

Oregon ESSENCE HL7 Message Testing Suite for Syndromic Surveillance: Emergency Departments and Urgent Care Data

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Version 1.0

HL7 message-testing: A tale as old as time....



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Revision History Ver/Rel #	Issue Date	Summary of Changes
Draft V1.0	February 26, 2013	Initial Draft.
V1.1		
V1.2		
R1.0		
R1.0.1		
R1.0.2		
R1.0.3		

1 Introduction

This testing suite is intended to be used as a companion guide to the PHIN Messaging Guide for Syndromic Surveillance: Emergency Department and Urgent Care Data, Release 1.1 (August 2012) and the Addendum to the 1.1 Release (both are located here <http://www.cdc.gov/phin/resources/PHINguides.html>).

This guide is intended to be used by technical staff assisting hospitals and facilities submit emergency department data to the Oregon Health Authority (OHA) for syndromic surveillance (the Oregon ESSENCE project).

2 How to Use this Guide

Message-testing is, by nature, an iterative process. This document is intended to help guide this process with specific message testing scenarios. Please check with Oregon ESSENCE epidemiologists (Oregon.ESSENCE@state.or.us) before beginning the testing process. Several categories of test cases are detailed in this guide, along with recommendations for the number of messages expected to be submitted. Where indicated, results of generated messages should be compared to expected results and any discrepancies resolved before finalizing the testing process. Verify successful completion of this testing process with ESSENCE epidemiologists before moving to ongoing message submission.

3 Message-Testing Cases

The main categories of message-testing cases mirror those of the syndrome categories used in syndromic surveillance in Oregon.

3.1 Instructions

Send one message per each scenario presented in Table 1 and five messages for each scenario in Table 2.

For syndrome-based scenarios, ensure that the test patient has one or more of the chief complaints listed to the right of each scenario.

Example

For the botulism scenario, the test patient enters the emergency department (ED) complaining of two of the chief complaints associated with botulism: dilated pupils and difficulty focusing. The patient registers in the ED, is triaged to a healthcare provider and diagnosed. The visit ends and the patient leaves the ED.

3.2 Tables

Table 1: Syndrome-Based Scenarios	
<i>Send one test message per scenario</i>	
Scenario	Chief Complaint
Botulism	Blurred vision Difficulty focusing Difficulty speaking Dilated pupils
Fever	Blister Fever Febrile
GI	Abdominal pain Bloating Food Poisoning Nausea Vomiting Diarrhea
Hemorrhagic Illness	Fever and bleeding gums Fever and nose bleed Fever and strawberry tongue
Influenza-like Illness	Flu Fever and Cough Fever and Sore Throat
Injury	Bite Sting Occupational Firearm
Neurological	Dizziness Drowsiness Seizure Projectile vomiting
Rash	Rash Bumps Scarlet Fever
Respiratory	Cough Difficulty breathing Pneumonia Wheezing
Shock or coma	Fainted Passed out Loss of consciousness Shock Comatose

Table 2: Message Type Scenarios	
<i>Send five test messages per scenario</i>	
Scenario	Details
1	<ul style="list-style-type: none"> - Test Patient A arrives in the emergency department. - A clerk in the ED registers the patient and records demographic information (name, age, race, ethnicity, residence and insurance information). - The clerk also records the patient's chief complaint. - A healthcare provider sees the patient and records the patient's temperature and pulse oximetry before assigning the patient at least one diagnosis and providing treatment (a procedure, in this case). - The provider then provides counsel to the patient before ending the patient visit. - The patient departs from the emergency department.
Expected result	A04, A08, A03 messages
Observed result	-
2	<ul style="list-style-type: none"> - Test Patient B visits the emergency department and is triaged for care. - His or her temperature and pulse oximetry are recorded. - A healthcare provider performs a clinical evaluation on the patient and provides two diagnoses before performing two procedures. - The patient is then admitted as an inpatient to the hospital (changing the patient's discharge disposition status).
Expected result	A04, A08, A01, A03 messages
Observed result	