

## Rhapsody Alerts – How effective are they?

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### INTRODUCTION

Imaging and histopathology plays a tremendous role in identifying incidental and non-incidental malignancies.(1-3) The Royal College of Radiologists state that there should be fail-safe alert procedures for significant unexpected findings.(2) Sandwell and West Birmingham NHS Trusts (SWBH) have integrated a Rhapsody platform into their Trust in order to overcome such issues.(4)

The Rhapsody system sends email alerts to relevant clinicians regarding radiology and pathology results.

### AIM

This quality improvement project aims to establish whether the Rhapsody alert system improves the management of the haematology cancer care pathway.

### METHOD

**Study Type:** Quality Improvement Project.

**Study Setting:** Secondary care, SWBH.

**Data Collection Tool:** Clinical Data Archive.

**Data Collected:** Retrospective data collection of referrals to the clinical nurse specialist lead and haematologist cancer lead from January 2019 to March 2019.

**Analysis:** Data was coded and analysed using Microsoft Excel.

### RESULTS

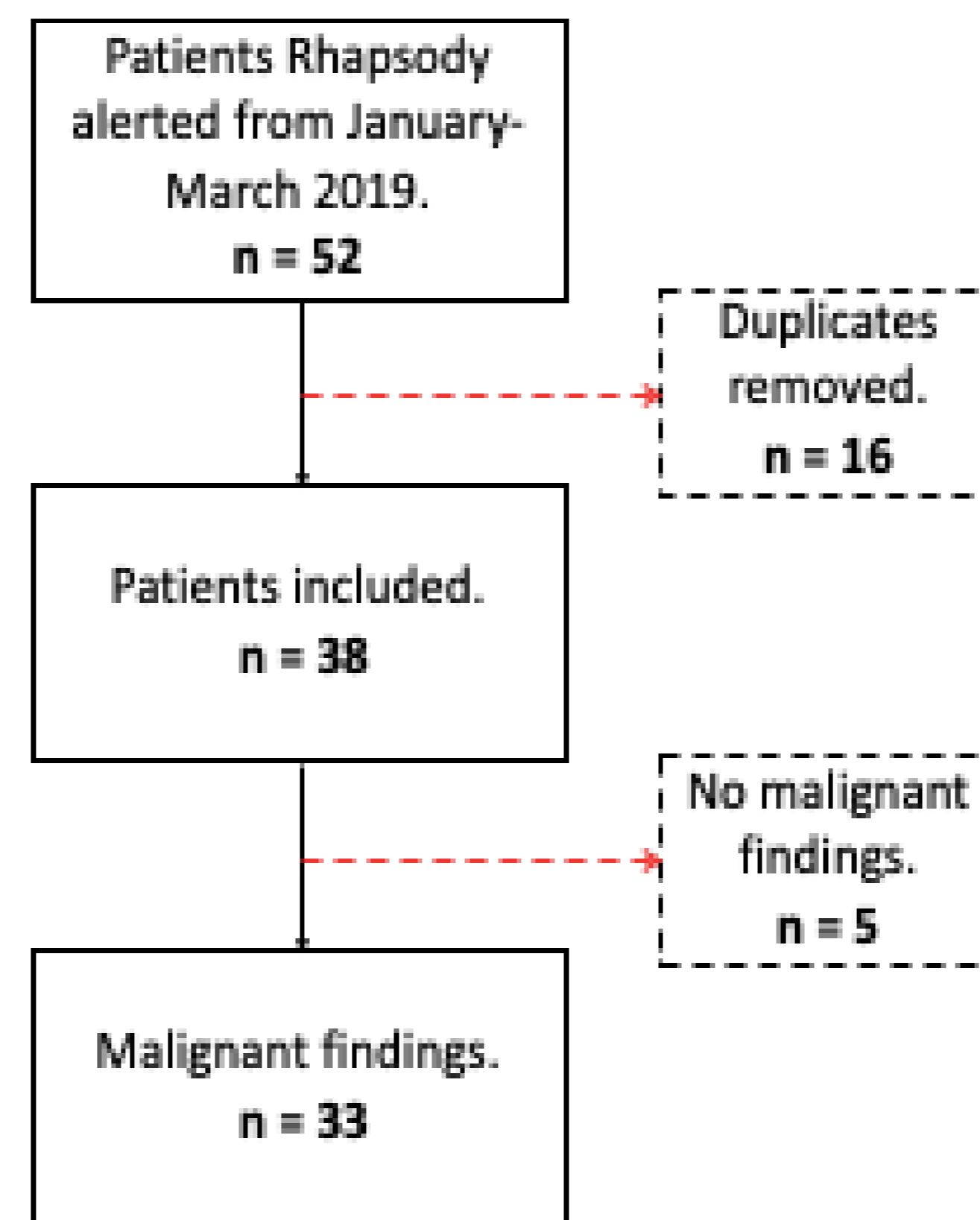


Figure 1: Flow chart showing inclusion criteria.

Rhapsody Alert Modality	
Imaging	55%
Pathology	45%
Patients flagged with query:	
Lymphoma	80.6%
Tuberculosis	2.8%
Sarcoidosis	2.8%
Not stated	13.8%
Imaging Modality used in Rhapsody Alerts	
Computerised Tomography	86%
Ultrasound	14%

Figure 2: Table displaying the Rhapsody Alert modalities that were used and the referral queries.

