I’m going to focus just on primarily on the clinical logic of this chapter within sleep wake disorders and not focus on detailed criteria for the conditions that are covered in this particular chapter. Please note the words sleep wake because sleep wake disorders actually have 24 hour implications when you think about it. If you care for people with insomnia disorders or with hypersomnolence disorders, disorders of excessive sleep then you fully appreciate as a clinician that these are 24 hour disorders and so that’s an important take home point. Let’s move ahead. I’ve listed for you, these are in your handout the sources of my research support over the last half dozen years.

So I’m going to make just two basic points in the next few minutes about the clinical logic of the DSM-5 classification. First, to facilitate the differential diagnosis of sleep wake complaints and what that really means, and this will be the focus today: what is the relationship between sleep wake disorders on the one hand and common mental disorders like depression, anxiety, psychotic disorders on the other, key focus, key take home point. And then when to consider referral to a sleep medicine specialist, those are the two take home points that I want to focus on with you today.

For your reference, these are the 10 disorders or groups of disorders that are covered in the DSM-5 chapter on sleep wake disorders. I hope as a result of the talk today you’ll be interested to take a look at the accompanying text because the text will explain I think and provide an excellent introduction or primer on sleep wake disorders and teach you how to apply the criteria appropriately. For our purposes today I’ll focus mainly on insomnia disorder, it’s most relevant to our clinical practice as mental health specialists and on hypersomnolence disorder.
So the core features of the DSM-5 sleep wake disorders criterion A, dissatisfaction regarding the quality, the timing and the amount of sleep again reflecting the basic physiology behind sleep wake, the circadian and homeostatic regulation of sleep, and then finally are secondly the resulting daytime distress and impairment. You remember what Abe Lincoln said, a government of the people, by the people, for the people; well sleep is of the brain, by the brain and for the brain, right. Sleep is of the brain, by the brain, for the brain and that if you are not getting good sleep you get daytime distress and impairment, cognitive, affective, behavioral, etc. So remember what Abe Lincoln said, and that’s the key to my presentation.

So our general approach in DSM-5 insomnia disorder was to take a lumping approach, again for lots of reasons, some epidemiologic, some based on field trials about the performance of the criteria, but rather than specifying subtypes of insomnia disorder the work group felt that a lumping approach would be quite appropriate with this category of disorder again based on the availability of validators from a number of different types of science. However we also used and advocated in this chapter the use of both categorical and dimensional approaches to understanding these disorders to diagnosing them and to assessing them, particularly not only in general medical settings but in general mental health settings as well in the service of what we came to call measurement based care.

So why include sleep disorders in DSM-5? We got a lot of questions about that because many sleep wake disorders are not necessarily mental health disorders. Well sleep disorders are often accompanied, aren’t they, by depression, anxiety and cognitive changes that have to be addressed in treatment planning and to get the patient to an optimal outcome. And the second reason, and this is
much more pertinent to us as mental health practitioners, sleep disorders, insomnia, hypersonmolence are established risk factors for the subsequent development of mental disorders. And they also represent a prodromal expression of episodes of mental illness which if addressed in a timely way represent an opportunity for early intervention, a preventive intervention, so that’s a key point about the underlying clinical logic of sleep wake disorders and why include them in the DSM-5. In addition though sleep disturbances furnish a clinically useful indicator of medical and neurological disorders that frequently coexist with common mental disorders like depression and I’ve listed the common ones here that as you see cover a good deal of the life cycle. At the same time there are some types of ongoing medical illnesses that worsen during sleep such as prolonged EKG arrhythmias or prolonged apneas during rapid eye movement sleep. Again sleep is a very active operating state of the central nervous system and together with wakefulness tells us a great deal about the state of a patient’s health.

Okay, I mentioned dimensional approaches to sleep wake disorders and again the basic clinical logic here which is explained at some length within the accompanying text is to capture severity, to facilitate measurement based clinical care over time. Is the patient getting better, worse? To capture behaviors that may contribute to the genesis and to the persistence of sleep disorders, so called sleep wake hygiene abuse, and finally to allow correlation and exploration of underlying biological changes that may explain the liability to sleep wake disorders and to mental disorders, genetic liability issues of hyperarousal, circadian dysrhythmia, etc.
Okay, examples of dimensional measures that we discuss in the text, I’d like to call your attention to the PROMIS, Patient Reported Outcomes Measurement Information System. This was an important contribution from our colleague at Pitt, Paul Pilkonis, as well as other self report inventories which we and others have developed. I’m particularly proud of the PSQI as it’s known locally, the Pittsburgh Sleep Quality Index, now translated into umpteen languages and very familiar and very helpful in bedside clinical practice.

This is the core, this slide is the core of my talk today, let’s talk about this change and what drove it in terms of our underlying clinical logic. So the most controversial change in the sleep wake chapter which was otherwise greeted with a huge yawn in terms of comment from the field. Dr. Kupfer will tell you this was greeted with a huge yawn with the exception of this one, and that was that the work group recommended dropping causal attributions inherent in the logic of DSM-IV, for example primary insomnia, and instead adopting a more clinically oriented descriptive framework focusing on coexisting disorders, insomnia disorder, major depressive disorder.

