## Cognitive Behavioral Therapy for Insomnia (CBT-I)



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## Workshop Learning Objectives

- Recognize for whom CBT-I is and is not appropriate
- Execute the various components of CBT-I, including sleep restriction and stimulus control
- Describe common resistances to CBT-I and strategies for overcoming them


## Disclosures

I have nothing to disclose.

## Outline

2-2:15pm:

2:15-2:45pm: CBT-I session-by-session
2:45-3:15pm: Cases from presenter \& attendees
3:15-3:30pm: Resistances
3:30-4pm: Group role-playing

## Outline

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2:15-2:45pm:
2:45-3:15pm:
3:15-3:30pm:
3:30-4pm:

Insomnia criteria \& determining if CBT-I is indicated
CBT-I session-by-session
Cases from presenter $\&$ attendees
Resistances
Group role-playing

## Defining Insomnia

Diagnosis of insomnia made by self-report
No overnight sleep study required to diagnose insomnia
However, sleep studies might be conducted to rule-out other sleep disorders that might cause or coexist with the insomnia


## Defining Insomnia

## DSM-5 Definition of Insomnia Disorder

- Complaint of sleep quantity or quality associated with problems falling asleep, staying asleep, and/or early morning awakenings
- The sleep problem causes distress and/or some sort of problem at work, with others, etc.
- The sleep problem occurs at least 3 nights/week and has been going on for at least 3 months
- The sleep problem occurs despite adequate opportunity for sleep
- The insomnia is not better explained by another sleep disorder, is not caused by the effects of a substance, and is not adequately explained by coexisting mental disorders or medical conditions
- NOTE: insomnia is diagnosed whether it occurs as an independent condition or is comorbid with another mental disorder, medical condition, or another sleep disorder; insomnia is not diagnosed when the insomnia is not severe enough to warrant índependent clinical attention


## Why Bother Screening for Other Sleep Disorders?

- Another sleep disorder might cause/worsen insomnia symptoms
- Insomnia might worsen another sleep disorder
- For differential diagnosis (e.g., sleep onset insomnia might actually be delayed sleep phase syndrome)
- The "standard" approach to CBT-I is contraindicated for those with certain untreated sleep disorders


## Other Sleep Disorders \& Insomnia Symptoms

- Sleep Apnea
- Problems with staying asleep can be associated with sleep apnea
- Part of CBT-I - sleep restriction - is contraindicated in patients with untreated sleep apnea
- Restless Legs Syndrome
- Problems falling and staying asleep are associated with RLS
- Periodic Limb Movement Disorder
- Problems falling asleep, staying asleep, or unrefreshing sleep attributable to the PLMS is required for a diagnosis of PLMD
- Narcolepsy
- Sleep disruption with frequent awakenings may be present


## Other Sleep Disorders \& Insomnia Symptoms

- Isolated Symptoms \& Normal Variants (NOT insomnia)
- Excessive Time in Bed
- Short Sleeper
- Insufficient Sleep Syndrome
- Daytime sleepiness caused by too little sleep due to reduced time in bed
- Circadian Rhythm Disorders


## Delayed \& Advanced Sleep Phases



* problems falling asleep can be due to a delayed sleep phase
* problems waking up too early can be due to an advanced sleep phase


## Spielman's 3 Factor Model of Insomnia

$\square$ Predisposing $\quad$ Precipitating $\quad$ Perpetuating


Spielman et al. A behavioral perspective on insomnia treatment. Psychiatr Clin of North Am 1987, 10(4), 541-553.

## Classical Conditioning



## Conditioned Arousal



Over
time ...


## Spielman's 3 Factor Model of Insomnia

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## Treatments for Insomnia

- Sleep aids
- Addressing precipitating factors
- Address perpetuating factors

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## Treatments for Insomnia

Addressing precipitating factors

- Medical/psychiatric management
- Stress management
- Improving sleep hygiene



## Treatments for Insomnia

## Addressing precipitating + perpetuating factors <br> - Cognitive Behavioral Therapy for Insomnia



## CBT-I is Effective

- Scientific reviews and meta-analyses show that CBT-I is effective (rrwin et al., 2006, Health Psychol, 25(1), 3-14; Morin et al., 2006, Sleep, 29(11), 1398-414; Murtagh \& Greenwood, 1995, J Consult Clin Psychol, 63(1), 79-89)
- CBT-I is recognized by the NIH Consensus and State-of-the-Science Statement as a first-line treatment for insomnia as it was found to be as effective as medication for brief treatment and likely more durable over time (NHH Consens and state Sci Statements, 2005, 22(2), ,1.30)
- CBT-I is recommended as standard, first-line treatment for insomnia per published clinical guidelines by the Chronic Insomnia Task Force of the American Academy of Sleep Medicine (schutute Rodif e e tal, 2008, of oflin sleep Med, 4(5), 487-504).


