General Considerations to Guide RCKMS Timeboxing Durations

- It is possible that “problems” (including diagnoses in problem lists) can remain active in electronic health records for months or years. This may be because:
  1. A condition is chronic or ongoing and appropriately active
  2. The clinician still believes the problem “needs to be considered” even though it has principally been resolved
  3. A problem was not marked as resolved in the electronic health record due to issues with clinical workflow

- Timeboxing is a tool to allow for the reduction of eICR messages that are determined to be reportable to PHAs based on problem list entries (including diagnoses) that may not be considered current by public health agencies (PHA) and that the PHA may not want to receive.

- When timeboxing is enabled for a particular condition, a date-based calculation will be applied to RCKMS rules to “filter out” case reports that contain active problems (including diagnoses) outside of the specified duration. For more information on how to use timeboxing in RCKMS, visit https://www.rckms.org/rckms-timeboxing/

- It is still early in the use of timeboxing and more experience by PHAs in its appropriate use will be needed for refinement and appropriate application.

- Timeboxing may be considered for use for acute, emergent, or chronic use cases:
  - Emergent conditions: Timeboxing was initially developed to address the instance where active problem list entries for COVID-19 remained in a patient’s chart because they were not marked as resolved. A pilot study showed that a 30-day timebox constraint would have reduced the number of COVID-19 reports sent to PHAs by approximately 13%, and that most COVID-19 problem list entries were current within 7 days of the encounter date. Based on these findings, very short timeboxing durations (up to a week) may be useful for such emergent conditions.
  - Acute conditions: Generally, shorter durations may also be considered for acute conditions to limit the volume of case reports (e.g., 15-30 days), however how much eICR volume reduction is desired and still meet public health needs may vary by condition.
  - Chronic conditions: It is not clear if the application of Timeboxing is appropriate for chronic conditions, or if there is an ideal duration for limiting eICRs based on problem list entries for chronic conditions. Jurisdictions may decide, on a case-by-case basis, whether it is appropriate to receive reports based on problem list entries and diagnoses for a given chronic condition and apply a suitable timebox duration accordingly.

- In general, PHAs may assess optimal durations based on public health need and the volume of case reports received for a given condition and adjust timeboxing durations accordingly.

- Turning on timeboxing will result in a PHA receiving fewer eICRs for that condition (in comparison to authoring the condition the same way without timeboxing). PHAs should carefully select timeboxing durations for conditions so that eICRs that are of interest for case ascertainment are not filtered out. PHAs should also consider that applying Timeboxing to certain rare or uncommonly occurring conditions may potentially result in missed reports for those conditions.