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Nathan Jung

Mr. Speice

ISM I

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Looking Into Trends in Interventional Oncology

Assessment 12 - Research

Date: 15 January 2021

**Subject:** Interventional Radiology

**MLA 8 Citations:** 

Kovacs, G. "[PDF] Interventional Oncology: Should Interventional Radiotherapy

(Brachytherapy) Be Integrated into Modern Treatment Procedures?: Semantic Scholar."

Undefined, 1 Jan. 1970,

www.semanticscholar.org/paper/Interventional-Oncology%3A-Should-Interventional-be-

Kovacs/a845161f40e2eedbcdcf978deab83e6f390f3ab4.

Assessment:

One of the major goals set for the spring semester was to investigate various trends and

changes in the interventional radiology field in order to stay updated on the events of the field.

Additionally, a major goal set for research was to focus on interventional oncology, which was

also explored in the last assessment. This article was essentially a combination of both goals,

since it investigates if a new type of treatment for interventional oncology should be integrated

into modern procedures. Thus, this assessment will be analyzing the information acquired from

the article and will discuss how to apply it to my understanding of interventional radiology as a whole.

The first goal of this assessment was to analyze if the information aimed to be learned was successfully learned. One of the goals was to identify and analyze trends in the interventional radiology field mentioned. The main trend that was mentioned was how interventional radiology is becoming increasingly popular in the treatment of elderly and in the field of fighting cancer. This trend was also previously identified in many articles analyzing, thus its mention in this article served the purpose of confirming the validity of the trend. Additionally, this article cited a treatment strategy that was not mentioned in previously researched articles: multidisciplinary teams. This must be a relatively new development, but since it is a question that arose and still has not been answered, this question must be presented to the future mentor. Another major topic that was looked for in the article was interventional oncology and recent developments in that field. The article mentioned brand new information about it, such as subspecialties within interventional oncology, such as interventional radiotherapy, interventional endoscopy, and interventional chemotherapy. This information was really interesting since no previous research mentioned interventional oncology having subspecialties. Additionally, this information can be useful in the future when any of these subspecialties are mentioned in future articles. Furthermore, future research can be done on one or more of these subspecialties in order to investigate if a specific one interests me. Finally, lots of terminology was acquired through analyzing this article, including radiotherapy, brachytherapy, H&N, IRT, and more. This terminology will be extremely useful for future research following paths carved out in this assessment as well as when asking professionals questions about this field of interventional radiology, which will occur since this article brought up some questions that must be answered.

Another goal for this assessment was to process how this article affected the previous understanding of interventional oncology and interventional radiology as a whole. Also, processing any surprising information is extremely important for this assessment in order to address any potential questions that arose or any future research that must be done to address this new interesting information. One piece of surprising information was the fact that the radiotherapy procedure investigated in this article is extremely complex and requires expert-level physicians from many different specialties. When choosing to research this procedure, there was no previous knowledge that would have led me to believe that this procedure would require that much experience and skill to perform. Building off of that, this article mentioned different physicians from different specialties working together in 'multidisciplinary teams.' This was never heard of before in previous research and will certainly be asked about to a professional. Also, future research into multidisciplinary teams will be critical. Another piece of interesting information was the fact that there is an entire committee called the 'Interventional Oncology Center' that assists multidisciplinary teams of experts to make a decision on how to carry out a patient's procedure. If a group of experts from different specialties was not enough, this committee can come into play and assist in making a decision. Additionally, this proves the idea that radiotherapy requires a ton of manpower mentioned earlier in the assessment. Furthermore, some connections to previous knowledge were made. One connection made to previous knowledge (also mentioned earlier) was the fact that the article mentioned the upward trend in the popularity of minimally invasive procedures. Many sources analyzed before said the same thing. Another connection was to the procedure 'percutaneous interventional tumor ablation.' This procedure was mentioned in an article researched previously about interventional oncology

and some surface-level details about it were learned. Future research can also go into this procedure.

The final goal for this assessment was to think about if this article offered any potential uses to the Final Product and to analyze any potential future research opportunities that arose. This article did not provide any specific uses for how the Final Product is currently designed; however mentor consultation may be useful in modifying the design to fit a wider range of techniques, such as in interventional oncology. Now, many opportunities for future research were mentioned in the article and in this assessment; however, it would be useful to analyze some of them to see if they would actually be useful to future research. There were two opportunities for future research that stood out to me as I was looking through the article. One was multidisciplinary teams and the other was the subspecialties within interventional oncology. Multidisciplinary teams may not be able to be completely researched using articles, so consultation of professionals and the future mentor will be critical in understanding what they are and how they fit into interventional radiology. On the other hand, subspecialities within interventional oncology can likely be researched using articles and will be explored in that way. It is important to study these in order to see if any of them in particular capture a significant amount of interest and will require more research.

In conclusion, this research assessment pretty much accomplished all of the goals set for it. Although no uses for the Final Product were found, future consultation with the mentor will hopefully open up some ideas for design modifications to fit more interventional oncology techniques. This assessment analyzed if the information desired to learn was acquired, how the information learned affects the current understanding of interventional oncology, and

opportunities for future research as well as potential uses for the Final Product. Overall, this assessment was successful.

## **Notes:**

<u>Interventional Oncology: Should Interventional Radiotherapy (Brachytherapy) be Integrated into Modern Treatment Procedures?</u>