Identity Tiger Team

Matching Patterns Overview

March, 2019

Executive Summary

- [Needs Drafting/placeholder text follows:] The Identity Tiger Team is assembling common patterns currently used in the field for patient matching/identity resolution as well as candidates for new best practices. This work will reference tools available in the field or gaps needing to be addressed, to best guide a higher level of automation for patient matching at scale.
- This collection of patterns is a work in progress that captures current knowledge, to be further informed through SME interviews our team will be conducting in coming months.
- Each pattern snapshot consists of 3 slides: Introduction, Workflow specifics, and Actor's Actions + Gaps; current slide topic is designated in blue at the far right.
- Team members are encouraged to submit additional patterns to add to the list and any suggestions for improvement to the pattern template/content.

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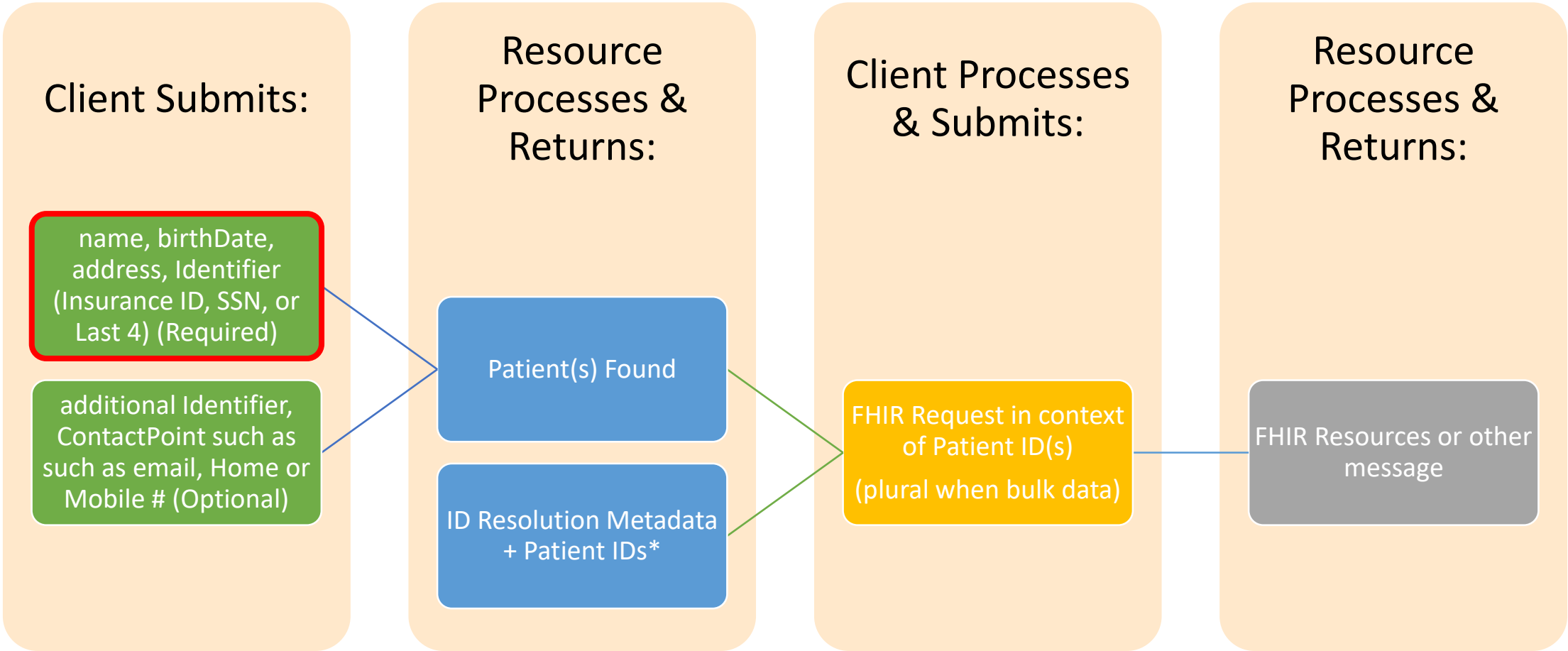
1. “Common” Case: Identity Match using Priority Patient Metadata

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

1. “Common” Case: Identity Match using Priority Patient Metadata



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1. “Common” Case: Identity Match using Priority Patient Metadata

