

Oncology Rehabilitation and secondary lymphoedema: the prospective surveillance model

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Description:

A comprehensive model of cancer survivorship care that focuses on improving physical function during and after cancer treatment, known as the Prospective Surveillance Model (PSM). The PSM was presented in depth in a supplemental issue of *Cancer* in 2012 and has served as the foundation for guidelines for early identification and management of lymphedema. The PSM has 3 goals: 1) to establish an interval surveillance program that enables repeat assessment points overtime to promote early identification of changes indicative of emerging functional impairment, 2) to facilitate engagement with individuals diagnosed with cancer for education and guidance to maintain function through treatment, and 3) to direct rehabilitation for physical impairments related to cancer. New guidelines published in 2016 recommend this model of care as an optimal construct for the early identification of lymphedema. The purpose of this symposium is to revisit the goals of the PSM providing evidence of effectiveness through implementation and to highlight areas of the PSM that need additional supporting evidence. Timing, frequency and duration of the proposed model will be discussed as well as recommendations as to how the model can be integrated into the cancer continuum across all cancer pathologies, progressing from the groundwork done in breast cancer.

References:

Alfano, C. M., Zucker, D. S., Pergolotti, M., Ness, K. K., Jones, L. W., Price, N. D., ... & Ligibel, J. A. (2017). A Precision Medicine Approach to Improve Cancer Rehabilitation's Impact and Integration with Cancer Care and Optimize Patient Wellness. *Current Physical Medicine and Rehabilitation Reports*, 5(1), 64-73.

Carli, F., Silver, J. K., Feldman, L. S., McKee, A., Gilman, S., Gillis, C., ... & Hirsch, B. (2017). Surgical Prehabilitation in Patients with Cancer: State-of-the-Science and Recommendations for Future Research from a Panel of Subject Matter Experts. *Physical Medicine and Rehabilitation Clinics of North America*, 28(1), 49-64.

Shah, Chirag, Frank A. Vicini, and Douglas Arthur. "Bioimpedance Spectroscopy for Breast Cancer Related Lymphedema Assessment: Clinical Practice Guidelines." *The breast journal* 22.6 (2016): 645-650.

Soran, Atilla, et al. "Breast cancer-related lymphedema after axillary lymph node dissection: does early postoperative prediction model work?." *Supportive Care in Cancer* 24.3 (2016): 1413-1419.

Yang EJ, Ahn S, Kim E-K, et al. Use of a prospective surveillance model to prevent breast cancer treatment-related lymphedema: a single-center experience. *Breast Cancer Research and Treatment*. 2016;160(2):269-276. doi:10.1007/s10549-016-3993-7.

Lai, L., Binkley, J., Jones, V., Kirkpatrick, S., Furbish, C., Stratford, P., ... & Beech, D. (2016). Implementing the Prospective Surveillance Model (PSM) of Rehabilitation for Breast Cancer Patients with 1-Year Postoperative Follow-up, a Prospective, Observational Study. *Annals of Surgical Oncology*, 23(10), 3379-3384.

Blaney, J. M., McCollum, G., Lorimer, J., Bradley, J., Kennedy, R., & Rankin, J. P. (2015). Prospective surveillance of breast cancer-related lymphoedema in the first-year post-surgery: feasibility and comparison of screening measures. *Supportive Care in Cancer*, 23(6), 1549-1559.

Binkley JM, Harris SR, Levangie PK, et al. Patient perspectives on breast cancer treatment side effects and the prospective surveillance model for physical rehabilitation for women with breast cancer. *Cancer*. 2012;118:2207-2216.

Stout NL, Binkley JM, Schmitz KH, et al. A prospective surveillance model for rehabilitation for women with breast cancer. *Cancer*. 2012;118:2191-2200.

Springer BA, Levy E, McGarvey C, et al. Pre-operative assessment enables early diagnosis and recovery of shoulder function in patients with breast cancer. *Breast cancer research and treatment*. 2010;120:135-147.

Stout Gergich NL, Pfalzer LA, McGarvey C, Springer B, Gerber LH, Soballe P. Preoperative assessment enables the early diagnosis and successful treatment of lymphedema. *Cancer*. 2008;112:2809-2819.

Stubblefield MD, McNeely ML, Alfano CM, Mayer DK. A prospective surveillance model for physical rehabilitation of women with breast cancer. *Cancer*. 2012;118:2250-2260