

Introduction

- Vestibular Schwannoma (VS) is managed through surveillance, surgery, or radiation with input from a multidisciplinary team.
- Structured data entry and automated data collection tools can potentially be used to reduce collection errors and enhance data quality.
- Process mapping helps establish a shared understanding and identifies the individual components in any given system.
- Through process mapping, critical data entry points can be identified and used for structured data entry as well as automated data collection.

Aim

- Using process mapping to establish the current state of the management of VS patients and identify critical data entry points within the patient pathway which may benefit from structured data entry and automated data collection.

Methodology

- A two-stage mixed methodology was conducted at a single neurosurgical unit to design the process maps.
- Process maps were validated retrospectively against EHR for patients admitted between August 2019 and December 2021.

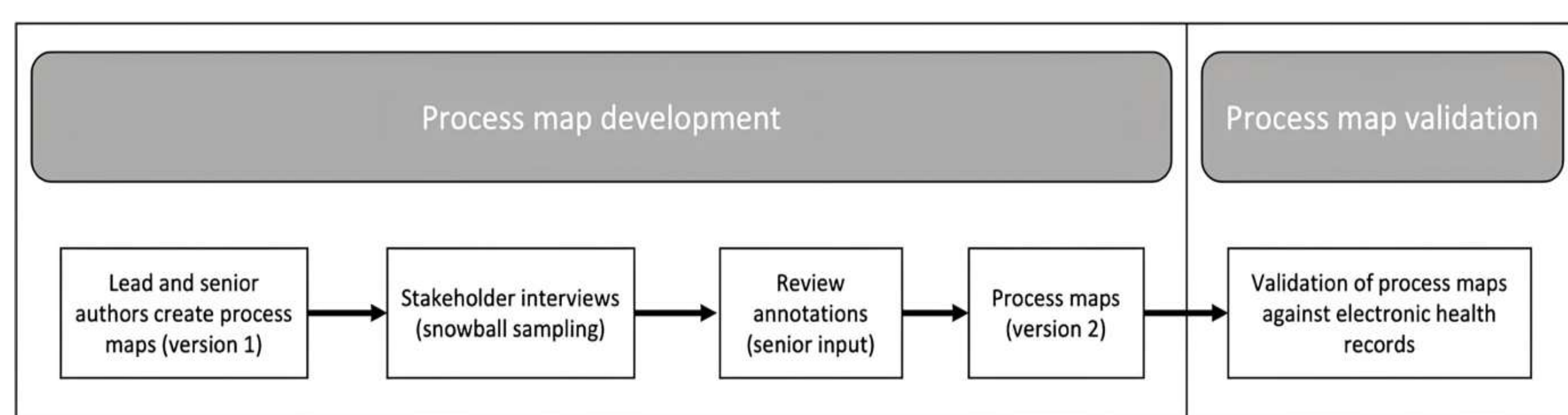


Figure 1: Study flow for process map development.

