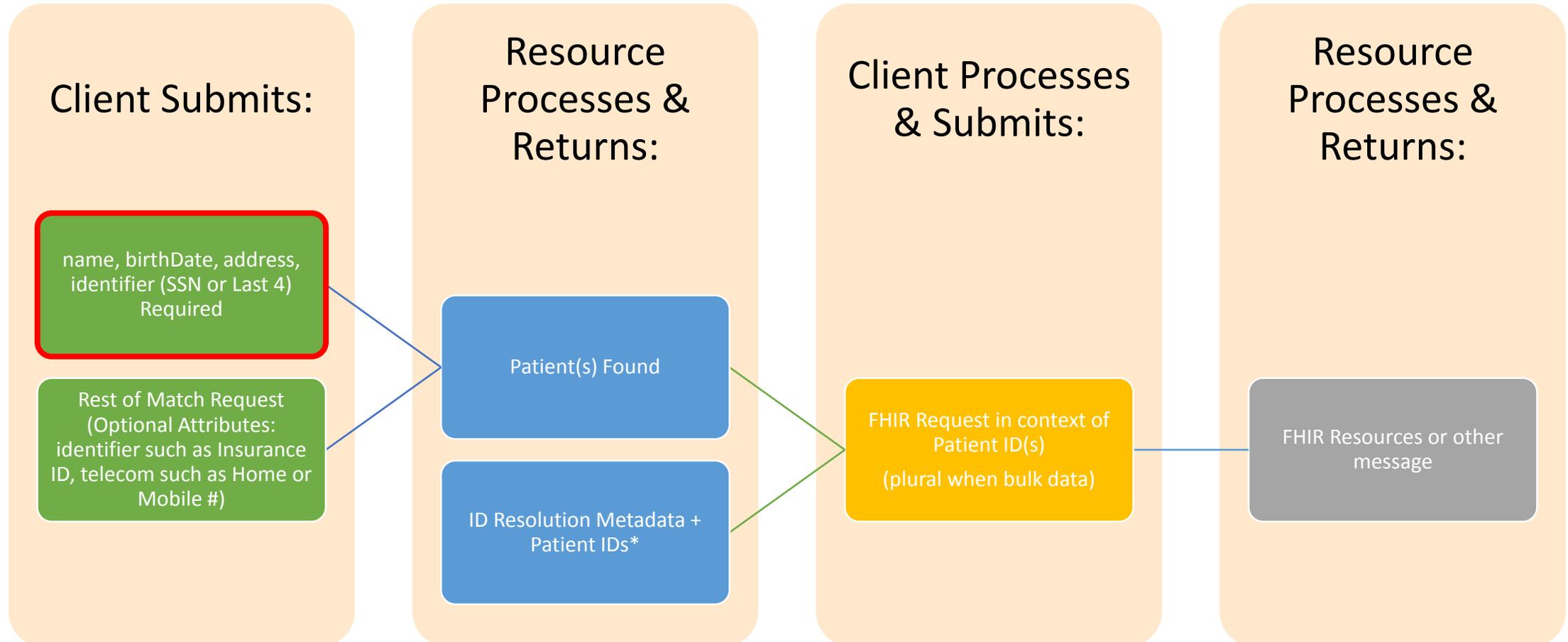# Identity Task Force
Matching Patterns Overview

February, 2019

"Common" Case: Identity Match using Priority Patient Metadata

Problem Statement

- The **client** has demographic information about a **patient** that it can provide to the **resource** as part of a match request which ultimately returns one or more (bulk data or additional ID resolution needed) patient IDs to the client

- In this case, it is not known whether a resource will have data about a patient or not, or whether the resource will be able to produce a single patient match or more than one match per match request

- NOTE: We will be performing interviews with patient matching SMEs to gather information which will inform drafting of additional common patterns based on variations in the set of initial attributes included by a client in the match request

"Common" Case: Identity Match using Priority Patient Metadata

Client Submits:

name, birthDate, address, identifier (SSN or Last 4) Required

Rest of Match Request (Optional Attributes: identifier such as Insurance ID, telecom such as Home or Mobile #)

Resource Processes & Returns:

Patient(s) Found

ID Resolution Metadata + Patient IDs*

Client Processes & Submits:

FHIR Request in context of Patient ID(s) (plural when bulk data)

Resource Processes & Returns:

FHIR Resources or other message

"Common" Case: Identity Match using Priority Patient Metadata

Actors' Actions:

