

# 'SleepWell' pilot study to assess the feasibility and potential clinical value of adapting sleep management on inpatient psychiatric wards

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## Aim

- This study aimed to assess the feasibility and potential clinical value of adapting sleep management across seven inpatient psychiatric wards, with a view to potentially implementing practice change across all old-age and adult inpatient wards in Northumberland, Tyne and Wear NHS Foundation Trust (NTW)

## Background

### Sleep

- Sleep is vital for normal mood and memory <sup>(1)</sup>. It is distinguished by two distinct stages: rapid eye movement (REM) and non-rapid eye movement (NREM) <sup>(2)</sup>

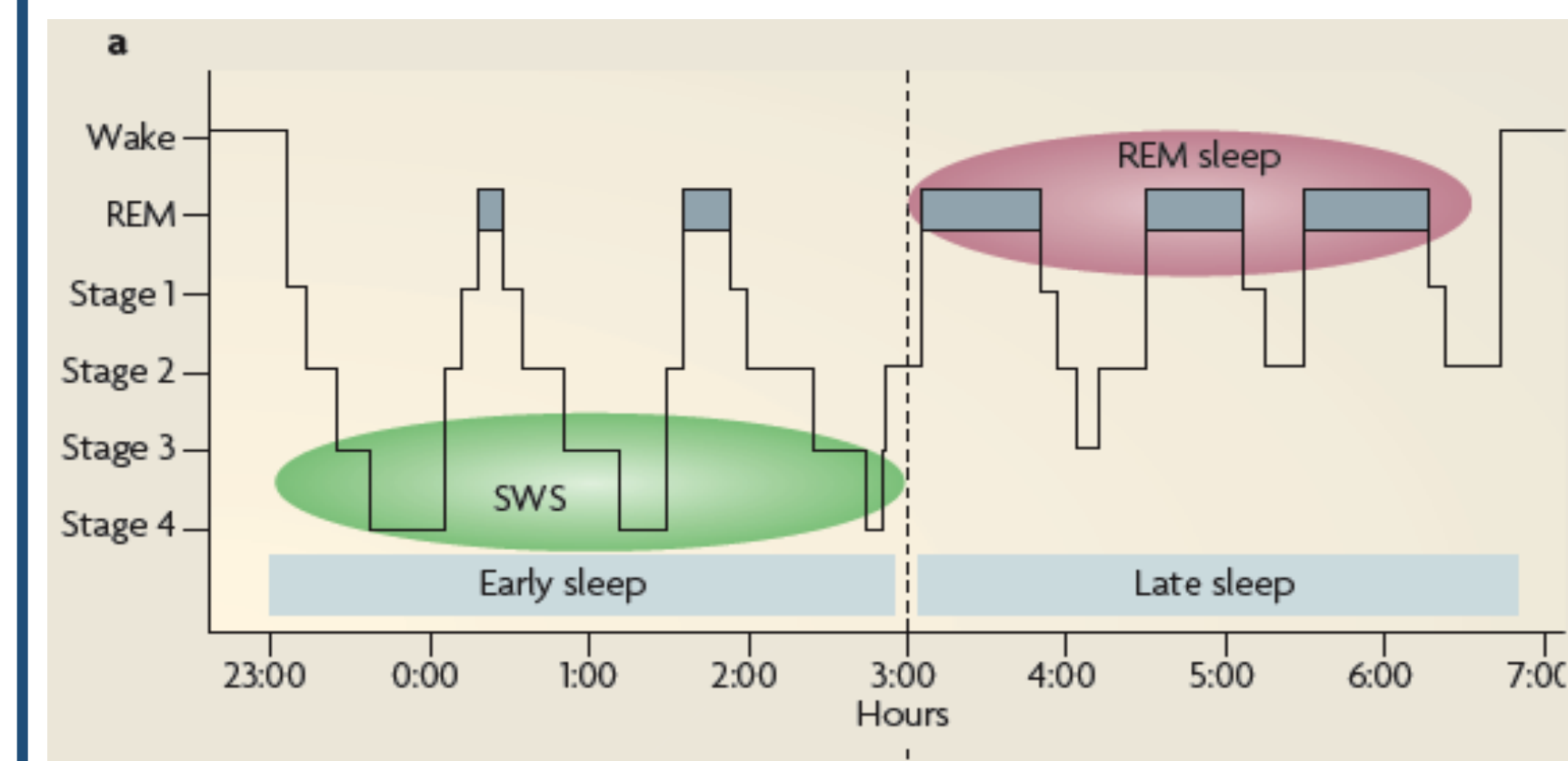


Figure 1. The individual stages of the sleep/wake cycle <sup>(1)</sup>

### Factors affecting sleep

- Sleep disorders, such as insomnia and restless leg syndrome, are often associated with psychiatric disorders, but can go undetected, furthering the decline in a patient's mental state
- Other factors including the environment, physical disorders, medication and stimulants also impact an individual's ability to sleep and thus can affect their mental health

