Does the Health Care System Affect the Length of Hospitalization of Preterm Infants?

Yes, and highly integrated health care delivery systems may provide the best value, according to a study of differences in lengths of hospitalization of moderate preterm infants — those with a gestational age of 30–34 weeks at birth — cared for by Kaiser Permanente's Medical Care Program in Northern California and by the National Health Service (NHS) in the United Kingdom.

"Infants in California were discharged home on average 4 days earlier. This equates to a reduction in length of stay of nearly 20 percent, a significant gain in efficiency," says Jochen Profit, M.D., M.P.H., assistant professor of pediatrics at Baylor College of Medicine.

Neonatal intensive care units (NICU) in Massachusetts, which lack integrated systems, did not have shorter lengths of stay relative to the United Kingdom.

Moderate preterm infants are an important group of infants because they represent nearly half of all admissions to the NICU. They make an ideal study population for cross-national comparisons because, on average, they are quite healthy and spend most of their hospitalization learning to regulate their body temperature, feed and grow. Thus, the influence of care practices and patient characteristics on the length of hospitalization may be reduced. Finally, all infants at this gestational age are admitted to a NICU, allowing for analysis of the entire population.

This is an area of policy interest because Kaiser Permanente and the NHS, differ in important ways that may affect resource utilization. Kaiser Permanente is known for its high degree of care integration, including standardized treatment protocols and care coordination between specialists and generalists, both of which have been associated with reductions in length of stay. Within the NHS, care integration is much less reliable, even though, in theory, it is well-positioned to achieve a high degree of care coordination. One explanation for Kaiser Permanente's success in managing care for its members may be that such strategies give it an edge in a highly competitive marketplace where patients can choose their health plan and provider affiliations on a yearly basis. By contrast, hospitals in the NHS are not exposed to such competitive pressures.

These findings support the previous literature suggesting that Kaiser Permanente patients get a better value for their money independently of patient characteristics and socioeconomic status. This research may carry lessons for patients in other U.S. states, including Texas, where greater care integration could improve the efficiency of care delivery.

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