

Referrals

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Agenda

- What is a Referral?
- Workflow of Referrals
- Challenges in Referrals
- FHIR Resources
- Outgoing Referral Creation
- What changed between DSTU2 and STU3?
- What's coming for R4?

What is a Referral?



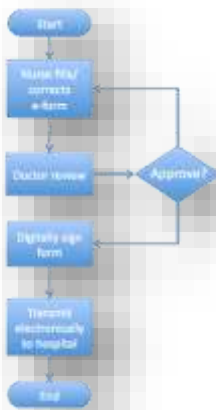
Oxford Dictionary: an act of referring someone or something for consultation, review, or further action.

- the directing of a patient to a medical specialist by a primary care physician.
- a person whose case has been referred to a specialist doctor or a professional body.

For me, this is either/or:

- *Simple – Just need the “paperwork” to get funded/claim*
- *Complex – sharing detailed care information*

Super simple Referral workflow



- Practitioner needs to refer Patient
- Locate Destination for referral
- Fill out required referral forms
- Attach all required documentation
- Send to destination

Challenges in Referrals

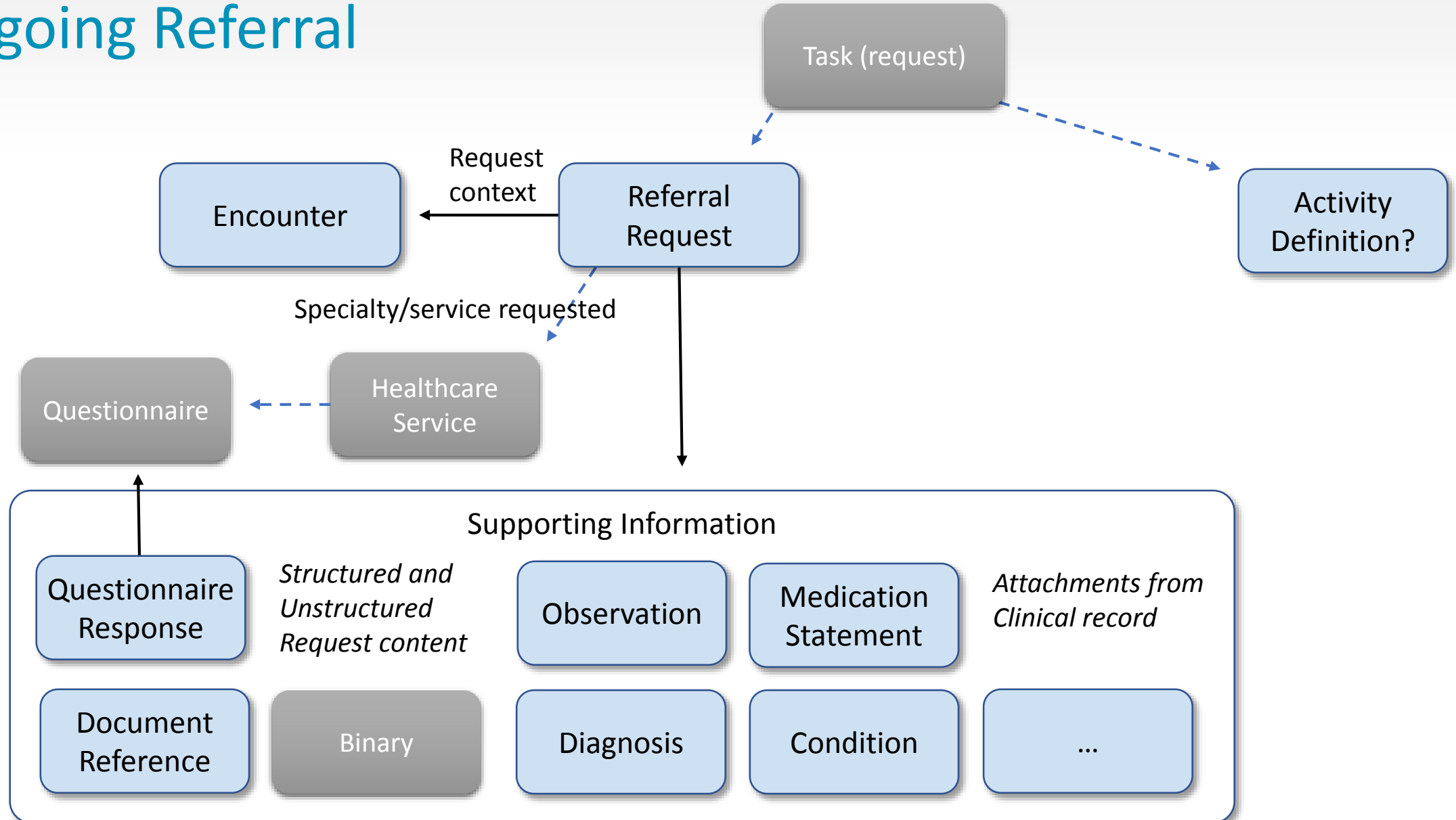


- Who can I send to?
- What format can they receive?
- Do they have some specific content needed?
- What delivery mechanisms do they support?
- How can I be sure delivery is secure/timely?
- This referral is missing data X!
- What is the status of referral X?
 - Did the receiver accept the transfer of care?
(*who's responsible for the patient?*)

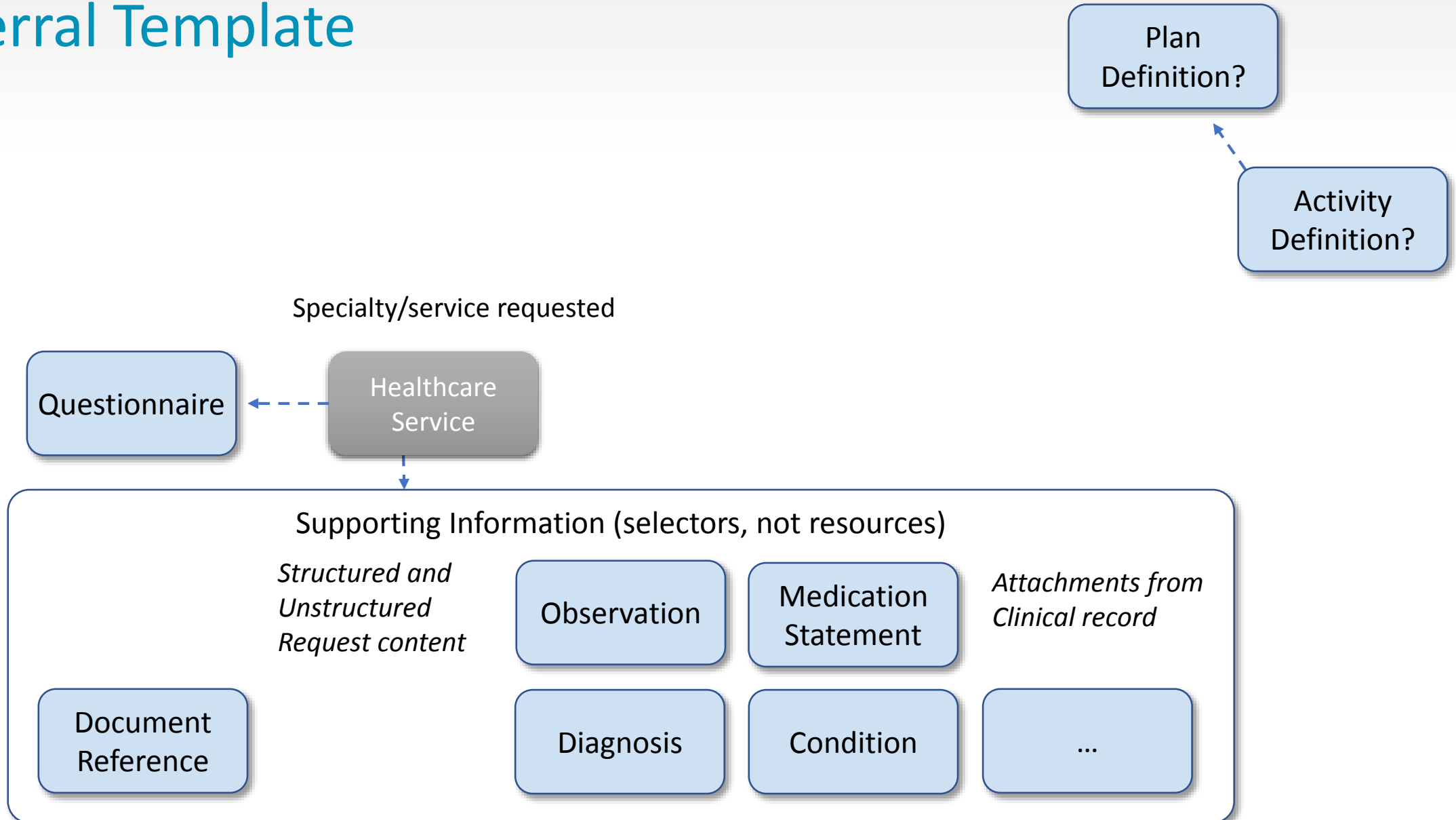
Supporting Referrals – A more complete pipeline