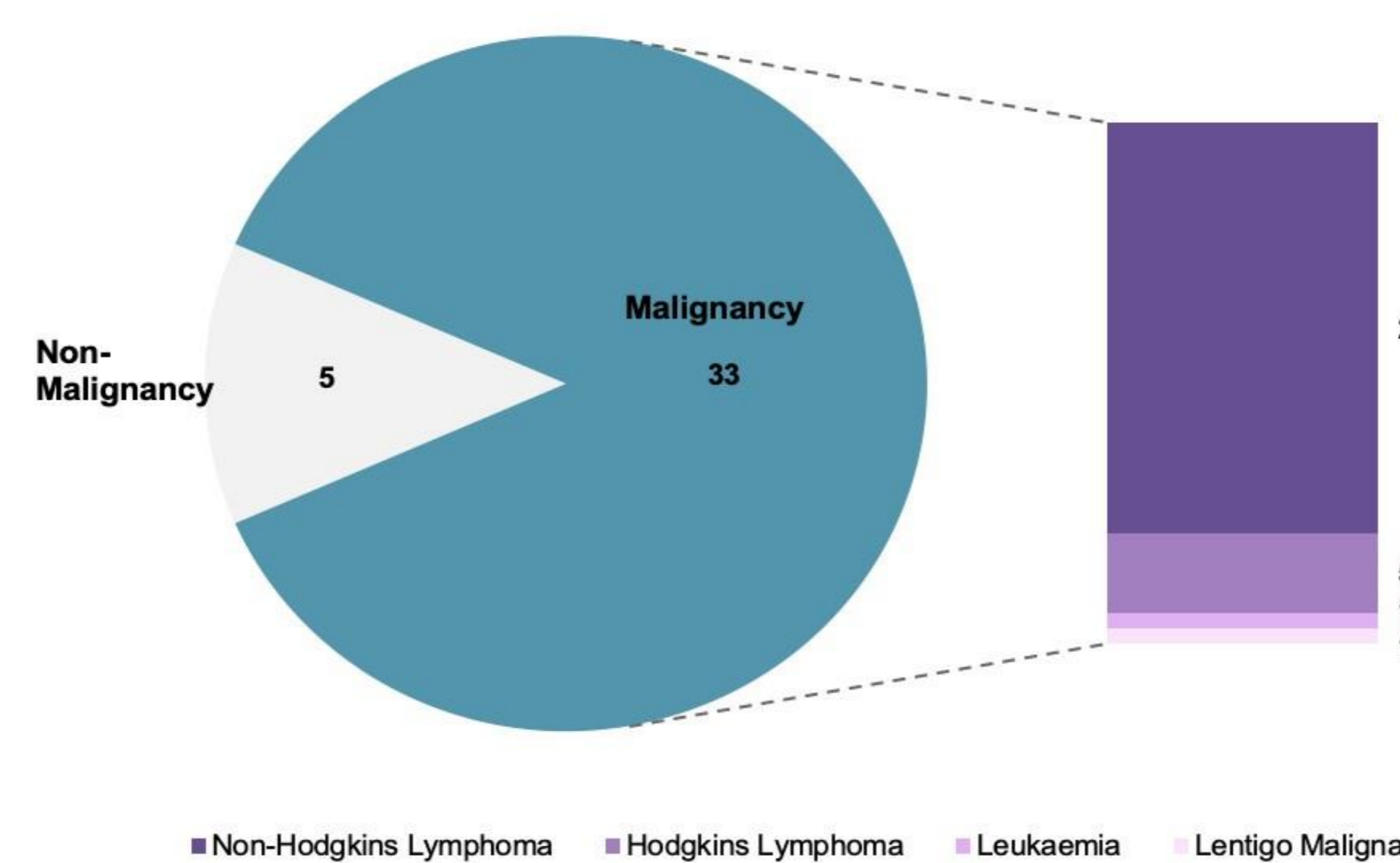


Figure 3: A pie chart illustrating the diagnoses from the 38 patients included.

### Summary

- Patients ranged from age 18 to 97.
- Rhapsody alerts correctly enabled identification of 87% of patients with cancer.
- Non-Hodgkin's Lymphoma was diagnosed most frequently (79%).
- Histopathology investigations were undertaken in all patients, except 2, to confirm diagnoses.
- Enabled identification of 1 patient with precancerous lymphoma.

### CONCLUSIONS

- 87% of patients alerted had cancer.
- 97% of those with diagnosed with cancer had a form of hematological malignancy.
- 9 patients were alerted up to more than 1 week after their imaging or pathology assessment was done – indicating a delay to department notification.
- Rhapsody alert system is an efficient modality for alerting suspicious imaging and pathology results to the haemato-oncology department, however, there still appears to be room for improvement.

### CONCEPTS FOR IMPROVEMENT

- The next stage would be to assess the effectiveness of the Rhapsody alert system on a larger cohort of patients. This would involve repeating the data collection to include those referred through the system over a year (January 2019 to January 2020).
- Further analyse how quickly patients are seen, then treated by a haem-oncologist and compare this to the national cancer care pathway timeline.