## Is CBT-I Appropriate?

## Sleep Assessment

- Is this insomnia or something else (e.g., insufficient sleep syndrome)?
- Even if comorbid conditions present (e.g., depression, pain), CBT-I can be beneficial*
- Even if the patient is on sleep aids or wants to start taking sleep aids, this can be done in combination with CBT-I


## Patient Characteristics

- Is the patient motivated to try CBT-I? Do they just want a pill?
- Does the patient have sufficient intellect to benefit from CBT-I?
- CBT-I is intended for adult patients
- A major component of CBT-I (sleep restriction) is contraindicated for those with bipolar disorder, untreated sleep apnea, parasomnias, and seizure disorder (Perlis et al. Behavioral Treatments for Sleep Disorders. 2011), so CBT-I should be modified in these cases
- A sleep study should be conducted in cases of suspected sleep apnea before sleep restriction started


## Outline

2-2:15pm: Insomnia criteria \& determining if CBT-I is indicated
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2:45-3:15pm: Cases from presenter \& attendees
3:15-3:30pm: Resistances
3:30-4pm:
Group role-playing

## CBT-I Protocol

Intake Session: Assessment, start sleep diaries
Tx Session \#1: Review sleep diaries, educate about sleep drive \& circadian rhythm, present 3P model, start stimulus control \& sleep restriction
Tx Session \#2: Review, titrate, sleep hygiene
Tx Session \#3: Review, titrate, relaxation training
Tx Session \#4: Review, titrate, cognitive therapy I
Tx Session \#5: Review, titrate, cognitive therapy II
Tx Session \#6: Review, titrate, insomnia relapse prevention

CBT-I is typically 4 to 8 weekly treatment sessions (Peris et al. Cognitive Behavioral Treatment of Insomnia: A

## CBT-I Protocol

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## Intake Session

Assessment should include:

- History of insomnia symptoms and past treatments
- Present sleep complaints
- Other sleep disorders, any past sleep studies
- General sleep schedule (remember weekend vs. weekday, naps)
- Sleep hygiene factors (environment, caffeine intake, exercise, etc.)
- Sleep-related anxiety/stress/frustration, evidence of conditioned arousal
- Psychiatric \& medical history
- Medications


## Sleep Logs



| Fatigue Severity Scale: | 0 <br> no fatigue | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 <br> incapacitating fatigue |
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|  |  |  |  |  |  |  |  |  |  |  |

Please complete the shaded areas prior to going to bed.

| Date | Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{aligned} & \text { Naps (time \& } \\ & \text { duration) } \end{aligned}$ | Fatigue Rating (0-10) for the day | Bedtime (time went into bed) | Lights out (time tried to go to sleep) | Mins it took you to fall asleep initially | $\begin{gathered} \text { \# of } \\ \text { awaken- } \\ \text { ings } \end{gathered}$ | Mins awake in the middle of the night/early morning* | Wake-up time (time of final awakening) | Time you wanted to wake-up | Time you physically got out of bed | $\begin{aligned} & \text { Sleep } \\ & \text { Quality } \\ & \text { Ratitng } \\ & (0-10) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ex | Ambren 5img -9pm | $6 p m$ - 30 min | 6 | 9:15pm | 10:30pm | 60 | 3 | 45 | 5:00an | 5:00am | 5:05am | 2 |
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* Amount of time awake in the middle of the night/early morning: this is the total time you spent awake between when you first fell asleep and when you woke up for the last time It does not include the time it took you to fall asleep initially. Add up the amount of time you were awake for each of your awakenings.


## CBT-I Protocol

Intake Session: Assessment, start sleep diaries
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## Sleep Logs

|  | Week 1 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |  |
|  | Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |  |
|  | Medication(s) taken at bedtime (med name, dose, \& time) | mel $3.75-$ 10pm, klon $.0625-$ 12am, .0625 3am'ish | $\begin{gathered} \text { mel } 3.75- \\ \text { 10pm, klon } \\ .0625- \\ \text { 12am, . } 0625 \\ \text { 3am'ish } \end{gathered}$ | mel $3.75-$ 10pm, klon $.0625-$ $12 \mathrm{am}, .0625$ 3am'ish | mel 3.75 - <br> 10pm, klon . 0625 12am | $\begin{gathered} \text { mel 3.75- } \\ \text { 10pm, klon } \\ .0625- \\ \text { 12am, . } 0625 \\ \text { 3am'ish } \end{gathered}$ | mel $3.75-$ $10 \mathrm{pm}, \mathrm{klon}$ $.0625-$ 12am, . 0625 3am'ish | mel $3.75-$ 10 pm, klon $.0625-$ $12 \mathrm{am}, .0625$ 3am'ish |  |  |
|  | Naps (time \& duration) | $\underset{\min }{13: 00-60}$ | 0 | 0 | 0 | 0 | $\underset{\text { min }}{15: 15-25}$ | 1:30-20 min | AVERAGE |  |
|  | Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 | Fatigue Rating |
|  | Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 | Bedtime |
|  | "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 | Lights out |
|  | Mins to fall asleep intially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 | Mins to fall asleep |
|  | \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 | \# of awakenings |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 | Mins awake after sleep onset |
|  | Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 | Wake time |
|  | If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 | Mins wake too early |
|  | Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 | Out of bed |
|  | Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 | Sleep Quality |
|  | Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 | Time in Bed |
|  | Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 | Total Sleep Time |
|  | Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% | Sleep Efficiency |

