Clinical Reasoning
Da Vinci Member
Attribution Track  Bulk Data
and Patient List
Member Attribution and Gaps In Care Experts

- Nagesh Bashyam - Nagesh.bashyam@drajer.com
- Rob Reynolds – rob@alphora.com
Member Attribution Overview

▪ Phase 1
  - Completed, Created an IG, balloted, reconciled and published
    - Deals with exchange of an Attribution (A.K.A. Patient) List

▪ Phase 2
  - In-progress
    - Deals with Attribution List reconciliation, notifications
    - Alignment with CMS DPC and BCDA programs
MEMBER ATTRIBUTION PHASE 1
Phase 1 - Member Attribution Workflow

A condition exists where a list of patients is needed to support an agreement between the Producer and Consumer.

1. Producer creates initial attribution list
2. Consumer receives list & historical information
3a. Request Changes needed
3b. No changes needed
4. Consumer loads data to various systems to support various use cases

Note: Steps 2 and 3a will be repeated manually as many times as needed until no further changes are needed.
Attribution List Data Element mapped to FHIR Constructs

- Group
  - Created Based on contract
  - Contract (Only Contract Identifier used in Member Attribution List)

- Patient (Member)
  - Related to 1
    - Patient/RelatedPerson (Subscriber)
      - has 1
        - Coverage
          - has 0..*
            - Any Resource for capturing related data
  - Attributed
    - has 0..1
      - Organization
        - has 0..*
          - PractitionerRole/Practitioner
MEMBER ATTRIBUTION PHASE 2
- Changes to Member Attribution IG in support of
  - Alignment with CMS Data at Point of Care program
    - [https://dpc.cms.gov/docs#attestation--attrribution](https://dpc.cms.gov/docs#attestation--attrribution)
  - Allow roster management and reconciliation using FHIR APIs
    - Creation of Attribution Lists by Providers in Payers systems
      - Addition of Members
      - Deletion of Members
      - Updates to Members
      - Record Attestation
    - See Appendix for details.
  - Notifications of Attribution List changes between producers and consumers
  - Data Retrieval – Other resources that need to be exchanged
- Outline specific steps on how Attribution List can be used for other DaVinci use cases
  - DEQM, GIC, Risk Based Coding.
Member Attribution Phase 2 Workflow

1. Producer/Consumer enter relationship and agree on attribution method and need for a list
2. Consumer identifies list of patients attributed to them because of their relationship and services rendered
3. Producer notifies of changes to list to consumer
4. Consumer requests add/modify or delete of a member
5. Producer and Consumers agree on a reconciled list

Note: Steps 3 and 4 are repeated as many times as needed.
CLINICAL REASONING: ATTRIBUTION LIST USAGE
Da Vinci DEQM IG and GIC Use Case

▪ The Quality Measurement Standards Landscape Diagram

Supports Gaps in Care Reporting
Attribution in Data Element Submission Scenario

- [http://build.fhir.org/ig/HL7/cqf-measures/capabilities.html](http://build.fhir.org/ig/HL7/cqf-measures/capabilities.html)
- Attribution/Selection - This workflow determines the attribution for the measure and determines the patients that would be in the initial population that will need to be submitted to the Receiving System

Data Element Submission Scenario
Attribution List – GIC Reference Implementation

- Da Vinci Gaps In Care Reference Implementation
  - Updated with DaVinci Risk Based Contracts Member Attribution (ATR) List IG functionality
Attribution List – Gaps in Care

- Member Attribution
  - Using member attribution specified by the DaVinci Risk Based Contracts Member Attribution (ATR) List IG
  - Add and remove Members from the pre-coordinated Group

- $care-gaps$ operation
  - subject parameter can be a group Group
  - Return Gaps in Care MeasureReports for each patient within the Group
DEMO
Attribution List – DEQM

- Da Vinci DEQM IG, supports Quality Measure Reporting
- `$evaluate-measure` operation
  - `subject` parameter can be a Group
  - Use Da Vinci Member Attribution List (ATR) IG APIs to manage Group
  - Returns a Quality Measure Report for each patient within the Group

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Da Vinci Risk Adjustment IG, STU 1, supports exchanging risk adjustment coding gaps from payers to providers

- **$report** operation
  - `subject` parameter can be a Group
  - Use Da Vinci Member Attribution List (ATR) IG APIs to manage Group
  - Returns a Risk Adjustment Coding Gap Report Bundle for each patient within the Group
Clinical Practice Guideline IG supports evaluating Libraries for use in Clinical Decision Support

- $evaluate$ operation
  - $subject$ parameter can be a Group
  - Use Da Vinci Member Attribution List (ATR) IG APIs to manage Group
  - Returns a the result of evaluating the Library against each patient within the Group
PAGING AND BULK DATA IMPLEMENTATION
Paging and Bulk Data Implementation Consideration – Gaps In Care

- Given $care-gaps has an OUT parameter of Bundle 0..*
- What’s the best way to implement the operation to provide both paging and bulk?
- Synchronous, the operation returns a Parameters with:
  - Standard: result – 0..*, each result includes a Bundle resource
  - Paging: next – 0..1, URL that acts as a continuation link for the next page of results

