Background

- Emergency departments (EDs) and poison control centers (PCCs) use separate information systems and do not routinely share data.
- PCC communication relies upon telephone communication, with related safety vulnerabilities.(1)
- An interprofessional University of Utah team is developing, implementing, and evaluating a health information exchange process for poison control centers.(2)
- Preliminary studies established information requirements, expert consensus on pertinent issues/considerations.(3,4)

Results/ Progress

- Prototyping and iterative pre-development design of POISon completed (5)
- Data standards established (2)
- CCDA consultation note completed and tested
- Mapping between PCC data and POISon software complete
- End-to-end test of connection complete
- POISon software under development and testing, to be completed in 2016
- Initial implementation phase scheduled for fall 2016

Methods

- Bidirectional health information exchange (2)
- High level of workflow integration for PCC specialists
- ED workflow integration
- Use of ED electronic tracking system to facilitate notification
- We developed software and informatics tools:
  - Standards-based approach (2)
  - CCDA consultation note, adapted for poison exposure/PCC use case
  - IT service layer that enables integration of incoming/outgoing messages (Intermountain Healthcare)
  - POISon: Software for PCC specialists to manage and monitor incoming and outgoing communications

Conclusions

- Model process for workflow-integrated health information exchange between emergency departments and PCCs developed
- Holds potential to improve safety, efficiency, and quality in emergency management of poison exposures
- Necessary software and informatics tools created, identified or under development.
- Studying effects on workflow, communication, efficiency, utilization, and user evaluation of processes and tools

References