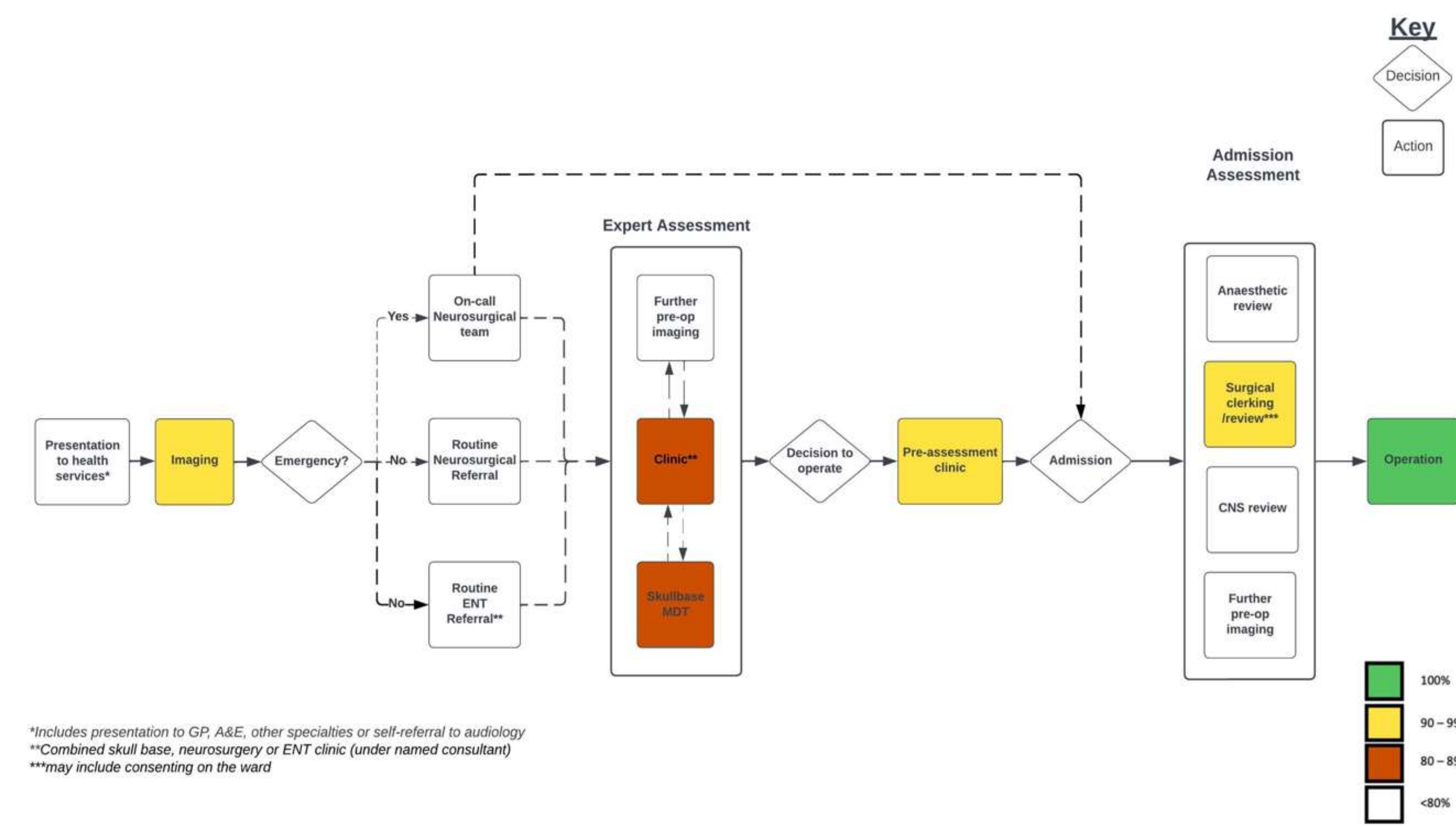


Figure 2: Process map from presentation to health care services through to operation