## Sleep Logs

Weekly Averages: Sleep Latency, Wake After Sleep Onset, and Early Morning Awakenings


## Sleep Logs

## Weekly Averages: Time in Bed vs. Total Sleep Time



## Sleep Logs

Weekly Average: Sleep Efficiency (\%)


## Education Important!

- First, it's very important to provide the patient some education about sleep to demonstrate the rationale behind CBT-I strategies since some recommendations will seem counterintuitive, might make sleep worse before it gets better
- This education at a minimum should include background about:
- Homeostatic sleep drive \& circadian rhythm
- 3 P Factor Model


## Sleep Regulation: Internal Mechanisms



Borbély, AA. A two process model of sleep regulation. Hum. Neurobiol. 1982, 1 (3): 195-204.

## 3 P Model \& CBT-I

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CBT-I primarily targets perpetuating factors (e.g., napping, oversleeping, spending too much time in bed, sleep-related stress, conditioned arousal)

## Stimulus Control to $\downarrow$ Conditioned Arousal



Over time ..


## Classical Conditioning

- Lying awake in bed night after night essentially "pairs" the bed/bedroom with wakefulness and possibly also anxiety and frustration
- This pairing, over time, can cause the bed/bedroom to automatically trigger feelings of wakefulness, anxiety, frustration
- "Conditioned arousal"
- Stimulus control attempts: (1) to break this pairing of bed with wake, and (2) to strengthen the pairing of bed with sleep and falling asleep quickly (...and this will take time)


## Stimulus Control Instructions

1. Do not use your bed for anything except sleep; that is, do not read, watch TV, eat, or worry in bed. Sexual activity is the only exception to this rule. On such occasions, the instructions are to be followed afterward when you intend to go to sleep.
2. If you find yourself unable to fall asleep within about 15-20 minutes, get up and go into another room. Since I do not want you to watch the clock, just estimate how long you have been lying awake. Remember, the goal is to associate your bed with falling asleep quickly! Return to bed intending to go to sleep only when you are very sleepy, or after a predetermined amount of time $\qquad$ ).
3. While out of bed during the night, you can engage in quiet, sedentary activities (e.g., reading, TV viewing, etc. - but make sure content of such is not too engaging or activating). Do not exercise, eat, smoke, or take warm showers or baths. Try not to fall asleep when not in bed.
4. If you return to bed but still cannot fall asleep within 15-20 minutes, repeat step 2. Do this as often as necessary throughout the night.

## Sleep Restriction



Figure from Perlis et al. Cognitive Behavioral Treatment of Insomnia: A Session-by-Session Guide. 2005

## Sleep Logs

## Weekly Averages: Time in Bed vs. Total Sleep Time



- TIB (hrs) ~TST (hrs)

Spielman et al. Sleep Restriction Therapy in Perlis et al. Behavioral Treatments for Sleep Disorders. 2011, 21-30.

## Sleep Restriction Instructions

1. Your bedtime is $\qquad$ .
2. Set your alarm and get up at the same time every morning, regardless of how much sleep you got during the night. Your wake time is
$\qquad$ .
3. Do not nap during the day.*

* In cases where sleepiness might cause harm to self or others, go ahead and nap, go to bed earlier, sleep in, etc. In elderly, scheduling a nap might be beneficial, but try to limit to 30 minutes (and track this!).


## Is CBT-I Appropriate?

## Sleep Assessment

- Is this insomnia or something else (e.g., insufficient sleep syndrome)?
- Even if comorbid conditions present (e.g., depression, pain), CBT-I can be beneficial*
- Even if the patient is on sleep aids or wants to start taking sleep aids, this can be done in combination with CBT-I


## Patient Characteristics

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- A sleep study should be conducted in cases of suspected sleep apnea before sleep restriction started


## Sleep Compression: A Gentler Form of SRT

## Weekly Averages: Time in Bed vs. Total Sleep Time



## Sleep Compression: A Gentler Form of SRT

## Protocol:

- Determine the difference between TIB and TST (in previous example, $6.1 \mathrm{hrs}-4.5 \mathrm{hrs}=96 \mathrm{mins})$
- 96 mins / 5 wks = ~20 mins per week
- Reduce TIB by 20 mins each week
- Track sleep efficiency after each week and adjust TIB appropriately

