Noteworthy Characteristics of Carolinas HealthCare System ELR to NC EDSS

Carolinas HealthCare System is referred to in this document as CHS.

1.1 Introduction

Carolinas Healthcare System (CHS) will send results seven nights a week. Results will be in the appropriate workflows when you log onto the system each morning.

Here is a list of each CHS facility, and whether they are included in the feed:

Included	Excluded
Carolinas Medical Center	Anson Community Hospital
Carolinas Medical Center – Lincoln	Carolinas Medical Center – Randolph
Carolinas Medical Center – Mercy	Carolinas Rehabilitation – Mount Holly
Carolinas Medical Center – Northeast	Columbus Regional Healthcare System
Carolinas Medical Center – Pineville	Crawley Memorial Hospital
Carolinas Medical Center – Union	Levine Children's Hospital
Carolinas Medical Center – University	Medwest Harris
Carolinas Rehabilitation	Medwest Haywood
Cleveland Regional Medical Center	Medwest Swain
Grace Hospital	Murphy Medical Center
Kings Mountain Hospital	Scotland Healthcare System
Valdese General Hospital	St. Luke's Hospital
Mecklenburg County Public Health Labs (both SE	Stanly Regional Medical Center
and NW)	
	Wilkes Regional Medical Center

The facilities excluded from the feed have not converted their laboratories to use the same computer system as the rest of CHS. If they convert to the CHS computer system, they could be included in the feed in the future. This is dependent upon CHS, not DPH.

1.2 Determining the "Lab Facility" on the Lab Results screen in NC EDSS

For ELRs from CHS, the Lab Facility displayed in NC EDSS is the laboratory of the hospital where the patient is registered, which is *not necessarily the laboratory where the tests were actually performed*. If a test was performed at a different CHS laboratory, the Comments field under that test will display "Performing laboratory is" followed by the laboratory name.

Important Exception:

Currently, Mecklenburg County Health Department's (MCHD) two laboratories are part of CHS. Although MCHD's patients are <u>not</u> registered as hospital patients, the ELR for lab tests performed by MCHD's laboratories will show in the ELR with Carolinas Medical Center as the Lab Facility. The Comments field under the test will display "Performing laboratory is MCHD."

In other words, the way that the Lab Facility and comments fields are populated for MCHD patients is the **opposite** of the way it's done for the other facilities within CHS (when the lab performing the test is different from the facility where the patient is registered).

If you have to contact the facility for treatment or other information, you need to review the Comments field. If the Comments field indicates that MCHD performed the test, you would contact the health department. Otherwise, follow up with the facility listed in the "Lab Facility" field because that is where the patient is registered.

1.3 Ordering Provider

CHS does not generally collect provider phone number for the ordering provider. There are also instances where an incomplete provider address is collected (e.g. only a street address is provided without a city, state, or zip code). As provider information is stored in a separate database at CHS, the feed only includes the information that is collected.

1.4 Patient Demographics

CHS includes patient demographic information (such as patient name, address, date of birth, race, Hispanic ethnicity and social security number) if the information is present in their hospital registry system. Occasionally, the patient's middle name is transmitted in all capital letters from their registry system.

1.5 Specimen Source

For non-microbiology tests (e.g. serology), CHS does not capture any description of the specimen source. For example, a NAAT test for Chlamydia or Gonorrhea would not have a value in the specimen source dropdown field at the top of the lab results screen.

For microbiology tests (e.g. cultures), CHS will capture a description of the specimen source but some of the values do not match the picklist in NC EDSS. For example, CHS might report a specimen source as a body site, such as "blood from right arm," rather than a coded specimen source value like "whole blood." When the specimen source can be matched to the picklist in NC EDSS, the system will display it in specimen source field. Otherwise, it will display the specimen description (e.g. blood from right arm) in the **notes** field at the **bottom** of the screen.

Therefore, if the specimen source dropdown at the top of the lab results screen is blank, please review the notes field at the bottom of the screen for the description of the specimen source.

1.6 Reporting of Multi-test Panels

For multi-test panels, the ELR includes all results (both reportable and non-reportable) for tests within the panel. Any non-reportable results are displayed in NC EDSS only as part of the text in the comments field **under a reportable result**. Bear in mind that State Lab, which also sends non-reportable results in these circumstances, populates each test and result into a separate block of fields. **CHS will not do this**. Please be sure to read the entire comment field since there may be text for the reportable results before or after the text describing the non-reportable results.

1.7 Corrected results

Extra care is needed when dealing with corrected results from Carolinas Health System.

If a test result was originally a reportable result and is subsequently corrected to become a non-reportable result, another ELR is sent, but the result text is updated to say that no reportable organisms have been identified.

For example, a TB Culture result is sent via ELR with a preliminary positive AFB Culture result but the identified organism is still pending. When the final ELR is sent, it turns out the organism identified is not TB, so the final result text might say:

"Microbiology result has been modified. No reportable organisms identified at this time".

Unfortunately, an ELR with the above result **does not identify the disease originally reported**. Therefore, NC EDSS will update that result to an existing event (for that patient) for <u>any</u> disease to which the test could possibly be relevant. For example, Gonorrhea and Chlamydia both use NAAT testing. If a NAAT result was updated so that the results are no longer reportable, the patient's open Gonorrhea <u>or</u> Chlamydia event may be updated because both of these diseases are tested for using NAAT. Again, this happens because the updated ELR result does not identify the disease originally reported, so NC EDSS is not sure where to post this result.

A corrected result can be posted to an open or closed event. NC EDSS will first look for a suitable open event to post the results. If no suitable open event is found, NC EDSS will look for a closed event.

Another example will demonstrate why this is a potentially confusing situation. Let's say a patient already has an open TB Event. Then an ELR for a respiratory culture with a result of "Haemophilus influenzae" creates an event for H. influenzae. Subsequently, a corrected ELR for the same specimen and test has the result "Microbiology result has been modified. No reportable organisms identified at this time".

Possibly, the corrected result may post to the TB event instead of the H. influenzae event. The reason is because both diseases are tested for using a respiratory culture.

What does a user need to do in this situation?

If the updated result posted to the TB event, of course you must manually add the new lab results to the event where it belongs (H. influenzae). Keep in mind that you will not be able to update the original CMS lab result in the H. influenzae event since ELRs are not updateable. Therefore, you will have to add the updated result as a new lab. PLEASE DO NOT DELETE THE ORIGINAL RESULT.

If you get an updated result, please verify whether this result has posted to the correct event, given what you know about the investigation, as well as the patient's other disease events in NC EDSS.