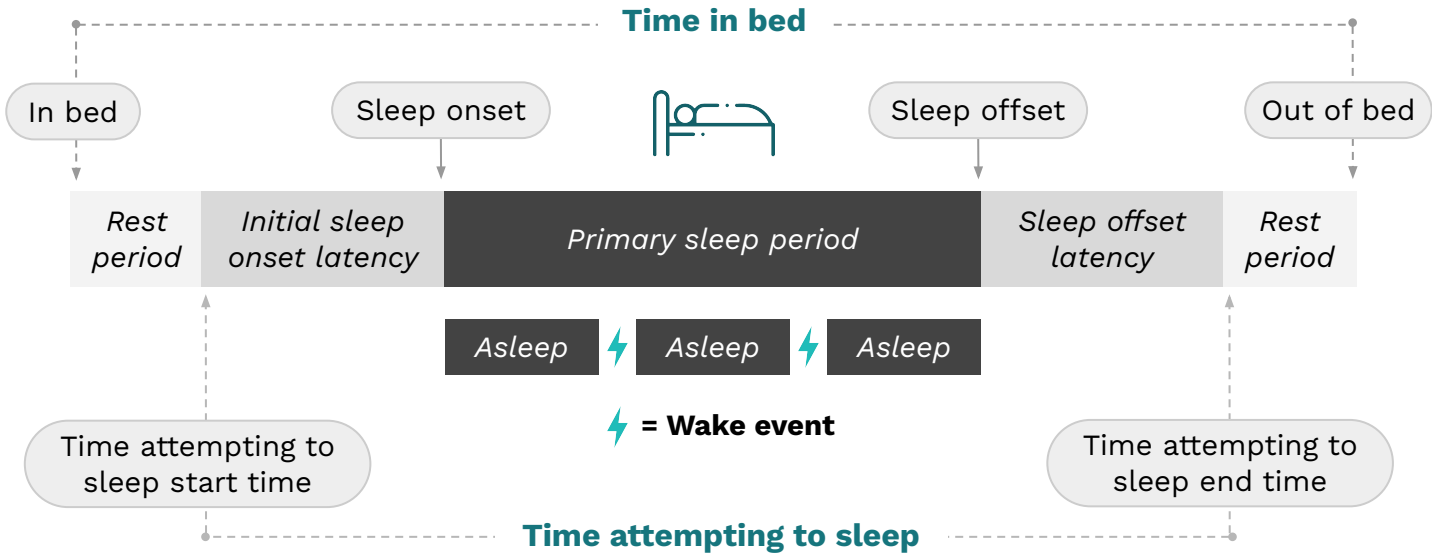
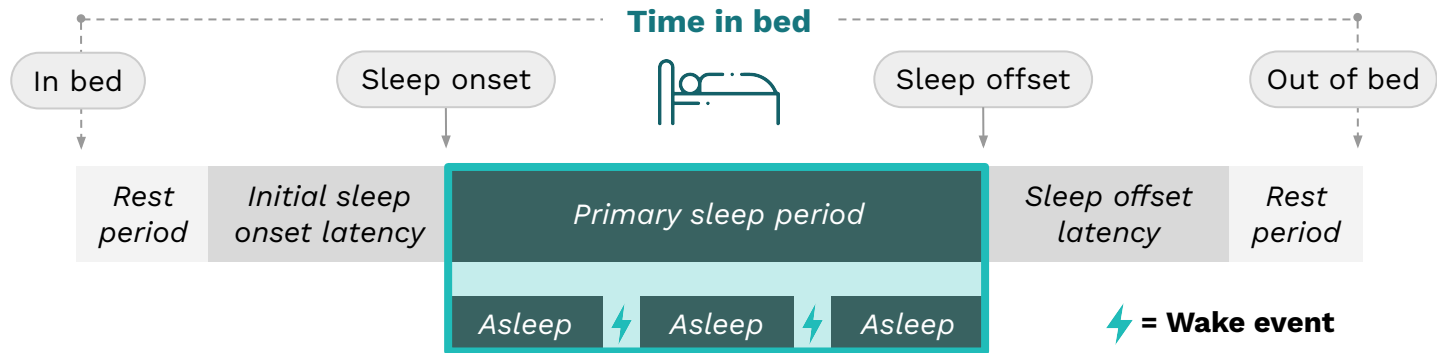


