Actigraphy Assessments



Actigraphic Assessments

Sleep Unlimited offer actigraphic assessments for individuals where there is a need to explore aspects of activity, sleep, rest and exercise for the individual.

As well as where information about care routines and effects on the sleep of carers and family members is pertinent.

Actigraphy is a non-invasive method of monitoring rest and activity cycles over time. A small watch-shaped actigraphic sensor is worn by a client and measures gross motor activity. The unit is very sensitive and continually records even the smallest of movements.

The advice provided is then tailored to the individual and is based on Cognitive Behavioural Therapy for Insomnia (CBTi). CBTi is the recommended NICE guidelines on how to treat a sleep problem.



Actigraphic assessments provide useful information on…

- Circadian rhythms
- The balance of sleep and activity over a 24-hour period
- Similarities and differences between 24-hour periods
- Consistency of routines, including imposed routines for less mobile individuals
- Compliance with advice regarding routines, rest and activity periods
- Effectiveness of interventions aimed at altering routines, rest and activity periods to promote rehabilitation
- Overall levels of activity in any given day or other time period (which can correspond to specific diarised activities)
- Sleep disturbances (length of time taken to fall asleep, time spent asleep etc...)
- Timing of care interventions at night
- Evaluation of fatigue levels in general and in relation to specific activities
- Evaluating sleep and sleep disturbance for those caring for people with injuries – this can be done in conjunction with evaluating the individual with an injury for the same period and gives a clear picture of the wider effects of sleep disturbances for those receiving care from family members or professional carers providing a ‘sleeping night’ service.

Actigraphy Report

Our actigraphic and expert assessment offers an opportunity to examine the sleep and wakefulness patterns, levels of movement and patterns of activity.

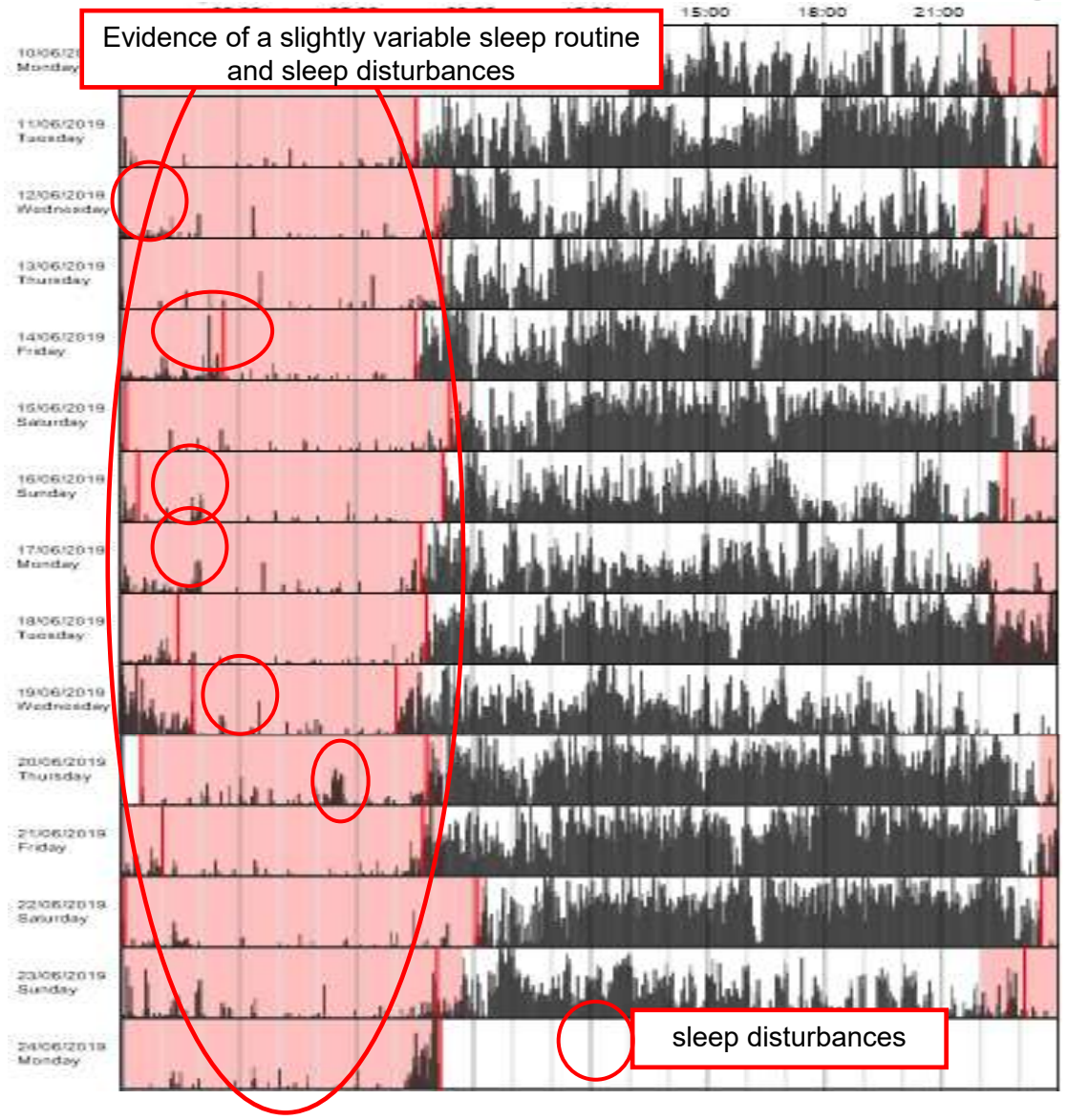
Actigraphy has the benefit of collecting data unobtrusively and over long periods of time, which can reveal significant patterns, which can further inform the treatment programme.

