Supplementary Material

Utility of a digital app to enhance patient—nurse communications and patient involvement in bedside handover: patient and nurse perceptions

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| Observer initials | |
|---|---|
| | |
| Time handover started | |
| | (hh:mm) |
| Location of handover | ☐ At Patient's Bedside ☐ At Nurses' Station ☐ In corridor ☐ Other (Check all that apply) |
| Location of handover_Other | |
| | (If 'Other' please describe where handover occurred) |
| Who is present during handover? | Nurses Patient Visitor(s) of the patient Other (Check all that apply for this handover) |
| Details for 'other' person (s) present during handover | |
| How many nurses in total were present during handover? | |
| | (Enter number. Excluding students.) |
| How many AM shift nurses were present? | |
| | (Enter number. Excluding students.) |
| How many PM shift nurses were present? | |
| | (Enter number. Excluding students.) |
| How many visitors were present at start of handover? | |
| | (Enter number.) |
| If visitors present, did they stay for duration of handover? | ○ Yes ○ No |
| Was handover conducted in the patient's presence? | YesNo |
| Did the AM nurse GIVING handover greet the patient and introduce the PM nursing team? | ○ Not evident at all○ Partial or limited in scope○ Clearly present |
| Did the AM nurse explain handover? | ○ Not evident at all○ Partial or limited in scope○ Clearly present |

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| Did the AM nurse GIVING handover make and maintain eye contact with the patient? | Not evident at allPartial or limited in scopeClearly present |
|--|--|
| Did any nurse ask the patient direct questions? | ○ Not evident at all○ Partial or limited in scope○ Clearly present |
| Did any nurse ask the patient for clarification / to confirm information? | ○ Not evident at all○ Partial or limited in scope○ Clearly present |
| Was the patient or any visitors given the opportunity to ask questions? | ○ Yes ○ No |
| If the patient / visitor asked questions, were they answered? | ○ Yes ○ No |
| Did the AM nurse GIVING handover acknowledge and respond to other team members' questions? | ○ Not evident at all ○ Partial or limited in scope ○ Clearly present ○ No questions from other team members |
| Did any nurse respond to patient's comments / needs? | Not evident at all Partial or limited in scope Clearly present No patient needs mentioned |
| Was the patient an active participant in handover? | Yes - Active (asks questions, makes statements about their condition) Yes - Passive (nods or makes short superficial comments) No (no form of patient input during handover) |
| Were there any interruptions during handover? | ○ Yes ○ No |
| Interruptions details: | |
| | (Please detail the nature of the interruptions) |
| Were any care activities done during handover? | YesNo |
| Care activity details: | |
| Time handover finished | (hh:mm) |
| Field notes on handover | |
| | (Record any other details that are relevant) |

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Patient Interview

HANDOVER AT THE BEDSIDE WITH NO PARTICIPATION OBSERVED

The nurses have just changed shifts and have passed on information about you and your care needs.

- 1. How well were you able to hear that?
- 2. How well could you understand what was being said?
- 3. If No Would you have liked the nurses to explain things to you (in more detail)?
- 4. How accurate (correct) was the information about you?
- 5. What information about you did you want the nurse to know, that wasn't shared?
- 6. Was there anything new, that you hadn't heard before?

These handovers happen every time nurses change shifts.

- 7. Would you like to be part of these conversations?
- 8. If No Can you tell me why?
- 9. If Yes How would you like to be involved?
- 10. How could the nurses or the health service make you feel comfortable to join in this conversation?
- 11. Is there anything that makes you feel uncomfortable about being part of this conversation?
- 12. Does it bother you that other patients might overhear some of the conversations about you? (more relevant if patient is in a shared room)
- 13. In your view, how do you think using the App influenced the nursing handover today?
- 14. In your view, how do you think using the App influenced your participation in the nursing handover today?
- 15. Is there anything else you'd like to tell me about being involved in handover that we haven't discussed?

Nurse Interview

HANDOVER AT THE BEDSIDE WITH NO PATIENT PARTICIPATION OBSERVED

To begin, just a few questions about you. You can decline to answer any of these questions-just let me know that you'd prefer not to say.

