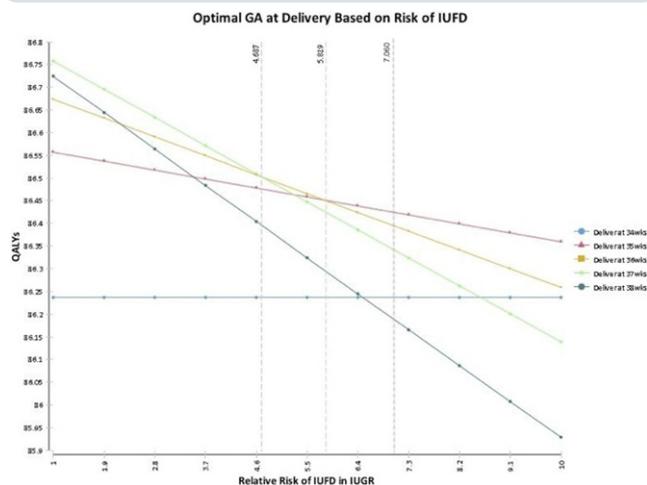


Dichorionic diamniotic twins in the setting of IUGR



Optimal delivery strategy with varying risk of IUFD

Planned GA of Delivery	Major Neurodevelopmental Disability /100,000	Neonatal Death/100,000	IUFD/100,000	QALYs
34	2,071	1,053	-	86.24477
35	1,275	731	555	86.42732
36	895	593	1,116	86.39456
37	661	435	1,732	86.33801
38	660	433	2,231	86.18300

As shown above, if the relative risk of IUFD in an IUGR twin is less than 4.54-fold greater than a non-IUGR twin, the optimal time of delivery increases to 37 weeks.

95 What is the optimal GA to deliver dichorionic diamniotic twins when one twin has a major cardiac anomaly?

Amy Doss¹, Keenan Yanit¹, Allison Allen¹, Brian Shaffer¹, Yvonne Cheng², Aaron Caughey¹

¹Oregon Health & Science University, Obstetrics & Gynecology, Portland, OR, ²University of California San Francisco, Obstetrics, Gynecology, & Reproductive Sciences, San Francisco, CA

OBJECTIVE: Optimal timing of twin delivery involves balancing the risk of IUFD against the potential morbidity of late preterm/early term birth, which becomes more challenging if one twin has a major cardiac anomaly, as this increases the IUFD risk and neonatal morbidity/mortality. We used decision analysis to estimate the optimal GA for delivery of dichorionic diamniotic (DCDA) twins when one has a cardiac anomaly.

STUDY DESIGN: A decision-analytic model was created using TreeAge to compare the outcomes of delivery at 34 through 38 weeks in a theoretical cohort of DCDA twin pregnancies when one twin has a major cardiac anomaly. Our baseline assumption was that a twin with a cardiac anomaly was at 10-fold increased risk of IUFD. Strategies involving expectant management (EM) until a later GA accounted for the probabilities of spontaneous delivery, indicated delivery, and IUFD during each successive week. GA associated risks of neonatal complications including major neurodevelopmental disability, perinatal and neonatal mortality. Baseline assumptions were derived from the literature. Total quality-adjusted life years (QALYs) were calculated, accounting for both neonatal and maternal utilities. Sensitivity analyses were conducted.

RESULTS: Our model showed that earlier GAs were associated with increased neonatal morbidity, but lower overall IUFD rates (Table). Balancing these outcomes, the optimal delivery strategy was EM until 38 weeks, which maximized the total QALYs. Sensitivity analysis showed that optimal GA at delivery was sensitive to the increased risk

of IUFD associated with major cardiac anomalies. EM until 38 weeks was the optimal strategy until the increased risk of IUFD in a cardiac anomaly twin increased beyond a relative risk of 21.6, when delivery strategies at earlier GAs became preferred.

CONCLUSION: Weighing the risks of IUFD against the outcomes of iatrogenic prematurity, the ideal GA to deliver DCDA twins in one with a major cardiac anomaly is 38 weeks.

Planned GA of Delivery	Major Neurodevelopmental Disability /100,000	Neonatal Death/100,000	IUFD/100,000	QALYs/1000
34	24,000	35,000	-	71,029
35	16,000	29,000	735	74,359
36	11,000	25,000	1,543	76,278
37	8,000	22,000	2,289	77,412
38	8,000	21,000	2,944	77,590

96 The effect of CenteringPregnancy Group prenatal care on enrollment in the post-partum family planning Medicaid waiver program

Nathan Hale¹, Amy Picklesimer², Deborah Billings³, Sarah Covington-Kolb²

¹University of South Carolina Arnold School of Public Health, Health Services Policy and Management, Columbia, SC, ²Greenville Hospital System University Medical Center, Obstetrics and Gynecology, Greenville, SC, ³University of South Carolina Arnold School of Public Health, Health Promotion, Education and Behavior, Columbia, SC

OBJECTIVE: To evaluate the effect of participation in group prenatal care (GPNC) compared with participation in traditional prenatal care (TPNC) on enrollment in the post-partum family planning waiver program among South Carolina women enrolled in Medicaid during pregnancy.

STUDY DESIGN: South Carolina Medicaid billing data was linked to birth certificate records to create a retrospective cohort of women delivering at a single hospital between May 2009 and May 2010. Women who chose to participate in GPNC were matched with women in TPNC using propensity scores. Multivariate logistic regression was used to examine differences in rates of participation in the Medicaid family planning waiver program by 3 months post-partum. **RESULTS:** 339 women participating in GPNC were compared with 602 in TPNC. With the exception of tobacco use during pregnancy, the propensity matched cohort was balanced across all descriptive covariates. The rate of enrollment in the family planning waiver was 57.8% (n=196) for GPNC, as compared with 43.7% (n=263) in TPNC (p<0.05). Multivariate analysis confirmed women in GPNC were more likely to enroll in family planning by 3 months post-partum (AOR 2.02, 95% CI 1.48-2.75).

CONCLUSION: This study found GPNC to be associated with improved enrollment in the family planning Medicaid waiver program. It expands the evidence base supporting GPNC by documenting improved transitioning into other important health service programs during the post-partum period compared to a rigorously matched cohort of women receiving TPNC. Previous studies have found participation in GPNC to be associated with improved birth outcomes. The current project evaluates ways GPNC participation could have a more lasting impact on women's health.