

Summary

Extensive experience in healthcare standards development and implementation, business/system analysis and software development, product management and project leadership. Focus on healthcare information exchange and supporting capabilities—providing industry leadership in the definition of interoperability standards, and helping clients implement them. Enjoy working closely with business stakeholders and software development teams to clarify understanding and deliver technology that makes a difference

Key strengths

- Thought leader, innovator, consensus builder and project driver. Success aligning stakeholder interests, clarifying aims and approaches, establishing action plans, overcoming obstacles and delivering concrete results in multi-stakeholder, multi-organization initiatives
- Respected voice in health IT standards development. Current NCPDP task group contributor and past Board of Trustees member. Have presented health information exchange topics to industry organizations and government audiences. Member of NCPDP, HL7 and IHE. Past speaker at global SNOMED CT health terminology showcase, US Long Term / Post-Acute Care IT Summit, AHIMA education conference, NCPDP webinars and other industry events
- Experience implementing e-prescribing and other healthcare standards: NCPDP, HL7, FHIR, X12
- Use of project management methodologies and tools: Agile software development, Lean development, UML, use case-centered design, Project Management Institute PMP

Health Information Exchange Analyst / Consultant

2009 – Present

Various clients: E-prescribing, EMR, payer / PBM, drug knowledgebase, other

Contract

Assist clients with their projects and strategy by providing health information exchange expertise, business and systems analysis, project leadership and product development guidance

Example projects**Business / Product Analyst—New Offerings**

October 2018 - Present

Surescripts

Contract

Providing analysis and leadership in the definition and development of new offerings that expand the company's services to new stakeholders and new capabilities

- *Exchange standards:* HL7 FHIR, NCPDP SCRIPT

E-Prescribing Standards Expert

October 2010 – August 2018

National Institute of Standards and Technology (NIST)

Contract

Provide subject matter expertise, software requirements analysis and standards group facilitation to support NIST's e-prescribing testing role for the federal Meaningful Use and EHR Certification programs and development of other validation tools and documentation for e-prescribing implementers

- Principal subject matter expert for federal EHR Certification (MU2 and MU3) e-prescribing validation tooling and test case development
- Created systematic validation profiles, Schematron validations for SCRIPT 10.6 and 2017071 test scenarios
- Led joint NIST / NCPDP working group to provide guidance and review for NIST efforts
- Performed analysis to add support for Structured SIG and other optional SCRIPT composites
- Provided guidance on e-prescribing standards: long-term care, controlled substances, other
- Assessed standards interoperability in medication reconciliation (SCRIPT, C32 CCD, CCR)
- *Exchange standards:* NCPDP SCRIPT (versions 10.6 and 2017071), HL7 CCD, ASTM CCR

Electronic PA Business/System Analyst and Project Champion

June 2015 – July 2018

Prime Therapeutics

Contract

Led automation of a critical electronic prior authorization (ePA) component, enabling accurate, real-time, member and drug-specific determination of utilization management / PA criteria. Provided subject matter expertise to clinical review system implementation

- Organized cross-business effort to model utilization management, plan benefit setup and clinical review processes. Led definition of business/system methodology and validated it through simulation analysis using historical PA cases. Performed detailed system analysis and prototyping. Worked closely with development team and data architect to build the resulting production web service
- Provided project management and development process consulting to increase the focus and productivity of a clinical review system implementation effort
- Assessed opportunities to automate steps related to the prior authorization process, including maintenance of utilization management criteria, workflow management and approval
- *Exchange standards:* NCPDP SCRIPT ePA

NCPDP SCRIPT E-Prescribing Standards Expert

June - August 2016

Surescripts

Contract

Performed foundational analysis supporting the network's transition from the currently-implemented prescribing standard (SCRIPT 10.6) to the standard taking affect January 2020 (SCRIPT 2017071)

- Performed detailed old-to-new data element mapping for all implemented message types
- Identified translation challenges and potential translation rules where necessitated by message content changes or newly added content
- Led team discussions to assess translation approaches, considering differing stakeholder perspectives
- *Exchange standards:* NCPDP SCRIPT (versions 10.6 and SCRIPT 2016071)

Information Exchange Conformance Analyst

November 2015 – June 2016

National Council for Prescription Drug Programs (NCPDP)

Contract

Provided standards expertise and technical assistance to NCPDP, helping assess opportunities to establish conformance testing capabilities for the range of NCPDP standards

- *Exchange standards:* NCPDP SCRIPT, NCPDP Telecom D.0

Health Information Exchange Expert

December 2014 – December 2015

Pharmaceutical Manufacturer

Contract

Researched and applied exchange standards to support tracking of manufacturer and lot information throughout the medication ordering and administration process and reporting of adverse drug events to registries

