Master's-Level Practitioners as Cognitive Behavioral Therapy for Insomnia Providers: An Underutilized Resource

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Despite the efficacy of cognitive behavioral therapy for insomnia (CBT-I) in treating chronic insomnia, it remains underutilized. Lack of appropriately-trained CBT-I providers is a major reason. Master's-level practitioners (MLPs) may, in addition to doctoral-level psychologists, be uniquely positioned to fill this role, based not only on "goodness of professional fit" but also given a handful of studies showing these individuals' care outcomes meet or exceed standard outcomes. However, the ability of MLPs to provide CBT-I will be significantly restricted

until a clear pathway is established that extends from training opportunities to credentialing. Further questions remain about how to attract and incorporate MLPs into established practices.

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Chronic insomnia affects up to a third of the population, resulting in more than \$100 billion in direct and indirect costs.¹ Several meta-analyses have demonstrated both short- and long-term efficacy of cognitive behavioral therapy for insomnia (CBT-I), alone and in comparison with benzodiazepine receptor agonists.²⁻⁶ The 2005 NIH Consensus and State-of-the-Science Statement recognized CBT-I as a first-line therapy for insomnia,⁷ a position the Chronic Insomnia Task Force of the American Academy of Sleep Medicine (AASM) echoed in their 2008 practice parameters.⁸ Nevertheless, CBT-I is generally underutilized.⁹

There are many plausible explanations for this situation, including both patient-centered and systems-based barriers to CBT-I delivery. Some *patient-centered issues* include: patients' inability to make time for 4-8 sessions lasting 30-60 minutes each, visit costs or insurance co-pays, difficulties maintaining the strict wake/sleep regimen prescribed, the stigma of psychotherapy, and patient desires for a simple pill to "cure" insomnia without behavioral changes. Some *systems-based issues* include: providers' lack of awareness regarding CBT-I's effectiveness, limitations on patient visit length, CBT-I insurance coverage difficulties, and limited availability of CBT-I trained specialists to perform the therapy. This final shortcoming—the gap between provider supply and patient demand—deserves particular consideration.

Despite sleep medicine's enormous growth, substantially more Behavioral Sleep Medicine (BSM) training programs, and commencement of a BSM credentialing process via the American Board of Sleep Medicine (ABSMD), the number of certified BSM (CBSM) specialists is relatively low. In 2007, less than one hundred Ph.D.s, Psy.D.s, nurses, and physicians were BSM certified.⁹ While these numbers have increased to over 200,¹⁰ access to certified specialists remains inadequate for millions of chronic insomnia patients.¹¹

How can this supply-and-demand gap be narrowed? Three possible approaches include: (1) Encourage self-help methods such as patient manuals and/or web based CBT-I; (2) Enable available clinicians to treat more patients through group formats, abbreviated CBT-I (i.e., brief behavioral therapy for insomnia [BBT-I]), and/or by extending the reach of individual clinicians via telemedicine (site-to-site) or Skype-type technology (one-to-one); and (3) Broaden the provider base so that clinicians other than clinical psychologists provide CBT-I. While each of these approaches may increase CBT-I provision (and may all be deployed within a stepped care model), we will focus on point (3): how to expand the provider base.

A CBT-I provider shortage has been recognized for more than a decade. Indeed, the AASM formed a presidential committee on BSM in 2000 to develop mechanisms for practitioner accreditation, address training program guidelines, investigate reimbursement, and develop BSM educational offerings at professional meetings.¹² These needs were reiterated 2008,⁹ and a 2013 article highlights persisting uncertainty as to how to meet them.¹³

It has been proposed that Master's-level practitioners (MLPs; such as nurse practitioners [NPs] and physician associates [PAs]) fill this vital role.^{9,13,14} To further explore this model, we raise three questions:

1. Should MLPs provide CBT-I?
2. How should MLPs be trained in CBT-I?
3. How should MLPs be credentialed as CBT-I providers?

SHOULD MLPs PROVIDE CBT-I?

