ADDENDUM I - NON SEDATIVE-HYPNOTIC TREATMENT OF INSOMNIA TOOLKIT

SCOPE: This toolkit is intended to offer non sedative-hypnotic treatment options for providers, clients and the interested general public for the treatment of insomnia. It is a supplement to the BHS safer prescribing of sedative-hypnotic guidelines.

GENERAL CONSIDERATIONS: Insomnia is often a symptom of a comorbid condition. Left untreated over time, patients may develop numerous psychological and behavioral issues that exacerbate insomnia-worrying about inability to sleep or daytime consequences of poor sleep, having distorted beliefs about the origin or meaning of insomnia, making schedule changes to accommodate the insomnia, and spending excessive time in bed. Treatment of insomnia should begin by treating comorbidities (such as major depression, pain, and movement disorders) or by eliminating activating medications. Psychologic and behavioral treatment should restructure maladaptive cognitions and establish healthy sleep habits/environments. Short term pharmacological treatment may be used to supplement these therapies. (JCSM Guidelines for Insomnia)

SPECIAL CONSIDERATIONS FOR OLDER ADULTS: The use of sedative-hypnotics in older adults should be avoided due to increased risk of adverse events including falls and hip fractures that can lead to hospitalization and death, increased risk of delirium, cognitive impairment and motor vehicle accidents. A recent meta-analysis compared the evidence of various interventions for tapering off benzodiazepines in older adults. This study found that supervised taper augmented with psychotherapy, such as CBT, resulted in higher odds of not using benzodiazepines post-intervention. Other interventions studies included taper plus a provider prescribing intervention (education, medication regimen reviews, prescribing feedback) and taper plus pharmacotherapy. (Gould et al, 2014)

SPECIAL CONSIDERATIONS FOR CONCOMITANT OPIOID TREATMENT: Studies show that 50-90% of patients with chronic pain also suffer from a sleep disturbance. Individuals in recovery from substance use disorders also tend to display sleep disturbances. The combination of opioids and sedative-hypnotics can create synergistic sedation with a risk of dangerous respiratory depression (Smith 2004). Recent guidelines from the American Society of Interventional Pain Physicians as well as BHS Safer Sedative-Hypnotic Prescribing Guidelines suggest that the use of sedative-hypnotic medications are relatively to absolutely contraindicated in individuals on chronic opioid treatment because of the safety risks. Because of the heightened risks of sedative-hypnotic medications and the high rate of sleep disturbances, alternative treatments for insomnia are needed.

PATIENT RESOURCES:

SLEEP DIARY: This can be used by patients to track their sleep patterns.
Attachment 1: https://www.sfdph.org/dph/files/CBHSdocs/SleepDiary.pdf

SLEEP HYGIENE HANDOUT FOR PATIENTS: The American Academy of Sleep Medicine recommends that patients practice good sleep hygiene techniques in combination with other treatments for insomnia. This is an easy-to-read handout that reviews healthy sleep habits that can be given directly to patients. Attachment 2:
English: https://www.sfdph.org/dph/files/CBHSdocs/SleepHabits-ENGLISH.pdf
Spanish: https://www.sfdph.org/dph/files/CBHSdocs/SleepHabits-SPANISH.pdf
Chinese: https://www.sfdph.org/dph/files/CBHSdocs/SleepHabits-CHINESE.pdf
Vietnamese: https://www.sfdph.org/dph/files/CBHSdocs/SleepHabits-VIETNAMESE.pdf
Tagalog: https://www.sfdph.org/dph/files/CBHSdocs/SleepHabits-TAGALOG.pdf
Russian: https://www.sfdph.org/dph/files/CBHSdocs/SleepHabits-RUSSIAN.pdf

SEDATIVE-HYPNOTIC OLDER ADULT PATIENT EDUCATION: The EMPOWER trial mailed 148 chronic benzodiazepine consumers aged 65-95 an 8-page education brochure on the risks of taking sedative-hypnotics along with a picture of a 20-week tapering protocol. After 6 months, 27% of individuals who received this intervention had discontinued their benzodiazepines and an additional 11% had reduced their dose (Tannenbaum et al, 2014). This handout can be given to clients as an educational tool to support clients during a taper of a sedative-hypnotic.
Attachment 3: https://www.sfdph.org/dph/files/CBHSdocs/EmpowerPatientHandout.pdf

PROVIDER RESOURCES:

CBT: CBT geared specifically for insomnia (CBT-I) has been found to improve sleep quality, reduce use of sedative-hypnotic medications and improve quality of life in a cost-effective manner. (Morgan et al, 2004). These handouts are outlines of CBT-I sessions and can be used by providers as a guide for non-pharmacologic management of insomnia.
Attachment 4: https://www.sfdph.org/dph/files/CBHSdocs/CBTforInsomniaHandout.pdf

