

The Kotelchuck Index

The **Kotelchuck Index**, also called the **Adequacy of Prenatal Care Utilization (APNCU) Index**, uses two crucial elements obtained from birth certificate data: when prenatal care began (initiation) and the number of prenatal visits from when prenatal care began until delivery (received services).

The Kotelchuck Index classifies the **adequacy of initiation** into four groups as follows:

- Pregnancy months 1 and 2
- Pregnancy months 3 and 4
- Pregnancy months 5 and 6
- Pregnancy months 7 to 9

with the underlying assumption that the earlier prenatal care begins the better.

To classify the **adequacy of received services**, the number of prenatal visits is compared to the expected number of visits for the period between when care began and the delivery date. The expected number of visits is based on the [American College of Obstetricians and Gynecologists](#) prenatal care standards for uncomplicated pregnancies and is adjusted for the gestational age when care began and for the gestational age at delivery. A ratio of observed to expected visits is calculated and grouped into four categories:

- Inadequate (received less than 50% of expected visits)
- Intermediate (50%-79%)
- Adequate (80%-109%)
- Adequate Plus (110% or more)

The final Kotelchuck Index measure combines these two dimensions into a single summary score. The NJSHAD query defines **adequate prenatal care** as a score of 80% or greater on the Kotelchuck Index, or the sum of the Adequate and Adequate Plus categories.

Caveats:

- The Kotelchuck Index does not measure the **quality** of prenatal care.
- Calculation of the Index depends on the accuracy of the patient or health care provider's recall of the timing of the first visit and the number of subsequent visits.
- The Index uses recommendations for **low-risk pregnancies**, and may not measure the adequacy of care for high-risk women.