In practice, this is often times less formal than the protocol

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## Titration Rules

## Sleep Efficiency $\geq$ 90\%: increase by $\mathbf{1 5 - 3 0}$ mins

SE between 85-89\%: stay the same

SE < 85\%: decrease by 15-30 mins
*In older adults, lower threshold

## Sleep Hygiene

- Cut down on caffeine
- Don't go to bed hungry

- Avoid moderate to heavy alcohol use in the late evening
- Avoid excessive liquids in the evening
- Avoid smoking before bed or during the night

- Make sure bedroom is quiet (except perhaps for some white noise), very dark, and comfortable in terms of mattress, pillow, and temperature


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## "Seesaw" of Sleep-Wake

## Wake-Promoting Factors:

- Anxiety/Stress (sleeprelated or otherwise)
- Noise
- Pain/Body Discomfort
- Caffeine
- Exercise?*
- Circadian Rhythm
- Conditioned Arousal


## Sleep-Promoting Factors:

- $\uparrow$ Sleep Drive
- Sleeping Pills
- Exercise?*
- Circadian Rhythm
- Conditioned Sleepiness
* Esteves et al. Sleep patterns and acute physical exercise: the effects of gender, sleep disturbances, type and time of physical exercise. J Sports Med Phys Fitness 2014, 54(6), 809-815.


## Relaxation Training

- Diaphragmatic Breathing
- Progressive Muscle Relaxation
- Imagery
- Many Others!



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## Cognitive Therapy



## Cognitive Therapy



## Cognitive Therapy II

## Adding " $D$ " to the $A B C$ model: <br> Activators (events) <br> Beliefs (thoughts) <br> Consequences (emotions or behaviors) <br>  <br> Dispute negative thoughts

## Cognitive Therapy II

## Example:

Disputing beliefs about negative consequences of sleep by examining the evidence
"I won't be able to do well at work if I don't sleep well tonight."

Compare estimated \# of poor nights of sleep with \# of days where you actually didn't do well at work (or record this prospectively)

Insomnia for 5 years, 3x/week = 780 "bad" nights
Days of poor work performance in the past 5 years $=100$ ? $100 / 780=13 \%$ chance of doing poorly at work due to sleep

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## Insomnia Relapse Prevention

- Setting Realistic Expectations
- Slip vs. Relapse

- Understanding the Relapse Cycle



## Insomnia Relapse Prevention

## Brainstorm (and write down!) with patient:

- High risk situations
- Signs/symptoms that mean the problem should be addressed now
- Strategies for preventing a slip from becoming a relapse


Confidence is key!

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## Case Example

- 63 year-old married, Caucasian female
- Self-employed psychotherapist
- Has an adult daughter, good relationship
- Difficulty falling and staying asleep most nights
- Mild sleeping problems since college but worse at age 24 following an accident with subsequent hospitalization
- PTSD-like symptoms once every 1-2 years
- Daytime symptoms: fatigue, depressed mood, anxious about sleep
- Klonopin 0.25 mg (trying to wean off) + melatonin every night, "somewhat effective"
- Melatonin CR $2.5 \mathrm{mg}+$ melatonin 1.25 mg @ 10pm
- Klonopin 0.125 mg @ 12am
- Klonopin 0.125 mg during awakening, around 3am
- No prior sleep study
- Besides occasional nightmares, no other sleep-related complaints (no snoring, sleep paralysis, etc.)
- Goal: to get off Klonopin completely


## MEDICAL \& PSYCHIATRIC HISTORY

## MEDICAL

- Motor vehicle accident at age 24
- Arthritis
- Mild aches and pains (but she denied pain interfering with sleep)


## PSYCHIATRIC

- "Anxious temperament overall" that worsened after the accident
- H/O depressive symptoms related to life stressors
- No psychiatric hospitalization, no suicide attempts
- Sees psychiatrist
- H/O individual and group therapy after hospitalization, after miscarriage, and after career transitions, currently not undergoing therapy


## MEDICATIONS

- Klonopin 0.25 mg qhs since 2000 for sleep
- She had been taking 1 mg but has been tapering
- Lexapro 20 mg qd since 2003
- Melatonin 1.25 mg qhs
- Melatonin CR 2.5 mg qhs
- Vitamin D qd


## SLEEP SCHEDULE

- Bedtime 10pm
- Reads in bed until about 1am, no clear time for when she intends to fall asleep
- Sometimes falls asleep with her book, sometimes she has put it away
- 1-2 awakenings, wake after sleep onset $\sim 1$ hour
- Final wake-up time 8-8:30am
- Get-up time = wake-up time
- Estimated total sleep time 5-6 hours
- Daytime naps of 30 minutes once every 1-2 weeks after a night of especially poor sleep


