

Prenatal Care Utilization Trends in the Privately Insured Population from 2009-2015

Aaron Bloschichak, MPH and John Hargraves, MPP

Background

Expand upon literature on the on explanations for variation in prenatal care.

This study examines utilization of specific prenatal care services (lab testing and obstetric ultrasounds) and compares the variation in utilization across age groups and individual risk characteristics.

Methods

Study Design and Population

We study a sample of women with employer sponsored insurance (ESI) who had a claim for a delivery (normal or C-section) within the years of 2009 and 2015.

Further classified into individuals with one lab or ultrasound visit based on first and last date of a claim. Our resulting sample contained 3.25 million individuals consisting of 450,000 to 480,00 women per year.

We analyzed the frequency of medical claims related to a lab test or ultrasound condensed to the first and last date of a claim to act as 1 visit.

CPT Codes and Risk Categories

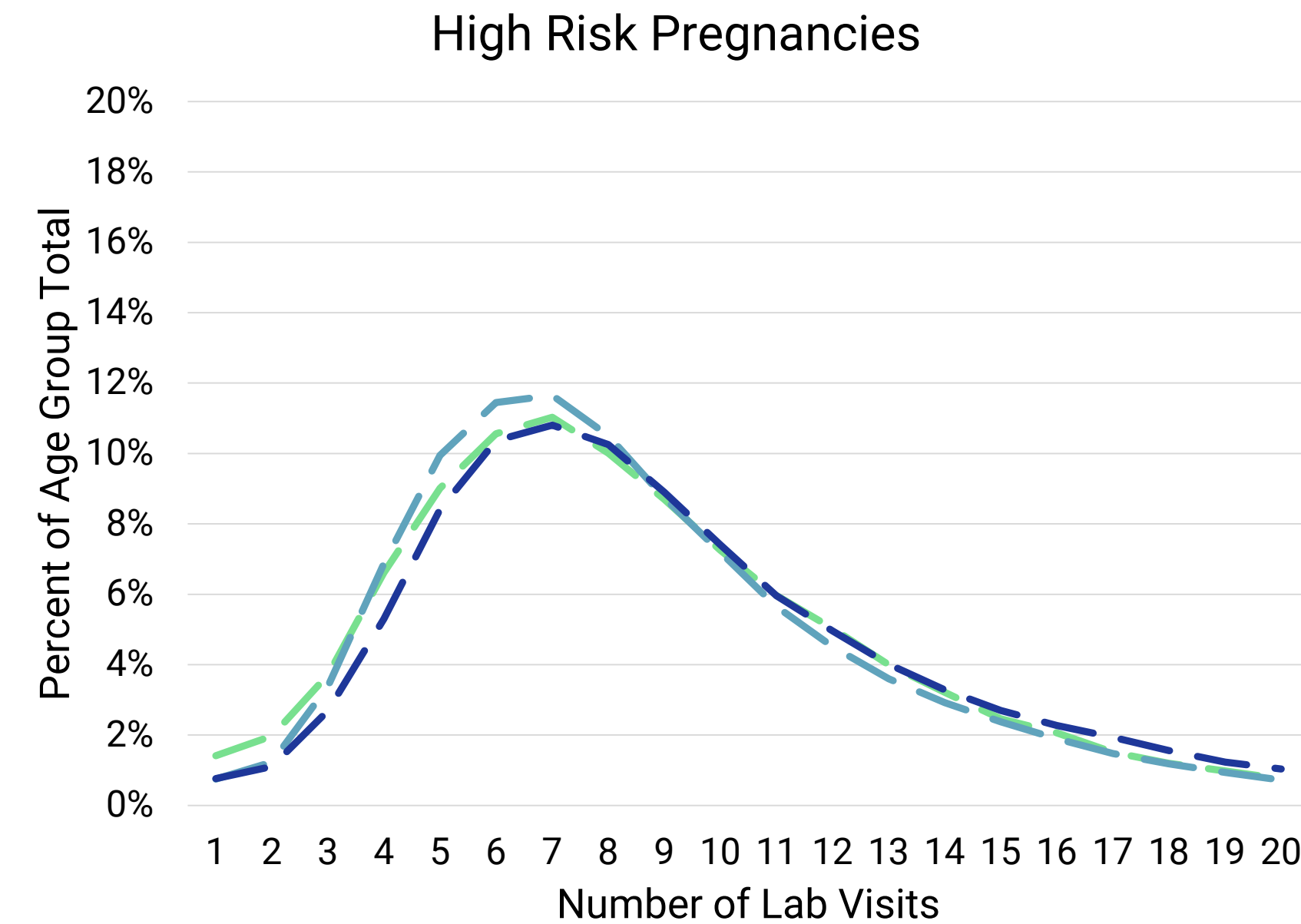
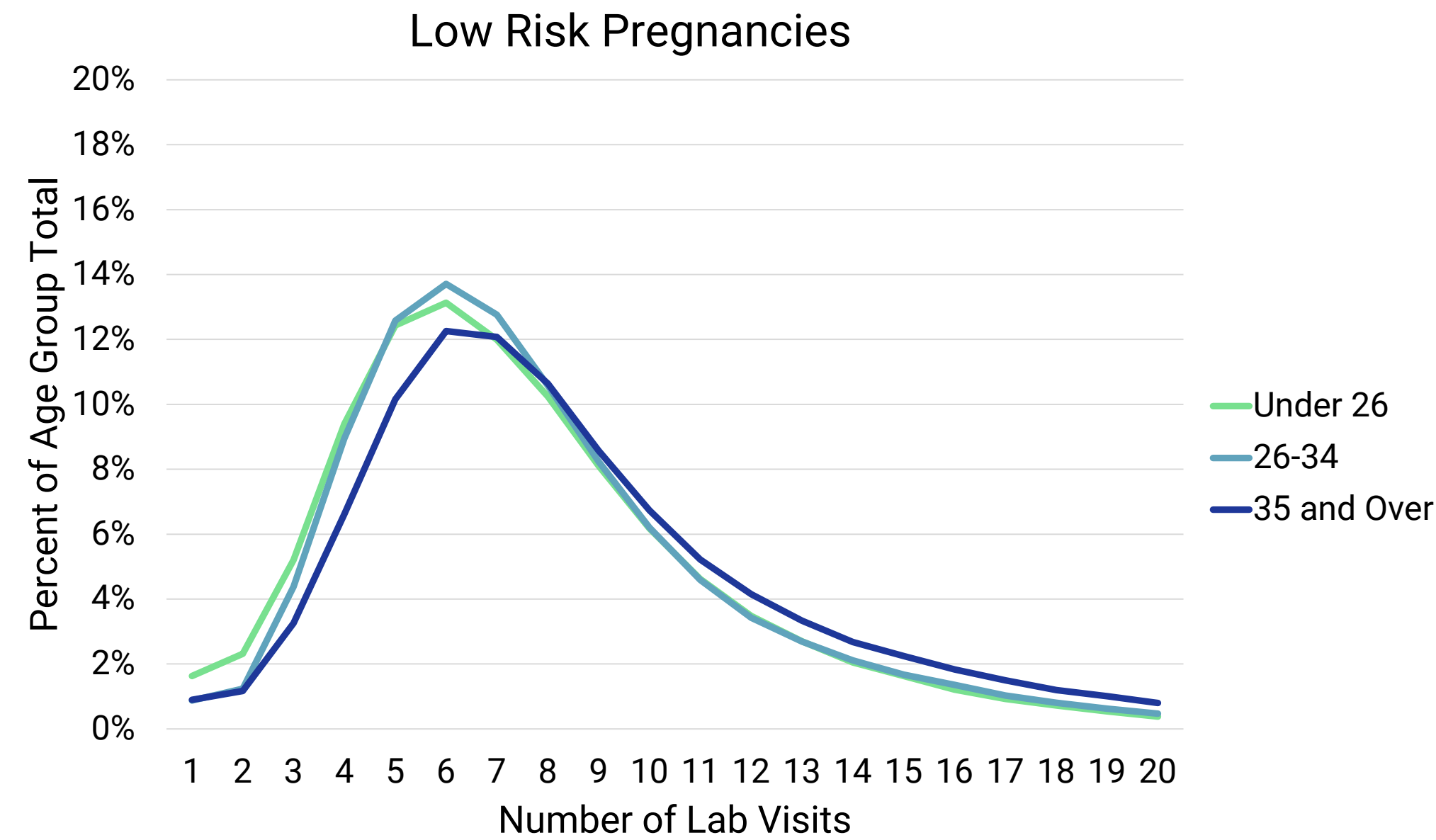
Lab Test Codes: From our population, we acquired the 100 most frequent CPT codes related to a lab visit

Ultrasound Codes: Presence of one of 23 CPT codes

Risk Categories: Patient risk was categorized by age categories (<26, 26-34, >35) or presence of an ex-ante ICD code relating to diabetes mellitus, hypertension, multiple gestation, obesity, and/or previous C-section.