CBT-I must first be distinguished from BSM. BSM, officially coined at the turn of the 21st century,¹⁵ refers to the application of behavioral principles and treatment approaches to the assessment and treatment of all sleep disorders.¹⁶ In contrast,

Box 1—Educational and credentialing resources**Overview**

- SBSM accredited Programs
www.behavioralsleep.org/FellowshipPrograms.aspx
- The American Board of Sleep Medicine
www.absm.org/bsmcertification.aspx

Clinician Training

- University of Massachusetts
www.umassonline.net/degrees/Online-Graduate-Certificate-Sleep-Disorders-Health-Disease.cfm
- University of Pennsylvania
www.med.upenn.edu/cbti/index.html
- University of Glasgow
http://www.gla.ac.uk/media/media_145680_en.pdf
- The Atlanta School of Sleep Medicine & Technology
www.sleepschool.com
- The School of Sleep Medicine
www.sleepedu.net
- Sleep School
www.freesleepschool.com
- Center for Sleep Counseling Studies
<http://sleepcounseling.org/training-certification-program/overview>

CBT-I refers to (as the term denotes) the cognitive behavioral assessment and treatment of insomnia. Therefore, a clinician might become a *CBT-I* provider without being a comprehensive *BSM* provider.

It has been suggested that non-BSM certified providers can provide CBT-I successfully, and that a doctoral level background is not necessary for CBT-I delivery or certification for CBT-I delivery. The former position is rooted in the belief that CBT-I is a highly structured therapy and thus it can be delivered by following standard protocols. The latter position is based on the idea that one need not be certified in BSM to be certified to provide CBT-I. Assuming both positions are true, then the ideal Master's-level healthcare workers to fill the gap appear to be NPs and PAs.⁹ These MLPs are strategically positioned for this role through their ability to: (1) conduct medical assessments, develop differential diagnoses, and evaluate response to initial treatment; (2) provide care for both general medicine and specialty disorders; (3) conceptualize their assessment and treatment using a biopsychosocial approach, which is essential in insomnia evaluation and treatment; and (4) be easily integrated into sleep centers because of their primary care skills and because their care is covered under a medical rather than mental health coverage umbrella.

The sleep community, however, has divided opinions as to whether MLPs and other non-doctorate clinicians should provide CBT-I. Advocates argue, as noted above, that a distinct CBT-I skill set could be delivered without complete BSM training. The caveat here is that MLP-delivered care requires that a proper evaluation has been done prior to ordering CBT-I therapy and that supervision by a CBSM and/or an ABSM is provided on an ongoing basis (for either a prescribed training period or for ongoing practice). Opponents express concern that appropriate BSM evaluation (before CBT-I) cannot be ensured

and that continuing education training is not sufficient to allow for the management of the complex cases that typically present with chronic insomnia. The traditional response to this point of view is that a “stepped care” approach be utilized whereby the MLP triages the most complex cases (cases that also present with other medical and/or psychiatric and/or sleep disorders) to doctoral-level credentialed specialists.¹⁷ Although a recent case series showed this strategy to be promising,¹⁸ it is possible that patients: (1) will not be referred when it is required, and (2) will drop out of treatment owing to increased resistances (“I have heard and done all this before”).

Beyond the arguments “for and against” MLPs having a role in CBT-I delivery is a small evidence base that speaks to NPs’ potential to conduct CBT-I. In 2007, Espie et al. showed initial and sustained (6-month) improvements in objective and subjective sleep quality indicators after a course of CBT-I therapy.¹⁹ Providers were primary care NPs who received specialized CBT-I training and ongoing supervision. Jungquist et al. found significant improvements in sleep and chronic pain using Master's-level CBT-I practitioners who received similar training and ongoing supervision.²⁰ Buysse et al. recently published promising findings in a geriatric population, where a short version of CBT-I (BBT-I) provided by NPs produced significant remission in insomnia symptoms up to 6 months after treatment.²¹ These studies not only demonstrate that NPs can deliver effective CBT-I, but also that general medicine providers (vs. Psychiatric NPs) can do so successfully when provided with adequate training and supervision. Of note, there are no direct studies assessing MLP versus doctoral-level provider care (M.D., Ph.D., Psy.D.) in terms of treatment outcomes, patient adherence and retention, and the occurrence of adverse events. Such studies would facilitate decision-making regarding unsupervised practice.

HOW SHOULD MLPs BE TRAINED IN CBT-I?