## SLEEP BEHAVIORS \& FACTORS

- When unable to sleep, reads in bed
- A couple nights a week, watches TV in bed earlier in the evening
- Mental alertness \& racing thoughts
- Anxiety near bedtime and during awakenings
- Heart rate increasing in bed
- No caffeine
- 2 alcoholic drinks per month
- Exercise 4-5x/week (elliptical, walking, yoga)
- Bedroom dark and comfortable, uses eye mask for morning sunlight
- Box fan + ear plugs to drown out husband's snoring
- Besides sleep aids, has tried increasing regular relaxation/meditation, reframing sleep-related thoughts


## PSYCHOMETRICS

- Patient Health Questionnaire (PHQ-9): 3.5, none/minimal depressive symptoms
- Generalized Anxiety Disorder screener (GAD-7): 0, none/minimal anxiety symptoms
- Insomnia Severity Index (ISI): 15.5, moderate insomnia symptoms
- Epworth Sleepiness Scale (ESS): 4, no significant daytime sleepiness
- Dysfunctional Attitudes and Beliefs about Sleep (DBAS-16): The patient reported significant concerns regarding daytime consequences related to a poor night's sleep, including interference with daily activities, feeling irritable, depressed, or anxious, and feeling tired and having no energy.


## DIAGNOSES

307.42 Insomnia Disorder
300.00 Unspecified Anxiety Disorder

H/O Depression?
Mild aches and pains

## PLAN

- Sleep logs, start CBT-I
- Continue regular meditation/relaxation and cognitive therapy
- Can be reviewed within the context of CBT-I as well
- Follow-up with psychiatrist about getting off the Klonopin


## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel 3.75-10pm, } \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
|  |  |  |  |  |  |  |  |  |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel 3.75-10pm, } \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel 3.75-10pm, } \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel 3.75-10pm, } \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel 3.75-10pm, } \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel 3.75-10pm, } \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, } .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am,. } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am,. } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, } .0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \\ \text { klon } .0625- \\ \text { 12am, } .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon . 0625- } \\ \text { 12am,.0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon . } 0625- \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | mel 3.75-10pm, <br> klon .0625-12am | ```mel 3.75-10pm, klon .0625- 12am,.0625- 3am'ish``` | ```mel 3.75-10pm, klon .0625- 12am,.0625 3am'ish``` | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medication(s) taken at bedtime (med name, dose, \& time) | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
|  | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
|  | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon .0625- } \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, klon .0625-12am | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ 12 \mathrm{am}, .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
|  |  |  |  |  |  |  |  |  |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon } .0625- \\ \text { 12am,. } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, } .0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, } 0625- \\ \text { 3am'ish } \end{gathered}$ | mel 3.75-10pm, <br> klon .0625-12am | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am,. } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon . } 0625- \\ \text { 12am, .0625- } \\ \text { 3am'ish } \end{gathered}$ | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm}, \\ \text { klon } .0625- \\ \text { 12am, } 0625- \\ \text { 3am'ish } \end{gathered}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |

## Baseline Sleep Log

| Week 1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| Date | 10/7/2014 | 10/8/2014 | 10/9/2014 | 10/10/2014 | 10/11/2014 | 10/12/2014 | 10/13/2014 |  |
| Medication(s) taken at bedtime (med name, dose, \& time) | ```mel 3.75-10pm, klon.0625- 12am,.0625- 3am'ish``` | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon . } 0625- \\ & \text { 12am, . } 0625- \\ & \text { 3am'ish } \end{aligned}$ | ```mel 3.75-10pm, klon .0625- 12am,.0625 - 3am'ish``` | mel 3.75-10pm, <br> klon .0625-12am | ```mel 3.75-10pm, klon .0625- 12am,.0625 3am'ish``` | $\begin{gathered} \text { mel } 3.75-10 \mathrm{pm} \text {, } \\ \text { klon . } 0625- \\ \text { 12am, . } 0625- \\ \text { 3am'ish } \end{gathered}$ | $\begin{aligned} & \text { mel } 3.75-10 \mathrm{pm}, \\ & \text { klon .0625- } \\ & \text { 12am, .0625- } \\ & \text { 3am'ish } \end{aligned}$ |  |
| Naps (time \& duration) | 13:00-60 min | 0 | 0 | 0 | 0 | 15:15-25 min | 1:30-20 min | AVERAGE |
| Fatigue Rating (0-10) for the day | 9.0 | 8.0 | 7.0 | 7.0 | 5.0 | 5.0 | 4.0 | 6.4 |
| Bedtime (time went into bed) | 21:00 | 23:00 | 23:00 | 23:30 | 23:30 | 23:30 | 0:00 | 23:04 |
| "Lights out" (time tried to go to sleep) | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:30 | 1:00 | 1:25 |
| Mins to fall asleep initially | 60 | 20 | 30 | 60 | 80 | 60 | 60 | 52.9 |
| \# of awakenings | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 1.4 |
| Mins awake in middle of night/early morning (how long awakenings lasted) | 120 | 60 | 45 | 0 | 60 | 30 | 15 | 47.1 |
| Wake time (time of final awakening) | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| If final wake-up time earlier than desired, mins awake too early | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 8.6 |
| Time physically got out of bed | 8:00 | 7:00 | 7:30 | 6:30 | 8:30 | 7:30 | 8:00 | 7:34 |
| Sleep Quality Rating (0-10) | 2.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 5.9 |
| Time in Bed (TIB) | 6.50 | 5.50 | 6.00 | 5.00 | 7.00 | 6.00 | 7.00 | 6.14 |
| Total Sleep Time (TST) | 3.50 | 4.17 | 4.75 | 4.00 | 4.67 | 4.50 | 5.75 | 4.48 |
| Sleep Efficiency (SE) | 53.85\% | 75.76\% | 79.17\% | 80.00\% | 66.67\% | 75.00\% | 82.14\% | 72.87\% |



