Version 2 of the RCKMS Timeboxing Template

April 2024

Overview

- Review timeboxing definitions
- What is new in version 2 of the timeboxing template?
- Timeline for the rollout of timeboxing v2

Review of Timeboxing Definitions

What RCKMS Timeboxing is...

 Timeboxing is an effort to reduce the number of eICR messages that are determined to be reportable to PHAs based on Diagnoses or Problem list entries that may not be related to the current instance of disease.

• This is accomplished by including date-based logic in RCKMS rules to assess the interval between two key dates from the eICR message.

What RCKMS Timeboxing is not...

- *Timeboxing will not change the content of eICRs*; historical data in problem lists will remain in the eICRs if they are "unresolved."
- Timeboxing will not eliminate "resolved" problems being present in the eICR. EHR vendors are being asked not to trigger off of, or load, "resolved" problems; however, the vendor must exclude the "resolved" problems for them to be removed entirely from the eICR.
- Currently, timeboxing is not applied to any other types of criteria (laboratory results, medication, pregnancy, hospitalization) aside from the "Condition (as a diagnosis or active problem)" criteria.

What is new in version 2 of the Timeboxing Template?

Hierarchical logic for deriving the date used in the timebox calculation

- Instead of looking at a single date, RCKMS can "derive" the Diagnosis/Active Problem date using a hierarchical approach if the primary date is not present.
- In the case where the primary date is NULL (i.e., missing), an alternate date is used for the timeboxing calculation.
- For example:
 - If the Encounter Diagnosis/Problem Observation/effectiveTime/low is not present, the Encounter Activity/effectiveTime/low will be evaluated.

Note: If BOTH dates are missing, the timebox calculation cannot be performed.

Timeboxing Definitions - version 1

Timeboxing = Evaluation of the duration between Date A and Date B**

- Date A = eICR Document Date
- Date B = effectiveTime/low of the Encounter Activity (for Diagnosis) or of the Problem Concern Act/Problem Observation (for Active Problems)**

Timebox Duration = The maximum acceptable interval between the two dates, as defined by the PHA

Timebox Calculation: Date B >= (Date A – Timebox Duration)

**If the value for Date B (the effectiveTime/low) is NULL, the timebox calculation cannot be performed.
The criteria will be considered "met" as if the date was present and within the timebox window.

Timeboxing Definitions - Diagnosis (v2)

Timeboxing = Evaluation of the duration between Date A and Date B**

- Date A ("Document Date") = eICR Document Date
- Date B ("Derived Diagnosis Date") = Encounter Diagnosis/Problem
 Observation/effectiveTime/low**
 - If the Encounter Diagnosis/Problem Observation/effectiveTime/low value is NULL, the Encounter Activity/effectiveTime/low will be evaluated in its place.

Timebox Duration = The maximum acceptable interval between the two dates, as defined by the PHA Timebox Calculation: Date $B \ge (Date A - Timebox Duration)$

**If the value for the Derived Diagnosis Date is NULL, the timebox calculation cannot be performed. The criteria will be considered "met" as if the date was present and within the timebox window.

<u>XPaths</u>

- eICR Document Date: ClinicalDocument/effectiveTime
- Encounter Diagnosis/Problem Observation/effectiveTime/low: ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation/effectiveTime/low
- Encounter Activity/effectiveTime/low: ClinicalDocument/component/structuredBody/component/section/entry/encounter/effectiveTime/low

Timeboxing Definitions - Active Problem (v2)

Timeboxing = Evaluation of the duration between Date A and Date B**

- Date A ("Document Date") = eICR Document Date
- Date B ("Derived Active Problem Date") = Problem Concern Act/Problem
 Observation/effectiveTime/low**
 - If the Problem Concern Act/Problem Observation/effectiveTime/low is NULL, the Problem Concern Act/effectiveTime/low will be evaluated.

Timebox Duration = The maximum acceptable interval between the two dates, as defined by the PHA

Timebox Calculation: Date B >= (Date A – Timebox Duration)

**If the value for Derived Active Problem Date is NULL, the timebox calculation cannot be performed. The criteria will be considered "met" as if the date was present and within the timebox window.

<u>XPaths</u>

- eICR Document Date: ClinicalDocument/effectiveTime
- Problem Concern Act/Problem Observation/effectiveTime/low:
 ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/effectiveTime/low
- Problem Concern Act/effectiveTime/low: ClinicalDocument/component/structuredBody/component/section/entry/act/effectiveTime/low

Comparison - Diagnosis

Version 1

Encounter Activity/effectiveTime/ low:

- If present, then the timebox calculation is performed
- If missing, then the criteria is considered "met"

Version 2

Encounter Diagnosis/Problem Observation/effectiveTime/low:

- If present, then the timebox calculation is performed
- If missing, then Encounter Activity/effective Time/low is evaluated in the timebox calculation
- If both dates are missing, then the criteria is considered "met"

Comparison - Active Problem

Version 1

Problem Concern Act/Problem Observation/effectiveTime/low:

- If present, then the timebox calculation is performed
- If missing, then criteria is considered "met"

Version 2

Problem Concern Act/Problem Observation/effectiveTime/low

- If present, then the timebox calculation is performed
- If missing, then the Problem Concern Act/effective Time/low is evaluated in the timebox calculation
- If both dates are missing, then criteria is considered "met"

The timebox duration is NOT considered in the reportability determination, when the following is true:

The latest version of the condition (which includes timeboxing) is NOT published to production

- Timeboxing is NOT enabled
- No timebox duration is set

The Derived Diagnosis Date is NULL

 Neither the Encounter Diagnosis/Problem Observation/effectiveTime/low nor the Encounter Activity/effectiveTime/low is present

The Derived Active Problem Date is NULL

 Neither the Problem Concern Act/Problem Observation/effectiveTime/low nor the Problem Concern Act/effectiveTime/low is present

What is the timeline for rollout of Timeboxing v2 in RCKMS?

RCKMS Timeboxing v2 – Initial Rollout

All conditions released as part of Content Release 11 will support timeboxing v2*:

- 3 new conditions
- 100 existing conditions

*Timeboxing v2 rules are ONLY available with the latest version of the latest version of the second the second tender of the second tenders and the second tenders are only tenders are only

Jurisdiction Administrators may enable/disable timeboxing in the tool for each condition that supports timeboxing.

RCKMS Timeboxing v2 – Remaining Rollout

All conditions released as part of Content Release 12 will support timeboxing v2*:

- 13 new conditions
- 114 existing conditions
 - Includes new versions of the conditions previously released with version 1 of the timeboxing template (including the initial 5 conditions released in June 2023, as well as the 7 respiratory conditions released in the October 2023 off-schedule release)

*Timeboxing v2 rules are ONLY available with the latest version of the Reporting Specification for each condition.

Jurisdiction Administrators may enable/disable timeboxing in the tool for each condition that supports timeboxing