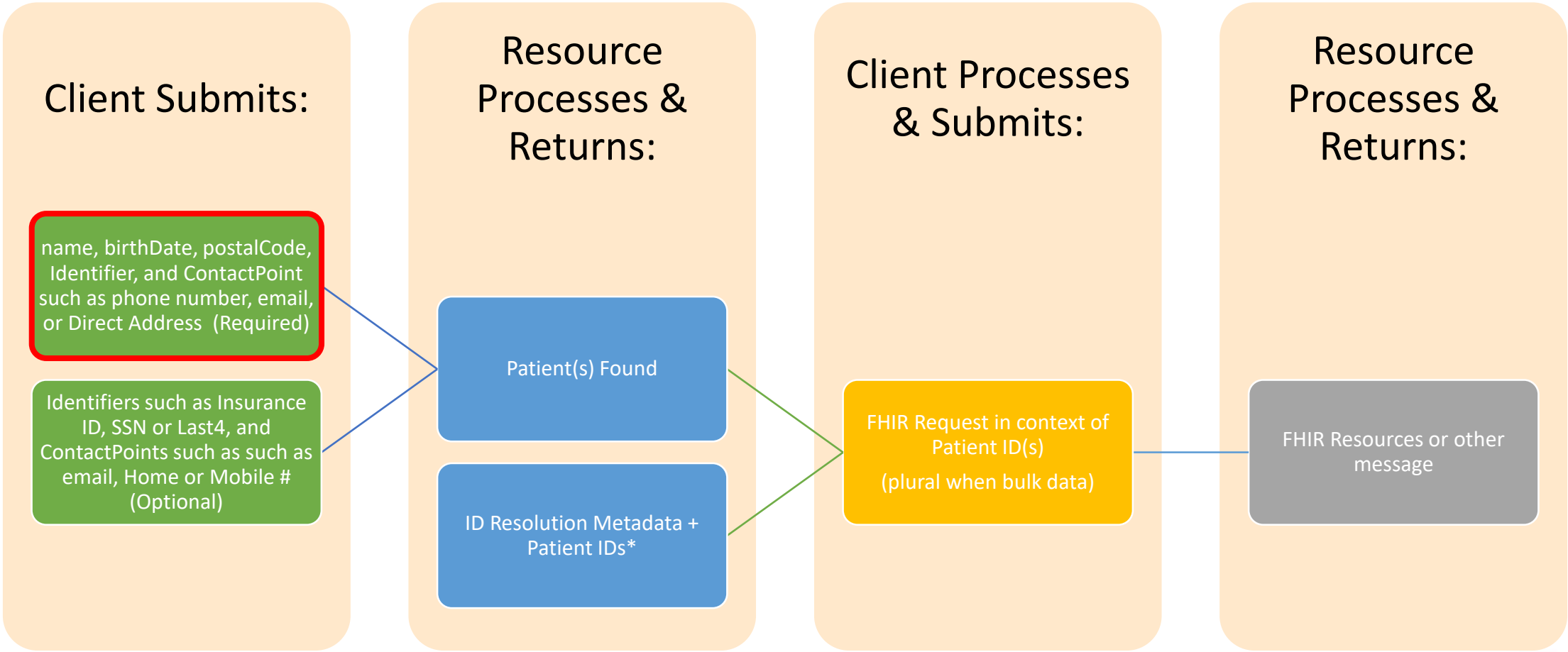
Actors’ Actions:

- Client submits match request using required attributes and any available optional attributes
- Resource either returns no results OR returns a list of one or more patients along with attributes the client can use to perform identity resolution (1)*
- If a match is determined, client submits FHIR request with patient context and resource returns results (2)
- In future slides we’ll refer to these steps as (1) **identity resolution step** and (2) **data request step**

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 & shall we further specify the contents of that action?)
- 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?