- Bulk: when called with `Prefer: respond-async` the operation follows the Asynchronous Request Pattern, with Bundles:
  - Kick Off Request
  - Bulk Status Request
    - Response – In-Progress Status
    - Response – Complete Status: eventually returns a bulk manifest where the output entries are links to ndjson files of Bundles
      - Need more detail on how this actually works
  - File Requests
Thank You!!
APPENDIX:
Addition of a Member to Attribution List

**Operation: Add**
- POST [baseURL]/Group/[id]/$member-add

<table>
<thead>
<tr>
<th>Parameter Type</th>
<th>Name / Type</th>
<th>Cardinality</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN</td>
<td>memberId / string</td>
<td>0..1</td>
<td>Identify Member for attribution</td>
</tr>
<tr>
<td>IN</td>
<td>providerNpi / string</td>
<td>0..1</td>
<td>Identify Provider for attribution</td>
</tr>
<tr>
<td>IN</td>
<td>patientReference / Reference</td>
<td>0..1</td>
<td>Patient to be attributed to the provider</td>
</tr>
<tr>
<td>IN</td>
<td>providerReference / Reference</td>
<td>0..1</td>
<td>Attributed Provider (Can be Practitioner/PractitionerRole/Organization)</td>
</tr>
<tr>
<td>IN</td>
<td>attributionPeriod / Period</td>
<td>0..1</td>
<td>Attribution Period</td>
</tr>
</tbody>
</table>

OUT – OperationOutcome due to errors
HTTP Status of 201 accepted

Supported Input Combinations:
- MemberId + ProviderNPI
- MemberId + ProviderNPI + attributionPeriod
- patientReference + providerReference
- patientReference + providerReference + attributionPeriod

Payer Responsibilities
- Validate the input combinations and either add the member or not add the member based on business logic
- Republish the Member Attribution List after addition or no-addition.
Addition of a Member to Attribution List

**Operation : Add**
- POST [baseURL]/Group/[id]/$member-add

- APIs used by Provider to discover patientReference on Payer Server
  - Use Patient search by MemberIdentifier
  - Use Coverage search by MemberIdentifier
  - Use Patient search by other identifiers (MRN / SSN etc)

- **HRex – Member-match does not work as it currently stands. Demographic search may not be needed for ATR purposes.**

- APIs used by Provider to discover Provider Reference on Payer Server
  - Use Practitioner search by NPI
  - Use Organization search by NPI
  - Use PractitionerRole search by NPI

- Attribution Period requested by the Provider is a suggestion and the Payer may or may not accept the request when the attribution list is finalized.
Removal of a Member from Attribution List

**Operation: Remove**

- POST [baseURL]/Group/[id]/$member-remove

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</tr>
<tr>
<td>IN</td>
<td>coverageReference / Reference</td>
<td>0..1</td>
<td>Coverage Reference to be removed</td>
</tr>
</tbody>
</table>

Supported Input Combinations:
- MemberId - (Removes all attributions for that Member from the list)
- MemberId + ProviderNPI - (Removes all attributions for the combination of Member and Provider)
- patientReference
- patientReference + providerReference
- patientReference + providerReference + coverageReference

OUT – OperationOutcome due to errors
HTTP Status of 201 accepted

Payer Responsibilities
- Validate the input combinations and either remove the member or retain the member based on business logic
- Republish the Member Attribution List after removal or retention
Removal of a Member from Attribution List

**Operation: Remove**

- POST [baseUrl]/Group/[id]/$remove

  - DPC uses customized JSON
  - Prefer using Parameters Resource
    - Contains Patient Reference
    - Attributed Provider Reference
    - Coverage Reference
    - Attribution Period
    - Active/Inactive

  - If any of the above resources are not found, then the Operation should fail

  - Consumer needs to find the Patient / Provider and Coverage References.
    - Patient and Coverage can be found using Member Id
    - Provider can be found using NPI

  - Patient can be present in the Attribution List for multiple times, hence the above parameters would be required.
Group Creation by Providers in Payers Systems

- Applicable only to DPC use case currently. So these are optional capabilities that will be added to the IG to be supported by the Payers.

- POST [base URL]/Group
  - Group contains the Patient and Practitioner resources applicable for attribution.
  - References have to be resolved to existing Patient/Practitioner resources.

- Attribution Details
  - NPIs or TAX Identifiers of the providers for whom the group is being created
  - Add these identifiers to Group.identifier
  - Characteristic is normally not part of an Actual Group
Pending Topics still to be addressed

- Notifications of Attribution List changes
- Attestation Requirements
Member Identification – Resources for Testing

- Member Attribution Server and other information for the Connectathon (Reference Implementation - https://github.com/HL7-DaVinci/atr)
  - Server: http://52.70.192.201/bulk-api-r4/fhir/
  - Client: http://52.70.192.201/MAL

- NPI: 1316206220
- TIN: 789456231
- Group Id: 1