- Outgoing Referral creation
 - Discovery
 - Directory definitions
 - Referral Delivery
 - Workflow
- Incoming Referral received
 - Referral processing
 - Referral response creation
 - Reply Delivery (back to sender)
 - Workflow

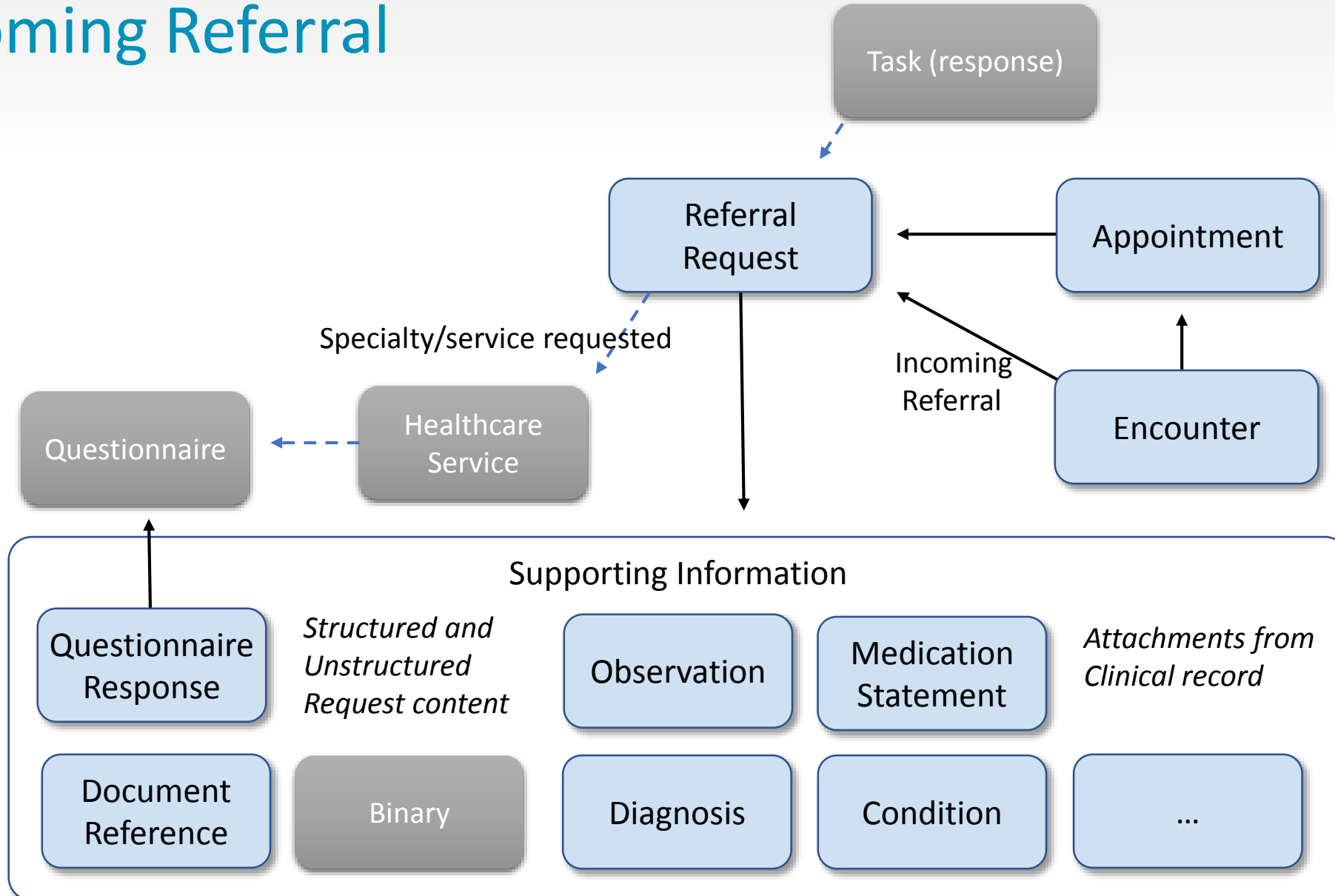
Outgoing Referral



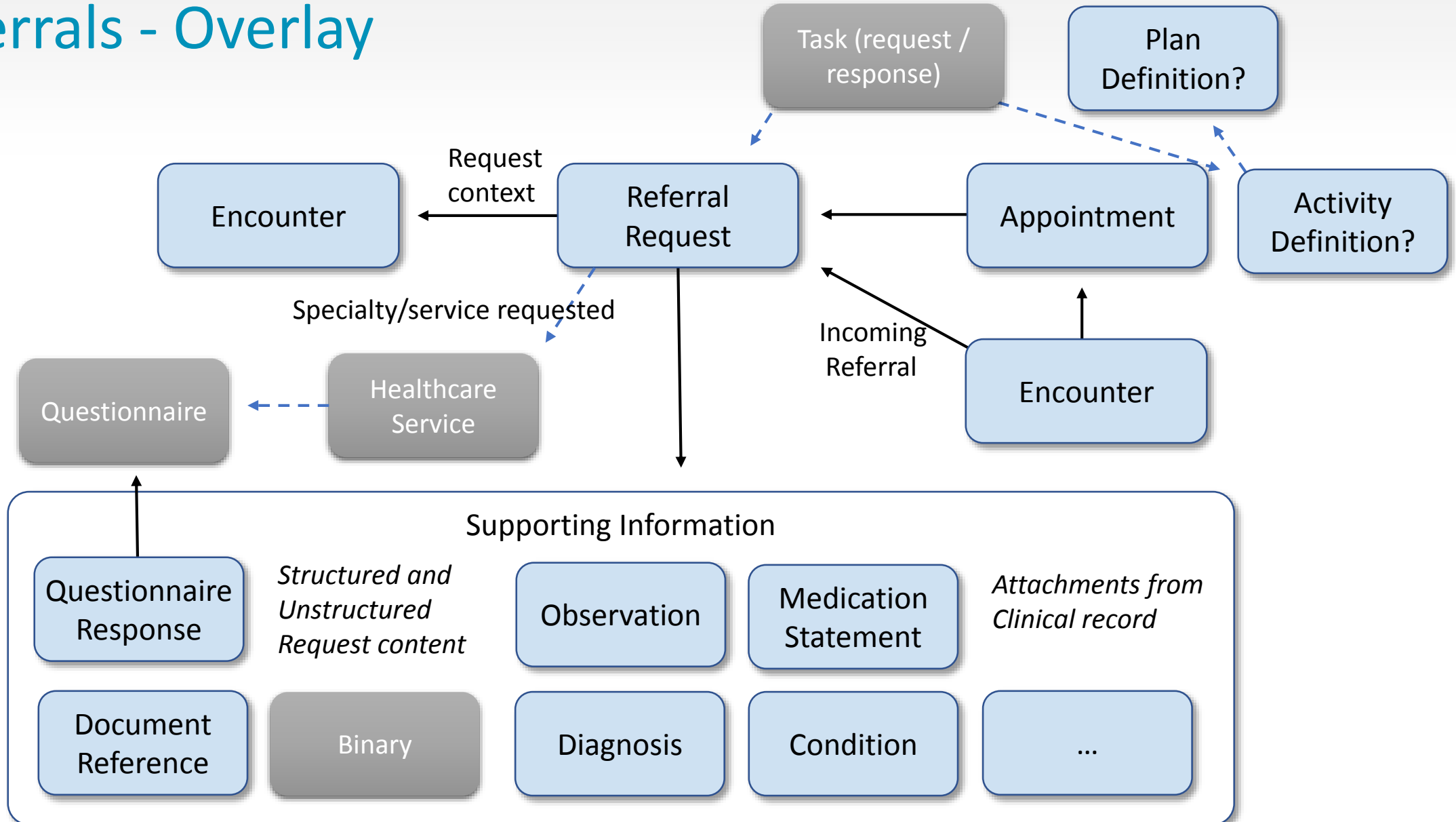
Referral Template



Incoming Referral

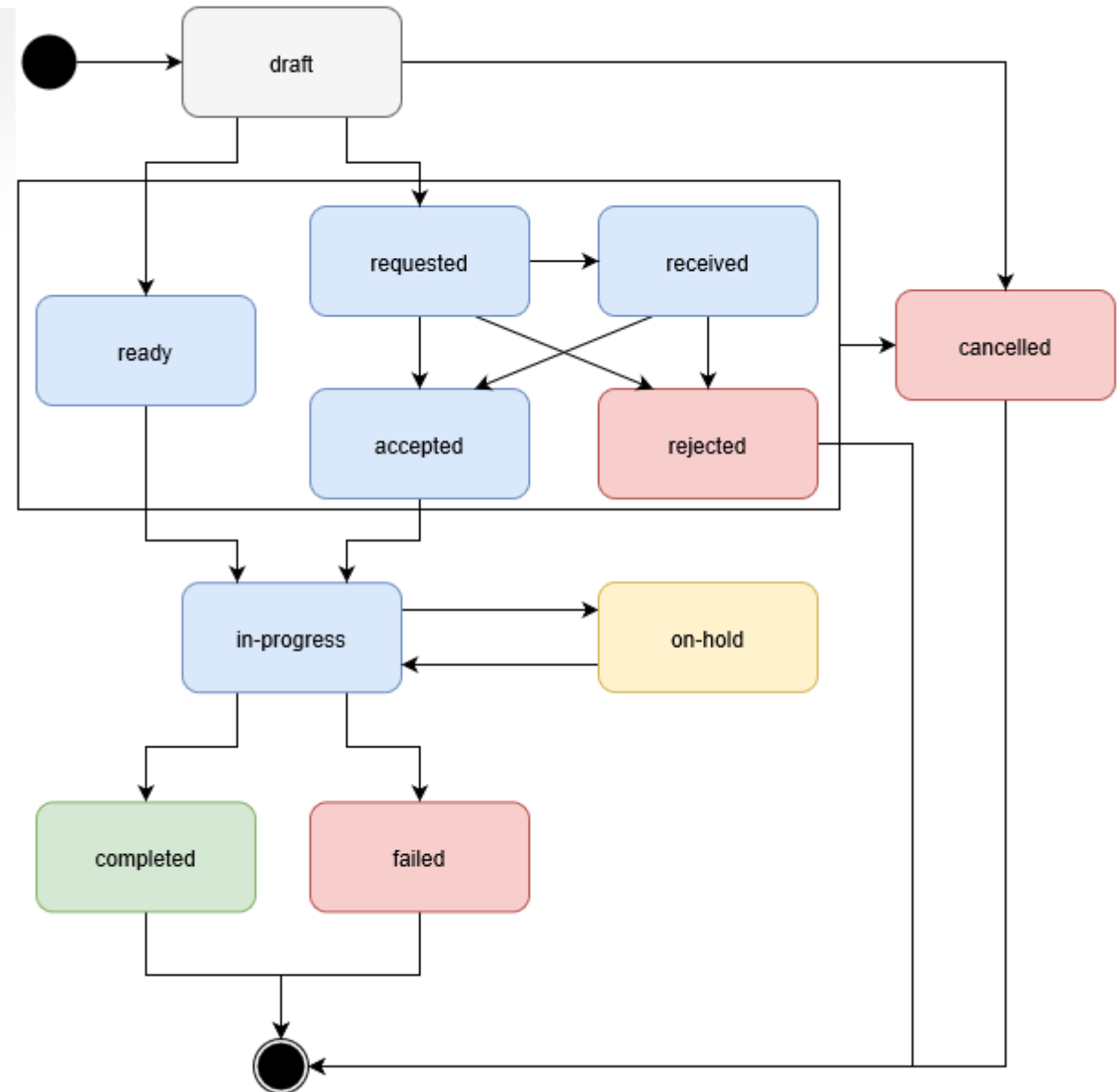


Referrals - Overlay



Status Management

- Task/Referral
- Communicated with a Task resource



Outgoing referral creation

The process of creating a referral appears like it should be a simple process, all I need is:

