

## CalHHS Data Exchange Framework Technical Advisory Committee (TAC) Recommendations

**Date(s):** August 7, 2025 – September 19, 2025

**Topic:** [Event Notification Architecture](#)

### Attendance

**Facilitators:** Rim Cothren, Cindy Bero

**Committee Members (in attendance):** Danielle Friend, David McCann, Dr. Brian Thomas, Eric Jahn, Eric Nielson, Gregg Smith-McCurdy, Irene Lintag Alvarez, Joe Sullivan, Julie Silas, Ken Riomales, Marta Galan, Michael Marchant, Ray Duncan, Robin Roberts, Tamara Hennessy-Burt, Tim Polsinelli, Uma Chandavarkar, MD, MHA, Vishaun Lekraj

### Objective

Develop recommendations for an architecture for statewide event notification under the DXF

### Recommendations

The following recommendations were summarized by the Facilitators as the consensus of Committee Members. This summary may not reflect HCAI recommendations or intended actions.

- 1. A decentralized model comprising multiple Nodes offering coordinated services was preferred to a centralized model comprising a single Node providing all services.**

Centralization implies selecting a dominant technology that may not be suitable for all use cases and may stifle innovation. A distributed model may provide for more incremental advancement.

Members recognized that a centralized model may be more cost-effective and is administratively simpler. Members felt that some but not all services associated with event notification might be suitable for centralization.

## **2. A model where Nodes shared Requests for Notifications was not recommended.**

Members preferred that an Event be the trigger for sharing PII or PHI among Nodes, not a Request for Notifications. Nodes should share information about Individuals when an Event is received and not when a Request for Notifications is received.

Matching Events to Requests for Notifications is a heavy burden. Models in which Events or information about Events were shared among Nodes both have a common strength that Person Matching is managed locally by a Node only for the Requests it receives from Recipients. The burden of Person Matching is distributed and the complexity for each Node reduced.

## **3. Requests for Notifications must include more information than the individuals' identities**

Information about the requesting organization, its participation in a program, its relationship to each individual, and the purpose for use should be included in every Request.

## **4. Individual privacy and consent must be an integral part of the architecture.**

Consent is required for some use cases and to share some Events with some Recipients. Sources and Nodes must have a means to determine if consent has been given.

Members acknowledged that not all use cases required Individual consent.

Members also expressed concern about Nodes receiving and retaining information beyond what was necessary under Applicable Law to perform the services they offer.

## **5. The architecture should minimize the number of places to which Recipients need to send Requests and Sources need to send Events.**

Recipients should not be required to send Requests for Notifications to all Sources or to many Nodes. Sources should not be required to send Notifications of Events to all Recipients or Events to many Nodes.

## **6. The architecture should support use case maturity.**

Not all use cases are as mature as Notifications for admissions and discharges. The architecture must be able to support variations in use cases, Event types, and the maturity of technologies used by Sources and Recipients.

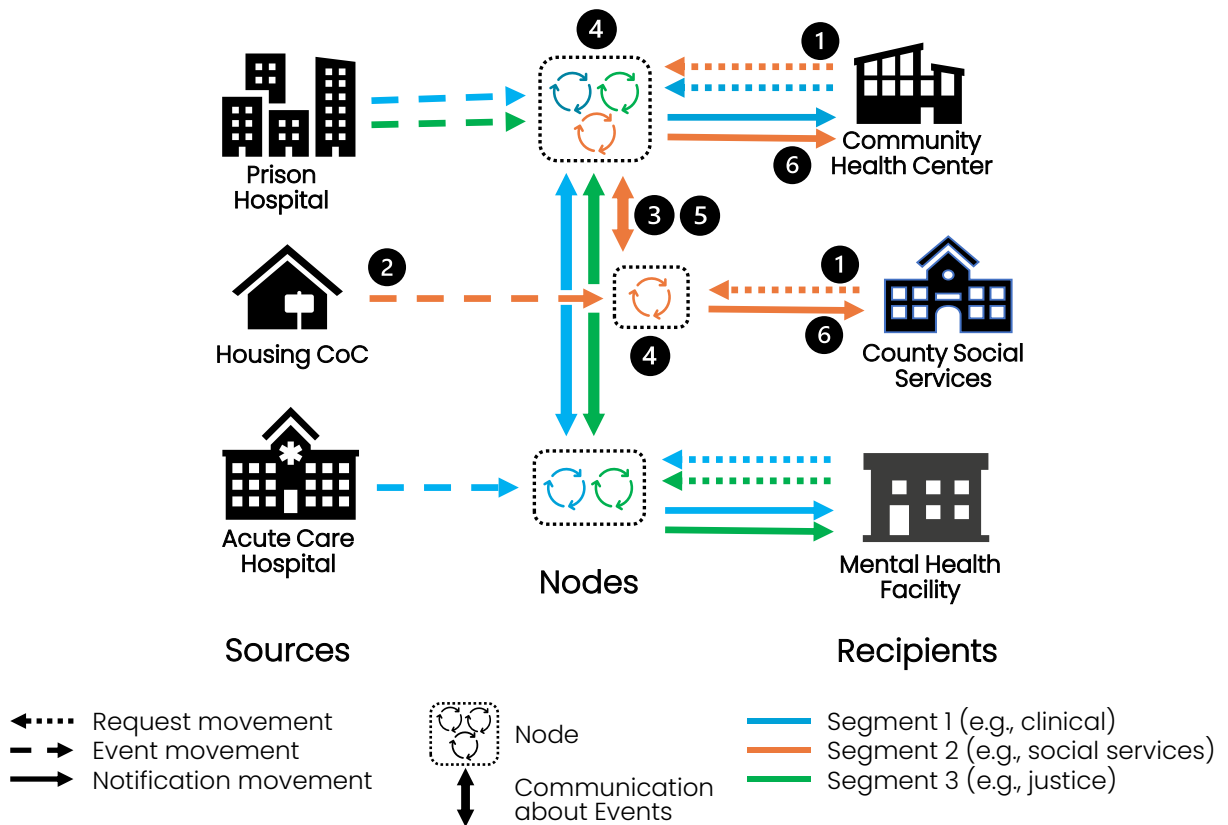
## **7. An architecture for event notification should have certain characteristics.**

