



# Queen's North Hawai'i Community Hospital OB/GYN Operations Improvement Project: Identifying Operational Drivers Leading to Variance in NHCH OB/GYN Outpatient Encounter Turnaround Times

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## Introduction

- Healthcare team and administrative leadership have identified that **patient encounters are exceeding the expected duration**.
- The Women's Health Clinic at the Queen's North Hawai'i Community Hospital is undertaking an initiative with the goal of improving access to care, enhancing the patient experience, and ensuring high-quality care for its obstetric and gynecologic (OB/GYN) patient population.
- The effort relies upon the embedding **Lean and Six Sigma principles** into everyday practice. So as to aid in standardizing workflows, clarifying team roles and expectations, and systematically identifying and eliminating sources of waste and variability (Rathi et al., 2022). The vision is to accomplish more than just **streamlining operations**, but to create an **environment that meets the evolving needs of patients and staff**.

### Research Questions

1. Why are some patient encounters (say) 20 minutes long and some 40 minutes long?
2. What recommendations to reduce the variability?

## Objectives

### Phase 2 (Intern's Focus): Data Collection and Analysis

- Collect and analyze both historical and real-time operational data.
- Identify true bottlenecks and root causes of inefficiencies using root cause analysis tools such as the 5 Whys, Fishbone Diagrams, and process mapping.

## Materials & Methods

### 1. Quantify Variance in Encounter Duration

- Determine the extent to which different encounters vary in length by-design
- Based on scheduled appointment types and standardized times
- Analyzed de-identified NHCH data using Excel Pivot Tables

### 2. Questionnaire Development

- Questions were related to (Patient Care & Clinical Workflow, Technology & Electronic Health Record Systems, Administrative & Documentation, Communication & Coordination, Supplies, Equipment & Facilities, Staffing & Scheduling)

### 3. Observations & Informal Interviews

- Intern took notes of daily operations for a span of 1 week while asking some of the questionnaire questions in real time

### 4. Questionnaire Distribution and Response Collection

- Questionnaire was distributed to the (Front Office Assistant, Physician Practice Assistants, & Triage Nurse)
- Ambulatory Clinics Manager emailed intern their responses

### 5. Meeting with Queen's North Hawai'i Community Hospital Providers

- Asked for their own unique insights and clinical experiences for Fishbone Diagram

### 6. Fishbone Diagram Creation

- Questionnaire Findings were mapped out
- Provider (Physicians) experiences and observations included

### 7. Provide Recommendations for Areas of Improvement

## References

Rathi, R., Vakharia, A., & Shadab, M. (2022). Lean six sigma in the healthcare sector: A systematic literature review. *Materials Today: Proceedings*, 50, 773–781. <https://doi.org/10.1016/j.matpr.2021.05.534>

