NT Quarterly Bulletin

NT/CRL Replacement Policy

The California Prenatal Screening Program often receives requests from NT practitioners, referring clinicians, and PDC staff to replace valid NT/CRL measurements with data from a more recent NT exam. As this has become more frequent, the issue was presented to our Perinatal Advisory Committee to obtain their recommendation on the practice of removing a valid NT/CRL exam from a case. Based on the Committee’s recommendation, and guided by recent studies, the California Prenatal Screening Program is enforcing the following policy:

When there is a valid NT exam in a case, it cannot be removed and a second NT exam be entered, regardless of the interpretation or the clinician making the request. A valid NT exam is performed by a FMF or NTQR credentialed NT practitioner between 11 weeks, 2 days and 14 weeks, 2 days gestation. If NT exam data is incorrect in the case due to a data entry error, the information may be corrected; however, a request to change a valid NT/CRL due to a data entry error needs to include the ultrasound report for verification.

Referring clinicians often request to replace NT exam data when the replacement would cause the screening interpretation to change from Positive to Negative. In a 2004 study, Muller et al. found that a persisting enlarged NT is associated with a higher incidence of chromosomal abnormalities (35%) compared to when the enlargement disappears (8%); however, they also concluded that when the NT normalizes, the frequency of adverse outcomes still remains relatively high (17%), suggesting that the original enlarged NT should not be disregarded.

We also receive requests from NT practitioners, supervising physicians and radiologists to replace NT exam data. After reviewing images taken by an NT practitioner, the supervising physician or radiologist sometimes concludes that the measurement is not accurate due to, for example, poor fetus position or image clarity. In situations where a supervising physician or radiologist is reviewing images for an NT practitioner, NT exam data should be submitted to the Program after the images have been reviewed. Additionally, if a good image cannot be obtained, NT exam data should not be submitted to the Program for use in prenatal screening. NT exam data can be submitted to the Program after another exam is performed and a good image can be obtained. Taking these steps will ensure that the best NT exam data is used for patients’ prenatal screening risk assessment.


CRL Range for Valid NT

The valid CRL range for an NT exam for use in prenatal screening risk assessment is 44.6–84.5 mm. This range corresponds to a gestational age range of 11 weeks, 2 days through 14 weeks, 2 days (Hadlock 1992). In twin pregnancies, the larger CRL will be used for dating the pregnancy for the purposes of prenatal screening.

If you measure a CRL that is less than 44.5 mm, please inform the referring clinician of the gestational age and advise the patient to return for an NT exam during the appropriate time window. If you measure a CRL that is greater than 84.5 mm, please use BPD to calculate the gestational age and send the dating information to the referring clinician for use with 2nd trimester screening.

Please note that the screening result for a case with a large (≥3.5 mm) NT measurement will be Large NT: Screen Positive, even when the CRL is less than 44.5 mm. If you measure an NT that is greater than or equal to 3.5 mm, please call the Case Coordinator to report the NT data to the Program. Your patient may be eligible for follow-up services.