DEPARTMENT OF HEALTH

Follow-up of Abnormal Newborn Screening Results Indicating Presence of Abnormal Hemoglobin (FC, FE, FD, or FU): A Guide to Interpreting Clinical Labs

**Please keep this in the child's chart until follow-up is completed.*

Your patient had an abnormal hemoglobinopathy result on newborn screening. This result is not associated with sickle cell disease or trait. This result may cause mild anemia, but typically, these patients have no long-term medical needs. The exception to this is when this abnormal hemoglobin result is accompanied by a beta-thalassemia. When combined, additional medical management may be needed. Unfortunately, newborn screening cannot determine if a beta-thalassemia is accompanying this result. **In order to determine this, the following clinical labs should be ordered at <u>4 months of age:</u> CBC, reticulocyte count, and hemoglobin electrophoresis.**

The table below can aid in interpreting the above clinical labs in order to determine if additional follow-up or consultation is needed. The information below was developed in collaboration with Minnesota pediatric hematologists and can be used as a guide in making this determination.

Please mark whether any of the following were seen:

STATEMENT	YES	NO
The hemoglobin (Hgb) is within normal limits (or near normal).		
There is more abnormal hemoglobin (C, E, D, or other) than fetal (F) hemoglobin.		
The reticulocyte count is within normal limits (or near normal).		

If you checked 'NO' for any of the above statements, please consult with a pediatric hematologist to discuss next steps for this patient.

This document is only a guide - if you still have clinical concerns about this child's lab results, seek consultation.

Of note, when a patient has a hemoglobinopathy, they will likely have an elevated Hemoglobin A2 as well. This elevation does not necessarily indicate an increased risk for thalassemia in patients who also have a hemoglobinopathy, and as such, should not be factored into the determination for further follow-up.

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REV 1/2019