CARIN IG For Digital Insurance Cards SMART Health Links
Use Case
CARIN IG For Digital Insurance Cards + SMART Health Links
Proposed updates to IG, June 14, 2023

Home Page
https://build.fhir.org/ig/HL7/carin-digital-insurance-card/index.html

Update the intro to reflect the SHL use case, I think we just need to add a few words:

1.1 Introduction

This implementation guide describes the CARIN for Digital Insurance Card (C4DIC) Framework, providing a set of resources that payers can display to consumers via a FHIR API or SMART Health Link. This implementation guide focuses on standardizing how data elements from the physical insurance card can be transmitted in a FHIR-based exchange, leveraging the Coverage resource as well as Patient and Organization resources. See the Table of Contents for more information.

Background
https://build.fhir.org/ig/HL7/carin-digital-insurance-card/Background.html

Add a reference to updating the IG to include SHLs at the end of Introduction 2.1:

While STU 1.0.0 focused on a FHIR API-based exchange of digital insurance cards, in 2023, the need was identified to create portable, verifiable versions of digital insurance cards. In [version x.x.x], the IG was expanded to include support for SMART Health Links.

Use Cases
https://build.fhir.org/ig/HL7/carin-digital-insurance-card/Use_Case.html#use-cases

Add a new sub-use-case for SHLs as a means for consumer access and exchange:

The Digital Insurance Card can also be made available to the member in a verifiable, tamper-proof package that the subscriber can store, manage, and share with healthcare providers as they see fit. In this model, the payer provides the member with a QR code or URL representing their digital insurance card, likely using the same modalities used to share digital cards today (e.g. payer mobile application, website, email). The member is able to present the QR code to be scanned during in-person visits or provide the QR code or URL to mobile or web forms during online registration or check-in flows. The provider then uses the QR code or URL to retrieve the Digital Insurance Card and verify its authenticity.

SMART Health Cards are a FHIR-based verifiable credential technical framework that has been made available to hundreds of millions of people around the world for proof of vaccination and infectious disease laboratory testing results.

SMART Health Links are a derivation of SMART Health Cards that enable larger and dynamic data payloads as well as other methods of interaction.

Flow:

1. Payer shares the insurance card with a member (e.g., as a QR code and text-based link, via the payer website, mobile application, secure messaging, etc)
2. Member downloads/retrieves the QR code and/or link.
3. Member stores the QR code and link as they see fit, with options ranging from printing on paper to storing in health apps or wallets capable of interpreting SMART Health Links.
4. Member presents the SMART Health Link to healthcare provider
   a. In-person:
      i. Member presents the QR code on their device or paper
      ii. Check-in staff or kiosk scan the QR code
   b. Online:
      i. Member provides the insurance card to the online check-in app or web flow by pasting the link into a field, uploading an image of the QR, or in the future via API-based methods tailored to wallet and health apps
5. Healthcare provider processes the SMART Health Link and retrieves the insurance card information from the Payor (or designated data hosting service), verifying cryptographic signatures if desired
6. Healthcare provider, EHR vendor, or other platform vendor incorporates insurance information into existing workflows

Guidance
Add a section for SHL-based implementation:

A Payer, to provide members with SMART Health Digital Insurance Cards:

SHALL generate a complete and appropriate FHIR bundle using as described in this specification, including Coverage, Organization, and Patient information, as well as any additional information defined by this IG’s extensions.

SHALL follow the **SMART Health Cards specification** to create a SMART Health Card containing the FHIR bundle.

- SHALL create the SMART Health Card as a JWS string, as defined by [https://spec.smarthealth.cards/#health-cards-are-encoded-as-compact-serialization-json-web-signatures-jws](https://spec.smarthealth.cards/#health-cards-are-encoded-as-compact-serialization-json-web-signatures-jws).
- SHOULD implement revocation as defined by [https://spec.smarthealth.cards/#revocation](https://spec.smarthealth.cards/#revocation).

SHALL follow the **SMART Health Links specification** to create a SMART Health Link referencing the SMART Health Card.

- SHALL include the SMART Health Card as `application/smart-health-card`, a JSON file with a `.verifiableCredential array` containing the SMART Health Card JWS string, as specified by [https://spec.smarthealth.cards#via-file-download](https://spec.smarthealth.cards#via-file-download).
- SHALL NOT require the user to set a passcode, and SHALL NOT enforce a passcode by default.

SHALL share the Digital Insurance Card with the member as other personal information would be shared.

- SHALL provide the member the SMART Health Link in text URI format as well as QR format, as described here [https://docs.smarthealthit.org/smart-health-links/spec#sharing-user-transmits-a-shlink](https://docs.smarthealthit.org/smart-health-links/spec#sharing-user-transmits-a-shlink).
- SHALL in close proximity to the link and QR code, specify to the member
  - Data referenced in the link.
  - Expiration date.
  - Whether or not the information is updated over time.
  - Caution about sharing the link with parties they trust.

A Consumer App, in helping members manage and share their Digital Insurance Card:

Can process the SMART Health Link as described here [https://docs.smarthealthit.org/smart-health-links/spec#shl-receiving-application-processes-a-shlink](https://docs.smarthealthit.org/smart-health-links/spec#shl-receiving-application-processes-a-shlink).

SHALL display the included data elements for the card.

- If the ‘flag: L’ is present, indicating the contents are for long term use, the application SHALL update the display of the contents or display a message noting that the contents may be stale.

SHALL display the expiration date, ‘exp’ (if present) for the card.

SHALL inform the user if the card has been revoked, as specified by [https://spec.smarthealth.cards/#revocation](https://spec.smarthealth.cards/#revocation).

SHALL update the display of data from the SMART Health Link

SHALL provide the member with the ability to share the SMART Health Link as they see fit.

- SHALL provide the member the SMART Health Link in text URI format as well as QR code, as described here [https://docs.smarthealthit.org/smart-health-links/spec#sharing-user-transmits-a-shlink](https://docs.smarthealthit.org/smart-health-links/spec#sharing-user-transmits-a-shlink).
- SHALL in close proximity to the link and QR code, caution the member about sharing the link with parties they trust.

Providers, receiving the Digital Insurance Card:

Can process the SMART Health Link as described here [https://docs.smarthealthit.org/smart-health-links/spec#shl-receiving-application-processes-a-shlink](https://docs.smarthealthit.org/smart-health-links/spec#shl-receiving-application-processes-a-shlink).