THE ECONOMIC IMPACT OF GESTATIONAL WEIGHT GAIN ACCORDING TO IOM GUIDELINES

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OBJECTIVE: We sought to estimate the costs and outcomes associated with keeping gestational weight gain within the 2009 Institute of Medicine (IOM) recommendations.
STUDY DESIGN: A decision analytic model was built using TreeAge software that compared the cost of gestational weight gain categorized by staying within versus exceeding the IOM guidelines in normal weight and obese women. We assumed the obesity prevalence from the most recent data in 2008 and applied to the estimated 4,000,000 million births per year. Outcomes included: gestational diabetes, preeclampsia, macrosomia (>4500g), small-for-gestational age, postterm delivery, cesarean delivery, postpartum weight retention, and child obesity.
RESULTS: Normal weight women who gained within the IOM recommendations incurred $2,502 less costs than normal weight women who exceeded the IOM recommendations. Obese women who gained within the IOM recommendations incurred $6,501 less costs than obese women who exceeded the IOM recommendations. With lower costs and better outcomes adhering to IOM guidelines for gestational weight gain is a dominant strategy. When applied to the U.S. population, gaining within IOM guidelines could lead to $12.7 billion dollars of savings. In addition, staying within the IOM guidelines would result in 76,400 fewer cesarean deliveries for normal weight women and 408,000 for obese women (see table).
CONCLUSION: From a societal standpoint, there is economic benefit to staying within the

IOM guidelines for gestational weight gain. With such an enormous potential impact on economic and clinical outcomes, further research into accomplishing these guidelines should be widespread.

TABLE: Perinatal Outcome Differences according gestational weight gain

	Normal Weight Women			Obese Women		
	Exceeding IOM	Within IOM	Difference in Outcomes	Exceeding IOM	Within IOM	Difference in Outcomes
Cesarean Delivery	328,880	249,480	79,400	761,600	353,600	408,000
Gestational Diabetes	76,400	76,400	0	253,600	190,400	163,200
Preeclampsia	76,400	45,840	30,560	326,400	108,800	217,600
Postterm Delivery	91,680	76,400	15,280	95,200	95,200	0
Macrosomia (>4500g)	91,680	30,560	61,120	259,400	83,600	174,800
Small-for-gestational age	91,680	137,520	-45,840	136,000	136,000	0
Postpartum Weight Retention	137,520	45,840	91,680	122,400	40,800	81,600