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Sergio Ambiado

QUALITY IMPROVEMENT ARTICLE

Check for updates

Diagnosis and management of cardiopulmonary events in very low birth weight infants close to discharge: a quality improvement initiative

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- Falta de estandarización en diagnóstico y manejo de Eventos cardiopulmonares centrales, obstructivos o mixtos pueden prolongar la estadía
- Objetivo: Incrementar precisión en dg de ECP y disminuir estadía en 10% en pret en 1 año, basándose en estadía 46 días reportado en paper (8)
- Método: Basado en evidencia se desarrolló algoritmo para identificar el tipo de ECP, determinar manejo y evaluar registros de monitor
- Resultados: Identificación de apnea central aumentó de 15% a 39% ($p < 0,001$). Estadía se redujo en 26% , 52 días vs 39 días
- Conclusión: Post implementación mejora precisión en dg de apnea central y disminuye estadía

Estimating Length of Stay by Patient Type in the Neonatal Intensive Care Unit

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Abstract

Objective Develop length of stay prediction models for neonatal intensive care unit patients.

Study Design We used data from 2008 to 2010 to construct length of stay models for neonates admitted within 1 day of age to neonatal intensive care units and surviving to discharge home.

Results Our sample included 23,551 patients. Median length of stay was 79 days when birth weight was < 1,000 g, 46 days for 1,000 to 1,500 g, 21 days for 1,500 to 2,500 g, and 8 days for $\geq 2,500$ g. Risk factors for longer length of stay varied by weight. Units with shorter length of stay for one weight group had shorter lengths of stay for other groups.

Conclusion Risk models for comparative assessments of length of stay need to

Keywords

- ▶ length of stay
- ▶ neonatal intensive care unit

Método

- Criterios de inclusión

- < 35 sem
- Sin cafeína
- Sin O2

Se excluyen

- O2 al alta
 - Fallecidos
 - Transferidos a otro centro
 - Transferidos para cirugía
-
- 2014 Enero- Abril: basal
 - 2014 Mayo a 2015 Mayo:
 - intervención revisando ECP en monitor y usando algoritmo de manejo
 - Estandarizando días de monitorización libre de apneas, 8 días en < 28 sem y 5 días en > 28 sem



Table 1. Patient demographics.

	Prior to algorithm N = 40	During algorithm N = 185	P value
Mean GA in weeks (SD)	29 0/7 (2.3)	29 3/7 (2.6)	0.23
Mean Birthweight in grams (SD)	1257 (452.6)	1388 (504.3)	0.13
Corrected GA at countdown process	34 2/7	34 2/7	0.99
% Received caffeine	78	76	0.81
Gender (%female)	45	44	0.93

GA gestational age, SD standard deviation.

Table 2. Process, outcome, and balancing measures.

	Prior to algorithm N = 40	During algorithm N = 185	P value
Identification of Central Apnea N (%)	6 (15%)	73 (39%)	<0.01
Diagnosis of Dysphagia N (%)	7 (18%)	25 (14%)	0.51
Diagnosis of GER N (%)	17 (43%)	55 (30%)	0.12
D/c Home on Thickened Feeds N (%)	15 (38%)	70 (38%)	0.97
Readmission Rate N (%)	3 (8%)	16 (9%)	0.81

GER gastroesophageal reflux, D/C discharge.