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RESEARCH ARTICLE

## Perspectives on Applying Organizational Psychology to Improve Rural Oncology Care

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### ABSTRACT

This editorial provides an interdisciplinary look at rural oncology care, blending healthcare delivery research, public health literature related to rural healthcare, and organizational science to better understand the benefits and challenges associated with rural cancer care. In particular, I provide a brief overview of how organizational psychology can and should be leveraged to better support rural oncology, including rural cancer centers, rural oncology teams, and individual healthcare professionals that practice in rural settings. This continued convergence of disciplines will further enhance oncology care provision for patients, improve rural healthcare professionals' work experience, and provide sustainable practices for rural cancer care centers. Recommendations, specifically from the lens of organizational psychology, blended with expertise in rural healthcare, are provided to help researchers, leaders, and healthcare professionals continue to move forward with exemplary rural healthcare.

## Introduction

There are three primary levels of any healthcare organization or system that can influence oncology care: the individual, the team, and the organization. Beyond these levels, there are also societal and cultural dynamics that further influence provision of oncology care. One particularly relevant societal structure is geographic location; in this case the focus is on rural oncology care. In this perspective, I layout the unique individual, team, and organizational system dynamics in rural oncology that influence provision of care. Additionally, I provide recommendations for rural oncology care systems, specifically from the lens of leveraging organizational science to improve organizational systems and oncology care team-member experiences. It is hoped that the interdisciplinary approach provided here will continue to advance research and practice in rural healthcare delivery.

## Unique Benefits and Challenges of Rural Oncology Care

Research frequently cites the ongoing challenges of recruiting and retaining healthcare professionals to rural communities<sup>1,2</sup> as well as continued closures of rural healthcare systems.<sup>3</sup> Location, access to resources, access to specialty care, and payment model challenges<sup>4-6</sup> are just a few reasons why rural oncology care systems and providers struggle.

## Rural Cancer Centers

Holistic oncology care provided through cancer centers is the way of the future for oncology care, to the point of receiving official recommendations from the National Cancer Institute and the American College of Surgeons as the preferred method.<sup>7-9</sup> However, in rural settings, development of these cancer centers is no small feat.<sup>10</sup> Payment or reimbursement models (e.g., rural patients rely more heavily on Medicaid/Medicare or more likely to be uninsured<sup>6, 11</sup>), scheduling systems, and patients' ability to transport to care all influence how rural centers can operate.<sup>12,13</sup> Additionally, these centers are more likely to form because of either a large outside institution buying-up smaller practices to acquiesce under their brand umbrella<sup>14,15</sup> or a regional system working to merge previously independent practices into one new institution. Either way, strong community cultures will influence both oncology care professionals' and patients' view and use of a new cancer center.

For example, oncology care professionals who experienced a regional merger into a rural cancer center identified multiple opportunities (e.g., expanded resources for patients and employees, increased access to modern care options) as well as

challenges (e.g., cultural and structural differences between units, patient navigation of new systems) that come with bringing together previously independent practices.<sup>10</sup> Other research suggests that rural patients will rely heavily on their primary care or other trusted physician's recommendation about where to receive oncology treatment,<sup>16,17</sup> suggesting that large brand name institutions buying up regional providers may in fact receive support from rural patients. However, rural patients are also very likely to rely on non-medical recommendations overall (e.g., guidance from religious leaders/institutions<sup>18</sup>).

## Rural Oncology Teams

It is no secret that recruitment and retention of oncology care professionals is difficult in rural settings. This results in limited recruitment pools and frequent turnover, resulting in consistently changing team-members as well as staff shortages.<sup>1,2</sup> Team-member expertise may also be limited as there are fewer oncologists, nurse practitioners, and/or specialized nurses in rural areas, with a rural cancer center perhaps only employing 1-2 medical oncologists, 1-2 radiation oncologists, and 1-2 nurse practitioners at a time.<sup>19</sup> These features can limit opportunities for professional development and day-to-day mentoring within oncology care teams.<sup>4</sup> Additionally, rural oncology teams are less able to specialize their care, often treating a wide range of cases within a given day.<sup>13</sup> Those cases they do see are often more complex or presenting later- or unstaged disease as rural patients are less likely to have access to or seek out screening and other preventative steps, as well as having lower health literacy rates.<sup>20,21</sup> These challenges can lead to greater job complexity, and greater role ambiguity and conflict among team-members and between team units.<sup>10</sup>

However, rural oncology care teams can experience various benefits as well, including perceptions of balanced workload, intimate community/team connections, and increased sense of meaningfulness and trust among team-members.<sup>10,13,19</sup> These connections appear to be the result of more consistent team-member scheduling, smaller teams, more frequent team-member interactions, and smaller organization structures that allow for easier connections across teams.

