ABSTRACT TITLE
INVERT THE PYRAMID TO IMPROVE OUTCOMES AND REDUCE COST WHILE PROVIDING QUALITY CARE TO AN UNDERPRIVILEGED VULNERABLE POPULATION

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INTRODUCTION AND BACKGROUND
This presentation is based on my experience at Monmouth Family Health Center (MFHC), which is a Federally Qualified Health Care Center (FQHC) located in Long Branch; Monmouth County, New Jersey gained from May 2004 through 2021 September. I am instituting the same protocol at the VNA Community Health Centers in New Jersey, commencing at CHC of Asbury Park from October 2021. Our mission is to provide high quality, cost-effective, comprehensive, linguistically and culturally sensitive care to our patients regardless of race or ethnicity or ability to pay.
We provide Obstetrics and Gynecology, Internal Medicine, Family Medicine, Pediatrics, Dentistry and Podiatry, Behavioral Health services. We work consistently to maintain efficiency and cost effectiveness while providing high quality patient care.

THE PROBLEM AND OBJECTIVE
Women with a positive pregnancy test would have an ‘intake’ visit with obstetrical nursing staff and then were examined by a physician or midwife 3 to 4 weeks later. 1 or 2 out of every 10 pregnancies would be found to be ‘non-viable’ at this examination and many patients presented to the emergency room in the interim. I see this same pattern at VNACJ CHCs.

This ‘traditional’ way of entry into prenatal care was and continues to be
• resource intensive and costly
• dangerous and life-threatening conditions such as ectopic pregnancy, hydatidiform moles were not diagnosed early and patients were often diagnosed via the emergency room where they presented
• wasted a significant number of weeks before final correct diagnosis
• frustrating for the patient and physician when the final diagnosis was made
• a significant number of non-viable pregnancies were found, who really did not need to be in prenatal care, but should have been diagnosed and appropriately treated earlier, thus saving cost, disappointment to the patient and frustration to physicians.

INVERT THE PYRAMID METHOD
As the Chief Medical Officer and Medical Director of Monmouth Family Health Center (MFHC from 2004 to 2021); Director of Reproductive Health at the VNACJ CHCs since October 2021, and a gynecologist-obstetrician in clinical practice, this ‘traditional’ method of prenatal care entry made little sense to me. I envisioned that only viable pregnancies should enter prenatal care and as early in pregnancy as possible. To achieve this, I instituted the ‘pregnancy confirmation visit’ wherein a patient presenting to MFHC and now VNACJ CHCs, suspecting pregnancy would get a pregnancy test, a history and physical examination and an ultrasound by a board-certified ob-gyn physician at that visit which effectively became the first prenatal visit.

RELEVANCE
• Early diagnosis of non-viable pregnancy and institute treatment
• Early diagnosis of life-threatening condition e.g., ectopic pregnancies or hydatidiform mole
• Improved outcomes by early prenatal care entry and channeled to ‘high risk’ or ‘normal care’ based on history and physical examination at this very first visit
• Accurate dating of early pregnancy
• Early diagnosis of multifetal pregnancies
• Enhanced patient satisfaction
• Cost reduction by avoiding emergency room visits

RESULTS AND LESSONS LEARNED
• By following the ‘inverted pyramid’ protocol, prenatal care entry was maintained at more than 80% of pregnancies being registered for prenatal care in the early first trimester before ~12 weeks of gestational age.
• Patient satisfaction with the protocol is high
• Cost of care is reduced.
• I have commenced the same protocol at my new place of work and expect to achieve the same results using this protocol. We have improved first trimester prenatal care entry from ~40% to more than 75% within one year at two of our sites and continue to work towards reaching this goal and higher as the protocol becomes our established standard of care at all our four sites.