# Sleep map for core digital measures





# Sleep map for core digital measure: Total sleep time (Duration)



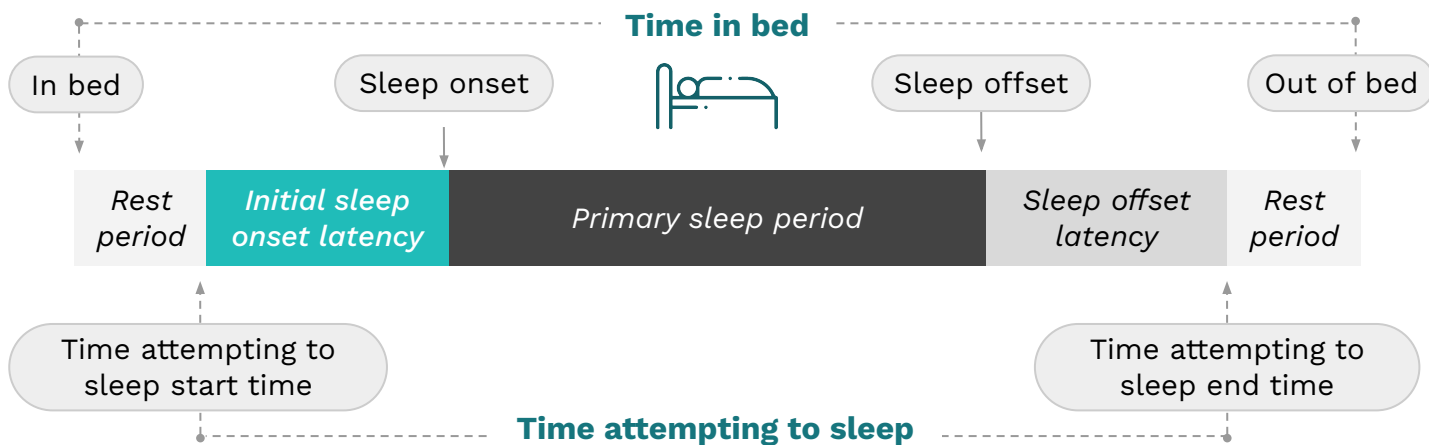
**Total sleep time = (Primary sleep period) - (WASO)**