### 'SleepWell' study

- Preliminary work across two in-patient psychiatric units in NTW evaluated sleep disturbance and identified several areas in which sleep management could potentially be improved <sup>(3)</sup>
- These include fewer observations during the night, greater detection of sleep disorders, quieter sleeping environment and greater light levels during the day to mirror those outside
- This work prompted the development of the six-month pilot project 'SleepWell'
- The 'SleepWell' intervention was implemented across seven inpatient psychiatric wards in NTW, with the aim of improving sleep management and thus patient health
- Proposed practice changes to be implemented through 'SleepWell'
  - Protected sleep time - patients not checked 12am-6am
  - Sleep disorder assessments for all patients
  - Adapt environment to ensure conducive to sleep
  - Decrease in prescription of hypnotics

## Method

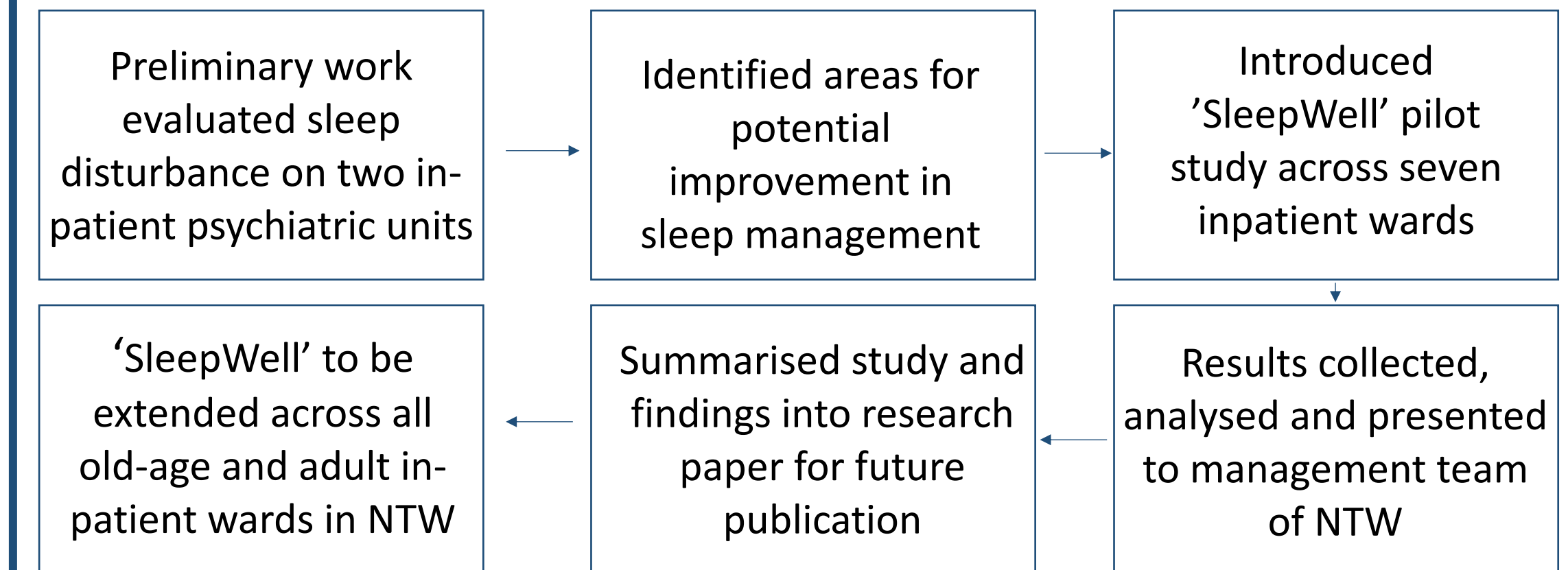


Figure 2. Methodology

### Changes introduced through 'SleepWell' pilot

- All suggested changes were implemented across all pilot wards

### Assessments

- Qualitative: patient and staff feedback recorded and sleep disorder assessments performed
- Quantitative: type and number of incidents pre and post 'SleepWell' and the number of patients involved recorded