SLEEP CLINIC REFERRAL: Sleep studies can be beneficial for ruling out medical causes of insomnia such as sleep apnea. Clients with Medi-Cal, Medicare or Medi-Medi may be referred to a sleep specialist, Dr. David Claman, at UCSF. For more information on Dr. Claman, see http://www.ucsfhealth.org/david.claman. For general information on referral to specialty clinics at UCSF, please visit http://www.ucsfhealth.org/health_professionals/make_a_referral/. The referral form can be accessed at http://www.ucsfhealth.org/pdf/referral.pdf, or here:
https://www.sfdph.org/dph/files/CBHSdocs/UCSF-SleepClinicReferral.pdf

NON SEDATIVE-HYPNOTIC OR NON ANTICHOLINERGIC MEDICATIONS FOR INSOMNIA:

Name	Dosage range	Mechanism	Comments
Doxepin	3-10mg	Tricyclic antidepressant	Doses >10mg will have anticholinergic effects.
Gabapentin	100-1200mg	Structurally related to GABA, may modulate the release of excitatory neurotransmitters	May also be helpful for neuropathic pain.
Melatonin	3-5mg	Natural hormone, regulates circadian rhythms	Works best if combined with exposure to sunlight during the day.
Mirtazapine	7.5-45mg	Central presynaptic alpha-2 antagonist	Lower doses are more sedating. May increase appetite, triglycerides. May cause weight gain.
Ramelteon	8mg	Melatonin receptor agonist	Mild therapeutic effect, not covered by many insurance companies.
Trazodone	12.5-300mg	Potentiates serotonergic activity in the CNS	Start at low doses, may have "hangover" feeling in the morning.

BACKGROUND: In 2008, 5.2% of adults aged 18-80 in the United States filled a prescription for a benzodiazepine. The percentage of adults who use benzodiazepines increased with age from 2.6% (18-35 years) to 8.7% (65-80 years). Of those older adults (65-80 years) who use benzodiazepines, 31.4% are using them long term. A majority of benzodiazepine prescriptions were prescribed by non-psychiatrists. The rates of benzodiazepine prescribing by psychiatrists declined with increasing patient age. Research suggests that a significant portion of sedative-hypnotics are prescribed for insomnia (Olfson 2015).

BHS Safer Sedative-Hypnotic Prescribing Guidelines recommend careful assessment and documentation for all clients in whom a sedative-hypnotic prescription is considered. Non-pharmacologic techniques and non-addictive medications are recommended to be used prior to sedative-hypnotic medications. Long term use of sedative-hypnotics should be avoided, especially in certain high risk populations such as older adults and clients on opioid medications. Offering psychosocial support and education during sedative-hypnotic taper is recommended. However the guideline does not include specifics regarding these parameters (BHS Safer Sedative-Hypnotic Prescribing Guidelines).

REFERENCES AND FURTHER READING:

1. Billoti S, Moride Y, Ducruet T, et al. Benzodiazepine use and risk of Alzheimer's disease: case-control study. BMJ. 2014;349:g5205 doi: 10.1136/bmj.g5205.
2. Gould RL, Coulson MC, Patel N, et al. Interventions for reducing benzodiazepine use in older people: meta-analysis of randomized controlled trials. Br J Psychiatry. 2014;204: 98-107. doi: 1192/bjp.bp.113.126003.
3. Olfson M, King M, Schoenbaum M. Benzodiazepine Use in the United States. JAMA Psychiatry. 2015;72(2):136-142. doi:10.1001/jamapsychiatry.2014.1763.
4. Tannenbaum C, Martin P, Tamblyn R, et al. Reduction of inappropriate benzodiazepine prescriptions among older adults through direct patient education: the EMPOWER cluster randomized trial. JAMA Intern Med. 2014;174:890–8.
5. Morgan K, Dixon S, Mathers N, Thompson J, Tomeny M. Psychological treatment for insomnia in the regulation of long-term hypnotic drug use. Health Technol Assess 2004;8(8).
6. Schutte-Rodin, S., Broch, L., Buysse, D., Dorsey, C., & Sateia, M. Clinical Guideline for the Evaluation and Management of Chronic Insomnia in Adults. Journal of Clinical Sleep Medicine : JCSM : Official Publication of the American Academy of Sleep Medicine. 2008;4(5):487–504.
7. Smith MT, Haythornthwaite JA. How do sleep disturbance and chronic pain interrelate? Insights from the longitudinal and cognitive-behavioral clinical trials literature. Sleep Medicine Reviews. 2004;8(2):119.132.
8. Manchikanti L, et al. American Society of Interventional Pain Physicians (A SIPP) Guidelines for Responsible Opioid Prescribing in Chronic Non-Cancer Pain: Part 2- Guidance Guidelines. Pain Physician. 2012;15(3 Suppl):S67-S116.