## Baseline Sleep



## Tx Session \#1

- Review sleep log \& sleep parameters
- She reported that she was likely dozing off before bedtime while reading
- Education about sleep drive, circadian rhythm, 3P etiological model of insomnia
- Sleep restriction started (5 hrs, 3am-8am)
- Stimulus control started
Prescribed TIB = 5 hrs, 3-8am



## Tx Session \#2


sleep efficiency

$\simeq S L$ (mins) $\simeq$ WASO (mins) $\simeq$ EMA (mins)

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| TIB = 5 hrs, | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| TIB = 5 hrs, | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| $\text { TIB = } 5 \text { hrs, }$ | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| $\text { TIB = } 5 \text { hrs, }$ | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| $\text { TIB = } 5 \text { hrs, }$ | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| $\text { TIB = } 5 \text { hrs, }$ | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

|  | Week 2 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prescribed |  | day 1 | day 2 | day 3 | day 4 | day 5 | day 6 | day 7 |  |
| $\text { TIB = } 5 \text { hrs, }$ | Date | 10/14/2014 | 10/15/2014 | 10/16/2014 | 10/17/2014 | 10/18/2014 | 10/19/2014 | 10/20/2014 |  |
| 3-8am | Medication(s) taken at bedtime (med name, dose, \& time) | mela-3.75,1:00, klon- $-125,2: 00$ <br> klon .-.125, 2:00 | $\begin{gathered} \text { 12:00 mela } 3.75, \\ \text { 1:00 klon } 1 / 4 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,1: 00, \\ & \text { klon } 25,1: 30 \end{aligned}$ | $\begin{gathered} \text { mela, } 3.75,12: 00 \\ \text { klon, } 25,1: 00 \end{gathered}$ | $\begin{aligned} & \text { mela, } 3.75,12: 00, \\ & \text { klon } 25,1: 00 \end{aligned}$ | same | same |  |
|  | Naps (time \& duration) | 0 | 10:30-20 min | 0 | 20:00-10 min | 0 | 14:00-50 min | 0 | AVERAGE |
|  | Fatigue Rating ( $0-10$ ) for the day | 4.0 | 8.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.7 |
|  | Bedtime (time went into bed) | 2:45 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | "Lights out" (time tried to go to sleep) | 2:50 | 1:45 | 2:00 | 2:00 | 2:00 | 2:00 | 1:30 | 2:00 |
|  | Mins to fall asleep initially | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 4.7 |
|  | \# of awakenings | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 |
|  | Mins awake in middle of night/early morning (how long awakenings lasted) | 0 | 10 | 10 | 0 | 5 | 5 | 5 | 5.0 |
|  | Wake time (time of final awakening) | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | If final wake-up time earlier than desired, mins awake too early | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4.3 |
|  | Time physically got out of bed | 7:30 | 7:30 | 7:30 | 8:00 | 8:00 | 8:00 | 7:30 | 7:42 |
|  | Sleep Quality Rating (0-10) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.6 |
|  | Time in Bed (TIB) | 4.67 | 5.75 | 5.50 | 6.00 | 6.00 | 6.00 | 6.00 | 5.70 |
|  | Total Sleep Time (TST) | 4.58 | 5.50 | 5.25 | 5.92 | 5.87 | 5.83 | 5.83 | 5.54 |
|  | Sleep Efficiency (SE) | 98.21\% | 95.65\% | 95.45\% | 98.61\% | 97.78\% | 97.22\% | 97.22\% | 97.16\% |

## Tx Session \#2

- She reported practicing stimulus control appropriately
- She reported being able to think more clearly this past week
- Titration
- Prescribed TIB: 5 hrs
- Actual TIB: 5.7 hours (SE = 97\%)
- New TIB: +15 minutes, 6 hrs, 1:30-7:30am
- Sleep Hygiene
- Monitor food intake, especially afternoon snacking (she has been $\uparrow$ eating to combat fatigue, undesirable weight gain)

$\varkappa \mathrm{TIB}$ (hrs) $\leadsto$ TST (hrs)