## Results

### Incident data

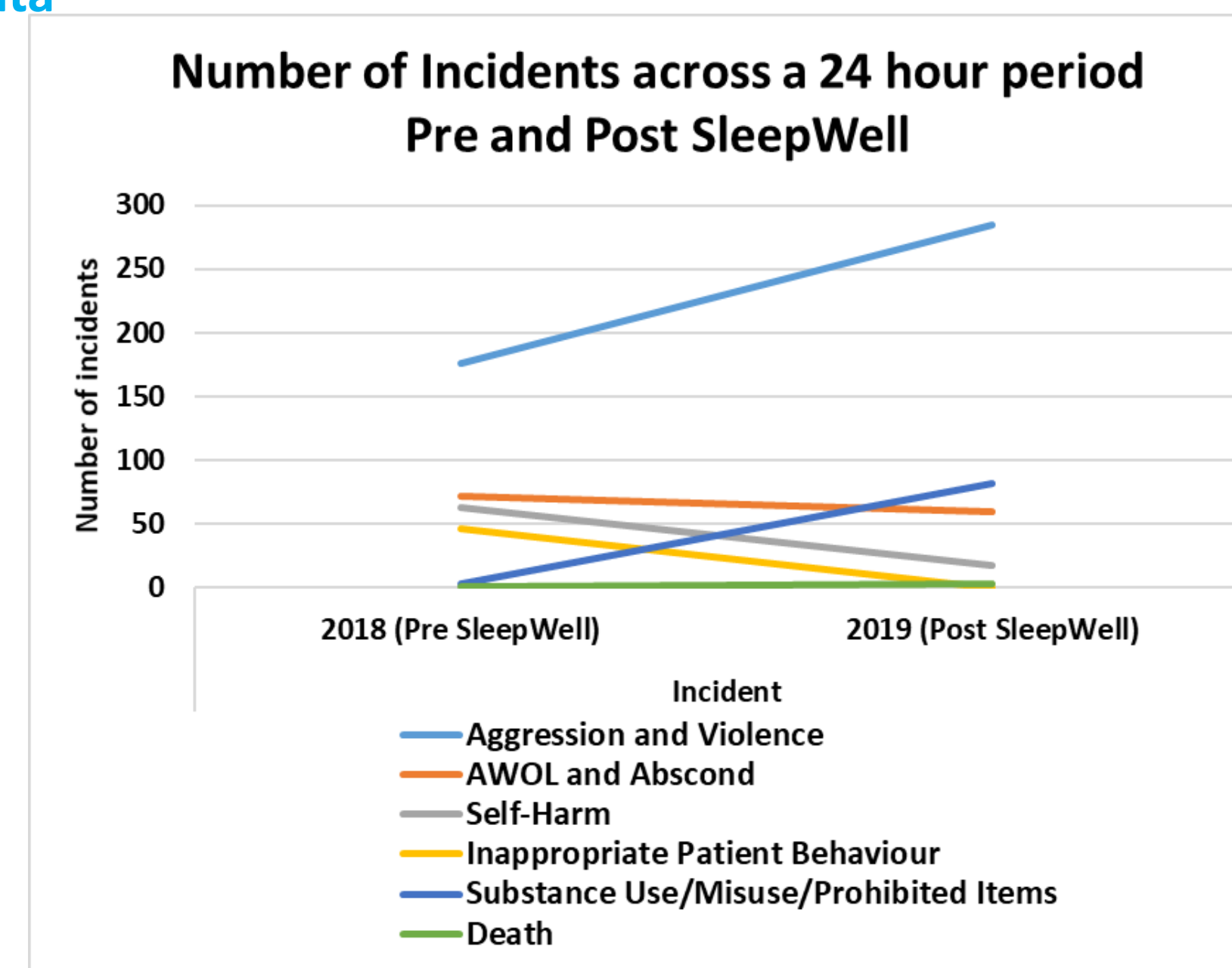


Figure 3. The number of incidents recorded over 24-hour periods

- Overall increase in the number of incidents, post 'SleepWell'
- 73% decrease in self-harm rates, post 'SleepWell'

### Protected sleep time (PST)

- All wards implemented PST; 50% of patients deemed safe to take part
- There was a steady increase in the number of patients on PST during the study

### Sleep disorder assessments

- Approximately 50% of patients assessed for sleep disorders

### Patient and staff feedback

- Patients commented that they felt 'safer'
- Staff stated that the study was having a 'positive impact'

## Discussion

### Incident data

- Figure 3 demonstrates an overall increase in incidents post 'SleepWell.' A number of confounding variables could account for this
  - Smoking ban introduced mid-intervention
  - Reclassification of incident recording mid-intervention
- Four deaths occurred during the study. These were related to a decline in physical health and not attributed to 'SleepWell'
- Decrease in self-harm rates post 'SleepWell,' indicating the positive impact of this intervention

### Protected sleep time (PST)

- Qualitative data suggests benefits for both patients and staff
- The benefit of the study is replicated through the increase in patients placed on PST over the course of the study

### Sleep disorder assessments

- Only 50% of patients were assessed for sleep disorders, due to uncertainty of staff responsibility, heavy workloads and frequent changes in consultant cover
- Assessments were difficult for a percentage patients to complete, therefore wards adapted them and introduced a traffic light system to assess this. These data were assessed during review meetings

### Data recording inaccuracies/not recorded

- Some data produced was not recorded in the correct manner if at all, highlighting that greater emphasis should be placed on recording in future studies

## Conclusions

- The reduction in self-harm and positive qualitative feedback suggest there is potential clinical value in 'SleepWell'
- PST and sleep disorder assessments were difficult to implement at the beginning of the study, due to staff anxiety and patient ability to take part
- However, with adaptation to practice and benefits of study observed, greater numbers of patients took part in 'SleepWell' suggesting the feasibility of the approach
- Results presented to management team of NTW, who endorsed future expansion of 'SleepWell,' with further safety assessments required to ensure the benefits outweigh any potential risks

## Future work

- Future implementation of 'SleepWell' measures requires greater frequency and accuracy of collecting and recording data
- To ensure inclusivity for all patients, sleep disorder assessments and the PST should be personalised for specific requirements
- 'SleepWell' to be extended across all in-patient adult and old-age wards in NTW

## References

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