

Daniel J. Vreeman, PT, DPT, MS, FACMI

Table of Contents

<i>Summary of Professional Experience</i>	1
<i>Education</i>	2
<i>Certification and Licenses</i>	2
<i>Professional Experience</i>	2
<i>Honors and Awards</i>	3
<i>Professional Organization Memberships</i>	3
<i>Professional Service and Appointments</i>	4
<i>Scientific Peer Review</i>	6
<i>Selected Project Experience</i>	6
<i>Books, Chapters, Reference Texts</i>	16
<i>Peer-Reviewed Journal Articles</i>	16
<i>Letters to the Editor</i>	19
<i>Refereed Presentations and Abstracts</i>	19
<i>Invited Presentations</i>	22
<i>Other Publications</i>	35
<i>Media Features</i>	35

Summary of Professional Experience

Daniel J. Vreeman is a physical therapist, biomedical informatician, and expert in health data standards. His work aims to create a global health ecosystem where data is available with open standards that unlock the potential for information systems and applications to improve health decision-making and care. Dr. Vreeman has developed internationally adopted health data standards, implemented them in multi-institutional health IT systems, evaluated their use, and provided strategic advice to interoperability initiatives of numerous U.S. federal agencies and national eHealth efforts in other countries.

Dr. Vreeman is presently the [Senior Clinical Data Standards Lead](#) at [RTI International](#) where his interoperability projects include development and evaluation of FHIR-based approaches. He also serves as the Technical Director for the Gravity Project, an HL7 FHIR Accelerator project that is developing consensus national standards for social determinants of health. From 2006 to 2019, Dr. Vreeman was the Director of LOINC and Health Data Standards with the [Regenstrief Institute, Inc.](#) and the inaugural [Regenstrief-McDonald Scholar in Data Standards](#) at the [Indiana University School of Medicine](#). In those roles, he led the development of [LOINC](#), an open vocabulary standard for health measurements, observations and documents that is now used in more than 185 countries.

Dr. Vreeman has served as principal investigator on 30 externally funded projects totaling approximately \$23 million. He has led productive collaborations with international organizations, federal agencies, academic institutions, professional associations, and industry leaders. Dr. Vreeman is a skilled communicator who has [written 40 scientific papers, a book, 2 book chapters, numerous technical documents](#), and has [presented over 250 invited lectures worldwide](#) on health data standards, interoperability, and health informatics topics.

Education

Indiana University School of Medicine — Fellow, *Medical Informatics* (2005)

Indiana University — MS, *Clinical Research* (2005)

Duke University School of Medicine — DPT, *Physical Therapy* (2003)

Cornell University — BA, *Biological Sciences* (2000)

Certification and Licenses

Licensed physical therapist, Indiana, #05008112A

Professional Experience

RTI International — *Research Triangle Park, NC*

Senior Clinical Data Standards Lead (2019—present)

Creates and executes strategies that identify emerging areas of importance in standards development, and works closely with federal, state, and commercial clients as a standards subject matter expert and advisor. Leads research, analyses, and implementation of technical solutions related to health IT standards. Represents RTI through participation in standards development organizations and industry forums.

Indiana University School of Medicine — *Indianapolis, IN*

Regenstrief–McDonald Scholar in Data Standards (2016—2019)

Inaugural appointee to this endowed chair that was established to support ongoing open development and dissemination of LOINC.

Associate Research Professor (2014—2019)

Assistant Research Professor (2007—2014)

Visiting Assistant Research Professor of Physical Therapy (2005—2007)

Served as an independent faculty investigator with expertise in biomedical informatics.

Regenstrief Institute, Inc — *Indianapolis, IN*

Director, LOINC and Health Data Standards (2016—2019)

Led, directed, and managed development and dissemination of the LOINC vocabulary standard and related efforts. Developed and implemented contract proposals, cooperative agreements, and grants. Led a team of 10+ program staff, including administrative, software development, and content development personnel. Cultivated the LOINC community worldwide. Served as an executive representative and liaised with other organizations and agencies on LOINC's behalf.

Research Scientist (2005—2019)

Directed, managed, designed, and conducted biomedical informatics research studies focused on developing and using open health data standards in information systems and applications to support electronic health information exchange and improve health decision making and care.

Associate Director of Terminology Services (2009—2016)

Led, directed, and managed development and dissemination of the LOINC vocabulary standard and related efforts. Developed and implemented contract proposals, cooperative agreements, and grants. Served as an executive

representative and liaised with other organizations and agencies on LOINC's behalf. Provided leadership and oversight to terminology services of the INPC, a regional health information exchange in central Indiana. Led a team of 10+ program staff, including administrative, software development, and content development personnel. Cultivated the LOINC community worldwide.

