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(57) Abstract:

The present invention relates to an automated device for detecting retained clots after delivery to prevent postpartum hemorrhage (PPH). The device comprises a sensor array (102) configured to non-invasively monitor uterine conditions using ultrasound, infrared, or pressure sensors. A device body (104) houses the components, and a control panel (106) enables operation. Data captured is processed in real time by an AI-powered processing unit (110) executing a clot detection algorithm (112) to identify abnormalities. Results are displayed on a display module (108), and an alert system (114) provides immediate audio or visual warnings. A data storage and recording module (118) archives all readings, while a continuous monitoring system (122) enables periodic reassessment. A hospital system integration interface (124) ensures seamless data transfer to electronic medical records. The invention enables early detection, rapid intervention, and improved maternal safety in postpartum care. Reference Fig 1

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