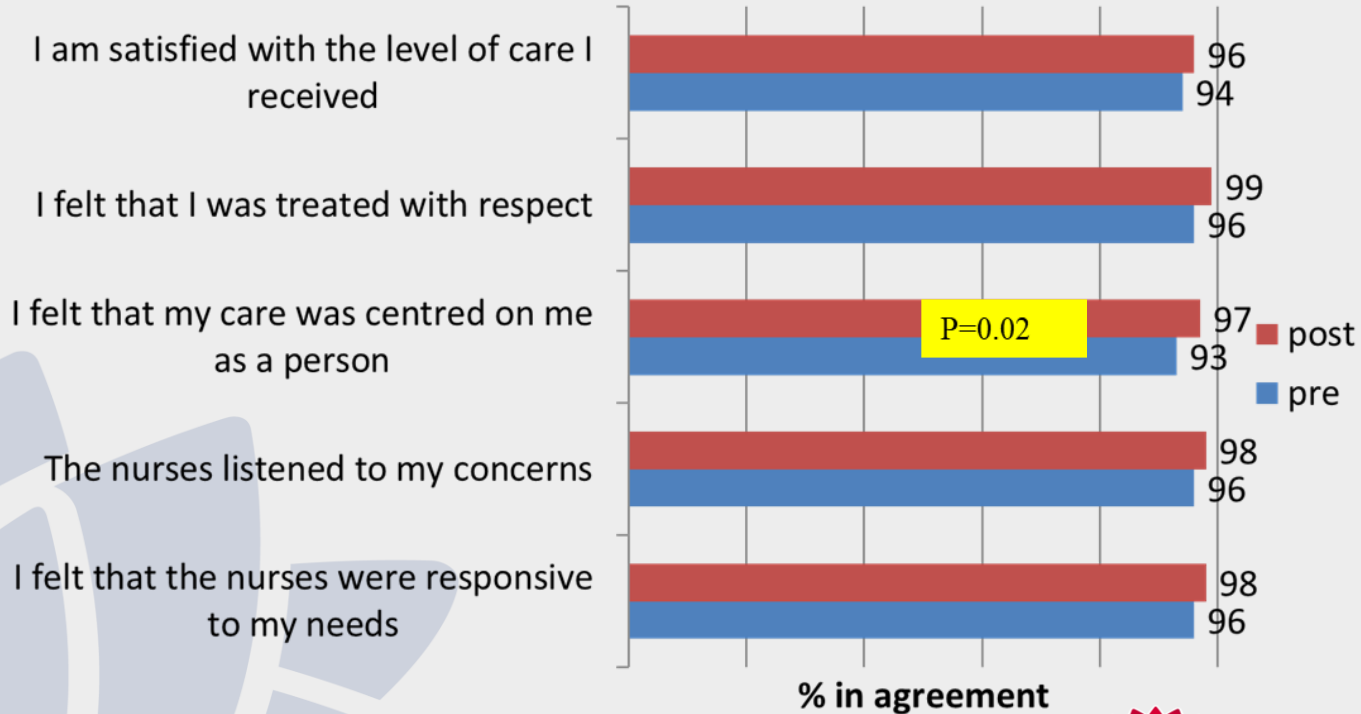
Domain: Your Medical Records

I feel happy that my medical records are stored electronically rather than on paper

I am concerned about who has access to my electronic medical records



Domain: Overall Satisfaction with Care



Did age influence responses?

- Pre Phase-Yes
- As age increased, feeling of acknowledgement by other staff increased ($P < 0.05$)
- Awareness of the use of computers at the bedside increased with age ($P < 0.05$)
- Concern about access to medical records decreased with age ($P < 0.05$)
- HOWEVER post phase

Note: There were no by-group differences re age



Did Gender Influence Responses?

- Pre-phase-A little, on the care-related domains, not the bedside technology-related domains
- Males less likely than females to feel personally acknowledged by nurses, listened to by nurses and feeling that they were treated with respect

Note: There were no by-group differences re gender



Did Culturally and Linguistically Diverse (CALD) status influence responses?