$$\text{WASO}^* = \sum (\text{⚡ Duration})$$

*\*Wake after sleep onset*

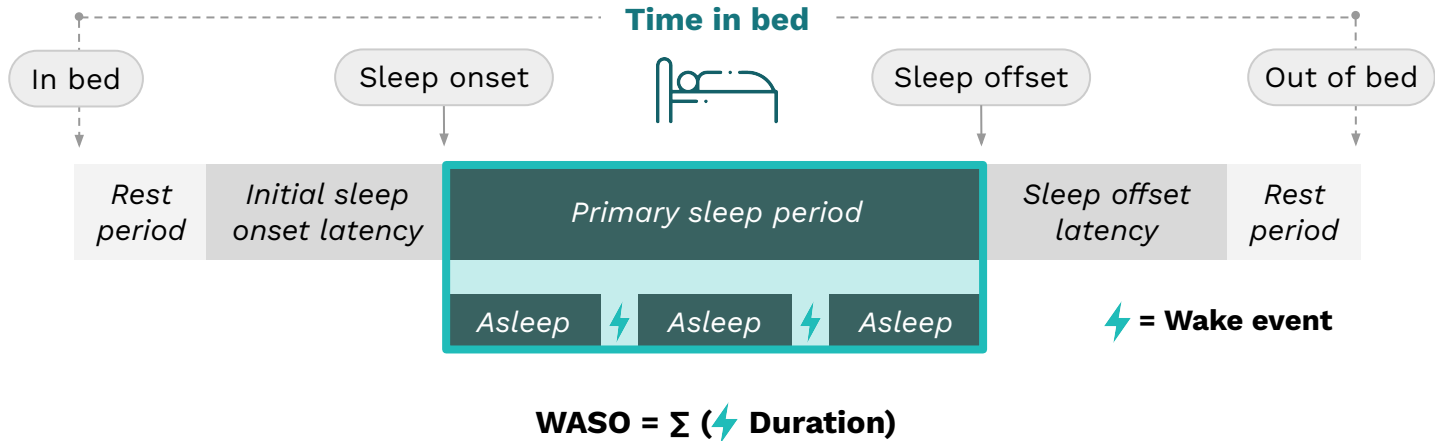


# Sleep map for core digital measure: Initial sleep onset latency (Duration)





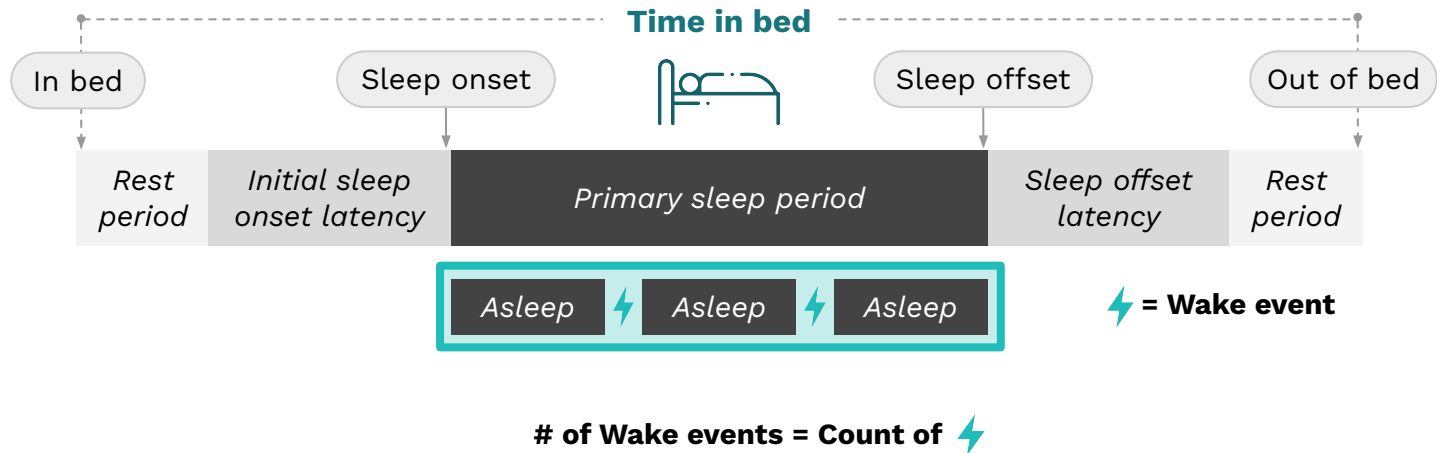
# Sleep map for core digital measure: Wake after sleep onset (Duration)





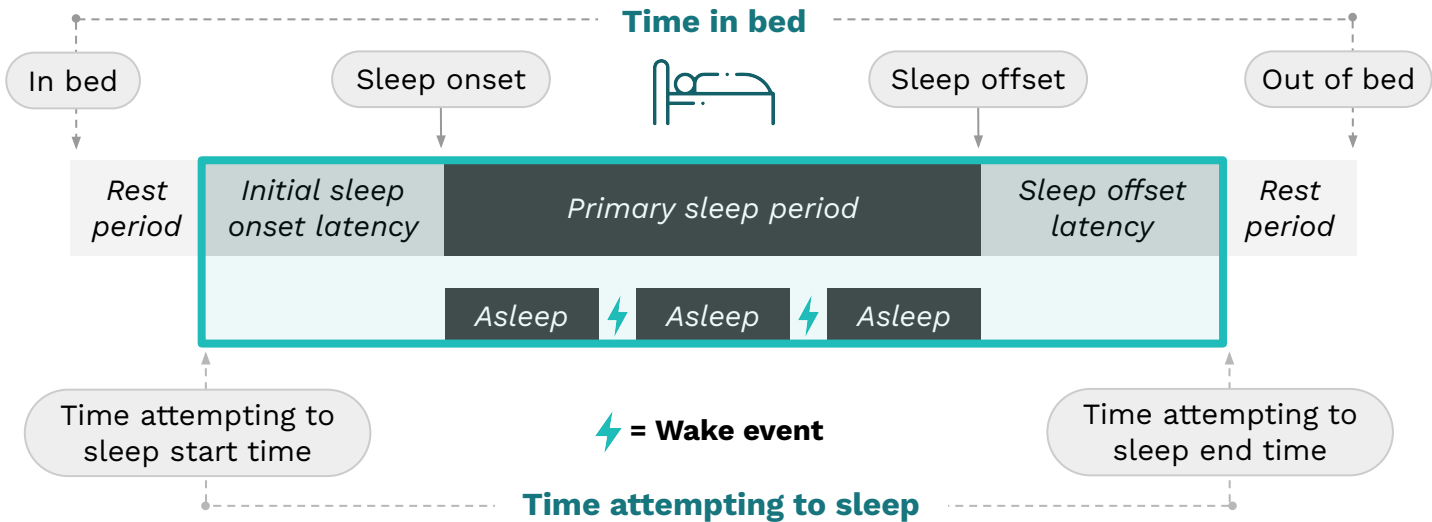
# Sleep map for core digital measure:

Number of wake events in the primary sleep period (Count)





# Sleep map for core digital measure: Sleep efficiency (Percentage)



$$\text{Sleep efficiency} = \frac{\text{Total sleep time}}{\text{Time attempting to sleep duration}} \times 100$$



# Sleep map for core digital measure:

## Total napping time (Duration)