## Rural Healthcare Providers

Considerable research highlights the emotional challenges associated with providing oncology care.<sup>22-24</sup> Cancer is an emotionally laden process, from diagnosis through treatment, till remission or unfortunately, loss of the patient. While certainly it

is emotional for the patient, it is also in fact an emotional process for the healthcare providers that treat the patients.<sup>22,23</sup> However, I argue that rural oncology care providers experience an even greater emotional burden than their suburban or urban counterparts. Findings suggests that rural oncology care professionals may experience increased levels of compassion fatigue as a result of the significant emotional attachments that come with their positions.<sup>13</sup> Specifically, these healthcare providers may have closer relationships with their patients because they practice in small, highly connected communities in which they must straddle multiple roles, including one of community member (e.g., family relation, neighbor, church member) and healthcare professional.<sup>25</sup> Having to straddle these multiple relationships can cause additional emotional drain in the patient-provider context and further enhance potential for increased emotional exhaustion and compassion fatigue. Additionally, the team and institutional challenges mentioned earlier can result in overworked and overwhelmed providers.<sup>10,13</sup>

The intimate setting that rural communities provide can also offer a source of support for rural healthcare providers<sup>13,19</sup> and an environment where oncology care team-members know their patients well. Thus, rural team-members can experience greater meaningfulness in their work, greater job satisfaction, as well as the benefits of seeing the direct impact of the care they provide as they see their patients thrive in their communities post treatment.<sup>10,13</sup>

## Recommendations for Advancing Rural Oncology Care Systems

Certainly, there are several lenses through which one can view advancements in oncology care: for example, improving care through advancements in technology, improving care through advancements in system optimization, improving care through bedside manner and emotional development, etc. And, arguably, to provide optimal care, healthcare systems/organizations should view their care through multiple lens simultaneously. Here, I make the case that one of those views should be advancement of oncology care through the lens of applying organizational psychology theory and best practices, across all levels of an organization: individual, team/unit, and the organizational system as a whole.

Briefly, organizational psychology (or industrial-organizational psychology, organizational science, organizational behavior, etc.) is the scientific study and application of evidence-based practices to

simultaneously support and advance employee well-being and effectiveness and organizational performance and strategy.<sup>26</sup>

## Organizational Psychology to Advance Rural Cancer Center Development

Recognizing the challenges that can emerge when creating a new cancer center, either through merger, acquisition, or new institution development, there are a number of best practices informed by organizational psychology that can be of use. For example, research on mergers and acquisitions<sup>27,28</sup> and change management strategies that support these processes<sup>29,30</sup> can directly inform healthcare administrators about how to initiate the best-informed steps from the beginning of any major systemic organizational change. Specific to oncology care, there should be continuous efforts to keep the patient at the center of the mission and vision of a) the change management process and b) the ultimate goal of the newly developed cancer center. Research points out that because of how uniquely devoted healthcare professionals are to their “customer” (i.e., patients) they are willing to support challenging merger processes if it means (and they fully believe) that such changes will absolutely result in improvements in patient care.<sup>10</sup> This commitment to a common vision is not a guarantee in every industry, and thus should be one that oncology care systems capitalize on when undergoing significant changes.

Another important point to make is that there are a number of lenses through which to view change management practices, including financially-driven, operational systems, technical-systems driven, etc. However, a view of change management through organizational psychology emphasizes the role of the individual employees in both the development of change and successful (or resistance of) uptake of the “new ways of doing things”.<sup>29,30</sup> Oncology care is a deeply vulnerable and personal area of healthcare for patients and care providers, thus, it would be best served to primarily take a change management approach that will also emphasize the role of individuals in ensuring successful advancements in care delivery (rather than a primarily financial or operational focus).

