



To:  
The Honorable Laurie Monnes Anderson  
Senate Health Care and Human Services Committee

Subject:  
SB 172, directs Oregon Health Authority to adopt rules requiring all infants born at birthing facilities located in this state to be screened for congenital heart defects

February 14, 2013

Members of the Senate Health Care and Human Services Committee,

I am a pediatrician at Oregon Health & Science University and I am here today because I have a particular interest in pulse oximetry screening in newborns to detect critical congenital heart disease.

As you may know, congenital heart disease is the most common birth defect affecting an estimated 400 babies in Oregon annually. Approximately 100 of those are considered critical and require intervention early in life. It is estimated that 25% of newborns with critical heart defects leave the hospital undiagnosed, which can lead to poorer outcomes. Pulse oximetry screening is an effective, cheap, and non invasive test that can diagnose critical heart defects earlier. Therefore, I am an advocate for universal pulse oximetry screening.

Over the past year, I launched an educational outreach program to encourage pulse oximetry screening in Oregon and surrounding states. Through this process I collected data regarding the current status of pulse oximetry screening and the barriers to implementing screening programs. I surveyed all 50 nurseries in Oregon and received responses from 75% of them this past Fall. At that time, nearly 60% of nurseries were performing universal pulse oximetry screening, and nearly 15% were planning to screen. I am collecting follow up data and now have data for 42 (84%) of the nurseries. Preliminary data shows that 74% of these nurseries are now screening with another 7% planning to screen. Some of this increase is directly related to my educational outreach program. This rapid increase in universal pulse oximetry screening in nurseries is very encouraging, especially considering the American Academy of Pediatrics endorsed universal screening just over a year ago.

I know of a few newborns that have been diagnosed in the last year in Oregon solely due to pulse oximetry screening. I have also cared for infants that were diagnosed with



their critical heart defect late and have seen the unfortunate complications they suffered due to the late diagnosis. I therefore support universal pulse oximetry screening, which is quickly becoming standard practice in our state.

I have some concerns that should be addressed by Oregon Health Authority. If this bill were to pass, I would like to see a system in place that encourages evidenced-based screening, follow up and monitoring for quality assurance. I would also like to know if OHA has resources for smaller birthing centers such as those nurseries that don't have access to echocardiography, the test required if an infant has a positive screen. Lastly, my research over the last year has shown that education is a powerful tool to ensure proper screening. Does OHA have the resources to educate additional staff such as nurses or midwives overseeing newborn care outside of a hospital?

Thank you for your time. Please contact me if you have any questions. I am also willing to share my knowledge of pulse oximetry screening and my data with Oregon Health Authority if it would be of any assistance.

Heather Carpentier, MD  
carpenth@ohsu.edu