



A Meta-Narrative Review on the Use of R.O.S.E in Telecytology for the Patient, Pathologist, and Cytologist

Brittany McDermott*, Daniel Onwunumagha*, Torye Smith*, Jennifer Willis*, Kimberly Hoggatt Krumwiede, Ph.D., Mary Coolbaugh-Murphy, Ph.D., MB(ASCP)^{CM}, Denise M. Juroske Short, Ph.D., MB(ASCP)^{CM}
Undergraduate program in Cytotechnology, School of Health Professions, UT MD Anderson Cancer Center

*Authors contributed equally and are listed in alphabetical order

Introduction

The relevance of collecting specimens and the demand for adequate specimens have both increased due to the expanding use of biopsied material in creating tailored medicine. ROSE is an acronym for **Rapid On-Site Evaluation**, which is a laboratory service to evaluate the cytomorphic characteristics of FNA smears or biopsy touch imprints. ROSE is frequently carried out in the biopsy suite by cytopathologists or skilled general pathologists and can offer the biopsy operator real-time feedback and guidance through rapid cytological evaluation of biopsy material.

Research Question(s) / Hypothesis

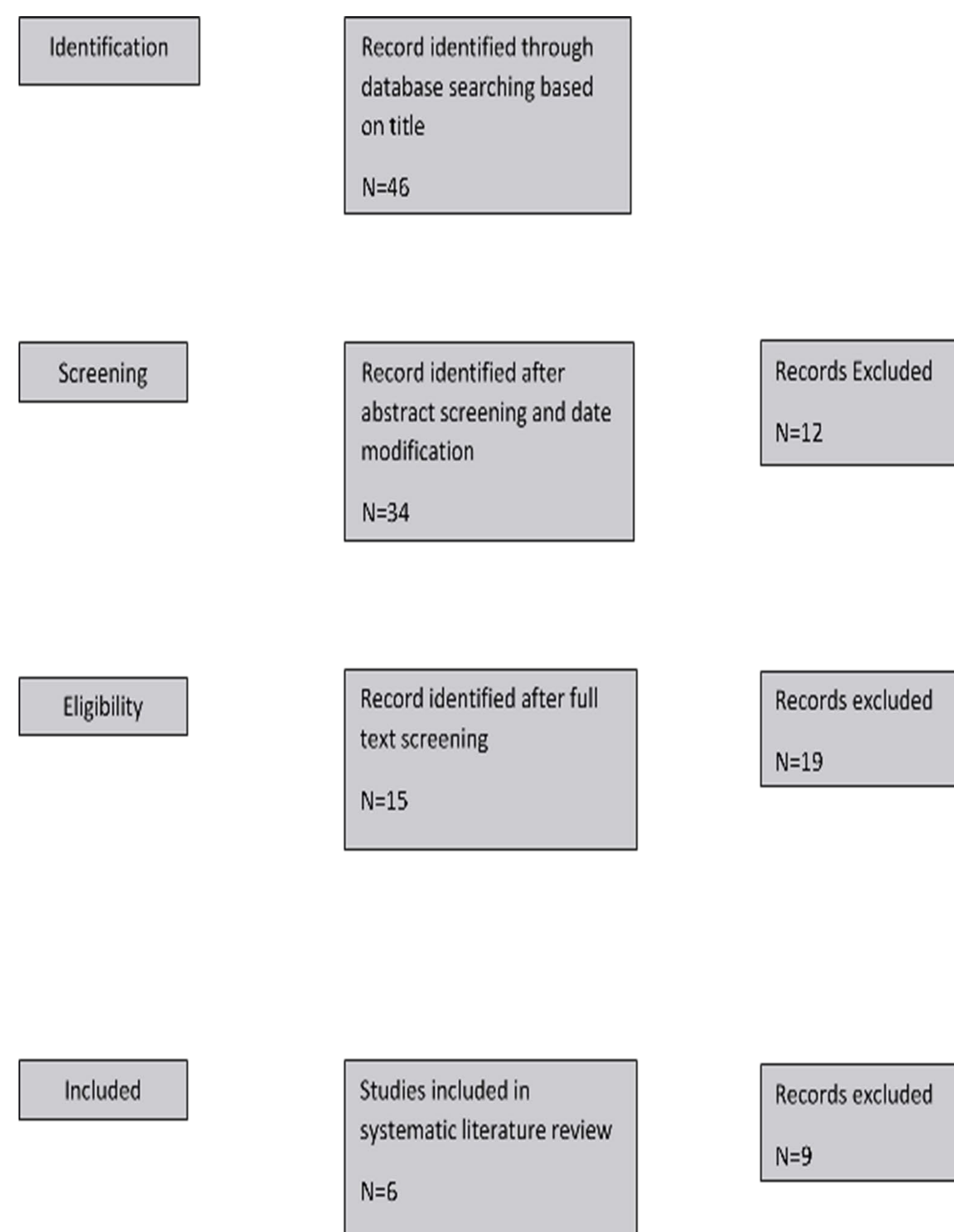
What are the advantages and disadvantages of the use of Telecytology in ROSE for the cytologist, patient, and pathologist?

Methodology

- Taking feedback into account, search criteria and wording were changed for better understanding.
- The abstract is read and if it pertains to the topic, then the article is read, and information is pulled to provide a deeper understanding. The source is then also cited.
- Searched “Telecytology with ROSE” in Library. Changed filters to: “Publication date of 2018-2023” and “peer-reviewed articles only”. Searched on 03/14/2023.
- Articles not including ROSE in the study were excluded. Inclusion criteria included aspects of the pathologist, cytologist, and patient advantages.