This is particularly true in rural communities where, as mentioned, the shared connections between healthcare professionals and their patients beyond the care environment really emphasizes the value of patient care. However, just as rural communities often struggle to recruit and retain healthcare professionals, they can also struggle with accessing

the most up-to-date guidance on evidence-based organizational psychology practices and recommendations. I recommend rural organizations think creatively about backgrounds and expertise they can hire for HR leadership roles. For example, applicants with graduate degrees in industrial-organizational psychology, organizational development, leadership, etc. will be well-equipped to support the HR processes of the organization while also bringing greater expertise related to individual employee experiences as part of the organizational system processes.

## **Organizational Psychology to Advance Rural Oncology Care Teams**

Organizational psychology has been integrated with oncology care team recommendations for decades, although it has gone by a different name: Team Science. While team science is an interdisciplinary approach to addressing challenges in healthcare teams,<sup>31</sup> it strongly integrates organizational psychology and organizational science as part of its approaches. National Institutes of Health, and in particular the National Cancer Institute, launched a focus on leveraging social science research to improve healthcare team practices as far back as the early 2000's, but continues to emphasize the need for additional research in this area in present day (e.g., as an NCI featured research area in healthcare delivery<sup>32</sup>).<sup>33</sup>

As mentioned, rural oncology teams face specific challenges because of their context, including increased likelihood of multiple relationships among team-members, frequent turnover of team leads (e.g., oncology care providers), and complex yet inconsistent treatment needs (e.g., serving as generalists but also consistently facing late-stage disease). Leveraging the multi-level lens through which organizational psychology and team science view team dynamics, in particular, the input-process-output (IPO) model with a consideration of contextual and individual inputs that influence the team,<sup>34</sup> can help inform more targeted support for rural oncology care teams. Specifically, it would be worthwhile to model the rurally-influenced inputs-processes-outputs that underly an oncology care team's work in order to identify the unique effects of the rural context. Without genuine consideration of the unique challenges these teams face, supporting their efforts to address their patients' needs will not be as effective.<sup>10</sup>

The National Cancer Institute provides useful tools, including the Team Science Toolkit.<sup>35</sup> Additionally, there are now short and effective resources to help teams identify their team process strengths and

weaknesses, in line with the IPO model.<sup>36</sup> However, just as oncologists are specialists and experts in cancer care and treatment, it is important for oncology teams to utilize a social science or team science expert as part of their team improvement efforts. Personnel data management can be particularly sensitive, and team-members may be unwilling to fully share perspectives if they suspect their data will not be handled with the utmost care, as confidentially as possible. The intimate structure of small, rural oncology care teams can potentially enhance these concerns. Thus, I recommend utilization of an external practitioner to manage team development efforts.

Recognizing that rural oncology teams are very often strapped for resources, one recommendation is to approach organizational scientists who could provide pro bono support in exchange for their utilization of anonymous team data to support their own research. Local universities may have such researchers on faculty, and listservs such as the SciTS listserv<sup>35</sup> provided through NIH can help connect in-need teams or organizations with researchers who could support them pro bono.

## **Organizational Psychology to Advance Rural Oncology Care Professionals**

Finally, it is important to address the individual-level challenges faced by rural oncology care professionals and providers. In particular, by addressing these challenges, rural oncology care organizations/teams could experience increased retention of providers and help reduce frequent turnover. This can contribute to increased consistency of care for patients as well as improved team functioning since team-members may not change as frequently.