Members discussed and supported an architecture presented in the final meeting with the following characteristics:

- a. The architecture includes multiple Nodes. Each Node is an Intermediary that must have five capabilities:
  - 1) receive Requests for Notifications from Recipients,
  - 2) receive Events in real time from Sources,
  - 3) communicate with other Nodes about a received Event in real time,
  - 4) match Events to Requests in real time, and
  - 5) share Notifications with Recipients in real time.
- b. Each Node must identify the health and/or social service segment(s) it serves (e.g., clinical, social services, justice-involved) to address variability in the capabilities and maturity of each segment. Any Node may serve one, more than one, or all segments.
- c. Each Node must coordinate with all other Nodes serving that segment.
- d. Each Node may elect to serve Participants locally, regionally, or statewide, but must still coordinate with all other Nodes serving that segment within the state.
- e. Recipients may submit Requests for Notifications to the Node(s) of their choice. Requests must communicate:
  - 1) Name of the Recipient organization
  - 2) Type of the Recipient organization
  - 3) Type of Events for which to be notified
  - 4) Identifiers for individuals for whom Request are being made
  - 5) Relationship to the individual and purpose for use of the Notification
- f. Sources must send Events in real-time to the Node(s) of their choice.

- g. Upon receiving an Event, the Node must alert all other Nodes serving the same segment of the Event in real time. Alerts include person attributes for the individual in the Event to allow other Nodes to match against Requests.
- h. Each Node must match the person attributes in real-time against Requests received from its Recipients. Matches are communicated back to the Node receiving the Event, including the requesting Recipient name, organization type, relationship to the individual, and purpose for use.
- i. Upon receiving communication of a match, the Node must share the Event with Nodes reporting a match following consideration of organization type, relationship, purpose for use, and applicable law.

Members agreed these characteristics were reflected in the following straw model architecture.



Request, Event, and Notification movements:

1. Recipients send Requests to a Node who serves their geography and segment(s), updating requests over time

2. Sources send Events to a Node that serves their geography and segment(s)
3. Nodes communicate person attributes of received Events with all Nodes in the segment
4. Nodes match the person attributes to individuals on Requests, returning organization name and type, relationship, and purpose for use for each match
5. Nodes send Events to Nodes with matches in accordance with required purposes, minimum necessary guidelines, and whether consent exists if it is required for the type of Recipient, purpose for use, and/or type of Event.
6. Nodes send Notifications to Recipients who Requested Events for the matched individuals

Members recommended that consent be integrated into the architecture, acknowledging that all Events do not require Individual consent.

Members expressed concern that Nodes offering services to different segments might create data silos preventing a Recipient in one segment (e.g., social services) to receive Notifications of Events from Sources in another segment (e.g., clinical).

Members recommended that privacy and applicable law be considered when determining what information a Node may retain and what it must destroy.

### **Defined Terms**

The following terms were adopted and utilized during discussions. Many appear in the recommendations above.

<b>Event</b>	A significant change in an individual’s status—currently defined as an Admission or Discharge from a Hospital, Emergency Department, or Skilled Nursing Facility.
<b>Node</b>	An entity or technology that receives Events from Sources and/or sends Notifications to Recipients.
<b>Notification</b>	Communication of an Event sent to a Recipient for Individuals requested by the Recipient.

<b>Person Matching</b>	The process by which an Event is matched to a Request for Notifications, such as a roster, to identify which Recipient(s) should receive Notifications.
<b>Recipient</b>	A DxF Participant who wishes to receive timely Event Notifications associated with the Individuals they serve.
<b>Request for Notifications</b>	A request submitted by a Recipient to a Notification Service requesting Notifications, such as a roster of individuals.
<b>Source</b>	The DxF Participant at which an Event occurs and who initiates the notification process - currently a Hospital, Emergency Department, or Skilled Nursing Facility.