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Improving Cancer Care through Digital Health Coaching

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Cancer is life-altering and challenging for patients. Through diagnosis, treatment, and even recovery, patients must brave many forms of uncertainty and complex challenges. While the cancer delivery system is increasingly able to cure patients or extend overall survival, a patient's journey towards healing and enhancing quality of life requires a holistic approach beyond what a primary oncologist's team may be able to provide. We believe that digital health coaching can be an important component of the patient's journey toward healing. In this perspective, we offer important considerations for providing digital health coaching customized to oncology patients, describe potential barriers to digital health coaching, and articulate strategies for overcoming them.

Health coaching is the practice of patient-oriented health education to enhance the quality of life and achieve health-related goals personalized to a patient's disease, treatment plan, and lifestyle behaviors.⁵ The benefits of health coaching have long been established in chronic care conditions and include improving a patient's physiological, behavioral, psychological and social outcomes.⁵ Health coaching provides continuous support that can supplement the care provided by the primary team and may be integrated at any stage. Traditionally, health coaching is delivered in-person and involves one-on-one coaching, group-based support, self-paced exercises, and skill building.⁵ However, in-person coaching may not be sustainable or scalable due to geographical and staffing limitations.²

Digital health coaching provides the same high-quality elements of traditional coaching through the integration of web or mobile experiences with remote human coaching. Digital health coaching has been studied and yielded positive results in chronic diseases such as diabetes, cancer, and mental illnesses.^{2,1,4} Despite the increasing numbers of digital health

coaching programs and publications in oncology, there is no clear guidance on design recommendations to meet the needs of oncology patients. We believe three components are crucial for providing digital health coaching customized to oncology patients: personalization of the coaching experience, focus on quality of life measures, and thoughtful patient engagement.

First, the digital health coaching experience should be personalized. In the setting of oncology, personalization factors include considering not only a patient's cancer type and phase of treatment, but also patient-specific characteristics (such as gender, race, emotional behavior, medications, side effects, and personal goals) and social determinants of health (such as economic stability, education, and access to care). The coaching experience for a patient with early stage breast cancer will be quite different than that of a patient with metastatic lung cancer, and programs must be sufficiently agile to adapt accordingly—while overall principles may be the same, there is no one-size-fits-all solution.

Second, digital health coaching programs should focus on quality of life. Given the positive correlation between quality of life and a patient's self-efficacy for coping with cancer, digital health coaching programs should incorporate activities enhancing self-efficacy and promoting self-care behavior.³ For instance, digital health coaches should focus on interventions to promote medication adherence and functional status. Adherence with oral antineoplastic therapies may range from 16% to 100% and suboptimal adherence has been linked with poor quality of life by way of adversely impacting treatment efficacy.⁶ Therefore, as the delivery of cancer care shifts to the home setting through the increase use of oral antineoplastic, digital health coaching should focus on improving medication adherence as a means to indirectly ameliorate quality of life.⁵ Digital health coaching can target functional

status by management of physical function, mental health, and pain management. Studies support the effectiveness of health coaching of chronic disease management in improving physiological and psychological outcomes.⁵ Digital health coaches can aid in coping with stressors to improve a patient's outcomes and ultimately better quality of life.

Third, digital health coaching should emphasize patient engagement. As cancer treatment necessitates multidisciplinary care, patient engagement is critical to manage complex medical tasks and individual's needs that change along the cancer continuum. Health coaching models may ensure continuous engagement by using positive reinforcement and bidirectional dialog between the patient and coach. Positive reinforcement takes shape in the form of frequent progress reports, motivational encouragement, activity tracking, and incentives for rewarding positive change. The goal of these activities is to encourage patient-initiated micro and macro-goals in order to build self-determination. As such, in addition to informative materials and pre-recorded videos, digital health coaching programs should incorporate remote access to a live health coach. This requirement may be a crucial component for any digital health coaching program, given programs without remote access to a live coach may be less effective.² The virtual nature of the program allows for patients to initiate counseling with a health coach on demand.

While digital health coaching has the potential to provide significant benefits to cancer patients, there are several barriers to the uptake of this technology that may jeopardize its larger adoption by healthcare institutions. First, identifying the appropriate health coach may present a challenge. A personalized coaching model requires dedicated training and sufficient expertise by the coach. While several health coaching training programs exist in the form of

continuing education credit (for example, through the Wisdom of the Whole Coaching Academy) or certification course (offered by the Center for Advancement in Cancer Education), the workforce for this training will need to grow to better scale this resource for cancer patients. Health coaches may be registered nurses, medical assistants, or health educators, thereby creating new job opportunities in a flexible, patient-focused, rewarding role. Second, reimbursement for digital health coaching is not universally provided. Recognizing the potential benefits of this form of care delivery, in April 2021 health coaching was recognized under the American Medical Association (AMA) Current Procedural Terminology (CPT®) code for billing outpatient & office procedure. However, the CPT code was approved as Category III, meaning reimbursement by payers is optional. With the shift to value-based payment models in oncology, digital health coaching may provide a solution to the missing tool that is outpatient day-to-day support to adequately meet the demands of the patient. With a proven clinical and cost benefit, digital health coaching may help provide improved quality of care at lower cost. As such, we urge that payers to act in reimbursing digital health coaching.

Digitalization of healthcare continues to transform the healthcare landscape by improving patient outcomes, reducing costs, and optimizing medical systems. Digital health coaching leverages digitalization to meet the growing needs of physicians and patients, streamlining processes for medical professionals while making care more accessible for patients. From a medical oncology team's perspective, digital health coaching may serve as a welcome tool to provide additional beneficial interventions for patients without creating an additional burden on the team. From the patient's perspective, digital health coaching is an

accessible, self-empowering, and cost-effective tool that has the potential to improve their symptom management and quality of life.

Patients face many challenges over the course of their cancer journey. Carefully designed digital health coaching strategies that are customizable and emphasize quality of life measures and patient engagement have great potential to address these challenges and enhance the patient experience throughout the cancer journey.

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