Wishard Health Services — *Indianapolis, IN*

Staff Physical Therapist (2003—2005)

Clarian Health Partners — *Indianapolis, IN*

Staff Physical Therapist (2003—2005)

Honors and Awards

Technology and Innovation Award (2018)

American Physical Therapy Association, Health Policy and Administration Section

Distinguished Alumni Award (2017)

Duke University Doctor of Physical Therapy (DPT) Alumni Association

Fellow of the American College of Medical Informatics (ACMI) (2017)

American College of Medical Informatics

Outstanding Investigator Award (2016)

Regenstrief Center for Biomedical Informatics

Forty Under 40 (2015)

Indianapolis Business Journal

Distinguished Paper Reviewer (2014)

American Medical Informatics Association (AMIA) Annual Symposium

Distinguished Paper Reviewer (2013)

American Medical Informatics Association (AMIA) Annual Symposium

Stanford Award (2010)

American Physical Therapy Association

Distinguished Paper Award (2007)

AMIA Annual Symposium

Faculty Recognition Award (2003)

Duke University DPT Program

Innovation in Service Award (2000)

Cornell University

Dean's List (1997—2000)

Cornell University

Professional Organization Memberships

American Physical Therapy Association (2000—present)

American Medical Informatics Association (2002—present)

Health Level Seven (HL7) (2009—present)

American College of Medical Informatics (2017—present)

HL7® FHIR® Foundation (2018—present)

Professional Service and Appointments

U.S. Core Data for Interoperability Task Force, *Member* (2021)
Health Information Technology Advisory Committee (HITAC)

Terminology Services for Common Data Model Harmonization Task Force, *Member* (2020—present)
National Center for Advancing Translational Sciences

Executive Council, *Member* (2019)
Regenstrief Institute, Inc

Health Standards Collaborative, *Chair* (2019—present)
Health Standards Collaborative

Health Standards Collaborative, *Executive Representative for RTI* (2019—present)
Health Standards Collaborative

LOINC/RadLex Committee, *Non-member Advisor* (2019—present)
Regenstrief Institute, Inc and Radiological Society of North America

Health Open Terminologies Task Force, *Member* (2018—2019)
National Center for Advancing Translational Sciences

LOINC/RadLex Committee, *Co-Chair* (2018—2019)
Regenstrief Institute, Inc and Radiological Society of North America

PTNow Liaison Committee, *Member* (2018—2020)
American Physical Therapy Association

RSNA/ACR Common Data Element Steering Committee, *Member* (2018—present)
Radiological Society of North America

U.S. Core Data for Interoperability Task Force, *Member* (2018)
Health Information Technology Standards Committee (HITSC)

FDA/CDISC/NIH/LOINC Workgroup, *Executive Representative for LOINC* (2017—2019)
Public-private coalition

Health Standards Collaborative, *Chair-elect* (2017—2019)
Health Standards Collaborative

Strategic Advisory Committee, *Member* (2017—2018)
Regenstrief Institute, Inc.

HITSC 2017 Interoperability Standards Advisory Task Force, *Member* (2016—2017)
Health Information Technology Standards Committee (HITSC)

HITSC 2017 Interoperability Standards Advisory Task Force—Structure Subcommittee, *Chair* (2016—2017)
Health Information Technology Standards Committee (HITSC)

Executive Policy Group, *Chair* (2015—2017)
Regenstrief Institute and International Health Terminology Standards Organization (IHTSDO)

Technical Expert Panel for Health Information Exchange, *Member* (2014—2015)
Agency for Healthcare Research and Quality

Standards Liaison to IHTSDO, *Liaison* (2013—2019)
Regenstrief Institute, Inc.

Biomedical Informatics Social Media Task Force, *Member* (2013—2015)
Regenstrief Institute, Inc.

Advisor for *PTNow* Editorial Board and Staff, *Advisor* (2012—2020)

American Physical Therapy Association
Biomedical Informatics Executive Leadership Council, *Member (2012–2019)*
Regenstrief Institute, Inc.
The Unified Code for Units of Measure (UCUM) Board of Advisors, *Member (2012–present)*
Regenstrief Institute, Inc.
HITSC Clinical Operations Workgroup, *Member (2012–2014)*
Health Information Technology Standards Committee (HITSC)
NIH Early Career Reviewer Program, *Member (2012–2018)*
National Institutes of Health
Interface and Mapping Team, *Faculty Advisor (2011–2019)*
Regenstrief Institute, Inc. and Indiana Health Information Exchange
Standards Liaison to HL7 International, *Liaison (2011–2019)*
Regenstrief Institute, Inc.
Health Standards Collaborative, *Executive Representative for Regenstrief (2010–2019)*
Health Standards Collaborative
National Outcomes Database Workgroup, *Member (2010–2014)*
American Physical Therapy Association
HITSC Task Force on Vocabulary, *Member (2009–2012)*
Health Information Technology Standards Committee (HITSC)
Advisory Committee on Health Information Technology, *Member (2009–present)*
American Physical Therapy Association
AMIA's Standards Standard, *Editorial Board Member (2009–2014)*
American Medical Informatics Association
Interface X-Team, *Co-Chair (2008–2009)*
Regenstrief Institute, Inc. and Indiana Health Information Exchange
Optimizing the Research Environment Workgroup, *Co-Chair (2008–2009)*
Regenstrief Institute, Inc.
Technology in Physical Therapy Special Interest Group, *President (2007–2013)*
Section on Health Policy and Administration
American Physical Therapy Association
HITSP Foundations Committee, *Member (2007–2010)*
Healthcare Information Technology Standards Panel (HITSP)
American National Standards Institute (ANSI)
Academic Studies and Research Development Committee, *Member (2006–2007)*
Indiana University School of Health and Rehabilitation Sciences
House of Delegates, *Alternate Delegate (2007–2008)*
American Physical Therapy Association - Indiana Chapter
IU DPT Health Service trip to Quito, Ecuador, *Faculty Advisor (2006–2007)*
Indiana University School of Health and Rehabilitation Sciences
Timmy Foundation
Technology in Physical Therapy Special Interest Group, *Vice President (2006–2007)*
Section on Health Policy and Administration
American Physical Therapy Association