- Documented applicable standards for ambulatory, hospital and long-term care settings
- Identified gaps and needed enhancements to exchange standards. Assisted in creation of SCRIPT standard enhancement proposals, which were ultimately approved by NCPDP
- Authored implementation guidance to electronic health record and prescribing system vendors for tracking medication manufacturer and lot information during medication ordering, dispensing and administration processes
- *Exchange standards:* NCPDP SCRIPT, NCPDP Telecom D.0, HL7 v2.x, ICH E2B Individual Case Safety Report (ICSR: adverse drug event reporting)

E-Prescribing Product Expert

April 2014 – June 2015

Large healthcare data exchange network

Contract

Provided e-prescribing and prescriber-PBM information exchange expertise and product development support to a large US network organization

- Informed client of industry standards and considerations for electronic prior authorization (ePA)
- Supported development of pharmacy eligibility and medication history data exchange
- Provided continuity and development team support during a period of organizational change
- *Exchange standards:* NCPDP SCRIPT, X12

E-Prescribing Analyst

May 2014 – June 2015

PharMerica

Contract

Supported the client's effort to enhance and expand its e-prescribing and patient census interfaces

- Authored SCRIPT 10.6 implementation guide to support medication order and resident census interfaces between PharMerica and its facility EHR vendor partners
- Facilitated enhancements to the client's patient census interface through close collaboration with key facility vendor partners and internal business and technical staff
- Provided subject matter expertise related to e-prescribing standards and regulation
- *Exchange standards:* NCPDP SCRIPT, HL7

Health Information Exchange Analyst

June 2009 – June 2014

Surescripts

Contract

Provided business analysis and healthcare standards expertise to support the development and certification activities of this leading electronic prescription and clinical information exchange network

- Assisted implementation of the current NCPDP electronic prior authorization standard. Provided standards and process expertise, business analysis, and stakeholder facilitation
- Led definition of new pharmacy benefit-related messaging approach. Facilitated working sessions with PBM, EMR and Surescripts stakeholders. Defined new XML schema and authored implementation guide and related materials. Assisted in stakeholder implementation and testing
- Provided ongoing standards expertise to support e-prescribing and clinical exchange initiatives
- Led HL7 message integration with US immunization registries. Standards strategy, negotiation with registries and providers on information requirements, detailed HL7 mapping analysis
- Developed formulary data test tooling based on the NCPDP Formulary & Benefit standard
- *Exchange standards:* NCPDP SCRIPT, ePA and Formulary & Benefit, HL7 2.3.1-2.5.1, HL7 CDA

E-Prescribing Analyst

August 2013 – January 2014

SigmaCare

Contract

Provided SCRIPT e-prescribing standards expertise to support the development of interfaces with pharmacy partners of this long-term care facility EHR vendor

- Analyzed existing HL7 medication order interface and document requirements to transition to NCPDP SCRIPT 10.6 standard. Developed implementation guide content and data mappings
- Worked closely with development team and pharmacy partner to provide subject matter expertise and to facilitate interface definition
- Assisted with ongoing questions related to electronic prescribing standards and regulation
- *Exchange standards:* NCPDP SCRIPT, HL7

Electronic Prior Authorization Analyst

April – June 2013

Minnesota Department of Health

Contract

Provided training and advice on electronic prior authorization (ePA) approaches and details on the current NCPDP SCRIPT ePA standard. Facilitated a state and national stakeholder group to agreement on Minnesota guidance for ePA.

- Led collaborative development of a MN statute-required ePA companion guide
- Produced background and training materials to quickly bring stakeholders up to speed on ePA
- Researched ePA standards development history and current state ePA legislative activity
- Produced a twenty-page ePA backgrounder document

E-Prescribing Analyst and Technical Writer

April 2013

Leading US drug knowledgebase vendor

Contract

Restructured and enhanced guidance for use of this vendor's knowledgebase product in NCPDP SCRIPT 10.6 e-prescribing messages

- Collaborated with the vendor's staff to retain organization document formats while correcting and extending usage guidance
- Set editorial conventions for referring to components of the standard and aspects of use
- Provided subject matter expertise on current industry use of the SCRIPT 10.6 standard

Health Information Exchange Analyst / Project Manager

May 2009 – April 2011

Minnesota Health Information Exchange, LLC (MN HIE)

Contract

Provided health information exchange standards expertise and project management to this statewide health information organization (HIO)

- Requirements development, testing, implementation, and project management responsibilities
- *Exchange standards:* HL7 lab, immunization, CCD; NCPDP medication history, X12 eligibility

E-Prescribing Analyst

January 2009 – May 2009

Medco

Contract

Performed in-depth analysis of upcoming e-prescribing standards changes for this leading pharmacy benefit manager (PBM)

- Performed detailed gap analysis between implemented e-prescribing standards and upcoming SCRIPT 10.6 and X12 5010 standards, identifying required and optional changes
- Evaluated the SCRIPT v10.6 standard in relation to Medicare Part D e-prescribing standards required in PBM operations
- *Exchange standards:* NCPDP SCRIPT (e-prescribing), NCPDP Formulary & Benefit, X12 Eligibility

E-Prescribing Analyst

November 2008 – March 2010

SRS Software, Ltd.

