

Table 1. Detection of abnormality of fetal growth or amniotic fluid

	USE Every 2 weeks (N=112)	USE Every 4 weeks (N=116)	RR (95% CI)	P
Primary outcome	46 (41)	44 (38)	1.11 (0.78-1.60)	0.68
FGR	21 (19)	16 (14)	1.40 (0.74-2.67)	0.43
LGA—Estimate	17 (15)	15 (13)	1.19 (0.59-2.4)	0.68
Oligohydramnios	4 (4)	6 (5)	0.83 (0.22-3.0)	0.68
Polyhydramnios	4 (4)	7 (6)	0.69 (0.2-2.4)	0.68
CMV	29 (26)	26 (22)	1.22 (0.73-2.02)	0.37
GNM	16 (14)	14 (12)	1.2 (0.58-2.5)	0.68

Data presented as N (%)
 USE, ultrasound examination; RR, relative risk; CI, confidence interval
 FGR, fetal growth restriction (estimated fetal weight <10th percentile for gestational age)
 LGA, large for gestational age (estimated fetal weight >90th percentile for gestational age)
 Oligohydramnios (AFI < 5.0 cm or MVP < 2.0 cm); Polyhydramnios (AFI > 24.0 or MVP > 8.0 cm)
 CMV, composite maternal morbidity: Chorioamnionitis, diabetic ketoacidosis, transfusion, wound infection, venous thromboembolism, admission to intensive care unit or death
 GNM, composite neonatal morbidity: Apgar score < 5 at 5 min, umbilical arterial pH < 7.00, hyperbilirubinemia, intraventricular hemorrhage grade III or IV, periventricular leukomalacia, intubation for over 24 hours, necrotizing enterocolitis grade 2 or 3, stillbirth or death within 28 days of birth

Table 2. Detection of abnormal fetal growth

	Sensitivity	Specificity	PPV	NPV	LR (+)	LR (-)
Small for gestational age						
USE Every 2 weeks	86% (72-94%)	88% (78-94%)	83% (68-92%)	91% (81-96%)	7.3 (3.8-14.2)	0.2 (0.1-0.3)
USE Every 4 weeks	82% (67-91%)	90% (80-96%)	84% (69-93%)	89% (79-95%)	8.3 (4.1-17.1)	0.2 (0.1-0.4)
Large for gestational age						
USE Every 2 weeks	32% (19-48%)	94% (85-98%)	76% (50-92%)	71% (60-79%)	5.6 (1.9-16.1)	0.7 (0.6-0.9)
USE Every 4 weeks	36% (22-53%)	96% (88-99%)	82% (56-95%)	75% (65-83%)	9.2 (2.8-30.2)	0.7 (0.5-0.8)

PPV, positive predictive value; NPV, negative predictive value; LR, likelihood ratio; USE, ultrasound examination

4 Reducing time to treatment for severe maternal hypertension through statewide quality improvement



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OBJECTIVE: The Illinois Perinatal Quality Collaborative (ILPQC) launched a Severe Maternal Hypertension (HTN) quality improvement (QI) initiative in May 2016 aiming to reduce maternal morbidity associated with HTN in 110 participating hospitals by reducing time to treatment of HTN and standardizing patient education and follow up at discharge. The objective of this analysis is to assess the improvement in these key process measures associated with HTN identification and treatment in the first full year of the initiative through June 2017.

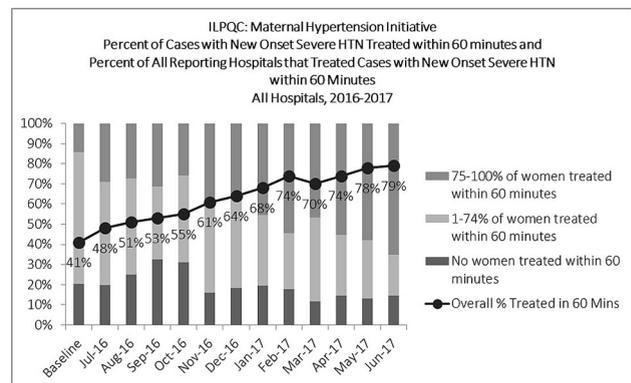
STUDY DESIGN: Participating hospitals recorded data on key process measures for all cases of new onset severe HTN (>160 systolic or >110 diastolic) in pregnancy to 6 weeks postpartum in the ILPQC Data System monthly. ILPQC facilitated collaborative learning opportunities, rapid-response data, and quality improvement support. Baseline data on key process measures from prior to the initiation of the QI initiative (Oct.-Dec. 2015) were compared to data one year into the initiative (June 2017).

RESULTS: 102 hospitals entered any data and an average of 79 hospitals entered data each month with a total of 9818 cases of severe maternal HTN reported. Hospital characteristics are available for 98 hospitals (Tab.). The percentage of new onset severe HTN cases treated within 60 minutes increased from 41.5% (baseline) to 78.9% (June 2017) (Fig.). The percentage of hospitals with 75-100% of women treated within 60 minutes increased from 14% to 65% (Fig.). The percentage of cases: receiving preeclampsia education at discharge increased from 37% to 81%; scheduling follow up appointments within 10 days of discharge increased from 53% to 75%; with debrief after event increased from 2% to 44%.

CONCLUSION: Women with severe HTN are often not treated within the recommended 60 minutes. Results suggest that a statewide QI effort, including collaborative learning, rapid response data and QI

support, can reduce time to treatment of severe HTN with antihypertensives, increase provider-nurse debriefs and patient education and follow-up appointments at discharge across IL hospitals serving diverse populations in diverse settings.

Hospital Characteristic	Category	% of Hospitals Participating in ILPQC HTN QI (n=98)
Urbanization	Urban	77%
	Rural	23%
Birth Volume	Low (<500)	25%
	Low to Moderate (500 to <1000)	20%
	Moderate to High (≥1000 to <2000)	33%
	High (≥2000)	22%
Non-Hispanic White	Low to Moderate (<60%)	43%
	High (≥60%)	57%
Medicaid Payment	Low to Moderate (<60%)	69%
	High (≥60%)	31%
WIC Recipients	Low to Moderate (<60%)	77%
	High (≥60%)	23%



5 Valnoctamide rescues CMV-induced deafness in a murine model



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OBJECTIVE: Congenital cytomegalovirus (CMV) is the leading infectious cause of non-hereditary sensorineural hearing loss in newborns and children. No treatments are currently recommended for