Improving Documentation of Fetal Heart Rate Tracings

The Problem

Documentation is a powerful tool for fostering patient safety and mitigating medical-legal risk. The Betsy Lehman Center for Patient Safety and Medical Error Reduction recommends the adoption of the NICHD consensus guidelines for documenting electronic fetal heart rate monitoring. Included is a three-tier system of classifying tracings using fetal heart rate baseline, variability and accelerations and decelerations. Although the goal of the system is to more meaningfully assess the predictive value of monitoring and to allow evidence-based clinical management of suspected intra-partum fetal compromise, clinician compliance with the documentation system was poor.

Aim/Goal

A multidisciplinary educational program designed to stimulate resident physician, attending physician and nursing compliance with documentation recommendations for fetal heart rate monitoring in accordance with the NICHD guidelines.

The Team

- Dr. Toni Golen, OBGYN, PI
- Dr. Mary Vadnais OBGYN/MFM
- Tracey Pollard, RN, OBGYN
- Barbara Stabile, RN
- Departments of Obstetrics, Anesthesiology and Neonatology
- The OB Leadership Committee

The Interventions

- Review charts to determine prior compliance
- Literature review to determine techniques likely to change practices
- Development of teaching tools: pocket cards, posters
- Didactics, email announcement, access to computer teaching module
- Six weeks of personal assistance, direct feedback
- Review charts to determine effectiveness of program

The Results/Progress to Date

	Before No. (%)	After No (%)	P value
Charts reviewed	41	41	
SOAP Notes reviewed	188	171	
Physician compliance:			
Notes completely compliant	1 (0.5)	154 (90)	<0.001
All elements but missing category*	113 (60)	12 (7)	<0.001
Category* but missing elements	0 (0)	3 (2)	0.107
Missing elements & missing category*	74 (39)	2 (1)	<0.001
Nursing compliance:			
Notes completely compliant	0 (0)	149 (87)	<0.001

**The term "category" is the newest descriptor introduced by the NICHD, and is used to objectively describe a clinician's assessment of a tracing.*

Lessons Learned

A multifaceted, multi-disciplinary, evidence-based educational program increased compliance with NICHD definitions and three-tier category system for electronic fetal heart rate monitoring documentation. Evidence-based strategies and a multi-disciplinary approach can yield high compliance in adoption of guidelines and result in practice change.

Next Steps

- Follow-up to determine long-term compliance and the need for additional education
- Study underway to determine the effect of category documentation on Cesarean delivery rate
- Continued auditing by the Quality Assurance Committee in the department of Obstetrics and Gynecology will provide continuous feedback to providers.

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