	Minutes per night	Total per night
TOTAL SLEEP TIME	644	10 hours 44 minutes
AVERAGE TIME TO GET TO SLEEP	6	6 minutes
TIME AWAKE DURING THE NIGHT	101	1 hour 41 minutes
TIME IN BED	762	12 hours 42 minutes
SLEEP EFFICIENCY	66.5%	
SLEEP EFFICIENCY FOR AGE MATCHED HEALTHY SUBJECTS	>85%	

	Number of activity counts	Average time activity commenced
NIGHTTIME ACTIVITY LEVEL	1209	01.00
DAYTIME ACTIVITY LEVEL	35702	10.00
	Relative Amplitude	Proportion of 24-hour activity occurring at night
RELATIVE AMPLITUDE OF 24-HOUR ACTIVITY PATTERNING	0.935	3.4%

2 weeks of Raw Actigraphy Data

We provide raw data from the (usually) 2-week actigraphy assessment in our reports to clearly display whether there are inconsistencies in the sleep routine and highlight sleep disturbances during the night.

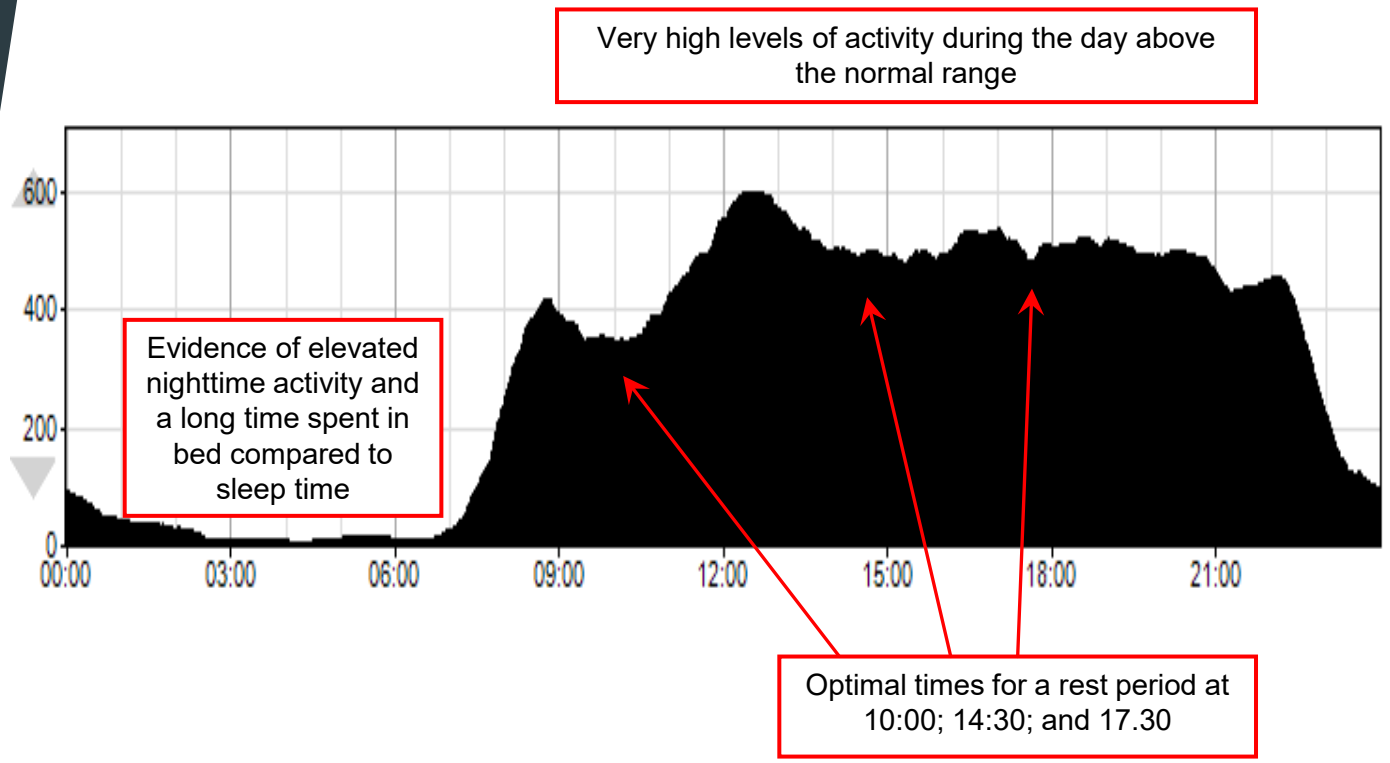


Average Actigraph Data

We also provide an average 24-hour actogram and compare to a healthy sleeping control participant's actogram to clearly display the differences in activity levels during the day and sleep disturbances during the night.

The average actogram allows us to examine:

1) dips in activity to advise on optimal rest periods; and
2) 2) peaks in activity to better enable the scheduling of interventions e.g. physiotherapy



Sleep Management Plan

Alongside the Actigraphy Report our actigraphy assessment includes a Sleep Management Plan.

Using the data from the actigraphy report we provide personalised sleep advice, using CBTi as well as suggested rise and bedtimes and optimal rest periods.

