THE PROBLEM | An estimated 1B people suffer from sleep apnea globally. Exponentially more have insomnia. People with both conditions face barriers to diagnosis, treatment and adherence. This is partially due to the fact that primary care practitioners - the typical entry point for sleep care - have low awareness of sleep conditions and treatments. If sleep apnea is suspected, patients are referred to a cumbersome sleep study for diagnosis, and then, in the case of Obstructive Sleep Apnea (OSA), are left alone to navigate Continuous Positive Airway Pressure (CPAP) therapy - a treatment that dominates the sleep care market, but that has poor compliance (~50%), which leads to increased risk of stroke and cardiovascular diseases. Sometimes, CPAP is prescribed without a comprehensive evaluation, leading to high costs without certainty. Meanwhile, insomnia lacks awareness, coverage, and proper treatment that can be delivered at scale. Insomnia patients experience depression and loss of productivity, and often have trouble finding a psychologist trained to deliver adequate therapy. Treatment is often not covered by insurance. On whole, there is no personalization or responsiveness in sleep care and with so many different players involved, costs balloon. All the while, sleep practitioners are still complaining about the poor compliance and outcomes for their patients.

THE INTERVENTION | Dreem is the first virtual sleep clinic, integrating all steps of the patient journey. Dreem provides consults and diagnosis, as well as insomnia and OSA virtual first care (V1C) that integrates data and technology to improve health outcomes. Here’s how the V1C approach works: patients initiate telehealth consults with sleep medicine experts from anywhere, and diagnosis occurs through patient interrogation for insomnia, or with the delivery of certified home sleep testing devices for sleep apnea. Treatment is also delivered virtually. For OSA, remote coaching by trained healthcare professionals supports patients through their adoption of CPAP. An insomnia diagnosis is treated with digital therapy sessions, which replicate the principles of the in-person therapy but can be delivered at scale. A unique finding from CPAP adherence in OSA patients is that 38% of them also suffer from comorbid insomnia and sleep apnea (COMISA). Dreem has developed a specific behavioral coaching program for patients who suffer from both conditions.

Components:

- Synchronous and/or asynchronous virtual interactions between a clinical team and individual
- Interdisciplinary approach that includes consults with specialists and other disciplines to provide comprehensive and longitudinal care
- Personalized digital content supporting individual education and self-management in their health journey
- Technical support to accommodate literacy, language, access, and technological barriers to adoption
- Prescription and/or provision of traditional medications or digital therapeutics
- Caregiver support (e.g. app with resources)
- Care navigation support
- Patient self-report (e.g. symptom survey)
- Dynamic patient monitoring capability
**V1C in Action**

**Virtual Sleep Clinic Provides Comprehensive Consult, Diagnosis and Treatment Solution**

**THE RESULTS** | Using a V1C approach enables Dreem to focus coaching on patients who need it most. As a result, adherence to CPAP increases, especially for COMISA patients who report 15% higher adherence. This increase in compliance with CPAP translates into fewer downstream risks, better quality of life, and an increase in productivity, especially for the COMISA population. The program also demonstrates reduced insomnia symptoms, supported by greater access to evidence-based, virtual therapy. With -8 points on the Insomnia Severity Index scale on average, and more than 70% retention, Dreem’s digital insomnia therapy is equivalent to an in-person therapy.

**THE BENEFITS** | 🆕️ **Affordability**  + 🌍 **Interconnectedness**

Experience + 🌍 **Increased Reach**

Reconstructing the whole sleep care pathway enables Dreem to optimize many of the unique benefits of V1C: Dreem offers a cheaper, bundled V1C experience to insurance companies that matches insomnia outcomes and exceeds OSA outcomes. Access to care is enhanced: appointments are available immediately (versus waiting up to 6 months for a diagnosis through a sleep center) in OSA and everyone diagnosed with insomnia is offered tailored treatment. Connected CPAP machines integrate continuous patient adherence data into the Dreem platform, providing coaches with compliance data to support personalized check-ins with patients. Finally, the V1C nature of the solution enables reach far beyond areas around sleep centers, enabling more certainty in diagnosis and access to care for rural populations.

“Dreem has helped me tremendously with my insomnia. The 6 week coaching has created rituals before going to bed and a set sleeping schedule. Nothing like having your own personal sleep coach!! Great job Dreem.” - Daniel

“**LEARN MORE** about Dreem

“I was tired of the medical system not being able to help me. Endless prescriptions and lack of funding for behavioural/cognitive help is a real problem. Dreem helps by being there for you, for the long haul. The support is receptive, and the tech has made a huge impact. It assists every day to make the behavioural changes needed to help with sleep, and more.” - Crystal

Presented by the virtual first Medical PrActice CollabraTion (IMPACT) IMPACT, a pre-competitive collaboration of leading digital health companies, investors, payers, and consultants dedicated to supporting virtual-first medical organizations and their commitment to patient-centric care. Hosted by the Digital Medicine Society (DiMe) and the American Telemedicine Association (ATA). Learn more about IMPACT at impact.dimesociety.org.