

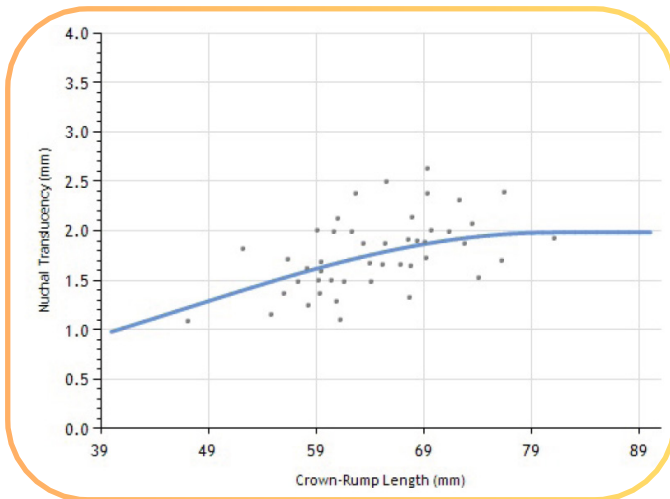
Steep Trend

Trend refers to the shape of the NT/CRL data point distribution, relative to the Fetal Medicine Foundation (FMF-UK) reference curve.

A steep trend means that the data show a faster rate of increase in NT with increasing CRL.

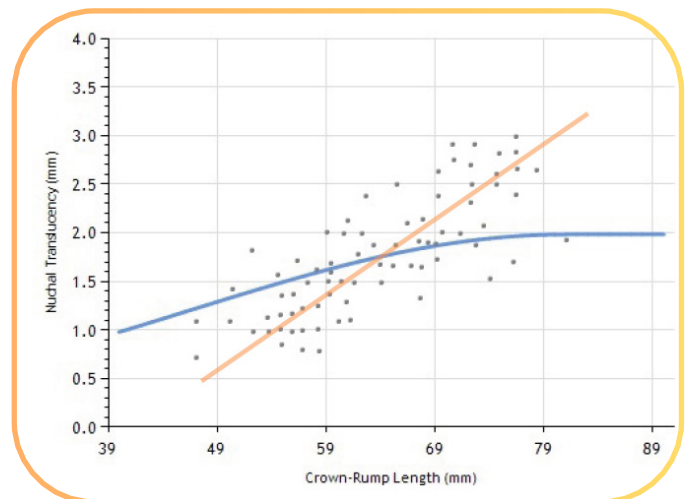
When the sonographer-specific NT performance curve shows a steep trend, it indicates that the operator may be **OVER-MEASURING THE NT AT LARGE CRLS AND/OR UNDER-MEASURING THE NT AT SMALL CRLS**.

Acceptable Trend



The data points follow the shape and slope of the FMF curve, and show the expected increase in NT with increasing CRL.

Steep Trend



The data points create a trend line (orange line) with a slope that is steeper than the expected increase in NT with increasing CRL.

→ Why does it matter?

A Steep Trend, resulting from inaccurate NT or CRL measurements, can lead to inaccurate and inconsistent prenatal screening risk results:

- Decreased risk estimates at smaller CRLs
- Increased risk estimates at larger CRLs

→ What to do about it?

The next step is to evaluate your scanning practice to determine WHY there are inconsistencies in your measurements at smaller versus larger CRLs.

Steep Trend

Common reasons for a Steep Trend

- **Over-measurement of NTs at larger CRLs**
Over-measurement of the NT can occur for a variety of reasons such as:
 - Incorrect caliper placement, with the calipers placed beyond the echogenic lines of the NT
 - Hyperextension of the fetal neck, resulting in an increase of the NT by up to 0.6mm
 - Not measuring the widest portion of the NT
- **Inaccurate CRL measurements.** High-quality CRL images are critical to producing accurate prenatal screening results and maintaining the quality of your performance curve. Please review the resource links on this page for reference.
- **Submitting measurements that do not meet the FMF criteria.** You will experience cases where it will be impossible to capture CRL and NT images that meet FMF imaging criteria. In these situations, you should NOT write these measurements on eFTS requests.

1. Nicolaides, K. H. (2004). The 11–13+6 weeks scan. London: Fetal Medicine Foundation. Retrieved from <https://fetalmedicine.org/education/the-11-13-weeks-scan>

Unable to obtain diagnostic NT Measurement

If CLR < 84mm
Rebook the patient

If CLR 84mm or greater
Refer the patient back to their provider

The patient's physician can refer for other prenatal screening options (e.g. **NIPT, MSS**)

Remember that it is best NOT to include the NT if you cannot obtain a diagnostic image and measurement.

Resources & recommendations

- Review the FMF Imaging Protocol and re-watch the NT Measurement sections of the [FMF 11-13 weeks scan course](#).
- This video by the [New Zealand Ministry of Health](#) provides excellent tips for imaging and measuring CRLs and NTs.
- Review all images for acceptability before using NT and CRL measurements for eFTS.

Summary and next steps



Step 1: Assess

Critically analyze your own NT and CRL images, to find reasons for your Steep Trend. Seeking feedback from colleagues may also be helpful.



Step 2: Review & implement

Review the Resources and Recommendations above, and implement changes to your NT and CRL scanning to correct errors contributing to a Steep Trend.



Step 3: Monitor

In six months, log in to your BORN account to view your NT performance curve, and monitor improvement in your Trend.