- 31. Braid S, Bernstein J. Improved cognitive development in preterm infants with shared book reading. Neonatal Netw 2015;34:10-7.
- **32.** Hepper PG, Shahidullah BS. Development of fetal hearing. Arch Dis Child Fetal Neonatal Ed 1994;71:F81-7.
- 33. Levesque BM, Tran A, Levesque E, Shrestha H, Silva R, Adams M, et al. Implementation of a pilot program of Reach Out and Read(R) in the neonatal intensive care unit: a quality improvement initiative. J Perinatol 2018;38:759-66.

50 Years Ago in The Journal of Pediatrics

Is Gowning Necessary in the Nursery?

Evans HE, Akpata S, Baki A. Bacteriologic and clinical evaluation of gowning in a premature nursery. J Pediatr 1971; 78:883-6.

The report by Evans et al described a single-center study testing whether routine caregiver gowning in a premature nursery influenced the developing bacterial flora and the acquisition of hospital-acquired infections (HAIs) in babies housed in enclosed incubators. Alternating 3-month periods were compared, one in which gowning was uniform and the other in which the caregiver only hand-washed when entering the incubator. No effect on either the flora or HAI rates was demonstrated.

HAIs, including those in newborn intensive care units, are a significant source of morbidity, mortality, and costs in the acute care environment. Since the publication of the article by Evans et al, the field of hospital quality improvement has blossomed in an attempt to better healthcare outcomes, including HAI rates. It is now clear that the success of interventions such as those described in Evans et al depends on the recognition that they are applied in multimodal, complex systems. Perhaps the most frequently used framework to develop and study healthcare quality initiatives is the Model for Improvement. This model, driven by successive heuristic plan-do-study-act cycles, was developed through the 1990s and has been used by many quality and safety departments now routine in American hospitals. Individual center efforts have been further enhanced by incorporating them into multicenter quality networks. These networks are built on infrastructures at both the local and national levels. National collaboration organizations such as The Children's Hospitals Solutions for Patient Safety leverage the leadership and data from local quality activities to set national standards and benchmarks aimed at achieving measurably improved outcomes for the entire population. The adoption of quality frameworks such as the Model for Improvement by individual centers, and the participation by hospitals in quality collaboratives, have identified additional factors, such as frequent communication and feedback regarding outcomes to healthcare workers and other hospital stakeholders, the development of a safety culture, and transparent and nonpunitive disclosure of medical errors, as dynamics that promote improved outcomes and explain performance variation from center to center. Since the time of Evans et al, we have learned much about the importance of the environmental influences surrounding quality interventions, and one wonders what their efforts would have yielded had they been applied today.

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