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Portable Pelvic Exam Positioning Device for Enhanced Workflow and Patient Comfort

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Title: Portable pelvic exam positioning device for enhanced workflow and patient comfort

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Background: Pelvic exams are often performed in settings other than designated obstetrics and gynecology suites. In these other settings, the equipment that is traditionally used to position the patient, such as a bed fitted with stirrups, may not be available. Therefore, physicians often improvise a solution to elevate the pelvis, such as using inverted bedpans, pillows or blankets. However, the lack of an appropriate device to position patients decreases patient and physician comfort, causes workflow inefficiency and leads to suboptimal examination due to inadequate provider visualization.

Methods: Over the course of five months, input from patients and providers alike was sought via conversations, interviews, online forums, and a formalized hospital survey in order to rapidly prototype potential solutions for the aforementioned problem. The final prototype was created with CNC machining and 3D-printing and tested using a full body medical mannequin.

Results: The prototype performed its intended function at a basic level, while taking into consideration patient comfort, as well as provider preference. The portable device can be folded for storage and deployed to elevate the patient's pelvis above the examination table to enable provider access for the speculum exam and sample collection. The team filed a provisional utility patent with the United States Patent and Trademark Office.

Conclusions: The device includes features to enhance patient comfort and dignity in a vulnerable exam. The device is easy to set-up and use, which allows for rapid integration into existing workflow. Further research is needed to determine how this product will impact workflow, patient comfort, exam quality, and assess potential dimensional changes. Limitations

of the project include inability to introduce the device into the clinical setting due to the sensitive nature of the exam and the liability risk related to the device being load bearing.