

## **Using evidence to design, implement and evaluate a NICU lactation programme: The Rush Mothers' Milk Club as exemplar**

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An abundance of evidence supports the feeding of high-dose, long-exposure mothers' own milk (MOM, excludes donor human milk) for premature and immunologically compromised infants that are cared for in the neonatal intensive care unit (NICU).<sup>1-5</sup> However, less well-known is how to translate this evidence into actionable policies and procedures that inform NICU best practices so that infants and mothers benefit from this evidence. The Rush Mothers' Milk Club, an evidence-based lactation/MOM feeding program in the 72-bed, level III NICU at Rush University in Chicago, was established in 1996 with a baseline lactation initiation rate of 17% of infants' mothers.<sup>6</sup> This presentation chronicles the integration of evidence, interventions and translational research (study and evaluation of interventions) that resulted in the current 98% lactation initiation rate and citations of excellence from multiple governmental and philanthropic organizations.<sup>7</sup> Special emphasis throughout will be on the use of a framework that identifies barriers to integration of evidence and then designing translational research and/or quality improvement initiatives to modify these barriers. Included in this presentation will be examining barriers to: 1) the initiation of lactation in NICU mothers, including physician messaging;<sup>8,9</sup> 2) mothers' receiving consistent evidence-based information from all NICU care providers;<sup>6,10-14</sup> 3) NICU-specific peer support for MOM provision;<sup>15-18</sup> 4) effective, efficient, comfortable and convenient MOM expression and provision;<sup>19-24</sup> 5) achieving comparable lactation outcomes in primarily African American mothers who are 4 times more likely than Caucasian mothers to deliver very low birthweight (VLBW; <1500 g birthweight) infants but less likely to initiate and maintain lactation;<sup>14,25-27</sup> 6) high-dose, long-exposure MOM feedings that are modifiable with lactation technologies such as test-weighing, creamatocrit and nipple shields;<sup>28-34</sup> 7) mothers' receiving institutional support for lactation due to lack of economic investment in a MOM acquisition infrastructure in the NICU.<sup>1-5,35-38</sup> This information will be applicable to global initiatives focused on improving the use of MOM in the NICU population.

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