


KEEPING FAMILIES TOGETHER: USING SIMULATION TO EMPOWER PHYSICIANS AND REDUCE ANTENATAL TRANSFERS IN RURAL NEWFOUNDLAND

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ABSTRACT: Poster (1I)

- Purpose:** A 2012 study revealed that rural Newfoundland physicians considered themselves to be less competent and confident in their neonatal resuscitation skills in comparison to their urban counterparts due to their lack of practice, both real and facilitated (i.e. simulation). This lack of confidence is reflected in the high antenatal transfer rate from rural Eastern Newfoundland facilities to the Health Sciences Centre (HSC) in St. John's. All secondary and tertiary health care facilities within Eastern Newfoundland are equipped to manage most obstetrical issues that occur in women that are at least 35 weeks pregnant, yet between 2012 and 2014, nearly half (43%) of all antenatal transfers from Eastern Newfoundland to the HSC were women who were 35 weeks (or more) pregnant. There is an ample amount of evidence to show that simulation improves physician competence in neonatal resuscitation, but very few studies have investigated whether or not simulation improves confidence, despite the fact that the literature shows that confidence is just as important as competence for physicians when deciding whether or not they should transfer pregnant patients. Therefore, our goal was to determine if simulation could improve not only physician competence, but also confidence.
- Methods:** To test this, we would ideally provide regular (quarterly), simulation-based neonatal resuscitation training sessions to rural Eastern Newfoundland family physicians over a two year period to see if our simulation sessions improved physician confidence, and as a consequence, resulted in fewer antenatal transfers. However, due to resource constraints, we instead compared first year family medicine residents' confidence in neonatal resuscitation before and after a quick (45 min), simulation-based training session on umbilical venous catheterization (UVC), a key skill in neonatal resuscitation.
- Results:** Our results showed that first year family medicine residents' confidence in delivering/caring for neonates born at 35 weeks or more, in a rural setting, had significantly improved with our simulation-based training session.





Conclusion: Based on this, it is not unreasonable to suggest that regular, simulation-based training could improve rural family physicians' competence and confidence, which would result in fewer antenatal transfers, allowing families to stay together during this special time.