Source Selection

Figure 1: Flow Diagram

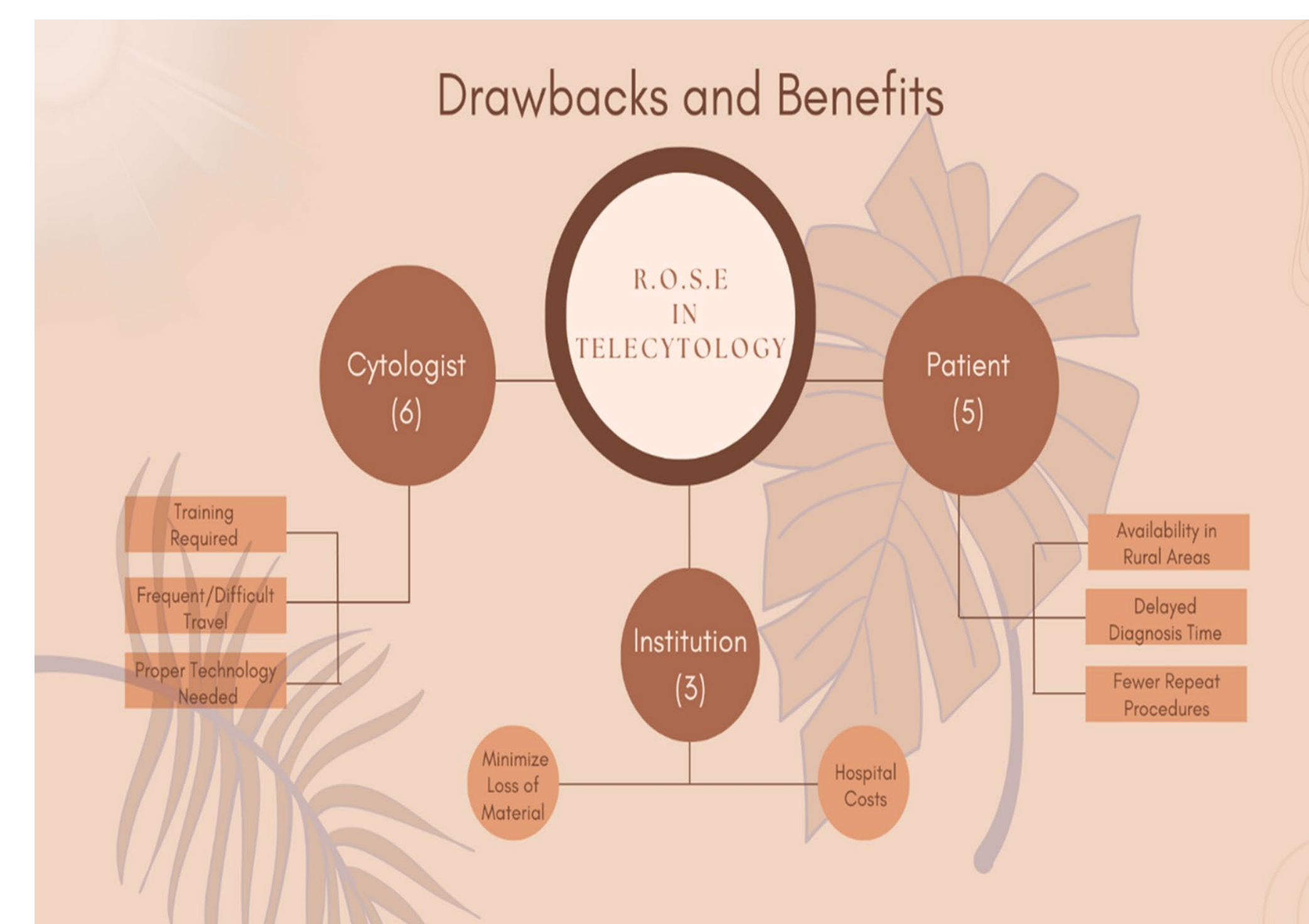


Source Characteristics

The sources showed the advantages and disadvantages for the patient, pathologist, and cytologist when using Telecytology for ROSE. Articles were chosen based on dates, with none of the articles picked being older than 5 years. As of now, there is not much research on Telecytology for ROSE as the technology is fairly new, however, we expect to see further research in the future.

Advantages and Disadvantages

Figure 2: Advantages and disadvantages listed as related to their respective category.



Note: The numerical values above indicate the number of articles that provide insight and research associated with each topic.

Key Findings

Advantages

- Decreased diagnosis time
- Availability to patients in rural areas
- Provides flexibility in covering ROSE procedures at several locations simultaneously
- Minimizes the chance of loss or damage to material
- Allows samples to be selected for special studies

Disadvantages

- Incorrect diagnosis is possible
- Extensive training is required
- Cost to the facility

Strengths and Limitations

The main challenge encountered while researching this procedure was that Telecytology with ROSE is still new. This greatly limited the number of articles available. Despite this, each group was able to be addressed with at least three articles each. As advancements are made, more studies will be able to evaluate R.O.S.E. further in order to give more feedback.

Conclusion and Implications

The benefits of Telecytology for ROSE include shorter diagnosis time as well as location diversity. Not many articles currently review this process due to the infancy of Telecytology with ROSE. In the future, Telecytology with ROSE could become a standard practice due to the increased need for worker flexibility and the necessity of patient access.

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