To address the unique issues rural oncology care providers face, I recommend the use of organization-wide programs focused on addressing the emotional needs of oncology care professionals. One example of such a program is Schwartz Rounds,<sup>37</sup> which is an internationally recognized method used to address the social/emotional difficulties associated with providing patient care.<sup>38</sup> Medical rounds have been at the foundation of medical training for centuries, but focusing rounds on concepts such as emotional labor, burnout, and compassion fatigue gives credibility to these stressors. Doing so from an organization-wide perspective also lends credibility as well as recognizes the systemic impacts of these individually faced challenges. Notably, such a focus is a direct extension of decades of research on these areas in

organizational psychology and organizational science.<sup>39,40</sup> It is another example of blending organizational science with healthcare practice to advance patient care, and in this case, also improve the healthcare professional's work experience. I propose interventions, such as Schwartz Rounds, can address compassion fatigue among rural oncology care professionals specifically by addressing the unique emotional difficulties of treating patients whom these providers know outside the scope of providing healthcare, particularly in instances when ultimately treatment is not successful. Basic interventions generally targeting compassion fatigue and other emotional challenges among healthcare providers may not be as effective as an intervention tailored to specifically address the unique circumstances faced by rural oncology care providers.

## Conclusion

In Figure 1 I provide a summary of recommendations on the role of organizational psychology and organizational science to advance rural oncology care, including developing rural cancer centers, rural oncology teams, and supporting rural oncology care professionals. As

noted, there has been and continues to be notable efforts in research and practice integrating social science, organizational science, and organizational psychology into oncology care best practices. My hope is that this article will continue to help spread awareness about progress made and generate continued work in this area. In particular, though, I hope to shed light on the specific experiences of rural oncology care, leveraging a multi-level organizational systems perspective, and provide recommendations on how these institutions and providers can leverage organizational psychology, within the resources they have available, to continue to support their patients and providers.

## Conflict of Interest:

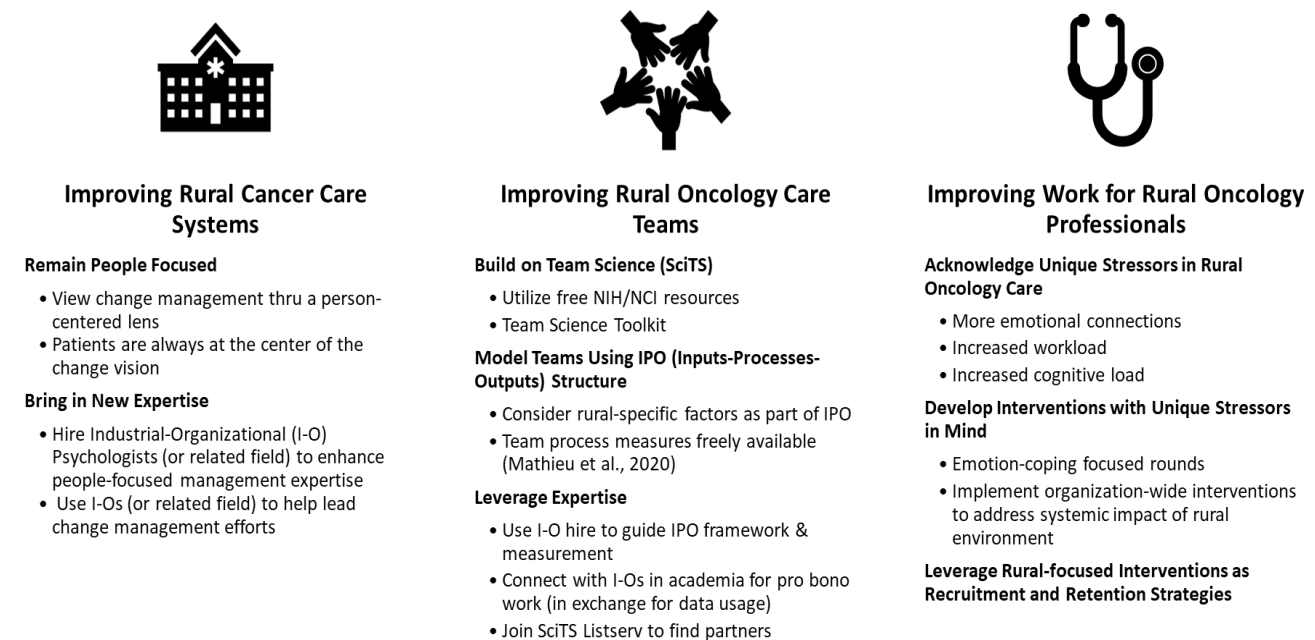
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**Figure 1.** Organizational psychology informed recommendations to support rural oncology care.



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