



Enhancing Access to Prenatal Studies Through EMR Customization: A Quality Improvement Initiative in Infants Aged 0-3 Months

Irene Dixe de Oliveira Santo, MD, CIIP, Radiology Resident, Diagnostic Radiology, Yale School of Medicine Anne Gormley; James Ha, MD; Lawrence Guan, MD; Cicero Silva, MD; Sophie Chheang, MD

Introduction

Access to prenatal studies provides invaluable insights for timely and accurate diagnosis and management in young children, especially infants with congenital anomalies that are undergoing their first post-natal imaging studies. However, navigating electronic medical records (EMRs) to retrieve prenatal studies can be time-consuming and inefficient. Epic, as a widely used EMR platform, offers opportunities for customization to enhance workflow efficiency and improve patient care.

Hypothesis

The goal of our QI project was to customize Epic in children aged 0-1 year, incorporating a direct link to the mother's chart to facilitate rapid access to prenatal studies.

Methods

In collaboration with our institution's Epic team, a new print group was designed to appear automatically on the opening page of the child's chart for patients aged 0-1 year. This section included a hyperlink to the mother's chart, enabling direct and easy access to prenatal imaging. Time to access prenatal studies and the number of clicks required for 20 patients, were measured before and after implementation. Measurements were performed independently by three radiology residents.

Results

The implementation of the embedded print group and link to the mother's chart significantly reduced the average time to access prenatal studies by an average of 27 seconds and decreased the number of clicks required by an average of 6.2 clicks. Radiologists' feedback indicated improved satisfaction with workflow and enhanced ability to make informed clinical decisions in a timely manner.

Conclusion

Integrating a direct link to prenatal studies into the child's chart on Epic proved to be an effective solution to a longstanding workflow inefficiency. This intervention highlighted the utility of EMR customization in optimizing clinical workflows and improving access to critical prenatal data. The benefits were particularly pronounced in cases of congenital abnormalities, where prompt access to prenatal studies facilitated better-informed diagnostic and therapeutic decisions. The creation and implementation of a print group section in Epic for children aged 0-1 year, with a direct link to the mother's chart, significantly improved efficiency in accessing prenatal studies. This quality improvement initiative underscores the importance of collaborative efforts between clinical teams and EMR developers in enhancing patient care through targeted technological interventions.

Figure(s)

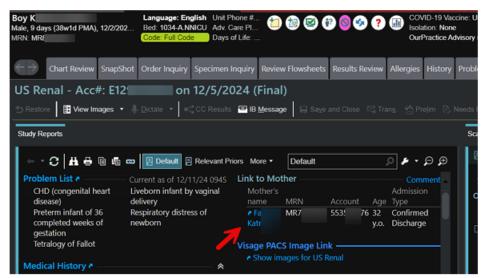


Figure 1. Screenshot of the new print group (red arrow) and link to the mother's chart set to automatically show up on the opening page when any radiologist accesses imaging studies of patients aged 0-1 year.

Keywords

Clinical Workflow & Productivity; Provider Experience; Quality Improvement & Quality Assurance