1.a. “Common” Case: Identity Match using Patient ContactPoint



This is one sub-example of the “Common” case

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1.a. “Common” Case: Identity Match using Patient ContactPoint

Actors’ Actions:

- Client submits match request using required attributes and any available optional attributes, then performs identity resolution step then data request step

Gaps Identified:

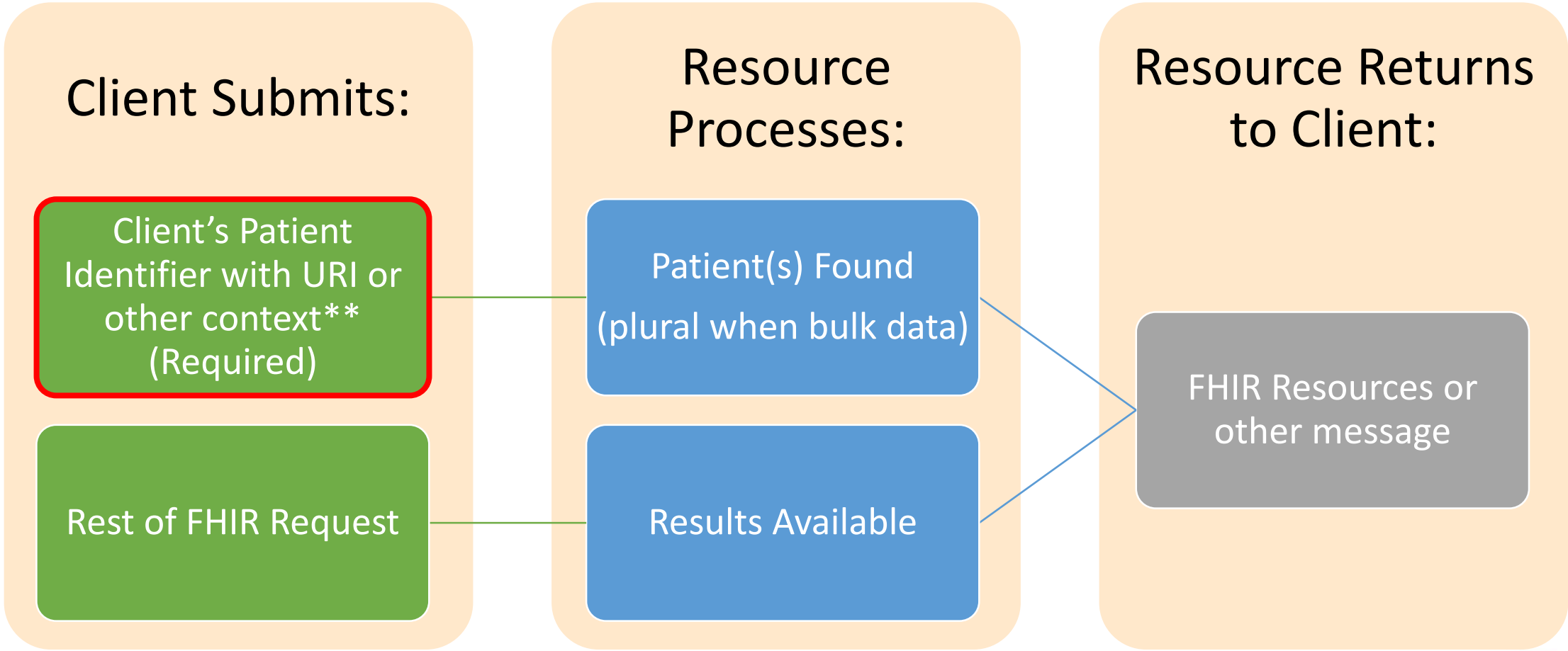
- PRECONDITION: both parties pre-register the patient’s ContactPoint, e.g. phone, email, Direct Address
- Is it a concern if the patient has multiple ContactPoints of the type being matched or the ContactPoint changes over time?

2. “Lookup” Case: Identity Match using ID on Client’s System

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 a precondition assumes the resource holder has associated another entity's identifier with their own local identifier

2. “Lookup” Case: Identity Match using ID on Client’s System



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2. “Lookup” Case: Identity Match using ID on Client’s System

Actors’ Actions:

- Client sends their patient identifier along with the FHIR request in a single pass
- Resource looks up the patient and goes right to data request step