Results

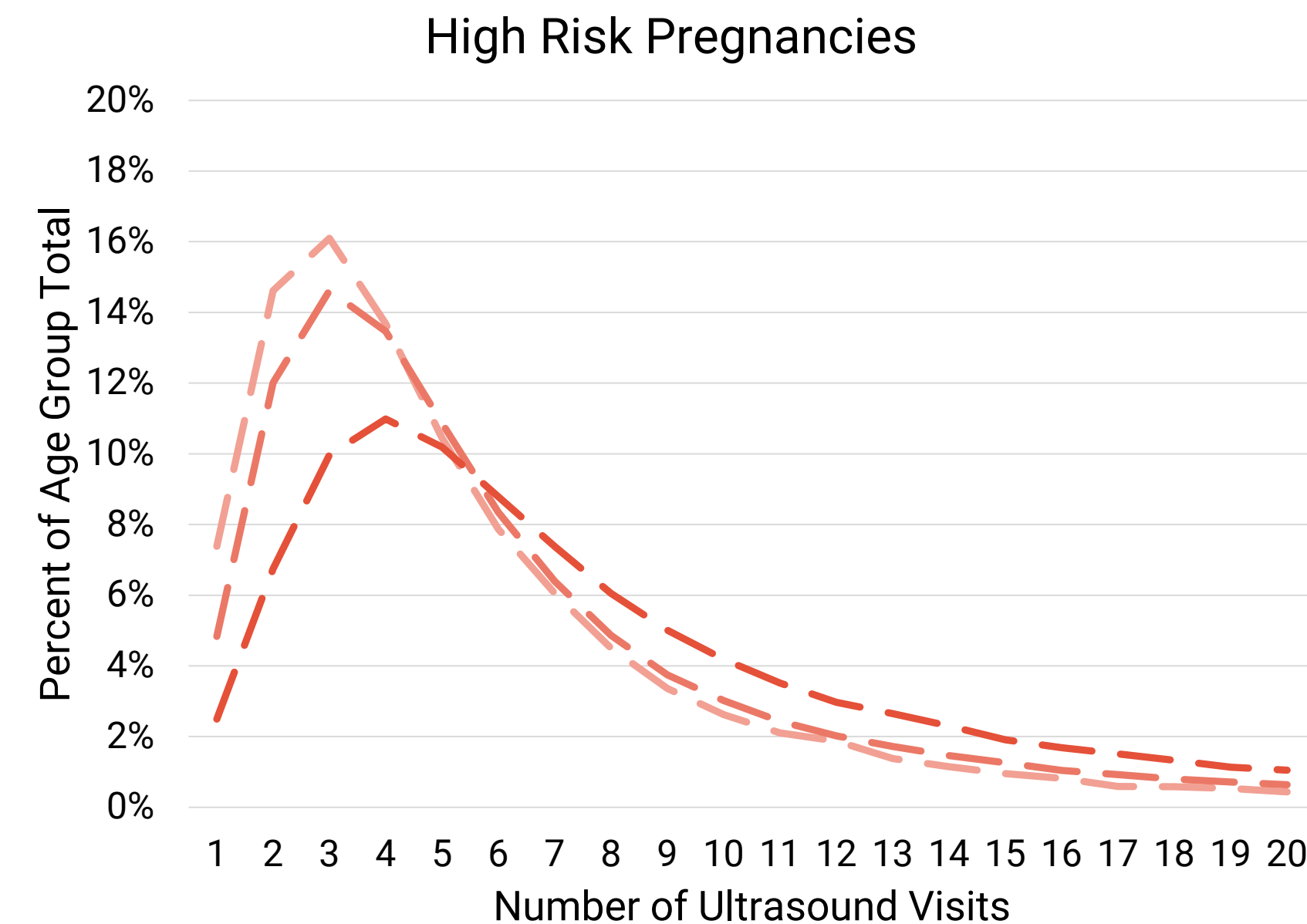
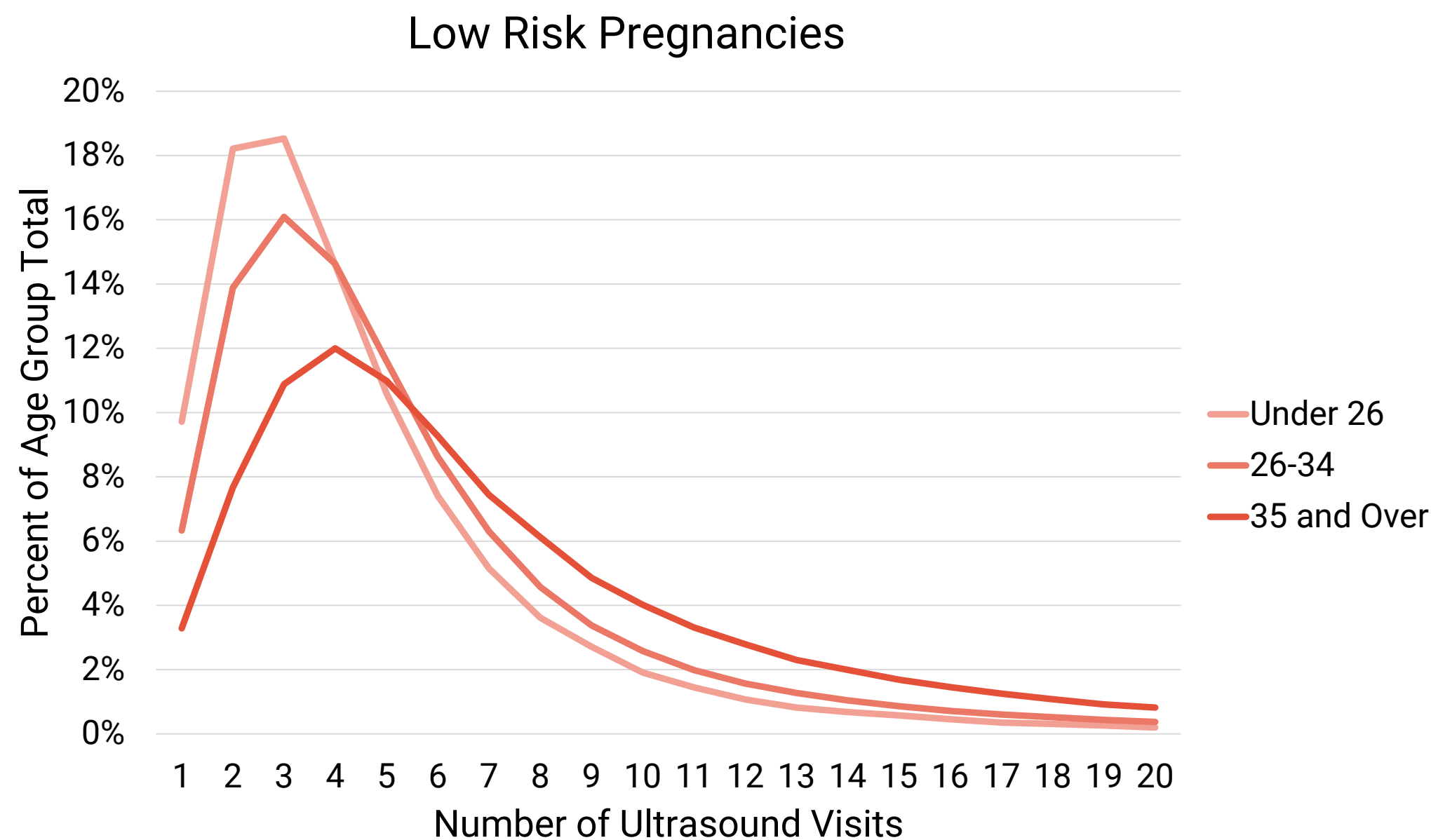
Lab Utilization Distribution



Utilization Descriptive Statistics

Risk	Age	Mean Lab Visits	Mean Ultrasound Visits
Low Risk	Under 26	7.8	4.9
	26-34	8.1	6.0
	Over 34	9.1	8.2
High Risk	Under 26	9.0	6.1
	26-34	9.0	7.1
	Over 34	9.8	9.1

Ultrasound Utilization Distribution



Discussion

Age categories had a greater effect on the number of mean visits for ultrasounds than labs

Presence of an ex-ante risk characteristic affected both ultrasounds and labs similarly

Large distribution in both types of prenatal care warrants further research