Tx Session \#3

$\leadsto \mathrm{SL}$ (mins) $\curvearrowleft \mathrm{WASO}$ (mins) $\simeq \mathrm{EMA}$ (mins)

## Tx Session \#3

- Review
- She cut the Klonopin in half this past week, under the guidance of her psychiatrist
- Daytime fatigue improving
- Titration
- Prescribed TIB: 6 hrs
- Actual TIB: 6.7 hours (SE = 92\%)
- New TIB: +15 minutes, 7 hrs, 1:30-8:30am



## Tx Session \#4

- Review
- No Klonopin at all partway through the week
- Still taking melatonin nightly
- Cognitive therapy started
- HW: track ABC's
- Titration
- Prescribed TIB: 7 hrs
- Actual TIB: 7.2 hours (SE = 91\%)
- New TIB: +15 minutes, 7.5 hrs, 12am-7:30am


## Tx Session \#5

Prescribed TIB $=7.5$ hrs, 12am7:30am



## Tx Session \#5

- Review
- Continued to take melatonin nightly (no Klonopin)
- Bedtimes and wake-up times less consistent this past week
- $\uparrow$ worries contributed to sleep maintenance problems this past week ( 2 nights of prolonged WASO - 120 \& 45 mins$)$
- Cognitive Therapy
- Reviewed her ABC logs
- Taught her ways to dispute maladaptive thoughts
- HW: ABCD logs
- Titration
- Prescribed TIB: 7.5 hrs
- Actual TIB: 6.9 hours (SE = 91\%)
- New TIB: remain the same at $7.5 \mathrm{hrs}, 12 \mathrm{am}-7: 30 \mathrm{am}$


## Tx Session \#6




Sleep Efficiency

$\simeq S L$ (mins) $\curvearrowleft$ WASO (mins) $\_$EMA (mins)

## Tx Session \#6

- Review
- Continued to take melatonin nightly (no Klonopin)
- Stress subsided this past week
- Cognitive Therapy
- Reviewed her ABCD logs
- Relaxation
- Brief review, she already has been using effective relaxation strategies
- Insomnia Relapse Prevention
- Patient doing well and feeling confident, so CBT-I terminated
- Patient planning to follow-up with psychiatrist about possibly getting off Lexapro


## ISI \& ESS Scores During CBT-I

Insomnia Severity Index

- 0-7: none/minimal
insomnia symptoms
- 8-14: mild
- 15-20: moderate
- 21-28: severe

| Date | ISI <br> score, category | ESS <br> Score, category |
| :--- | :--- | :--- |
| 10/7/14 <br> (baseline) | 15.5, moderate |  |$\quad 4$, not significant

## Epworth Sleepiness Score

- 0-10: no significant daytime sleepiness
- 11-24: significant daytime sleepiness


## Outline

| 2-2:15pm: | Insomnia criteria \& determining if CBT-I is indicated |
| :--- | :--- |
| 2:15-2:45pm: | CBT-I session-by-session |
| 2:45-3:15pm: | Cases from presenter \& attendees |
| 3:15-3:30pm: | Resistances |
| $3: 30-4$ pm: | Group role-playing |

## Resistance to Sleep Restriction

I already don't get much sleep, so how is staying in bed LESS going to help?

- Educate, educate, educate - sleep drive, circadian rhythm, rationale
- TIB is matched to TST, so not restricting to less than average sleep time
- Prescribed schedule can change week to week, so just asking to commit for 1 week
- Frame it as an experiment and that we need data of how sleep will respond to a new sleep schedule
- "Short-term pain for long-term gain"


## Resistance to Sleep Restriction

I usually sleep in if I had an especially bad night of sleep - why can't | keep doing that? I'll be a wreck otherwise!

- That sleepiness can translate into a better night sleep the next night
- Focus on what you CAN control: staying awake until bedtime and waking up at rise time works better than trying to will yourself to sleep
- Use caffeine in moderation
- Cognitive therapy: challenge "I'll be a wreck"
- If sleepy to the point where risk to self or others, take nap (set alarm)
- Again, "short-term pain for long-term gain" \& frame as experiment


## Resistance to Sleep Restriction

I won't be able to stay up until my bedtime.

- Won't be able to vs. doesn't want to? Often want to catch sleep whenever it might happen - but we need to change this mindset
- If truly cannot seem to stay up until bedtime, brainstorm activities for what to do at night
- Sit up straight vs. lie down
- Avoid sleep-inducing activities (e.g., reading, watching certain shows)
- Try slightly more activating activities (e.g., wash dishes, fold laundry, phone call with someone on the west coast)
- Splash cold water on face, set timer in another room to go off in 5 to 10minute increments


## Resistance to Stimulus Control

If I get up out of bed, I'll become more alert and I'd sleep even less than if I just stayed in bed and tried to sleep.

