# The Use of Decision Support Standards for Prior Authorization Information Used in ePrescribing

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# **Background**



### What is the proposed workflow?

#### **PAYER** Drugs can be flagged as **PATIENT** requiring PA, and simple Determines PA Status rules applied via **NCPDP** Visits Physician Formulary & Benefit Determines Criteria, Rules Standard Processes PA Requests Processes Drug Claims Drug Claims are Submit Required Patient Pharmacy PAs are Submitted via Information *via* Submitted via NCPDP X12N-278 **NCPDP Telecommunication** X12N-275 with HL 7 **Telecommunication Attachment PRESCRIBER PHARMACY** Writes Prescription Prescriptions are Obtains Pharmacy PA Completes a structured Q&A submitted via Dispense Drugs Submits PA Request NCPDP SCRIPT Files Drug Claims Transmits Prescription





# **AHRQ-Sponsored Project**



#### **Scope of Project**

- Term: October 3 to November 20
- Complete three reports:
  - Analysis of HL7 RIM vs 6 normalized PA therapeutic categories
  - Mapping of HL7 RIM's ability to GELLO Expressions for 6 normalized PA therapeutic category
  - Simulated model of a Web-based GELLO authoring and delivery tool
- Project Team:
  - Barbara McKinnon, Point-of-Care Partners, Project Manager
  - Margarita Sordo, MD, MSc, Partners HealthCare
  - Robert Greenes, MD, PhD, Partners HealthCare
  - Robert Dunlop, MD, Infermed
  - Ross Martin, MD, MHA, Pfizer Inc
  - Tony Schueth, MS, Point-of-Care Partners



#### **GELLO**

- Guideline Expression Language (GELLO) is an ANSI-accredited standard intended to be a standard query & expression language for clinical decision support.
- Specifications developed in coordination with HL7 Clinical Decision Support Task Group
- Prior Authorization was recognized as a timely use case that merited further exploration

### Where GELLO May Help PA Process

- Plans & PBMs will continue to:
  - designate which drugs require prior authorization (PA)
  - define PA criteria and determine PA rules
- GELLO could:
  - encode existing PA criteria to create machine-computable data that can be shared between payers & providers in a standards-based, interoperable fashion
  - facilitate automatic extraction of PA criteria from EMR to prefill answers to PA questions
  - support prescriber's answer to PA criteria being transmitted in a standardized message transaction



#### **Findings**

- ▶ PA criteria, queries & responses can be managed within HL7-compliant systems & tools but further refinements are needed to information models
- HL7 GELLO expression language provided a consistent framework for the standard representation of PA criteria
- When coupled with HL7 RIM, GELLO could support the sharing of information across applications
- GELLO + HL7 RIM allowed integration of SNOMED, RxNorm and ICD9
- Simulated models of GELLO Web-based authoring & delivery tools demonstrated a more standardized process and comprehensive approach to best practices



# Potential Standards-based Approach to Prior Authorization



#### **Potential Standards-based PA**

- Leverage the structured product label (SPL) to include GELLO expressions
  - Also include structured logic, fully computable GELLO expressions that are human readable
- Third party entities (eg medical societies, consensus-driven expert panels) could use GELLO expressions in SPL to build model clinical guidelines
- Payers, plans and PBMs could use the model clinical guidelines as prototypes for their own PA criteria, aligning them with their plan benefits.
- Clinical software vendors could download PA criteria into their PA delivery tool.



#### Potential Standards-based PA (cont.)

- Standardized, machine computable PA criteria could be presented to a physician after being alerted that a drug requires PA
- Answers to PA questions could be pre-filled by EMR software, reducing possibility of error, minimizing time required to complete and shortening turn-around time
- Answers to questions and other justification can be transmitted electronically to payer
  - Or approval, denial can be granted, or more information requested, instantaneously.
- Payers, plans and PBMs could calculate responses via whatever process chosen, including electronically



# **Next Steps**



#### **Next Steps**

For GELLO to be successfully utilized in the PA process, additional investments will need to be made in its development. Both public and private stakeholders will need to work toward completing the following projects:

- 1. Complete an analysis of GELLO vs the basic HL7 Query Mechanism
- Develop a GELLO open source compiler or interpreter to translate GELLO queries and expressions into executable statements for other programming languages.
- 3. Develop HL7 RIM-compliant GELLO interfaces to commonly used databases such as Oracle, SQL Server, and DB2.
- 4. Test GELLO in a live clinical care setting to ensure it is capable of accurately executing clinical decision support rules and extracting information from HL7 RIM-compliant systems.
- 5. Develop prototypes of the Authoring and Delivery tools, based on the designs described within the Web Based Solution Report.
- 6. Conduct an ePrescribing prior authorization pilot, utilizing the Authoring and Delivery Tools.