- Client submits match request using required attributes and any available optional attributes
- If more than one match exists, resource either returns 0 results OR returns a list of patients along with attributes the client can use to perform identity resolution*
- If a match is determined, client submits FHIR request with patient context
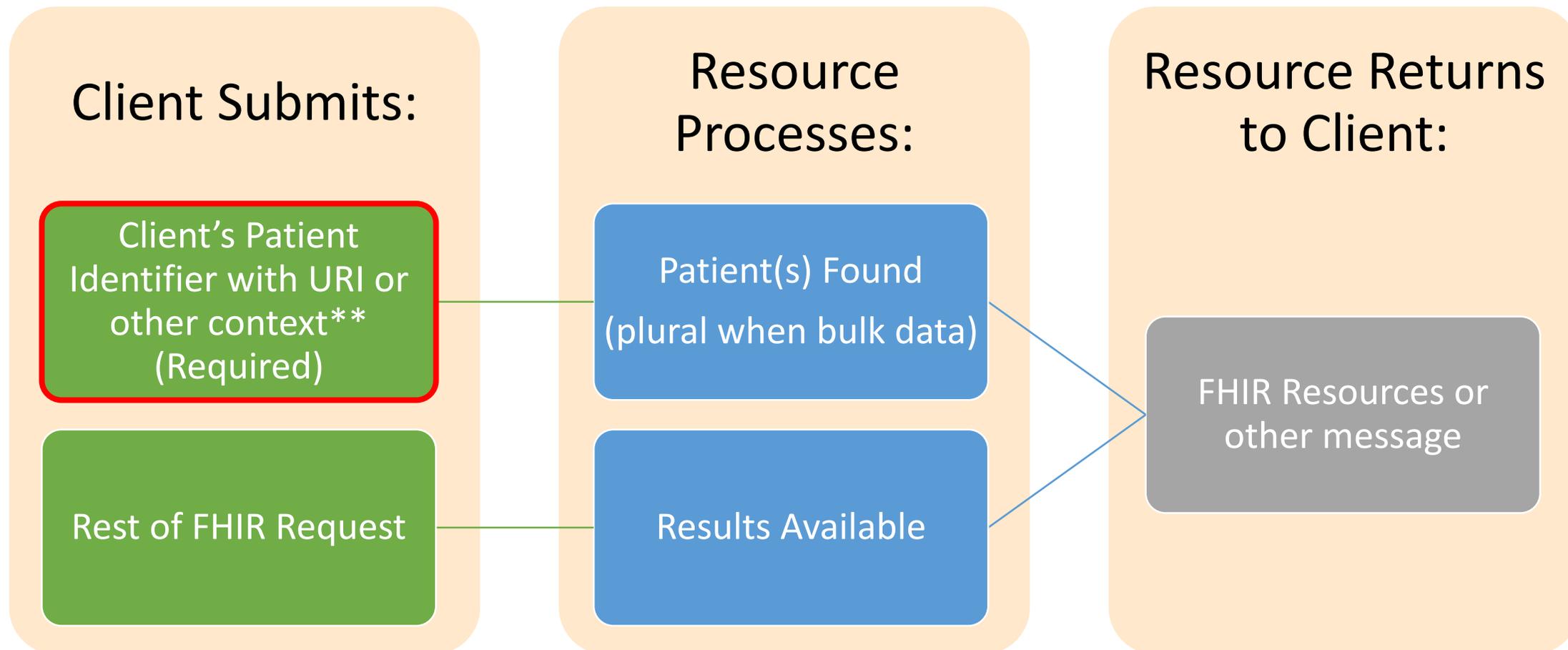- Resource returns results

Gaps Identified:

- *Are multiple patient IDs provided by a resource as the result of a match request OR only the chosen patient ID after client identifies a "matching" patient based on attribute information alone? (In other words, who will perform resolution?)
- Should the query identify the reason for the match request, e.g. part of a certain use case? Or would the credential of the ecosystem participant be sufficient to determine that the matching request is authorized?

"Lookup" Case: Identity Match using Client's ID

Problem Statement

- Provider to Payer/Provider to Provider communication when both parties use common identifiers

- This is a special scenario in which a resource holder can match to a patient with 100% accuracy based on the client's identifier because resources have pre-associated another entity's identifier with their own local identifier

"Lookup" Case: Identity Match using Client's ID

Client Submits:

Resource Processes:

Resource Returns to Client:

Client's Patient Identifier with URI or other context** (Required)

Rest of FHIR Request

Patient(s) Found (plural when bulk data)

Results Available

FHIR Resources or other message

"Lookup" Case: Identity Match using Client's ID

Actors' Actions:

- Client sends their patient identifier along with the FHIR request in a single pass
- Resource looks up the patient and returns data OR does not have records for that patient and returns no data

Gaps Identified

- Assumes pre-registration of patient so that resource has already matched client's identifier to their local identifier(s) as a unique patient
- **A URI for each participating organization's identifier should be developed, or other means of providing context that can indicate what organization's identifier is being provided
- Additional metadata will be needed from time to time to resolve members within a family who share the same insurance ID (other outlier cases?). This then becomes the "Common" case.