

# Clinical Approach for Patient-Centered Physical Activity Assessment and Interventions

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**Background:** A physical activity algorithm for adults was created with the aim of reducing patients' barriers for physical activity by providing healthcare professionals with a standardized process to guide clinical discussions on physical activity to reduce the risk of chronic diseases, specifically cancer.

**Objectives:** The physical activity algorithm was designed as an applicable process that could be adopted in many professional settings with the mission to provide relevant, safe, and appropriate physical activity interventions.

**Methods:** A multidisciplinary team designed a physical activity algorithm that incorporated guidelines from the American College of Sports Medicine and the National Comprehensive Cancer Network.

**Findings:** The algorithm is a road map for nurses or physicians to provide evidence-based recommendations, knowledge of physical activity importance, and personalized exercise prescriptions for chronic disease risk reduction and to improve quality of life in a target population.

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The American Cancer Society (2016) estimated that more than one million Americans would be diagnosed with cancer in 2016 and that more than 337,000 of those cancer cases could be prevented through healthy lifestyle choices in the areas of physical activity (PA), diet, and weight management. Research indicates that patients with cancer who participate in regular PA have better long-term survival outcomes compared to those who are less physically active (Rock et al., 2012). To improve patient outcomes with PA, a multidisciplinary team at the University of Texas MD Anderson Cancer Center created a PA algorithm. Incorporated in the PA algorithm are the recommendations of the American College of Sports Medicine (ACSM). ACSM (2014) advocates for a minimum of 150 minutes of moderate PA, 75 minutes of vigorous PA, or a combination of moderate and vigorous activity per week, as well as two or more days of muscle-strengthening

exercises. The National Comprehensive Cancer Network (2015) guidelines also influenced the development of the PA algorithm. The algorithm provides users with materials to educate patients on how to safely meet these PA guidelines and is applicable for patients who are beginning a PA program for the first time or those who desire to increase to a higher activity level.

Livingston et al. (2015) showed the impact a provider has when he or she initiates discussion and refers a patient to a PA program. Likewise, nursing teams and physicians can implement the PA algorithm into practice to encourage patient populations to go from inactive to active. The PA algorithm begins with an initial assessment by a nurse or other clinician, flows into exercise prescription and patient education, gives examples of in-clinic forms, and concludes with suggested readings. It was very important to the development team that the PA algorithm break down