There is no single, established training model for MLPs to learn CBT-I. Formal CBT-I training is typically only obtainable within a select few psychology internships (for Ph.D.s), psychiatric residencies (for M.D.s) and/or sleep medicine fellowship programs (for Ph.D.s and M.D.s). More recently, training is also available through Society of Behavioral Sleep Medicine (SBSM) accredited fellowships and mini-fellowship programs, through the Veterans Affairs (VA) CBT-I dissemination and implementation program (for VA employees only), and through a variety of continuing education (CE)/continuing medical education (CME) offerings by the AASM, SBSM, university-based programs, and finally through private educational offerings (e.g., sleep medicine schools; see **Box 1**). In each of these cases, it is unclear whether MLPs are eligible for such programs, though it is most likely that those that offer CE/CME accredited trainings are open to MLPs. Burden, in terms of both time and cost, varies greatly among options. Some online courses offer maximum scheduling flexibility (University of Massachusetts), while live CBT-I seminars offer more intensive 2-3 day experiences in various cities (University of Pennsylvania). Training costs vary from free (e.g., within the VA system), to \$200-\$700 for multi-day trainings, to \$1,000-\$5,000 for mini-fellowships, certificate, and diploma programs (**Box 1**).

Comprehensive training programs leading to certification examination eligibility (question 3 below) are key to ensuring comparably prepared CBT-I providers. A standardized curriculum combining didactic instruction, independent reading, and clinical experience could include:

- Course work or CE/CME activities related to Intrinsic Sleep Disorders (Assessment and Differential Diagnosis [2 Semester credits or > 24 hours continuing education units (CEUs)])
- Course work or CE/CME activities including introduction to, and continuing education for, CBT-I (2 semester credits or > 24 hours CEUS)
- Documentation of independent reading, including an accepted CBT-I training manual and core insomnia literature (**Box 2**)
- Observing 10 complete patient cases, each consisting at minimum of 1 initial evaluation, 2-3 follow-up sessions (including the delivery of sleep restriction, stimulus control, cognitive therapy, and sleep hygiene), 1 titration session, and 1 discharge session.
- Conducting 10 of these complete patient cases under supervision.

A significant issue remains whether *psychiatric-trained* MLPs should have differing training requirements or practice parameters than other MLPs. We suggest that BSM and NP/PA educational leadership prioritize consensus on this issue.

In addition to training established MLPs, other approaches are still needed. Nursing programs can help address the shortage of NP CBT-I providers by increasing access to training. Historically, nursing schools have failed to offer CBT-I training as one of their educational offerings. Development of improved nursing education curricula to address these potential shortcomings began in 2000 and culminated in 2004, with an Association of Professional Sleep Societies Nursing Task Force publishing their “Recommendations for Nursing Education.”²² Undergraduate sleep education and specific sleep training for NPs were encouraged, but CBT-I was not highlighted as an integral part of the training. Including CBT-I training as a regular offering in nursing curricula will allow greater numbers of providers to be trained while improving visibility and awareness of this treatment.

HOW SHOULD MLPs BE CREDENTIALLED AS CBT-I PROVIDERS?

Developing a uniform CBT-I credentialing process for MLPs has proven a major challenge. One factor is MLPs’ exclusion from the ABSM certification exam. The field came quite close to a substantive policy change at the 2009 BSM conference in Ponte Vedra, Florida. Attendees agreed on eligibility requirements for the 2010 ABSM exam which included “A Master’s Degree or equivalent in a health-related field, a doctoral degree or equivalent in a health-related field, or an M.D. or D.O. degree (and certification in sleep medicine by the ABSM or ABMS).”²³ However, the SBSM and ABSM leadership ultimately restricted exam access only those with a Ph.D. or Psy.D.; MLPs were excluded due to uncertainty about state licensing laws and concerns that such certification could imply expertise beyond true scope of practice.

Box 2—Sample reference materials for standardized MLP training

Chesson A, et al. Practice parameters for the evaluation of chronic insomnia. *Sleep* 2000;23(2):237-41.

Edinger J, Carney CE. *Overcoming Insomnia: A Cognitive-Behavioral Therapy Approach Therapist Guide*. New York: Oxford University Press, 2008.

Morgenthaler T, et al. Practice parameters for the psychological and behavioral treatment of insomnia: An update. *Sleep* 2006;29(11):1415-9.

Morin CM, Espie CA. *Insomnia: A Clinician’s Guide to Assessment and Treatment*. Philadelphia: Springer, 2003.

