



eICR (Electronic Initial Case Reporting)

Origin Story

In the late 1990s, electronic lab reporting (ELR) enabled laboratories to electronically send cases of reportable conditions (those required by law to be reported) to public health agencies.

ELR was a groundbreaking data transportation method, but it could not organize or act on reports. If a patient tested positive for a reportable condition, like pertussis, public health agencies had to flag the report, create a case and look for trends in vast amounts of data to track and stop outbreaks. This took considerable time when intervention was needed quickly to save lives.

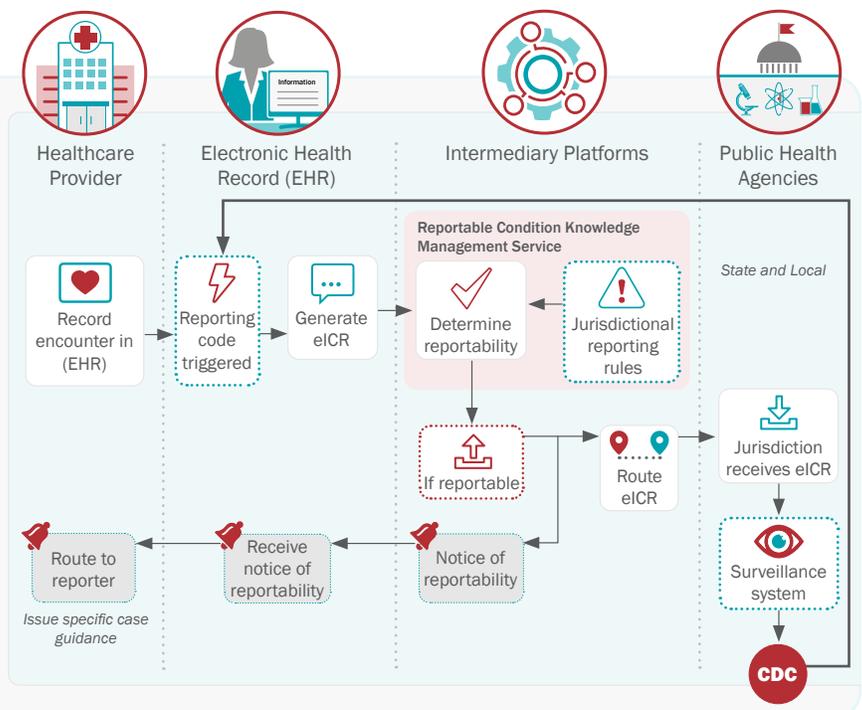
The advent of electronic initial case reporting (eICR) ushered in a new revolution—one that automated these vital processes.

How It Works

The eICR goes into motion as soon as a patient's electronic health record indicates certain reportable conditions. A case report is created and sent to a public health agency, which uses the information to determine any next steps, such as contact tracing or quarantine.

Where ELR sends information from the lab or health provider to the public health agency, eICR enables two-way dialogue.

Benefits of eICR include earlier detection and intervention for communicable diseases since data travels faster, fewer data errors since less manual data entry is required and better patient care enabled by immediate feedback from the public health agency.



COVID-19 Response

Earlier this year, the Association of Public Health Laboratories (APHL) established a link for reports of COVID-19 to automatically enter the [AIMS \(APHL Informatics Messaging Services\) platform](#). This was the first case of eICR for COVID-19, where reports were sent directly to local and state jurisdictions.

The system routes the data to jurisdictions automatically, so each report has just one connection. For example, if a patient lives in Maryland but gets tested in Virginia, the system knows to send a report to each jurisdiction for epidemiologists to review.

Additional Reading

[Building a Digital Bridge](#)
Lab Matters Fall 2017