- Assess the data from prior to the implementation of the Rhapsody alert system will indicate its effect on a non-monetary scale.
- Co-ordinate a multidisciplinary meeting with the Pathology and Radiology department to present the findings and educate staff on how to appropriately flag patients and to flag patients in a timely manner.
- Minimise the advent of duplicate or multiple Rhapsody alerts sent to the Haemato-oncology department through educating the Radiology or Pathology department and devising a proforma or daily log of patients that have been flagged.
- Assess how many patients are not referred to the Haemato-oncology department through the Rhapsody alert pathway and evaluate why this is.
- Devise a survey on clinician's opinion of the Rhapsody alert system and whether they deem it an effective method of improving patient's care and journey and if there are changes that would be useful to implement.

### REFERENCES

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4. Rob Jones. Rhapsody improves management of cancer care alerts. [Internet]. Sandwell and West Birmingham Hospitals; 2018 [cited 6 November 2019] Available from: [https://www.rhapsody.health/assets/Docs/39beef4b6e/Rhapsody\\_Sandwell-West-Birmingham-Hospitals-NHS-Trust\\_Case-Study.pdf](https://www.rhapsody.health/assets/Docs/39beef4b6e/Rhapsody_Sandwell-West-Birmingham-Hospitals-NHS-Trust_Case-Study.pdf)

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