Improving Maternal Care with Automation
Perinatal Risk Assessment Reporting

Automation, AI, and Data Analytics for better healthcare

Background

The United States faces a persistent maternal health crisis, maintaining one of the highest mortality rates among developed nations, underscored by stark racial and geographic disparities. Several states are responding with mandatory prenatal risk assessment requirements, signaling a crucial shift from reactive to proactive maternal care.

These strategic mandates replace individual provider discretion with systematic screening protocols. By identifying risk factors early, healthcare organizations can intervene sooner, ultimately reducing preventable maternal and infant mortality while improving care coordination across the pregnancy journey.

However, implementing mandatory pregnancy risk assessments presents healthcare providers with significant operational hurdles that extend beyond clinical care. Integrating these assessments into existing workflows requires strategic restructuring of practice patterns in already time-constrained clinical environments.

In addition, documentation requirements compound these challenges. Providers face:

- Maintaining detailed records in specific formats within electronic health records.
- Reporting screening rates and outcomes to state agencies or managed care organizations.
- Meeting varying documentation standards across different payers.
- Demonstrating compliance with evolving regulatory requirements.
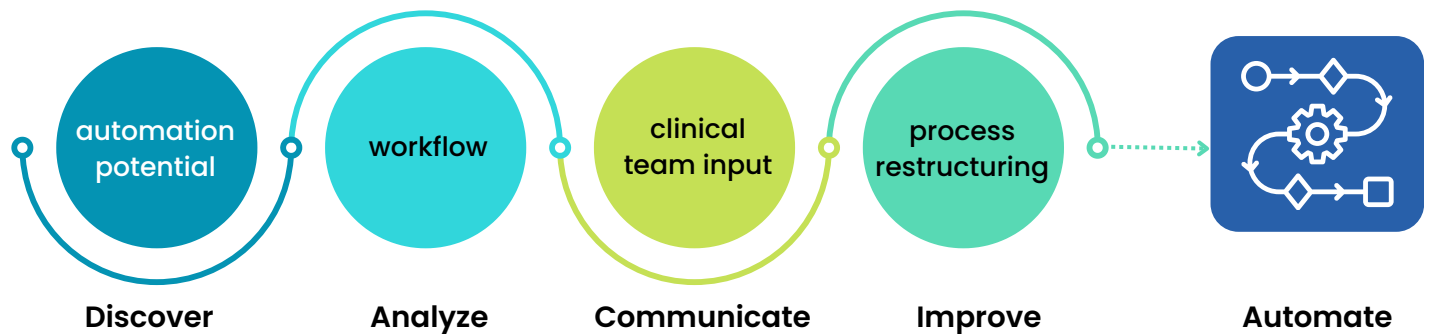
CHALLENGE

The state-mandated Perinatal Risk Assessment process created a significant administrative burden for our client's OB/GYN nursing staff. With requirements to complete these forms each trimester for 1,600 patients annually, each containing over 350 fields, clinical staff invested 3,000 hours yearly on documentation alone. This administrative workload diverted valuable time away from direct patient care. The complexity of navigating disparate reporting systems, managing exceptions, and correcting documentation errors further exacerbated staff frustration and workflow inefficiencies.

SOLUTION

Amitech Solutions joined forces with our client to transform the perinatal reporting process. The Amitech consulting team worked directly with clinical staff to understand their daily challenges. Together, they measured automation opportunities, refined workflows, and designed solutions that resonated with the people who would use them daily. This partnership approach generated a technical win for the organization while cultivating a genuine enthusiasm for the new system. By focusing on the human experience alongside operational improvements, the team built a process that both lightened the administrative load and honored the critical work of maternal care providers.

automation potential	workflow	clinical team input	process restructuring	
Discover	**Analyze**	**Communicate**	**Improve**	**Automate**

AUTOMATION IN ACTION

1 Bot Checks Appointment Schedule
The bot identifies appointment types requiring Perinatal Risk Assessment submissions. After the appointments, the information collection process triggers automatically.

2 Data Collection
The data required to fill the PRA form fields is collected from the patient's electronic health record (EHR). If any information is missing, the bot pauses the process and sends an email to the assigned personnel.

3 Manual Intervention
The email recipient then completes the patient's EHR with the required data. The next day, automation seamlessly resumes as the bot verifies these updates and continues the submission process.

4 Logging in to the PRA Form Website
The bot accesses the secure form submission portal using authenticated organizational credentials. It then performs a verification check for existing patient records. When no previous file exists, the system automatically creates a new patient profile. For returning patients, the automation updates their existing records with current clinical information.

5 Form Completion
The bot then fills out each of the 350 fields across seven sections, including:

- Patient information
- Medical information
- Pregnancy risk factors
- Medical conditions
- Psychosocial risk factors
- 4Ps Plus© (behavioral health screening instrument)
- Referrals

6 Submission and Confirmation
Once all required fields are populated, the bot submits the completed form to the state registry. At the end of each business day, the system generates a verification report and delivers it to the assigned staff members' email inboxes.

RESULTS AND IMPACT ⌄

90% of process automated

~3,000 hours clinical hours returned to patient care

>$120K in annual savings

CONCLUSION ⌄

The successful automation of the Perinatal Risk Assessment process represents more than just an administrative victory—it demonstrates how healthcare organizations can overcome traditional barriers to clinical workflow automation. While many providers hesitate to automate clinical processes due to concerns about patient safety, regulatory compliance, and workflow disruption, this case illustrates that thoughtful implementation can address these challenges effectively.

This automation model offers a blueprint for healthcare systems facing similar documentation challenges. The approach demonstrates that automation can:

- Preserve clinical expertise while eliminating administrative burden.

- Transform regulatory requirements from burdens into opportunities.

- Create a more sustainable healthcare workforce.

The results speak for themselves: 90% process automation, 3,000 hours redirected to patient care, and $120,000 in annual savings. Beyond these metrics lies an even more significant achievement: **a workforce empowered to deliver better maternal care by focusing on patients rather than paperwork.** As healthcare continues to face documentation challenges across specialties, this case demonstrates that automation, when implemented with **both people and processes in mind**, can transform administrative burdens into opportunities for improved care delivery.

AMITECH
Automation and AI for better healthcare

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