- The patient details
- The details of who I'm sending the referral to
- My details (as the sender)
- Some details of the service that I'm referring the patient for
- Optionally: some additional background information on the patient

The basics

```
<ReferralRequest >
  <id value="hcx-qr-example"/>
  ...
  <status value="draft"/>
  <date value="2016-10-04"/>
  ...
  <priority >
    <coding >
      <system value="http://connectingcare.com/fhir/CodeSystem/prioritycodes"/>
      <code value="routine"/>
      <display value="Routine"/>
    </coding>
  </priority>
  <patient >
    <reference value="Patient/45"/>
    <display value="Brian Postlethwaite"/>
  </patient>
  <requester >
    <reference value="Practitioner/77272"/>
    <display value="Dr David Hay"/>
  </requester>
  <recipient >
    <reference value="#recipient"/>
    <display value="Central Psychology - Counselling Services"/>
  </recipient>
  <dateSent value="2016-10-14"/>
  ...
</ReferralRequest>
```

Service Info

```
<ReferralRequest >
  <id value="hcx-qr-example"/>
  ...
  <type >
    <coding >
      <system value="http://connectingcare.com/fhir/CodeSystem/referraltypes"/>
      <code value="sctt2012"/>
      <display value="SCTT 2012 Referral"/>
    </coding>
  </type>
  <specialty >
    <coding >
      <system value="http://connectingcare.com/fhir/CodeSystem/specialties"/>
      <code value="ent"/>
      <display value="ENT"/>
    </coding>
  </specialty>
  ...
  <reason >
    <text value="Brian seeks some counselling support to cope with his
      increased workload."/>
  </reason>
  <description value="In the past 2 years Brian's work/home life
    has been stretched very thin and needs to have some mechanisms
    for coping with the additional strains."/>
  <serviceRequested >
    <text value="Councelling"/>
  </serviceRequested>
  ...
</ReferralRequest>
```