## Results

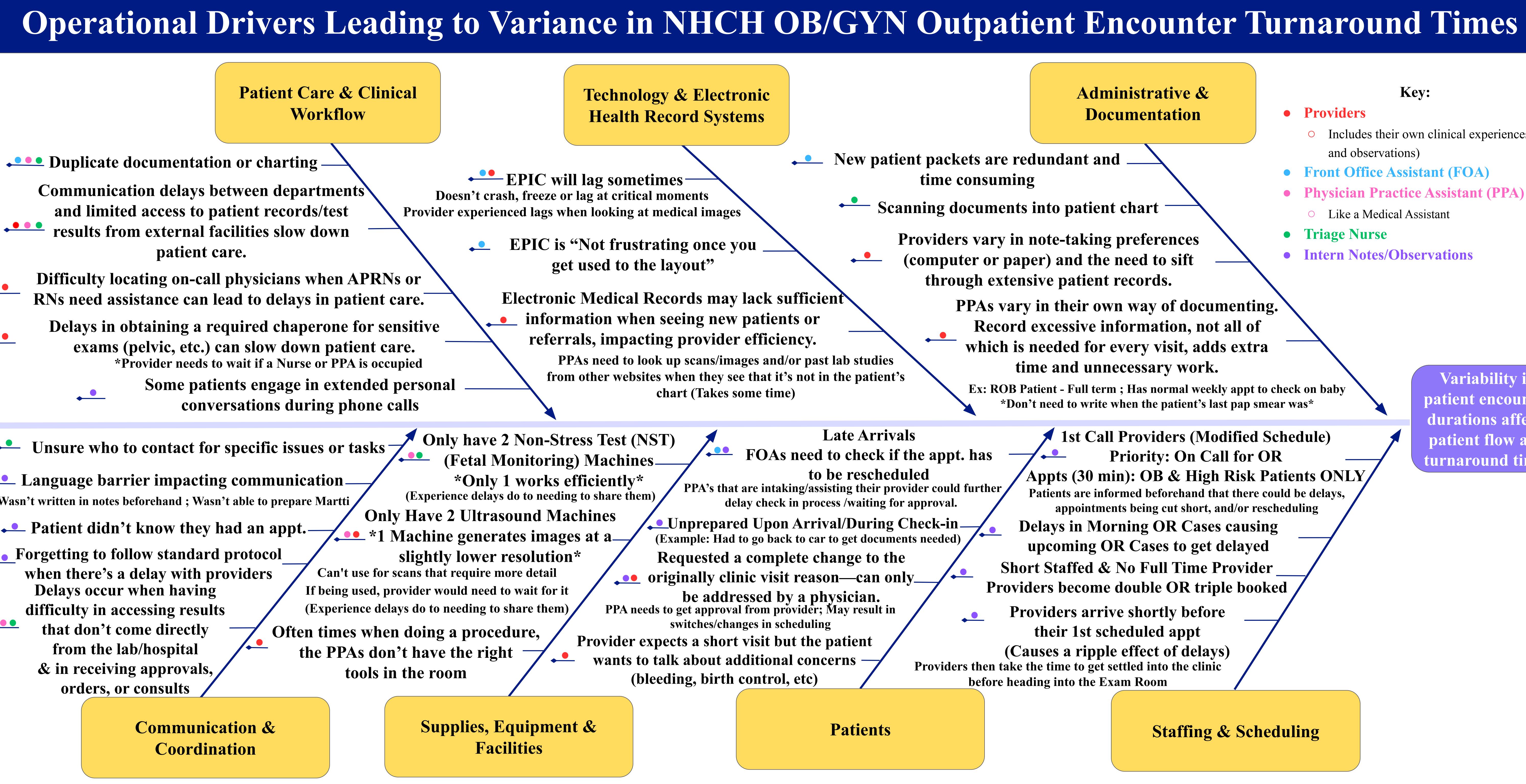


Figure 1. Qualitative data derived from multiple perspectives which result in the variability in patient encounter durations thus affecting patient flow and turnaround times

## Results (cont.)

### Identifying Encounter Types with High Overrun Counts

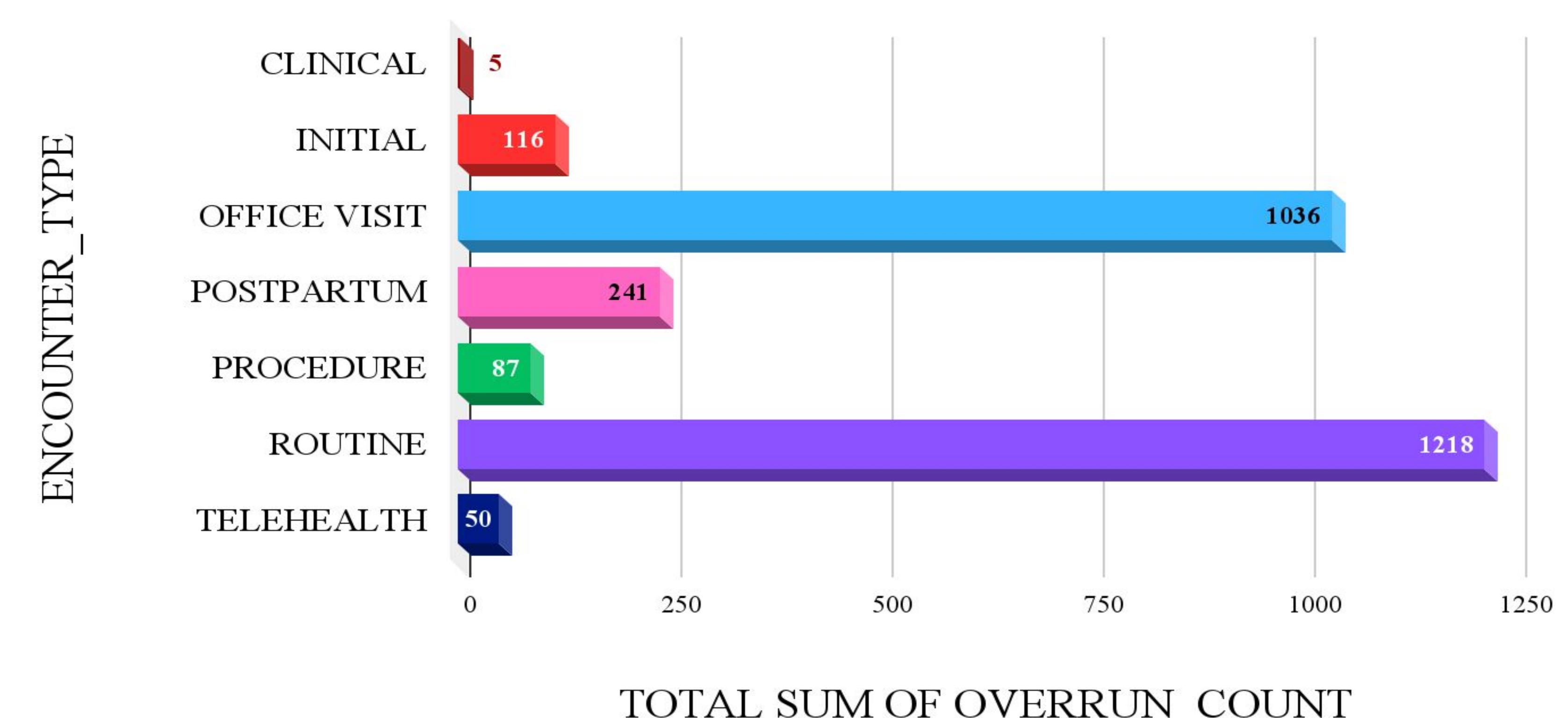


Figure 2. Overrun Count by Encounter Types within the Past 6 months of 2025 (1/2/2025 to 7/3/2025).

## Recommendations

- FOA's should set clear expectations with patients about the purpose and duration of phone calls (Create a script)
- For sensitive exam appointments, FOAs should ensure a chaperone is already reserved during scheduling
- Management should investigate why the standardized list of tools/equipment is not being used for each procedure type OR update the list as needed
  - Investigate if it's provider preferences outside of the standard list
- Management should investigate why the escalation process (when tests/labs/results/orders are delayed) is not being followed
- Management should reinforce the importance of following work flows and protocols during daily team huddles
  - Conduct "Pop-Quizzes" on what should be done during certain scenarios

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