

Sleep Health: Is There Rest for the Weary?

Not willing to rest, we leave no pillow unturned in exploring what approaches are - and are not - working in improving sleep health. From science to seance, health industry incumbents and innovators alike are devising solutions to put groggy days and sleepless nights to rest.

While troubled sleep may appear to be a single health condition, in reality, it can be caused by a wide range of sleep disorders requiring unique diagnoses and therapeutic approaches. From insomnia to sleep apnea, the healthcare industry offers a wide range of strategies to improve sleep health. Depending on the diagnosis, solutions can range from expensive and complex to affordable and convenient. Sleep health treatment plans may include medical appliances, prescribed and over-the-counter medications, and behavioral and lifestyle modification therapies - and even a combination thereof.

Each sleep treatment option presents its own set of challenges and, ironically, may introduce new struggles for patients already tired of wrestling with poor sleep health.

Traditional Healthcare Approaches to Address Sleep Disorders and Improve Sleep Health

Approach	Challenge
 Lifestyle Changes Daily suggestions & reminders	 Hard to implement Hard to implement and adhere to without support
 CBTi Cognitive behavioral therapy for insomnia	 Inaccessible Often expensive, inaccessible and lacking on-demand guidance
 Pharmacological Prescribed medications	 Addictive May have adverse health and safety consequences and pose abuse or dependency risks
 CPAP Continuous positive airway pressure	 Low adherence Many CPAP users find it difficult to use and adhere to these devices

Although the range of possible solutions is broad, many individuals struggle to find an optimal remedy for consistently improved sleep health.

Recommended approaches can prove to be:

- Too generic for particular concerns
- Too expensive for long-term needs
- Inaccessible due to distance or shortage of care providers and behavioral therapists
- Difficult to maintain adherence
- Lacking in ongoing support

The wide range of approaches, solutions, and costs of addressing sleep health exemplify how complex and elusive it can be to achieve a good night's sleep.

The good news for sleep sufferers ... achieving better sleep is possible for everyone!

Coming to the rescue (and alongside) traditional clinical approaches to improving health are [Digital Therapeutics](#) (DTx) solutions. DTx deliver evidence-based therapeutic interventions to patients and are driven by high-quality software programs to prevent, manage, or treat a medical disorder or disease. AI-infused and personalized, DTx can be used independently or in concert with medications, devices, or therapies to optimize patient care and health outcomes.

DTx is forecasted to be one of the biggest influencers of how healthcare will be delivered and consumed in the next 5 years.

DTx can deploy clinical care in a more affordable and convenient manner and are seeing rapid adoption across the health industry. Consider these findings on the increased acceptance of DTx (a subset of Digital Health) as an approach to improving health:

- A [Juniper Research study](#) reported DTx to be one of the biggest influencers of how healthcare will be delivered and consumed in the next 5 years.
- In [Accenture's 2019 Digital Health Consumer Survey](#), over 50% of consumers were willing to choose providers who offer digital capabilities for reminders, monitoring, and recording their own health indicators.
- [A 2020 study by Mercer Marsh](#) reported that 68% of employers worldwide are planning to invest in digital health in the next five years.
- According to a [Deloitte 2018 Health Care Consumer Survey](#), consumers' use of digital health technology for health monitoring increased over 250% from 2013 to 2018.

DTx - coupled with recommendations from smart tech - drive maximum engagement and encourage adherence.

Driven in-part by big data, DTx are used to design a dynamic and personalized plan to promote often challenging lifestyle changes. Unlike conventional treatments, digital therapeutics are specifically tailored to individuals' daily routines, perspectives, and abilities, and empower users to proactively track, treat, and manage their health goals. DTx are also accessible, affordable, and easy to use from the comfort of home or while on-the-go.

DTx are accessible, personal and often combine technology and human elements.

While some consumers will find that science-based, data-driven, and consumer-centric DTx solutions to be the perfect combination for achieving their sleep goals, others will require a human nudge (or two) to guide them towards better sleep health.

The [2018 Deloitte Consumer Health Study](#) cited earlier reported that over thirty percent of consumers using digital tech for self-directed care were interested in connecting with a live health coach that offers 24/7 text messaging for nutrition, exercise, sleep, and stress management. DTx solutions that combine remedy (the clinical) with empathy (the human) have the potential to increase their value across the domains of care and customer services.

In short, DTx can help consumers regain a sense of purpose and put into practice the behavioral and lifestyle changes that will lead to improved health outcomes.

The dayzz solution

Fortunately for sleep sufferers, the dayzz solution provides the optimal combination of tech and touch. The dayzz app delivers a dynamic smart mix of personalized, digital data to drive maximum engagement coupled with the live chat to encourage adherence and follow through on sleep care recommendations. The dayzz solution learns from consumer's self-reported sleep health data (as well as data pulled automatically from any smart device or wearable users decide to sync with their dayzz' app such as movement, activity, or location data) and makes science-based recommendations to improve their sleep health.

Dayzz successfully completed and published findings from a [clinical trial at Johns Hopkins University](#) showing the dayzz sleep assessment questionnaire and machine learning algorithm can accurately predict risk for common sleep disturbances compared to gold-standard physician diagnoses.

Dayzz Solution Can Replace or Augment Traditional Approaches to Improving Sleep Health

Approach	Challenge	dayzz Solution
 <p>Lifestyle Changes Daily suggestions & reminders</p>	 <p>Hard to implement Hard to implement and adhere to without support</p>	 <p>Data driven intervention Leverages mobile and wearable data to offer the right intervention at the right time in a personalized manner</p>
 <p>CBTi Cognitive behavioral therapy for insomnia</p>	 <p>Inaccessible Often expensive, inaccessible and lacking on-demand guidance</p>	 <p>Contextual coaching Digital solution uses scientific methods to enable long-lasting sleep behaviors</p>
 <p>Pharmacological Prescribed medications</p>	 <p>Addictive May have adverse health and safety consequences and pose abuse or dependency risks</p>	 <p>Behavioral based CBTi is the best method to prompt long-lasting sleep improvement</p>
 <p>CPAP Continuous positive airway pressure</p>	 <p>Low adherence Many CPAP users find it difficult to use and adhere to these devices</p>	 <p>Constant support Offer motivational and emotional support to patients with CPAP devices</p>

dayzz | Wake-up to sleep health

dayzz supports and encourages sleep seekers through:

- Personalized sleep health plans developed as a result of self-reported, synced and scientific data
- A comprehensive set of sleep health tools including white noise options, room sensors, and relaxation or meditation sessions
- Daily reminders to engage in healthy behaviors and activities that support sleep
- Human touch from sleep trainers and support groups to help make meaningful progress
- Rewards for achieving sleep health improvement milestones
- Reports on progress towards sleep health goals
- Full control over permissions, notifications, tracking, syncing, and data sharing

By leveraging data from a consumer's mobile and wearables, and incorporating human support, the dayzz app offers the right intervention at the right time in the right manner.

It turns out that there is rest for the weary!

For more information regarding dayzz's sleep solution visit dayzz.com or contact amir@dayzz.com