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February 14, 2013

Senator Laurie Monnes Anderson, Chair  
Senate Committee on Health and Human Services

Chair Monnes Anderson and Committee Members:

Legacy Health supports SB 172. We believe that critical congenital heart disease (cCHD) screening should become the third mandated universal newborn screening program. A strong case can be made for the addition of cCHD screening based on convincing evidence, strong, multi-organizational support, and published evaluation of the cost-benefit analysis.

Legacy implemented this test almost a year ago at two of our five Family Birth Centers – Legacy Emanuel Medical Center and Legacy Salmon Creek Medical Center. At the beginning of this month, Legacy implemented this screening at our three remaining Family Birth Centers – Legacy Meridian Park Medical Center, Legacy Mount Hood Medical Center, and Legacy Good Samaritan Medical Center.

In the last year, we have detected one well baby with a critical heart defect. Undoubtedly, that baby will have a much better outcome as her condition was detected prior to discharge from the hospital after birth and underwent surgery a few days later. Based on the number of deliveries at each of our sites, we believe as many as 5-6 cases of cCHD could be detected each year that otherwise would go undetected.

A body of knowledge supports the effectiveness of routine measurement of oxygen saturation in the asymptomatic newborn to detect congenital heart defects that might otherwise be missed prior to discharge from the hospital. Babies with undiagnosed cCHD may return emergently to the hospital, often presenting in crisis.

Researchers have studied a combined total of over 220,000 newborns, and have concluded that, while routine clinical examination for cCHD is often ineffective, the routine screening of all newborns with oxygen saturation with pulse oximetry before discharge from the birth facility is easy, noninvasive, and can save lives (Thangaratinam et al, 2012; Kemper et al, 2011). Research also shows the test is very accurate and highly specific for detecting cCHD. The false positive rate is very low, estimated to be 0.14%.

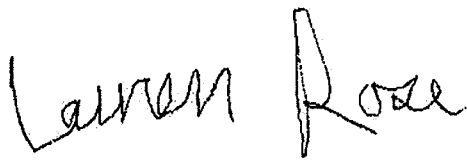
According to a report by Kemper et al (2011), the cost of pulse oximetry screening is low (\$5-\$10 per baby), takes only a few minutes of nursing time, and is offset by avoided costs

of care. A group in Sweden calculated the health care cost savings by preventing one case of complications of circulatory collapse from undiagnosed cCHD. They estimate that emergency cardiac surgical care for the compromised newborn with cCHD, as opposed to those who received early detection and surgical intervention while physiologically stable, may exceed the cost of screening two thousand newborns (de-Wahl Granelli, 2009).

In September 2010, the US Health and Human Services Secretary's Advisory Committee on Heritable Disorders in Newborns and Children recommended adding cCHD screening to the current newborn universal screening regimen for inborn errors of metabolism and hearing loss. We believe Oregon should join the nine other states that have mandated newborn screening for cCHD.

As an advocate of good health for all, Legacy Health asks you to support SB 172.

Sincerely,

A handwritten signature in black ink that reads "Lauren Rose". The signature is written in a cursive, flowing style.

Lauren Rose, MD  
Medical Director, Legacy Health Newborn Nurseries  
Pediatric Hospitalist, Randall Children's Hospital

## References

Centers for Disease Control and Prevention (2011). Pulse oximetry screening for critical congenital heart defects. Retrieved October 22, 2011 from <http://www.cdc.gov/ncbddd/pediatricgenetics/CCHDscreening.html>

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