

Rowan University

Rowan Digital Works

Rowan-Virtua Research Day

28th Annual Research Day

May 2nd, 12:00 AM

Physical Medicine & Rehabilitation Referrals in Cancer Patients

Bhumik Patel

Rowan University

Venkateswar Venkataraman

Rowan University

Deanna Janora

Rowan University

Jack Goldberg

Rowan University

Follow this and additional works at: https://rdw.rowan.edu/stratford_research_day



Part of the [Alternative and Complementary Medicine Commons](#), [Integrative Medicine Commons](#), [Neoplasms Commons](#), [Oncology Commons](#), [Osteopathic Medicine and Osteopathy Commons](#), [Pathological Conditions, Signs and Symptoms Commons](#), [Primary Care Commons](#), [Psychiatric and Mental Health Commons](#), [Rehabilitation and Therapy Commons](#), and the [Therapeutics Commons](#)

Let us know how access to this document benefits you - share your thoughts on our [feedback form](#).

Patel, Bhumik; Venkataraman, Venkateswar; Janora, Deanna; and Goldberg, Jack, "Physical Medicine & Rehabilitation Referrals in Cancer Patients" (2024). *Rowan-Virtua Research Day*. 178.

https://rdw.rowan.edu/stratford_research_day/2024/may2/178

This Poster is brought to you for free and open access by the Conferences, Events, and Symposia at Rowan Digital Works. It has been accepted for inclusion in Rowan-Virtua Research Day by an authorized administrator of Rowan Digital Works.



Background

- Cancer has a high prevalence in the United States with an estimated 18 million cancer survivors.¹ This is likely due to new emerging therapies that allows for early detection and treatment, while contributing to a growing community of long-term cancer survivors.^{2,3}
- Cancer therapies often take a debilitating toll on the patient's body, increasing comorbidities and disabilities, ultimately decreasing their quality of life.^{2,3}
- Physical Medicine and Rehabilitation (PM&R) addresses functional limitations in various conditions, including cancer. Cancer rehabilitation aims to address functional impairments resulting from both the disease itself and its treatments, striving to optimize physical, social, psychological, and vocational functioning.^{2,3}

Significance

- Functional problems are commonly observed among cancer patients, yet they may go undocumented by oncologists in the inpatient setting.^{4,5}
- Studies show that PM&R services significantly increase the Functional Independence Measure (FIM) in cancer patients.⁶
- Optimal utilization of PM&R services positively impacts quality of life and functional outcomes.^{2,3}
- Current guidelines (ACS, NCCN) emphasize the importance of incorporating PM&R services into oncology care to enhance the function and quality of life of cancer survivors.⁷

Methods

Literature Search:

- Utilized PubMed and Google Scholar.

Study Selection:

- Inclusion criteria:
 1. Studies published in peer-reviewed journals.
 2. Articles focused on PM&R service referrals or utilization in cancer patients.
 3. Research conducted on adult cancer patients.
 4. Studies published in English language.
 5. Articles published within the last 15 years.
 6. Research involving diverse cancer types and stages.
 7. Studies exploring factors influencing PM&R service referrals or interventions to improve referral rates.
 8. Articles reporting on referral patterns, barriers, interventions, or outcomes related to PM&R in cancer care.

Methods

Table 1. Literature search queries

Database	Search String	Results
PubMed	Physiatry utilization rate in cancer patients	137
PubMed	Physical Medicine and Rehabilitation consultations in cancer patients	277
PubMed	PM&R referrals in cancer patients	34
Google Scholar	Physiatry utilization rate in cancer patients	2400

Results

Literature search:

- Existing literature indicates that PM&R services can significantly benefit cancer patients, improving their overall quality of life.^{2,3} Referrals to PM&R among cancer patients have been on the rise.⁸ However, they are still not being fully utilized. It is estimated that >60% of cancer patients have a functional morbidity,^{9,10} but only 2.9% are referred to PM&R services.⁷ A study conducted by Wang et al. revealed underutilization of rehabilitation services in head and neck cancer cases in the United States.¹¹ Another study by Cheville et al. found similar trends of underutilization in metastatic breast cancer patients.¹² Furthermore, a survey conducted by Francis et al. involving medical oncologists, radiation oncologists, surgical oncologists, and pediatric oncologists found that 92.3% of surveyed oncologists acknowledge the importance of PM&R services in cancer care.¹³ Despite this they found underutilization of these services.¹³ Additionally, a survey conducted by Molinares et al. reported that while a most of oncology trainees agree on the potential benefits of cancer rehabilitation services in improving patient quality of life, only 25% of their patients are referred to these services.¹⁴

Factors contributing to underutilization of PM&R services: 2,3,7,8,11,13,14

- Lack of patient awareness
- Limited resources
- Patient prognosis
- Lack of physician awareness
- Patient adherence
- Socioeconomic status

Based on the literature search, a survey was developed to further understand referral patterns to PM&R services among oncologists.

Survey:

The survey was developed using Qualtrix and asked questions about:

1. The symptoms their patients experienced.
2. The types of cancers that were treated by them.
3. At what stages of cancer did they consider referring their patients to PM&R services.
4. At what stages of treatment did they consider referring their patients to PM&R services.
5. If they had rehabilitation services integrated with their practice.

Results

- The purpose of this ongoing survey is to gain insights into oncologists' perspective to PM&R. The results from the questionnaire will help identify effective interventions needed within the community to better address the issue.

Discussion

Contrasting the frequency of rehabilitation recommendations outlined in the identified guidelines with the utilization data published reveals a disparity between the recommended optimal care as per guidelines and the actual care patients are receiving.⁷

1. The **lack of awareness** of the benefits of PM&R services among patients, or oncologists, to properly educate the patients, can lead to underutilization.^{2,15}
2. A survey conducted by Spill et al. found that medical oncologists saw **patient prognosis** as a significant barrier to referring to PM&R services. This could be mitigated by better cross-disciplinary education between oncology and rehabilitation physicians.¹⁶
3. Patient's **insurance status** can affect their decision to receive PM&R services. In addition, less educated patients are more likely to forgo them than their educated counterparts.¹⁷

Future Directions

Patient's Knowledge/Understanding:

- Increasing awareness among cancer patients can boost utilization of PM&R services. One effective method is creating a brochure that educates patients about the services, which oncologists can distribute to patients during their visits.

Regular Screenings:

- An electronic screening tool for oncologists that, if positive, generates an automatic physiatry consult, who can then triage the patient to appropriate services has been shown to increase access at the VA.¹⁸ Implementing a similar intervention could help increase quality of care for cancer patients.