Gaps Identified

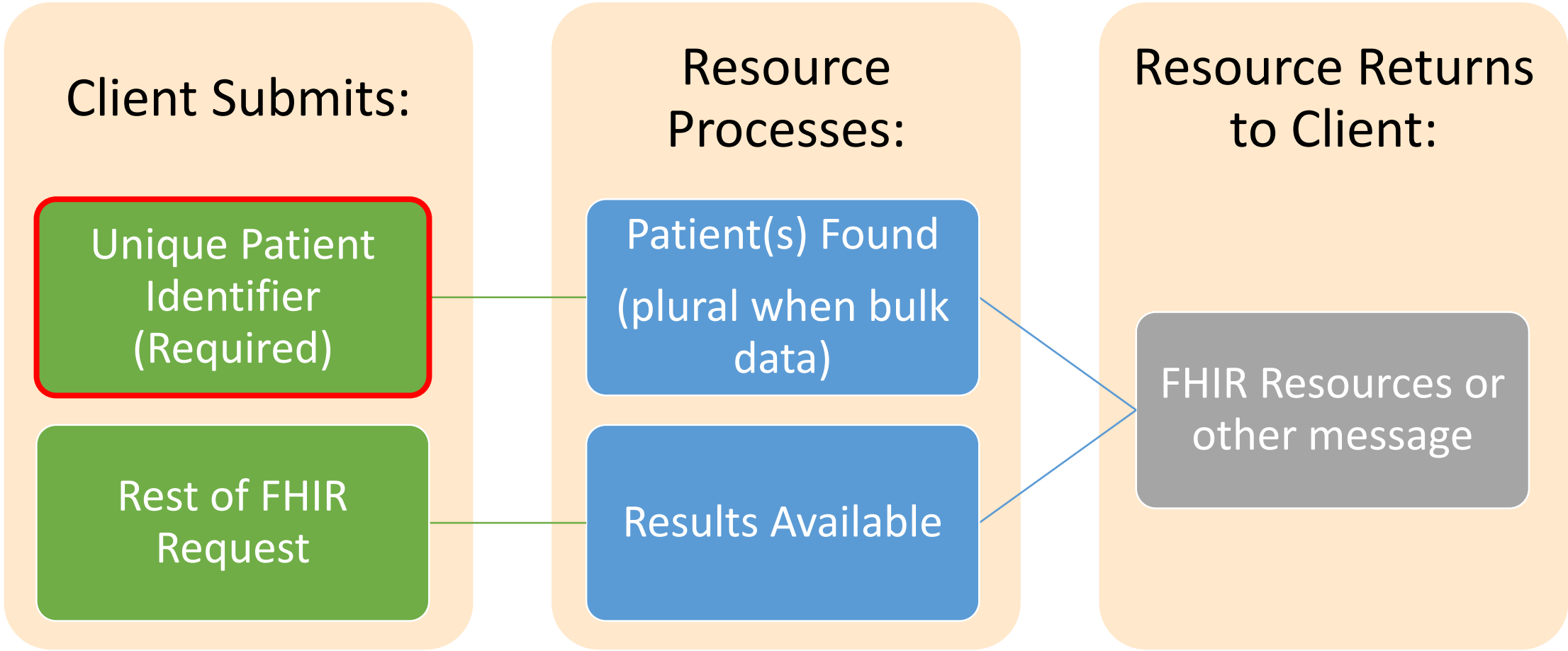
- PRECONDITION: Assumes pre-registration of patient so that resource has already matched client’s patient identifier to their local identifier(s) as a unique patient
- A URI for each participating organization’s identifier should be developed, or other means of providing context that can indicate what organization’s identifier is being provided
- Additional metadata such as name, DOB, or Last4 will be needed from time to time to resolve members within a family who share the same insurance ID (other outlier cases?).
  - If no patient attributes are provided, does the resource return all matching records, which may be an entire family→what is the impact?
- Patient has been a cash payer to date→pre-registration would not be possible

3. “Lookup” Case: Identity Match using Other Unique Patient Identifier

Problem Statement

- Provider to Payer/Provider to Provider communication when both parties recognize one or more types of unique patient identifiers
- This is a special scenario in which a resource holder can match to a patient with 100% accuracy based on a unique patient identifier

3. “Lookup” Case: Identity Match using Other Unique Patient Identifier



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3. “Lookup” Case: Identity Match using Other Unique Patient Identifier

Actors’ Actions:

- Client sends unique patient identifier along with the FHIR request in a single pass
- Resource looks up the patient and then goes right to data request step

Gaps Identified

- PRECONDITION: Assumes pre-registration of patient’s unique identifier at both organizations
- A URI for each identity service or another method to make identifiers unique across identity providers should be established, along with identity proofing requirements, if any

Parking Lot/Notes from a previous meeting…

- Option A: Real-time patient matching, fallout, scale, headless
- Option B: Payer and Provider have (access to) same digital ids

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