So let’s suppose you were treating Mrs. Jones for major depression, Mrs. Jones is getting better, you are using measurement based care of some kind and you are pleased, she’s pleased with her progress but she continues some several months after your work with her to have a persistent insomnia complaint. It may well be that Mrs. Jones in addition to having a major depressive disorder also has an insomnia disorder and that unless that insomnia disorder is also addressed in an appropriate way the course of her depressive disorder will be stormier. She will be at higher risk for a relapsing recurrent course of major depression. It may also be the case when you take her history that for
several years before the onset of her episode of major depression, that she had chronic insomnia. Again this kind of historical clinical evidence as well as evidence which you can see prospectively from your work with Mrs. Jones suggests that she may have two disorders, major depressive disorder and a coexisting insomnia disorder. They interact with each other, they make each other worse and unless both are addressed in appropriate ways Mrs. Jones is at risk for a relapsing recurrent course of major depression, right, as well as continued undermining of her health related quality of life from persistent insomnia. This is really the key take home point of my talk today and it is at the foundation of the clinical logic of the sleep wake disorders chapter.

Let’s see, the other change, the big change and this really reflected and is a tribute to David Kupfer’s leadership of the DSM-5 is that we were finally able to introduce neurobiological validators into the diagnosis of sleep wake disorders. Again David’s vision was to create a living, breathing document that was fully reflective of the neuroscience, the epidemiology, the treatment science that had developed since DSM-IV and we were able to really push this agenda with I think great vigor in the sleep wake disorders chapter. We are very proud of that.

So let’s see, I’m just going to focus for the last couple of minutes of my talk and walk you through the criteria for insomnia disorder because I think this has lots of clinical relevance for your work. Again criterion A you recall that I said global sleep dissatisfaction and typically that is manifest or is associated with one or more of the types of symptoms and behaviors that are listed here. And again these are discussed at some length within the text and these are a part of your handout booklet today. We made a decision to integrate a lifespan perspective into the diagnostic criteria as well as into the
accompanying text rather than breaking apart a set of criteria say for kids and adults but rather to try to integrate them taking a lifespan perspective.

Criterion B again is the significant distress and impairment which results from the fact again that sleep is of the brain, by the brain and for the brain, and when you are not getting sufficient quantity and quality of sleep you pay the price in terms of cognition, affect regulation, behavior, metabolic health, etc. And again underscoring the 24 hour nature of this disorder you can see a number of the issues that crop up in relation to Criterion B, and that are discussed in the text. Another major difference from the DSM-IV is that the criteria for insomnia disorder became more quantitative based upon extensive epidemiologic research that had been conducted in the intervening years.

Criterion C as you can see specifies that the sleep difficult have occurred at least 3 nights a week for a period of at least 3 months, Criterion D.

We also ask again in consort with a clinical logic of not attributing A to B or B to A but simply specifying coexisting clinical conditions that the diagnostician specify co-occurring mental disorders, medical disorders or other sleep disorders as the case may be. The logic here is simply that unless we recognize that Mrs. Jones has more than one condition and unless we accord to those conditions the independent clinical condition that they warrant we’re probably not going to help Mrs. Jones get to an optimal clinical outcome. That’s the take home point today.
I’m going to skip this because I said it in fewer words. Maybe again the interest of not getting in the way of you and your lunch, and because you have this I’m going to point quickly to some of the clinical techniques that are used in sleep disorders medicine, and I’m going to finish this part of my talk by highlighting for you when you should consider referral of a patient to a sleep disorder specialist.

So the assessment of sleep disorders again relies on a careful history and the point that I would emphasize here is that the history should be taken if possible not only from the patient but from the patient’s bed partner. Very often the bed partner is a source of valuable corroborating information. We also use stuff like diaries. We’ve learned from our colleagues in psychology the importance of using prospective diaries to document behaviors that may promote or that may destroy sleep. Generally for research purposes we may use instruments like wrist actigraphy, which again help to document the stability or otherwise of a patient’s sleep wake rhythms since that is core to the kinds of behavioral interventions we are likely to recommend.

And this is what polysomnography looks like, literally that word means the writing, graphy, of many signals during sleep, polysomnography, polysomnography. And it allows us to record activity in the brain to know what sleep stage someone is in as well as relevant physiological signals from muscle, from heart, from limbs as well as the dynamics of breathing. It’s very important obviously if someone has a breathing related sleep disorder.
Okay, and this is where I will conclude my talk. When should you consider referral to a sleep medicine specialist? Severe daytime sleepiness, the patient who falls asleep repeatedly while driving a car and puts himself, herself or others in harm’s way. Please take that very, very seriously. Risk factors for sleep apnea, sleepiness, snoring, obesity; caution, not all patients look like this but the prevalence and incidence of sleep apnea increase with age. So when you have a patient who is sleepy, who is overweight, thick neck, hypertensive, perhaps hypothyroid think about a breathing related sleep disorder. And you can save this patient’s life by getting appropriate assessment and treatment. Treatment is good.

Unusual or dangerous behavior during sleep, this is where one of the newer disorders come in, REM sleep behavior disorder. This is the guy who is 50, sleeping with his bed partner he becomes violent during sleep, may strike out at his bed partner, may get up, may fall out of bed not fully awake, seemingly enacting dream behavior, which is what it is physiologically, REM sleep behavior disorder. Often a precursor to Parkinson’s disease, there is a pearl for you.

And then insomnia and restless leg syndromes and other conditions like this that are not getting better despite your best efforts is a very good indication for a sleep specialist indication.

I’m going to stop there, this is the basic clinical logic of the DSM-5 sleep. I hope that the talk will have stimulated your interest and you’ll go take a quick look at the chapter. I guaranty you it will not put you to sleep. Thank you.
DSM-5: CHANGES AND IMPLICATIONS FOR CLINICAL PRACTICE SLEEP WAKE DISORDERS, CHARLES F. REYNOLDS, III, MD