Supporting Info

```
<ReferralRequest >
  <id value="hcx-qr-example"/>
  ...
  <supportingInformation >
    <reference value="#binaryattachment"/> <!-- a contained PDF -->
    <display value="attachment name"/>
  </supportingInformation>
  <supportingInformation >
    <reference value="#sctt01"/> <!-- A contained QuestionnaireResponse -->
    <display value="SCTT 2012 Summary and Referral Information"/>
  </supportingInformation>
  <supportingInformation >
    <reference value="Condition/2342"/>
  </supportingInformation>
  <supportingInformation >
    <reference value="Observation/7845"/>
    <display value="Blood Pressure 12 Sept 2016"/>
  </supportingInformation>
</ReferralRequest>
```


Then ...

What is difficult here is knowing what *should* be included in the supporting information, and what the receiver really thinks is mandatory information. This would be found in a directory during the discovery stage.

This resource is now ready to be sent, which could be via messaging, or just saved on a FHIR server and start a workflow in progress.

Is any of this done today?

FHIR Resources – in production at Telstra Health



- *ReferralRequest*
- **Questionnaire / QuestionnaireResponse**
(with pre-populate)
- **Terminology Resources (Valueset...)**
- *DocumentReference / Binary*
- *Observation, Diagnosis, Condition, MedicationStatement, ...*
- *(other clinical resources)*
- *Encounter*
- **Organization, Location, HealthcareService**
- *Future: Task (for workflow tracking)*
Endpoint (for addressing details)

Consumer details

*Family name:

*Given name(s):

Your client reference number:

*Date of birth:
(dd/mm/yyyy)

*Gender:

Service Forms

SCTT 2012: or

SCTT Referral Cover Sheet and Acknowledgement	Required
SCTT Consumer Information	Required
SCTT Summary and Referral Information	Required
SCTT Consent to Share Information	Required

your use of tobacco led to health, social, legal or financial problems?

- Monthly
- Weekly
- Daily/Almost Daily

Q6. Has a friend or relative or anyone else ever expressed concern about your use of tobacco?

- Never
- Yes, in past 3 months
- Yes, not in past 3 months

Q7. Have you ever tried and failed to control, cut down or stop using tobacco?

- Never
- Yes, in past 3 months
- Yes, not in past 3 months

Total

Alcohol

(Beer, wine, spirits)

Q1. In your life which of the following substances have you ever used?

- Yes
- No

Total

Current services

Services used in the last twelve months. Consider all health and community services.

Agency

Service type

Record contact details or other information as appropriate (eg key contact)

Remove

Add Current services

- Aged residential care
- Magnetic resonance imaging (MRI)
- Mental health assessment/triage/crisis response
- Mental health non-residential rehabilitation
- Mental health residential rehabilitation/community care unit
- Non-residential alcohol and/or drug dependence treatment
- Residential alcohol and/or drug dependence treatment
- Residential/out of home care
- Respite care

Referrals sent

Agency

Service type

Difference between FHIR versions

DSTU2 -> STU3

- Workflow alignment
- Task related properties removed
- *(Order and OrderResponse resources were removed)*

STU3 -> R4

- Merged into ProcedureRequest
- Which was then renamed to ServiceRequest
- Seeking feedback in spec

<http://hl7.org/fhir/referralrequest.html> (check the R2 Diff tab – not a complete mapping)

Summary



- The referral is:
 - Only a part of referrals in FHIR
 - Simple or complex
 - A Header and attachments (many types)
 - A workflow process (enabling transfer of care)
- Directories are needed to support referrals
- Task resource supports the workflow
- Know your part in the referrals solution
 - Sender, receiver, processing, delivery
- Changing name in R4 - ServiceRequest

Questions?

Thank you

Keep FHIR-ing on all cylinders