Contraindication Fhir Resource Proposal
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Contraindication

Owning committee name
Clinical Decision Support Workgroup

Contributing or Reviewing Work Groups
- Pharmacy WG
- Patient Care

FHIR Resource Development Project Insight ID
Pending

Scope of coverage
The contraindication resource identifies a particular issue associated with a proposed or actual clinical action. For example, a drug-drug interaction, a procedure contraindicated based on weight or health condition, an out-of-range drug dose, etc. These may be identified by decision support systems or through human cognition. The scope includes both human and animal therapies and covers all disciplines and care environments.

QUESTION: should this be limited to clinical? Can administrative issues (lack of consent, permissions, etc.) fall here or is that always an OperationOutcome? ANSWER: No, should not be limited to clinical - use wherever a persistent resource is required. OperationOutcome is not intended to be persistent, rather is a transport acknowledgment similar to HL7 v2 ack/nack. Should provide guidance as to when this resource should be used in preference to OperationOutcome.

RIM scope
Observation [classCode=OBS, moodCode=EVN, code <= ISSUE]

Resource appropriateness
Contraindications are a common concept in medicine, particularly in decision support. Contraindications tend to come into being as a result of some other resource, however they exist as separate structures and can be returned on their own. As well, they can have relationships to multiple resources. For example, in the case of a drug-drug interaction, the resource (prescription, dispense, etc.) for each of the two medications would be implicated and neither would have a stronger affiliation with the contraindication than the other. Therefore, the contraindication must be captured as a distinct resource.

Contraindications may be persisted and queried, though updates will be uncommon as they are typically point-in-time assessments.

Standardization of Contraindications is important for decision support purposes.

Expected implementations
- QUICK decision support/quality metric logical model
- CQF pilots including Health eDecisions
- OpenCDS (longer term)
- SocraticGrid (longer term)
- Canadian pharmacy implementations (eventually)

Content sources
- QUICK model
- v3 CMET
- OpenEHR?
- CIMI DCM models?

Example Scenarios
- Drug-drug interaction detected between a prescription and an existing medication statement
- Dose out of range by age
- Contraindicated medical procedure based on existing condition
Resource Relationships

- OperationOutcome: A rejection or warning operation outcome may include an extension linking to a Contraindication providing the clinical basis for the rejection or warning.
- The various clinical resources (MedicationPrescription, AllergyIntolerance, Observation, Procedure, CarePlan, etc.) may all be triggers of a Contraindication.

Timelines

At least a draft prepared for the Jan 2015 DSTU ballot

gForge Users