

### Description

A patient is hospitalized for substance abuse. The physician orders a hepatitis panel through the hospital's EHR system to test for Hepatitis A, B and C antibodies/antigens. The serum specimen is collected the same day at in the morning and submitted to the hospital lab for testing via their LIS right after it was drawn. A few hours later the patient's test results are as follows:

- (1)Hepatitis A IgM antibodies (IgM anti-HAV) "Negative"
- (2)Hepatitis A antibodies (anti-HAV) "Negative"
- (3)Hepatitis B core antibodies (anti-HBVC) "Negative"
- (4)Hepatitis B core antibodies (anti-HBVC) quantitative 0.40 IU/mL (reference range: <0.50 IU/mL)
- (5)Hepatitis B virus e antibodies (anti-HBVe) "Negative"
- (6)Hepatitis B surface antigen (HBVsAg) "Negative"
- (7)Hepatitis B surface antibody (anti-HBVs) "Negative"
- (8)Hepatitis C antibody screen (anti-HCV) "Positive"
- (9)Hepatitis C antibodies Signal to Cut-off Ratio 10.8 s/co (reference range: 0.0-0.9 s/co)

Per CDC recommendations, a confirmatory Hepatitis C RNA PCR test is performed because of the positive Anti-HCV findings. The next day, the Hepatitis C RNA PCR test results confirm the patient is positive for hepatitis, with a value of 761120 IU/ml (reference range: < 43). The Hepatitis C results trigger an Abnormal Flag or "High", as well as the comment:

"Negative: < 0.8, Indeterminate 0.8 - 0.9, Positive: > 0.9. In order to reduce the incidence of a false positive result, the CDC recommends that all s/co ratios between 1.0 and 10.9 be confirmed with additional Verification or PCR testing."

The final report is completed on that day and sent to the ordering provider.

### Comments

This is the reflex message and this test case is evaluating correct use of the status codes in OBR-25 and OBX-11.

Special case test aspects include ensuring that the system can correctly populate the data elements for linking parent/child results in accordance with the requirements specified in the implementation guide for the FRN and FRU profiles.

### PreCondition

LRI\_5.0\_1.1-NG\_FRU has been previously sent.

### PostCondition

No Post Condition.

### TestObjectives

- Demonstrate the capability to create a valid Parent-Child message for a Hepatitis-Reflex lab result message.
- Tests support for multiple comments for one test result.