

Enhancing Pediatric Vaccination Compliance: **A process optimization study at Cloudnine** **Hospitals**

Introduction and Background

Vaccination is a cornerstone of infant healthcare, playing a vital role in reducing child morbidity and mortality. Despite robust scheduling systems under programs like India's Universal Immunization Program, compliance in urban settings often suffers due to forgetfulness, lack of awareness, or logistical challenges. This study investigates how structured follow-ups can serve as a proactive measure to improve vaccination adherence and reduce missed appointments.

Problem Statement

Even with scheduled appointments, many parents fail to present their infants for timely vaccinations. These missed visits not only compromise child health outcomes but also disrupt hospital workflows, underutilize resources, and reduce operational efficiency.

Objectives

- To evaluate the effectiveness of reminders in improving timely vaccination compliance.
- To measure the conversion rate from reminder calls to confirmed appointments.
- To identify key barriers preventing parents from adhering to vaccination schedules.
- To recommend strategies for institutionalizing effective follow-up mechanisms in pediatric care settings.

Research Questions

- How effective are reminders in increasing vaccination compliance?
- What are the predominant reasons parents postpone or skip scheduled vaccinations?

Hypothesis

Timely, personalized follow-up calls significantly enhance adherence to infant vaccination schedules in urban healthcare environments.

Research Methodology

- Study Design: Prospective observational and descriptive study.
- Duration: 3 Months
- Sample Size: 365 babies
- Inclusion Criteria: Parents of infants scheduled for vaccinations during the study period.
- Exclusion Criteria: Patients unreachable by phone .
- Data Points: Infant Name, Age, Vaccine Due, Reminder Call, Parent Response, Appointment Confirmation, Scheduled Date Remarks/Barriers Identified.
- Data Collection Tool: Microsoft Excel Spreadsheet.
- Data Analysis: Descriptive statistics—percent adherence, conversion rates, barriers categorization (logistical, financial, psychological).

Expected Outcomes

- Improved compliance with scheduled vaccinations.
- Reduced rate of missed or delayed immunizations.
- Enhanced appointment flow and reduced operational disruptions.
- Clear understanding of behavioral and systemic obstacles to pediatric vaccination.
- Practical recommendations for integrating follow-up strategies into hospital operations.

References

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