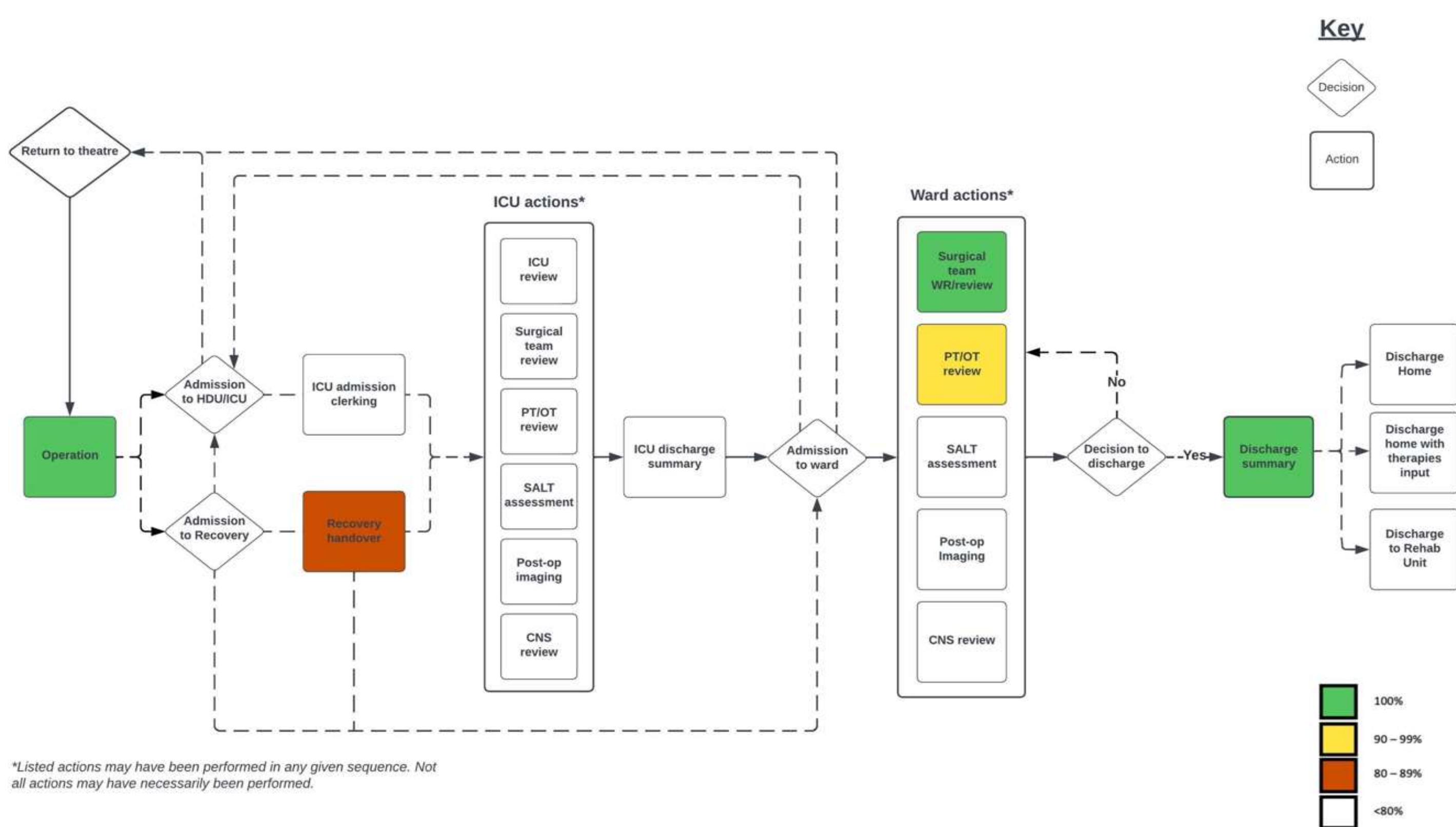


Figure 3: Process map from operation through to discharge from hospital.