- 1. How old are you?
- 2. What is your gender identification?
- 3. In what country were you born?
- 4. What is your preferred language?
- 5. How many years of experience do you have as a Nurse?
- What is your highest qualification? (Bachelor, Post Graduate Certificate/Diploma, Masters etc)
- 7. What is your professional role? (ANUM, CNS, RN Grade 2, Graduate Nurse)

I noticed that the handover occurred at the patient's bedside today, but that this patient was not included in the conversation.

- 8. How important do you think it is for patients to participate in handover if they are able to do so?
- 9. Can you explain a little more about the reason you think that?
- 10. In this instance, why do you think patient participation in handover did not happen?
- 11. In your view, what makes it easier for a patient to be involved in nursing handover?
- 12. In your view, what would make it more difficult for a patient to be involved in nursing handover?
- 13. As a nurse, what strategies or techniques could you (or do you) use to increase patient participation in handover?

These next few questions are to understand your perceptions of the App and its influence on patient participation in handover.

- 14. In your view, how do you think using the App influenced the nursing handover today?
- 15. In your view, how do you think using the App influenced the patient's participation in nursing handover today?
- 16. Is there anything else you'd like to tell me about patient participation in nursing handover that we haven't discussed?

Patient Interview

HANDOVER AT THE BEDSIDE WITH PARTICIPATION OBSERVED

The nurses have just changed shifts and have passed on information about you and your care needs. I noticed that you were part of the conversation.

- 1. How easy was it to hear what was being said?
- 2. How well could you understand what was being said?
- 3. **If Not Well** How could the nurses have helped you better understand what was being said?
- 4. How accurate (correct) was the information about you?
- 5. Did you feel you had the opportunity to ask questions/offer information during the handover?
- 6. What made it easy for you to ask questions/offer information during handover?
- 7. What made it difficult for you to ask questions/offer information during handover?
- 8. Was there anything new, that you hadn't heard before?

These handover conversations happen every time nurses change shifts.

- 9. How important is it for you to be involved in these conversations?
 - a. **If it's NOT important** can you tell me why?
 - b. If it IS important- can you tell me how you like to be involved?
- 10. How could the nurses or the health service make you feel more comfortable to join in this conversation?
- 11. Is there anything that makes you feel uncomfortable about being part of this conversation?
- 12. Does it bother you that other patients might overhear some of the conversations about you?

These next few questions are to understand your experience of using the App this morning.

- 13. How do you think using the App influenced the nursing handover today?
- 14. How do you think using the App influenced your participation in the nursing handover today?
- 15. Is there anything else you'd like to tell me about being involved in handover that we haven't discussed?

Nurse Interview

HANDOVER AT THE BEDSIDE WITH PARTICIPATION OBSERVED

To begin, just few questions about you. You can decline to answer any of these questions-just let me know that you'd prefer not to say.

- 1. How old are you?
- 2. What is your gender identification?
- 3. In what country were you born?
- 4. What is your preferred language?
- 5. How many years of experience do you have as a Nurse?
- 6. What is your highest qualification? (Bachelor, Post Graduate Certificate/Diploma, Masters etc)
- 7. What is your professional role (ANUM, CNS, RN Grade 2, Graduate Nurse)

I noticed that the handover just occurred at the patient's bedside and the patient was included in the conversation.

- 8. How important do you think it is for patients to participate in handover if they are able to do so?
- 9. Can you explain a little more about the reason you think that?
- 10. In this instance, why do you think patient participation in handover was able to happen?
- 11. In your view, what makes it easier for a patient to be involved in nursing handover?
- 12. In your view, what makes it more difficult for a patient to be involved in nursing handover?
- 13. As a nurse, what strategies or techniques could you (or do you) use to increase patient participation in handover?

These next few questions are to understand your perceptions of the App and its influence on patient participation in handover.

- 14. In your view, how do you think using the App influenced the nursing handover today?
- 15. In your view, how do you think using the App influenced the patient's participation in nursing handover today?
- 16. Is there anything else you'd like to tell me about patient participation in nursing handover that we haven't discussed?