

**Evidence-Based Patient-Centered Needs Assessment**

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**Introduction**

Patient engagement plays a crucial role in effectively managing health conditions, particularly in the context of overweight and obesity. Overweight and obesity are prevalent health conditions characterized by excessive body weight and adipose tissue accumulation. These conditions result from an imbalance between energy intake and energy expenditure, often influenced by genetic, environmental, and behavioral factors. Overweight and obesity have reached epidemic proportions globally, affecting individuals of all ages, socioeconomic backgrounds, and ethnicities.

### **The importance of addressing patient engagement**

Considering the patient's health, economic, and cultural requirements, addressing patient engagement is of the uttermost importance in the administration of their specific health conditions (Holmes et al., 2019). According to Holmes et al. (2019) patient participation is of the uttermost significance in the management of overweight and obese patients, taking into account their economic and cultural requirements. Individuals with overweight and obesity must be actively involved in their own care and empowered to manage their specific health conditions through patient engagement. By participating in their treatment plans actively, patients are able to make informed decisions, establish objectives, and assume responsibility for their health. This participation promotes a sense of responsibility, motivation, and adherence to lifestyle changes and interventions. In addition, patient engagement enhances communication between healthcare providers and patients, resulting in enhanced shared decision-making, higher patient satisfaction, and better health outcomes (Semlitsch et al., 2019). When patients are actively involved in their care, they are more likely to adopt healthier behaviours, adhere to treatment recommendations, and achieve long-term success in weight management, resulting in enhanced health and well-being.

### **Potential use and impact of information and communication technology tools**

The use of ICT tools has enormous potential to increase consumers' health literacy among those who are overweight or obese. These tools can play a crucial role in providing relevant information, resources, and support to empower patients in managing their weight effectively (Mokmin & Ibrahim, 2021). Various health care technology modalities are useful in enhancing consumer health literacy for overweight and obesity. Mobile applications tailored for weight management offer features such as calorie tracking, meal planning, and progress monitoring, enabling individuals to make healthier choices and track their progress. Telehealth features, including video consultations, facilitate remote access to healthcare professionals for personalized guidance and support. Additionally, wearable devices, such as fitness trackers, can monitor physical activity levels and provide real-time feedback to encourage active lifestyles. Online platforms and patient portals offer educational resources, interactive tools, and support communities (Mokmin & Ibrahim, 2021). By leveraging these modalities, healthcare providers can improve consumer health literacy, promote patient engagement, and enhance patient care for individuals with overweight and obesity.

### **Value and relevance of the technology modalities**

There is great significance and relevance in the technological modalities utilised to satisfy the demands indicated in the evaluation of patients who are overweight or obese. Each suggested technological modality promotes individualised and patient-centered treatment in a manner that is ethical, considerate of cultural differences, and welcoming to all patients. According to Patel et al. (2021) mobile applications provide interactive features and educational content that can be tailored to individual needs, allowing patients to actively participate in their weight management

journey. These apps can incorporate culturally sensitive dietary recommendations and exercise options, while also considering language accessibility and educational levels by providing simplified explanations of complex medical terms and concepts (Patel et al., 2021). Additionally, telehealth features enable remote consultations, ensuring that patients have access to healthcare professionals who understand their cultural background and can address their specific needs. By facilitating honest communications and ensuring that only necessary and permitted information is shared, these technology modalities prioritize patient privacy and confidentiality.

Their use is boosted by the fact that different technological modalities may communicate with one another and share patient records. Seamless data sharing between different platforms and devices enables healthcare providers to access comprehensive patient information, leading to more informed decision-making and personalized care (Patel et al., 2021). Interoperability ensures that relevant health data can be securely transferred, allowing healthcare professionals to have a holistic view of a patient's health status, including their weight management progress, comorbidities, and medication history. This exchange of information promotes coordinated and integrated care, reducing the likelihood of fragmented or duplicated interventions. Additionally, the interoperability of technology modalities enables collaboration between healthcare providers, allowing them to share insights, discuss treatment plans, and provide a unified approach to patient care. By leveraging health information exchange and interoperability, the technology modalities used in addressing overweight and obesity patients' needs enhance the value of care delivery and contribute to improved patient outcomes (LeRouge et al., 2019).

**Innovative strategies for leveraging technology to support quality, ethical, and efficient patient care**

Careful selection and development of technology solutions are at the heart of innovative methods for using technology to enhance quality, ethical, and efficient patient care that is culturally and linguistically suitable for patients with overweight and obesity (Thomas et al., 2022). Individuals' cultural backgrounds, linguistic preferences, and special health concerns in regards to weight control should all be taken into account when designing technological interventions (Ryan et al., 2021). This may be accomplished via the use of mobile apps, telemedicine platforms, and online resources that provide culturally diverse material, language choices, and dietary advice that take into account the needs of different groups. (Mokmin & Ibrahim, 2021). Technology may be made more accessible and useful for culturally and linguistically varied patient groups by including features such as language translation, multilingual interfaces, and culturally appropriate images. Patients are more likely to understand and stick to weight-management strategies when they are provided with guidance and advice that is consistent with their cultural values, which can be achieved through the integration of virtual coaching or support programs with culturally competent healthcare professionals (Ryan et al., 2021). To give treatment that is respectful, inclusive, and successful to patients with overweight and obesity, the chosen technology should prioritize cultural and language appropriateness, taking into consideration the different origins and interests of these patients.

### **Proposed strategies will mitigate the risk of adverse outcomes**

The suggested methods are aimed to assist those who are overweight or obese in mitigating the negative effects of a lack of equitable access to personal health data and technology modalities. One potential risk is that certain individuals won't be able to experience the full advantages of digital health treatments because of unequal access to resources and technology (Ryan et al., 2021). Initiatives like giving gadgets or supporting access to inexpensive

internet connection may help address this problem (Sarma et al., 2021). More people in underserved areas may learn about and make use of existing technology if specific outreach and education programs are established. Health information inequalities and biases within technological modalities can pose a threat to some demographics. To combat this, it is crucial that information and resources be accessible, objective, and respectful of other cultures and languages when they are developed and implemented. To ensure that the content and functionalities of the technology modalities reflect the needs and values of the overweight and obesity patient population, a collaborative approach involving diverse stakeholders, such as patients, healthcare providers, and technology developers, is necessary. It is vital to regularly examine the efficacy of these techniques and adapt them to the unique context of overweight and obese patients, even if they have been used in a variety of healthcare settings to address disparities and dangers. Healthcare organizations can improve health outcomes for overweight and obese patients by utilizing technology and implementing targeted interventions, ultimately fostering a more inclusive and patient-centered healthcare system.

### **Conclusion**

The importance of patient participation in the management of overweight and obesity is highlighted in this patient-centered needs assessment. Increased patient participation and better health outcomes are possible with the use of health care technology including mobile apps, telehealth features, and wearable devices. The suggested technological modalities must be evaluated for their ethical, cultural, and language suitability to guarantee universal access and good outcomes for patients. Care for those who are overweight or obese should be accessible to everyone, cost-effective, and respectful of patients' cultural backgrounds; this means addressing the dangers connected with unequal access to technology.

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