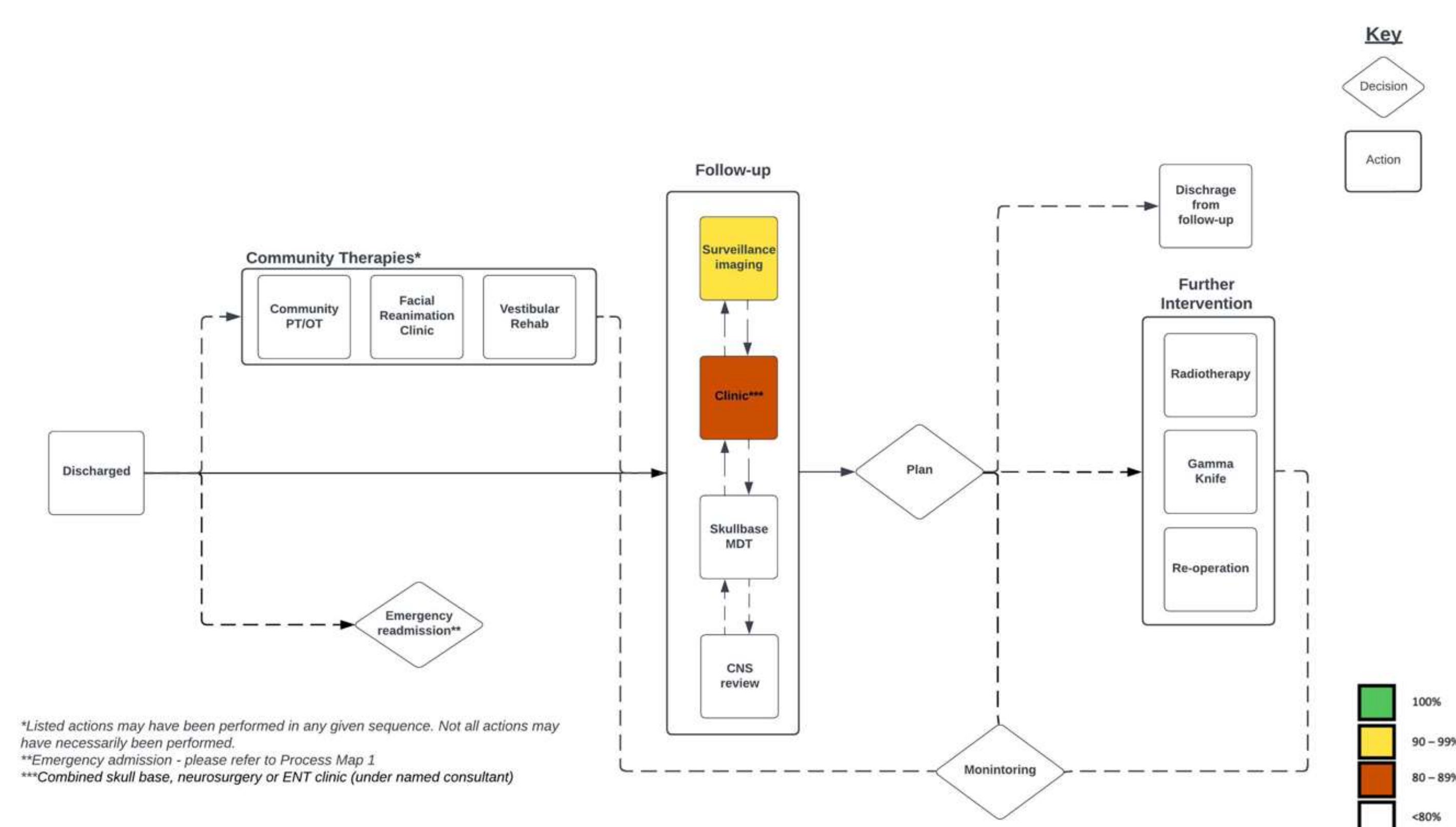


Figure 4: Process map depicting the outpatient pathways following vestibular schwannoma resection.

Results

- Twenty stakeholders were interviewed to develop the process maps.
- Process maps were validated with EHR data from 36 patients undergoing VS resection.
- Operation notes, surgical inpatient reviews, and discharge summaries were present in the clinical notes for all patients.
- Areas for documentation improvement were identified in preoperative clinics (83.3%), preoperative multidisciplinary teams (88.9%), postoperative follow-ups (88.9%), and postoperative team meetings (80.6%).

Conclusions

- This study is the first to apply a two-stage mixed methodology for process mapping VS resection pathways.
- The study identified key data entry points for structured data entry and automated collection.
- These findings can positively impact patient care through improved data quality and be used for automated data collection.

References

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- Antonacci G, Lennox L, Barlow J, Evans L, Reed J. Process mapping in healthcare: a systematic review. *BMC Health Serv Res.* 2021;21(1). doi:10.1186/S12913-021-06254-1
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