

Continuing Medical Education for Primary Care Physicians: A Practical Online Course in Expanded Newborn Screening

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INTRODUCTION

SUMMARY of PROJECT PROPOSAL:

This proposal will address two areas of priority of the Heartland Genetics and Newborn Screening Collaborative:

- Education
- Service

This is a proposal to develop a Continuing Medical Education (CME) website for education of primary care providers on the topic of expanded newborn screening (NBS), with features targeting specific NBS issues for the Heartland states. This website will be established on the University of Oklahoma School of Medicine Continuing Medical Education website, and the physicians will be able to take the course online and obtain CME credit. Funds were requested to cover a reduction or elimination of CME fee for physicians in the Heartland states on a "first-come, first-served" basis.

Collaborations with other states include links to the NBS websites of all the Heartland states Departments of Health, as well as other useful NBS links. Four Heartland states have also agreed to link to this site or announce it in NBS materials. The OUHSC CME site permits anyone to access the online courses; the fee is only paid if CME credit is desired by the user. Therefore the major goal is for this NBS course to become a readily-available resource for providers who are looking for additional information.

PROJECT PLAN:

Specific Aims

PHYSICIAN EDUCATION in NEWBORN SCREENING:

I. To provide education on expanded newborn screening for clinical application

- An online course will provide easy access to all providers
- CME credits offered can contribute to their total CME requirements for state licensure.
- Information will be geared toward primary care practitioners who provide the majority of newborn care.

II. Regional service:

- Project will target physicians in the Heartland states of Oklahoma, Arkansas, Nebraska, Iowa, Missouri, South Dakota, and North Dakota. However, the materials will be open to any U.S. physician.

Background and Significance:

- Expanded newborn screening did not reach national prominence until the 1990s, and many primary care providers have no formal education in newborn screening of inborn errors of metabolism beyond phenylketonuria and galactosemia.
- Many states have started screening mandates for these additional disorders, including Iowa, Missouri, Nebraska, North Dakota, and South Dakota, with Oklahoma starting with MCAD deficiency in 2006.
- The American College of Medical Genetics, in collaboration with HRSA, has recommended a uniform testing panel of 29 disorders.
- Recent reports showed that NBS education targeted to the medical home is not consistent in all states, and up to 28% of primary care providers do not actively confirm NBS results.
- Although online CME is relatively new in media-based CME, several recent studies suggest it may be comparable or superior to live lecture CME. Few websites offer online CME for NBS education.

PROJECT DESIGN AND METHODS:

The website will consist of educational materials on the subjects below. As much as possible, existing materials from HRSA-funded and other open-access federal sources will be used as links or downloaded files.

Educational materials on:

- Expanded NBS and tandem mass spectrometry for Inborn Errors of Metabolism (IEM)
- Information on IEM
 - Abnormal NBS profiles for each disease
 - Natural history of disease with and without treatment
 - Genetics information
 - Treatment and referral protocols, such as:
 - ACT sheets (developed by American College of Medical Genetics and HRSA)
 - STAR-G Professional Factsheets (HRSA-funded, newbornscreeninginfo.org)
- Chronic management information, including role of metabolic consultant and coordination with medical home
- Links to Heartland states Departments of Health websites for contact information, lists of disorders screened, and state-specific follow-up protocols
- Links to authoritative NBS and IEM sites such as the National Newborn Screening and Genetics Resource Center

Educational materials on:

- Although emphasizing IEM, links for other genetic disorders detected by newborn screening will be provided
- Open access to any user; those physicians desiring CME credit will take a short case-based quiz and apply for CME credit
- Project funds awarded will reduce or eliminate the usual CME fee to encourage choice of this tutorial over other CME courses

COLLABORATING STATES:

To assist with announcement of the NBS CME course to Heartland physicians, four state Departments of Health have agreed to collaborate, either by announcing it on their website or other NBS materials, or providing a direct link:

- Iowa State Newborn Screening Program, Iowa Department of Health
- Missouri State Newborn Screening Program, Missouri Department of Health
- Nebraska State Newborn Screening Program, Nebraska Department of Health
- Oklahoma State Newborn Screening Program, Oklahoma Department of Health

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- STAR-G Professional fact sheets. Accessed 3/2006 @ www.newbornscreeninginfo.org/pro/facts.html