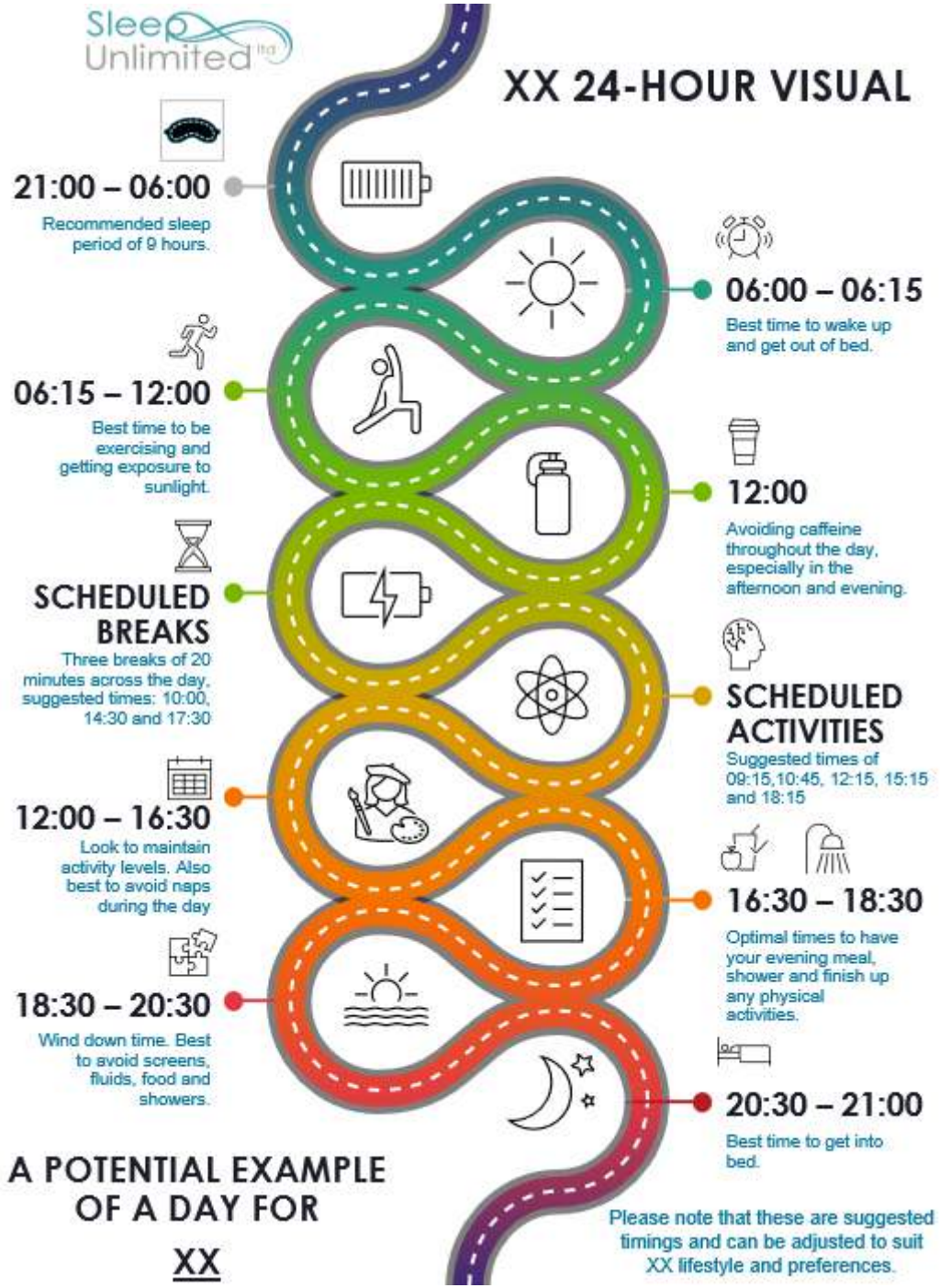
Example 24 Hour Sleep Management Plan Summary

Sleep Unlimited ltd

Time	Activity	Time	Activity
00.00	Bed Time	12.30	Awake
00.30	Sleep	13.00	Awake
01.00	Sleep	13.30	Awake
01.30	Sleep	14.00	Rest 20 mins
02.00	Sleep	14.30	Awake
02.30	Sleep	15.00	Awake
03.00	Sleep	15.30	Awake
03.30	Sleep	16.00	Awake
04.00	Sleep	16.30	Awake
04.30	Sleep	17.00	Awake
05.00	Sleep	17.30	Awake
05.30	Sleep	18.00	Awake
06.00	Sleep	18.30	Awake
06.30	Sleep	19.00	Rest 20 mins
07.00	Sleep	19.30	Awake
07.30	Rise Time	20.00	Awake
08.00	Awake	20.30	Awake
08.30	Awake	21.00	Awake
09.00	Awake	21.30	Awake
09.30	Awake	22.00	Awake
10.00	Awake	22.30	Awake
10.30	Awake	23.00	Awake
11.00	Rest 20 mins	23.30	Awake
11.30	Awake	00.00	Bed time
12.00	Awake		

24 Hour Planning

Using the data from the actigraphy report we also provide a personalised visual road map of a potential 24-hour for the client, factoring in the CBTi centred advice recommended in the Sleep Management Plan.



Our data have been used by a range of healthcare providers and case managers to inform level of function and appropriate type and timing of intervention delivery. Several legal practitioners have used our data and reports in successful litigation claims for their clients, whereby our objective, empirical data have augmented other expert witness testimony.

Please contact us for further information or to book in an assessment:

email info@sleepunlimited.co.uk or telephone (0191) 580 0008.

