GENERAL ASSEMBLY OF NORTH CAROLINA

Session 2013

Legislative Fiscal Note

BILL NUMBER: Senate Bill 98 (First Edition)

SHORT TITLE: Require Pulse Oximetry Newborn Screening.

SPONSOR(S): Senators Brock, Pate, and Stein

FISCAL IMPACT

Yes () **No (X)** **No Estimate Available ( )**

	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
REVENUES:					
EXPENDITURES:	**No fiscal impact**				
POSITIONS (cumulative):					

PRINCIPAL DEPARTMENT(S) & PROGRAM(S) AFFECTED: NC DHHS Divisions of Medical Assistance and Public Health; State Health Plan

EFFECTIVE DATE: This act is effective when it becomes law

BILL SUMMARY: Amends GS 130A-125 to require the Newborn Screening Program to include a pulse oximetry screening for each newborn in order to detect congenital heart defects. Directs the Commission for Public Health to adopt temporary and permanent rules to include pulse oximetry screening in the Newborn Screening Program. Specifies issues that must be addressed by the rules governing pulse oximetry screening.

ASSUMPTIONS AND METHODOLOGY: Preliminary survey data by the NC Chapter of the American Heart Association (57 of 82 hospitals responding – survey is still in progress) indicate that more than half of North Carolina hospitals currently screen newborns using pulse oximetry. Although the UNC hospitals have not yet responded to the survey, it appears that it is current UNC policy to universally screen newborns using pulse oximetry. Any fiscal impact of the proposed legislation for the State would be due to any new training and reporting requirements in the Division of Public Health and any impact to payments by Medicaid or the State Health Plan.

Division of Public Health (DPH)
The Department of Health & Human Services (DHHS) reported that the implementation of newborn screening pulse oximetry as described in the draft legislation would have no fiscal impact on the Division of Public Health. DHHS states that it will be the responsibility of birthing hospitals and local providers to (a) ensure that the required screening is made available to all newborns; (b) ensure appropriate follow-up when a positive screen is obtained; (c) report information on positive screens to a centralized database; and (d) provide continuing education to appropriate staff to ensure proficient screening. Thus, the Division of Public Health (DPH) does not anticipate any additional costs associated with the bill.

The proposed legislation directs that the Commission for Public Health shall adopt rules for the screening and for a centralized database. It is anticipated that the proposed rulemaking can be accomplished with existing staff resources.

Division of Medical Assistance (DMA)
Screening Costs: The Division of Medical Assistance (DMA) does not anticipate new costs to Medicaid due to the screening itself. Newborn screening is reimbursed by Medicaid based on specific billing codes within the Diagnosis Related Groups (DRGs). While the proposed legislation would add an additional element to the newborn screening, Medicaid reimbursement to hospitals for the overall newborn screening would be covered within the current DRGs. Medicaid would not reimburse physicians an additional amount for either performing or interpreting pulse oximetry.

Potential Costs Due to Positive Screening Results: In North Carolina in 2011 there were 120,403 live births. Data indicates that approximately 1 in 500 newborns will have a positive screen using pulse oximetry (Dr. Alex Kemper, Duke University). The Department estimates that of the 120,000 screenings performed annually, around 170 would be false positives.

Current data indicates that follow up echocardiograms reveal that 75% of positive pulse oximetry screenings are false and show that the infant's heart is healthy. In these cases, no further screening or follow up is required. A screening that tests positive for congenital heart disease would be followed by an inpatient echocardiogram test, a test that uses sound waves to create a moving picture of the heart. The hospital charge for an echocardiogram is approximately $60. The annual cost to perform 170 echocardiograms would be around $7,620 (170 x $60). A portion of the annual cost would be borne by the State Medicaid program which covers approximately 54% of infants born in the State. Thus, the Medicaid program would incur around $4,100 annually for those cases where the initial echocardiogram indicates that the pulse oximetry results were false positives and no further follow up is necessary.

For the remaining 25% of infants (42) whose screenings results are false positive, DHHS indicates that one or more additional echocardiograms would be performed on an outpatient basis, at a cost of $314, the outpatient rate. DHHS estimates that 63 subsequent outpatient echocardiograms would be performed for a total cost of $19,782, of which $10,741 would be charges for infants in

the Medicaid Program. In addition, DHHS anticipates that 22 infants would be referred for a follow up outpatient cardiology consultation at a charge of $140 each. The total cost of the outpatient cardiology consultations for these 22 infants would be $3,080, of which $1,672 would be charged to the Medicaid Program.

The potential Medicaid costs due to false positive results from a pulse oximetry screening is $16,552, as summarized in the following table. This cost is not considered significant and can be accommodated within the existing Medicaid budget, which is approximately $14.2 billion.

False Positive Follow Up Procedures	#Procedures	Rate/Charge	Medicaid Cost
Inpatient Echocardiogram	127	$60	$4,138
Outpatient Echocardiogram	63	$314	$10,742
Outpatient Cardiology Consultation	22	$140	$1,672
Total	**212**		**$16,552**

DHHS indicated that some newborns with a false positive screen for congenital heart disease have other unrelated and serious conditions that will require medical care. In addition, DHHS anticipates a higher incidence of false positives when staff is first trained, declining as staff become more experienced in performing the screening.

State Health Plan
The Fiscal Research Division has not obtained an actuarial note for the impact on the State Health Plan. However, as there are approximately 6,000 deliveries covered by the State Health Plan each year, and many of these are at hospitals that already provide the screening, the impact is not anticipated to be significant.

SOURCES OF DATA: DHHS Division of Medical Assistance; Dr. Alex Kemper, Duke University; NC Chapter of American Heart Association; Carl Seashore, MD, Newborn Screening in North Carolina, UNC Department of Pediatrics, March 2012.

TECHNICAL CONSIDERATIONS: none

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