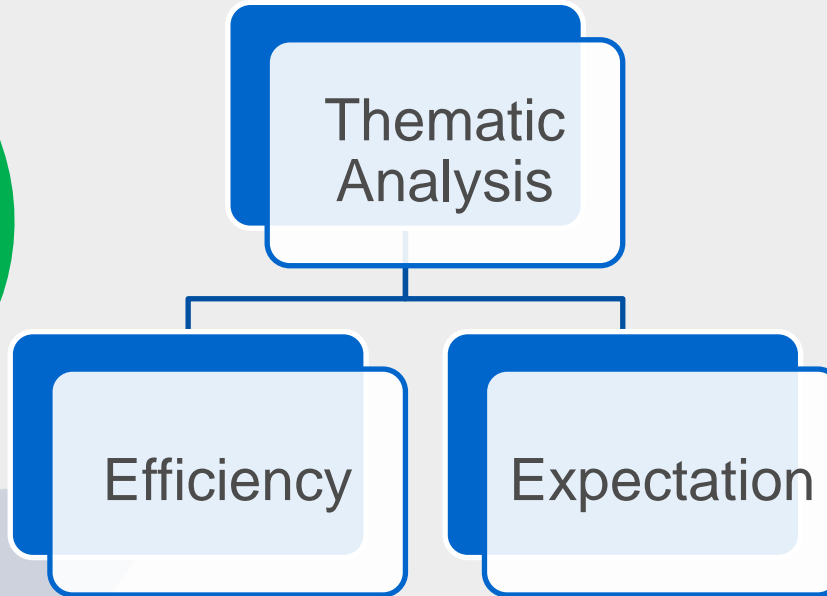
- Pre-phase- Yes!
- CALD patients were happier about the amount of devices at the bedside
- They were less happy about being treated with respect, than non-CALD patients (has been reported before)
- However post –phase

Note: There were no by-group differences re CALD



Patient Interviews (Pre)

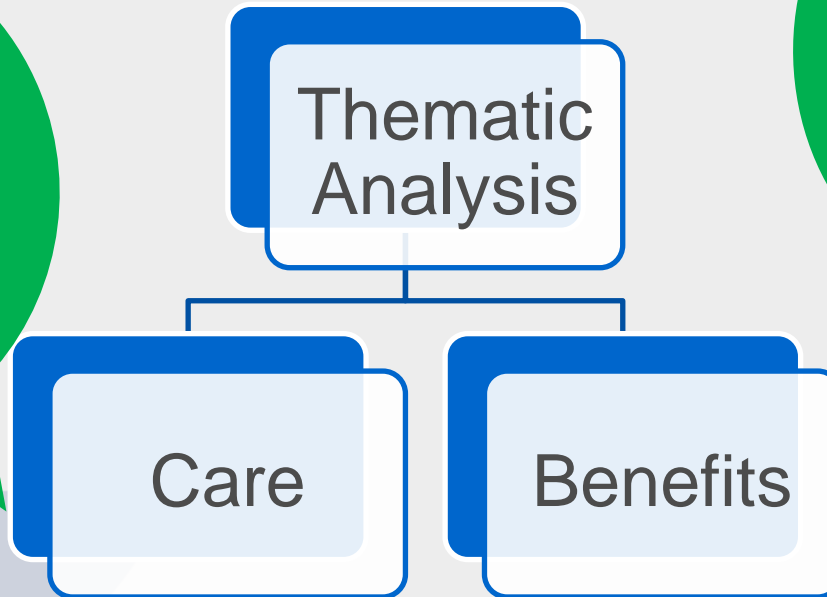
I think that it actually works better for me as I can see the doctors on their rounds, they bring it with them and they are typing, but they're including me and talking about my hip



I think that is what I expect to see, computers in hospital

Patient Interviews (Post)

One of the nurses said he knew I've been hungry and he said 'guess what mate you get dinner tonight', he would have seen it on the system, that's taking technology and displaying it in a human way. That was very nice



"I think the technology alerts staff so things aren't missed. It brings warnings, I find it so prevalent here and I have never seen this hospital function so well"

Conclusion

- Adding bedside technology does not impact significantly on patient perception regarding personal contact with clinical staff nor patient satisfaction
- These findings also suggest that the addition of further bedside technology in the future may not unduly affect the patient experience, as patients are yet to perceive that there is ‘a lot’ of bedside technology in their environment
- Despite the positivities reported here, there are a few patient concerns regarding electronic storage of medical records that should not be ignored



Thank you

Greg Fairbrother (SLHD/USyd)

Aaron Jones (SLHD)

Ivanka Komusanac (SLHD Nursing & Midwifery Executive)

Fran O'Brien (The Canterbury Hospital Nursing and Midwifery)

Leanne Wiseman (Canterbury Hospital)



Health
Sydney
Local Health District