- If you sleep less, then $\uparrow$ sleep drive the next day would increase the chance of better sleep the next night
- Review rationale of stimulus control (pairing bed with just sleep)
- Stimulus control is not intended to improve sleep that night but instead helps to gradually establish a new conditioned response to set your body/mind up for better sleep in the long-run
- To help decrease additional alertness at night, make sure you're engaging in sedentary and boring activities, relaxation, cognitive therapy as needed, adopt a mindset of acceptance vs. frustration


## Resistance to Stimulus Control

I understand and want to practice stimulus control, but I just can't seem to pull myself away from my warm and comfortable bed!

- Have a blanket or robe close by
- Know where you plan to go if you need to get up at night and set-up this area to be comfortable and relaxing beforehand (e.g., extra pillows, blankets, candles)
- Have something ready that you look forward to doing (e.g., a particular TV show - but not too engaging, a magazine, crafts, using a massage device/heat pad)


## Resistance to CBT-I

My sleep has gotten worse - not better! I don't want to keep doing this.

- Before starting SRT or SCT, discuss how the first few nights might be worse and daytime symptoms might be worse - this is expected
- If CBT-I is continued, all that exhaustion and sleepiness can translate into a better night of sleep later
- Importance of staying consistent, keep going
- HOWEVER, always make sure the patient feels like you're listening to their concerns
- Might have to de-emphasize certain CBT-I strategies for others (e.g., address sleep-related anxiety vs. keep pushing sleep drive), consider sleep aids for short-term use


## Barriers to CBT-I

I want to do CBT-I, but I can't afford it and/or I can't find a CBT-I specialist in my area.

- First make sure they are aware this is short-term treatment of about 6-8 sessions on average
- Can't find a specialist: help them search
- If no specialist close by, consider other CBT-I delivery options
- Cost still a barrier: consider other CBT-I delivery options


## CBT-I Delivery Options

- Treatment with a CBT-I specialist
- "Do It Yourself" CBT-I



## CBT-I Delivery Options

Treatment with a CBT-I specialist, who is likely a psychologist

- Board-certified in Behavioral Sleep Medicine ("CBSM") ideal, but very few providers with this certification, less than 200 in the US
- http://www.absm.org/bsmspecialists.aspx
- http://www.behavioralsleep.org/findspecialist.aspx
- Individualized CBT-I or Group CBT-I



## CBT-I Delivery Options

## "Do It Yourself" CBT-I

- Books
- Quiet Your Mind and Get to Sleep by Carney \& Manber
- Say Good Night to Insomnia by Jacobs \& Benson
- The Insomnia Answer by Glovinsky \& Spielman
- Overcoming Insomnia (workbook \& therapist guide) by Edinger
- Cognitive Behavioral Treatment for Insomnia: A Session-by-Session Guide by Perlis, Jungquist, Smith, \& Posner
- Internet
- SHUTi: \$135 for 16 weeks
- Sleepio: \$149 for 12 weeks, $\$ 249$ for 1 year; can link with Jawbone or Fitbit
- Go! To Sleep (Cleveland Clinic Wellness): \$40 for lifetime access


## Outline

2-2:15pm: Insomnia criteria \& determining if CBT-I is indicated
2:15-2:45pm: CBT-I session-by-session
2:45-3:15pm: Cases from presenter \& attendees
3:15-3:30pm: Resistances
3:30-4pm:
Group role-playing

## Role-Playing

Scenario \#1:
The patient just arrived for his/her initial intake. Conduct the intake, asking about:

- History of insomnia symptoms and past treatments
- Present sleep complaints
- Other sleep disorders, any past sleep studies
- General sleep schedule (remember weekend vs. weekday, naps)
- Sleep hygiene factors (environment, caffeine intake, exercise, etc.)
- Sleep-related anxiety/stress/frustration, evidence of conditioned arousal
- Psychiatric \& medical history
- Medications
** Throughout the intake, discuss amongst each other how what you're learning about the patient's sleep might guide certain CBT-I recommendations


Scenario \#2:
Baseline sleep log data reveals an average time in bed of 9 hours but an average total sleep time of only $61 / 2$ hours.

Therapist(s): Initiate sleep restriction, including rationale for such. Feel free to draw!
Patient: Be difficult! Express resistances for the therapist(s) to address.


Scenario \#3:
The patient admitted that when unable to sleep, he/she often remains in bed, feeling frustrated and anxious.

Therapist(s): Initiate stimulus control, including rationale for such.
Patient: Be difficult! Express resistances for the therapist(s) to address.

## Additional Resources

For information on sleep, sleep disorders, \& treatments for sleep disorders:

- http://yoursleep.aasmnet.org/
- http://www.sleepeducation.com/
- http://sleepfoundation.org/
- http://www.behavioralsleep.org/

To locate an AASM-accredited sleep center:

- http://www.sleepeducation.com/find-a-center

For a list of Behavioral Sleep Medicine specialists:

- http://www.absm.org/bsmspecialists.aspx
- http://www.behavioralsleep.org/findspecialist.aspx