Perlis M, Jungquist C, Smith MT, Posner D. *The Cognitive Behavioral Treatment of Insomnia: A Treatment Manual*. New York: Springer Verlag, 2005.

<http://www.absm.org/resources/bsmreadinglist.pdf>

Given that this long-standing issue is unresolved, there is immediate need to establish eligibility requirements for an ABSM certification exam (whether the current BSM exam or a new CBT-I focused exam) for MLPs. Potential credentialing pathways could be based on those currently in place for doctoral-level clinicians. MLPs would obtain eligibility for the exam through either (1) completion of a BSM-accredited training program (“standard track”) or (2) demonstration of significant clinical experience (“alternative track”). Upon providing appropriate documentation of these prerequisites, they could then sit for a standardized ABSM licensing examination. This formalized credentialing model could help ensure uniform competence and standardized scope of practice among Masters-level CBT-I providers.

Beyond exam-based board certification, additional questions arise regarding MLP scope of practice. For instance, should they practice only with the proviso they do so with doctoral-level supervision? What form might this supervision take—real-time availability within the clinic, access by telephone/computer, or periodic review of individual patient cases? Is supervision an on-going component of practice (akin to some nurse practitioner-physician practice agreements) or is it a training component that is time-limited? Perhaps these questions raise a broader one: Should the practice environment for MLP provision of CBT-I be any different than that in which MLPs practice other services or procedures? That is, does CBT-I require more (or less) supervision than is normally required for diabetes management, depression screening, etc.? We believe that, assuming MLPs successfully complete standardized training and credentialing, practice environments and supervision requirements should be no different for providing CBT-I than for managing any other chronic disorder.

Aside from the three main issues discussed above, another major obstacle to increasing the number of CBT-I clinicians is appropriate reimbursement. Despite insurers’ recognizing insomnia as a (sleep) medical disorder, they may carve out coverage for CBT-I as a mental health service, leaving the patient in a self-pay situation. When coverage is provided, it

is often covered as either a medical *or* a mental health benefit. In the case of the former, millions of insomnia patients without anxiety, depression, or other psychiatric disorders may be required to see a medical provider who cannot offer CBT-I. In the case of the latter, the patient may be referred to a mental health provider who is trained in CBT but not BSM or CBT-I. Compounding the problem, many sleep centers do not offer CBT-I, partly because they are often credentialed as medical practices without mental health services. As such, these sleep centers are unable to bill insurance companies that follow older coding of insomnia treatment(s) as exclusively mental health disorders. While these reimbursement considerations are daunting, here again, the provision of CBT-I by MLPs may represent a solution. Since MLPs may have within their scope of practice the provision of both medical and psychiatric services, this could allow CBT-I to be reimbursable when delivered as part of their sleep disorders practice. The MLPs' unique position to practice CBT-I, which incorporates both medical and mental health services, may motivate them to seek this additional CBT-I training. Further, sleep and general practices may encourage MLPs to pursue this additional training in order to improve patient care and to expand billable services.

MOVING FORWARD

Without a standardized credentialing process for MLPs, we perpetuate their marginalization as CBT-I providers. We need multiple pathways for CBT-I training, including expanded offerings within existing nursing, graduate and medical programs, additional post graduate offerings with a special emphasis on both residency and fellowship training, and CE/CME educational offerings. In this regard, the success of the VA CBT-I training program has much to teach us.²⁴ The question moving forward is how to export this level of dissemination from a self contained system like the VA to the open access health care system that exists throughout the U.S.

In sum, our challenge is to increase CBT-I treatment accessibility while maintaining standardization of training and quality in delivery. Availability of training opportunities continues to expand across the educational spectrum. A vigorous discussion/evaluation must now follow about who can and should provide CBT-I, and under what conditions. We believe that MLPs represent an underutilized resource and should be considered the next professional group to target for the provision of CBT-I. This position is founded not only on "goodness of professional fit" and practical and logistical considerations, but on good preliminary evidence that quality of these individuals' care meets or exceeds standard outcomes.^{19,21} What remains for the development of an MLP model for CBT-I delivery is: (1) how to attract MLPs to seek out training; (2) how to credential these clinicians; and ultimately (3) what practice approach to adopt (supervised practice vs. independent practice).

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