Contract

Provide e-prescribing technical background and performed research on e-prescribing incentive programs, standards, federal and state requirements to this electronic medical record system vendor

- Supported the addition of e-prescribing functionality to an existing EMR system by providing background on industry conventions, technical standards and regulations
- Support ongoing information needs related to e-prescribing standards and environment
- *Exchange standards:* NCPDP SCRIPT (e-prescribing), NCPDP Formulary & Benefit, X12 Eligibility

Prior healthcare and other experience**E-Prescribing Product Strategist**

July 2006 – April 2009

MDI Achieve, Eden Prairie, MN (Industry: Electronic Health Record vendor for long-term care settings)

Led e-prescribing product development and standards strategy for this long-term care software provider

- *Exchange standards:* NCPDP SCRIPT, NCPDP Formulary & Benefit, X12, HL7

Product Development Manager

November 2001 – July 2006

RxHub, LLC, St. Paul, MN (later Surescripts) (Industry: Healthcare information exchange network)

During tenure, defined product requirements and exchange standards, developed testing and reporting tools, and led software product development activities

- *Exchange standards:* NCPDP SCRIPT (e-prescribing), NCPDP Formulary & Benefit, X12 Eligibility

Sr. Business Analyst

January 2001 – October 2001

HealthNexis, LLC., St. Louis Park, MN (Industry: Healthcare supply chain)

Defined requirements for software services provided by this web-based application service provider.

Product Manager / Sr. Business Analyst

June 1999 - January 2001

Gelco Information Network, Eden Prairie, MN (Industry: Consumer Packaged Goods)

Managed the product strategy for software and financial services targeted to CPG manufacturers

Project Manager / Business Analyst

September 1998 - June 1999

Reliastar Financial Corp., Minneapolis, MN (now ING)

Contract

(Industry: Insurance and finance)

Managed a portion of a multi-team effort to improve data integration with key business partners

Project Manager / Sr. Business Analyst

July 1997 - August 1998

Access Financial Lending Corp., St. Louis Pk., MN (Industry: Mortgage lending)

Managed the implementation of a packaged accounting system (Lawson general ledger and A/P)

Project Manager / Business Analyst

July 1996 - June 1997

Green Tree Financial Corp., St. Paul, MN (Industry: Mortgage lending)

Managed the selection and integration of an off-the-shelf mortgage loan origination system

Programmer / Analyst

August 1994 - June 1996

The St. Paul Companies, Inc., St. Paul, MN (Industry: Insurance and finance)

Developed information systems to meet the needs of investment managers and accountants

Investment Accountant

January 1991 - July 1994

Reliastar, Inc., Minneapolis, MN (Industry: Insurance and finance)

Responsible for the accounting of the firm's \$50 million investment real estate portfolio

Healthcare industry involvement

NCPDP (National Council for Prescription Drug Programs)

Past member of NCPDP Board of Trustees, leader of NIST / Meaningful Use task group, Long-term and Post-Acute Care E-Prescribing task group and Implementation of Structured Sig task group. Contributor to Electronic PA, Formulary and Benefits, and other task groups. Presenter in NCPDP webinars

HL7 (Health Level Seven) Member. Participant in the TermInfo working group (SNOMED CT in HL7)

IHE (Integrating the Healthcare Enterprise) Member

SNOMED International (formerly IHTSDO – Int’l Health Terminology Standards Org.)

Presenter at 2014 SNOMED CT Implementation Showcase program

AHRQ E-Prescribing Expert Meeting (Agency for Healthcare Research and Quality)

LTC software representative providing input on further pilots for e-prescribing standards, including prior authorization, codified sig, and RxNorm (2008)

AHIMA (American Health Information Management Association)

Speaker: National LTC practice meeting (April 2010): E-Prescribing & E-MARs in LTC

NASL (National Association for the Support of Long Term Care)

Past Chair: Medication Management Workgroup. Speaker: 2012 *Introduction to NCPDP and E-Prescribing Standards* webinar; 2008 LTC HIT Summit: *Incorporating Physician Input to Improve LTC E-Prescribing*

ASCP (American Society of Consultant Pharmacists)

Speaker (2007): *An Industry Perspective of Electronic Prescribing in Long-Term Care*

HITSP (Healthcare Information Technology Standards Panel)

Contributor (2007-2009): Medication Management standards selection

NAHIT (National Alliance for Health Information Technology)

Member: Health Information Technology Terms Standardization Project (ONC, 2008)

HHS / Assistant Secretary for Planning and Evaluation Expert Panel

Participant: 2009 Expert panel refining design and content for the National Nursing Home Survey

Minnesota eHealth Initiative

Workgroup member: Standards, Electronic Prescribing, Exchange and Meaningful Use

Education and Certifications

Bachelor of Business Administration – Finance. University of Wisconsin, Eau Claire, Eau Claire, WI
Project Management Institute (PMI) - PMP certification