Website Redesign Team, *Member* (2006)
Regenstrief Institute, Inc.
Terminology and Mapping Team, *Supervisor* (2005—2011)
Regenstrief Institute, Inc.
Clinical LOINC Committee, *Member* (2003—present)
Regenstrief Institute, Inc.
Laboratory LOINC Committee, *Member* (2003—present)
Regenstrief Institute, Inc.

Scientific Peer Review

Archives of Physiotherapy (2016—present)
Health Policy and Technology (2016—present)
International Journal of Medical Informatics (2016—present)
Western Journal of Nursing (2016—present)
Journal of the AMIA (2014—present)
Indiana CTSI Sustainable and Collaborative Informatics Projects Program (2012)
Journal of Biomedical Informatics (2011—present)
Journal of Medical Internet Research (2008—present)
MedInfo 12th World Congress on Health Informatics (2007)
Physical Therapy (2006—present)
AMIA Annual Symposium (2005—2019)

Selected Project Experience

The Gravity Project

Health Level 7 International
Technical Director (2021—present)

The Gravity Project, a member of the HL7 FHIR ACCELERATOR Program, is a national public collaborative that develops consensus-based data standards to improve how we use and share information on social determinants of health (SDOH). The Technical Director leads development of FHIR implementation guides and standards-based approaches that enable interoperability across systems and settings.

CMS Data Element Library (DEL) Health Information Technology Workgroup (HITWG) SME Support to Advance Electronic Health Record (EHR) Adoption and Interoperability in Post-Acute Care (PAC) Settings

Centers for Medicare and Medicaid Services
Co-Investigator (2021—present)

This contract renewal provides ongoing Subject Matter Expert (SME) support for strategic planning and thought leadership on advancing electronic health record (EHR) adoption and interoperability in Post-acute Care (PAC), including alignment of PAC assessment data elements with existing and emerging national health information technology (HIT) standards to support interoperable health information exchange across the continuum of care.

The HEAL Data Ecosystem Initiative: Data Management and Governance Core Plus Search

Renaissance Computing Institute (RENCI) at the University of North Carolina at Chapel Hill

Subcontract on NIH Office of the Director award

Co-Investigator (2021—present)

The NIH Helping to End Addiction Long-term Initiative (NIH HEAL Initiative), is an aggressive, trans-agency effort to speed scientific solutions to stem the national opioid public health crisis. This project is developing strategy for the HEAL Federated Data Ecosystem and support for the data management and sharing across the 500+ research studies through data management consultancy, promoting core data access via APIs, and tools for implementing FAIR data principles.

Building Data Capacity for Patient-Centered Outcomes Research—Strategic, Operational and COVID-19 Use Case Support for the Office of the Assistant Secretary for Planning and Evaluation (ASPE)

The MITRE Corporation

Subcontract on Assistant Secretary of Planning and Evaluation award

Co-Investigator (2020—2021)

This contract supports and informs the development of a 10-year strategic plan and enhance business operations for the Office of the Secretary's Patient-Centered Outcomes Research Trust Fund portfolio to build data capacity and infrastructure for patient-centered outcomes research (PCOR). The outcomes will enable the Department of Health and Human Services (HHS) to advance the goals of PCOR and better coordinate and leverage data from federal programs to inform and support the health care decisions of patients, families, and their health care providers.

Transferring Harmonized Laboratory Data from Healthcare Institutions to Registries Using FHIR Protocol

Food and Drug Administration

Principal Investigator (2020—present)

This cooperative agreement with the Food and Drug Administration is advancing the semantic interoperability of laboratory test data exchange between health institutions and registries using LOINC, FHIR, and other standards.

CMS Data Element Library (DEL) Health Information Technology Workgroup (HITWG) SME Support to Advance Electronic Health Record (EHR) Adoption and Interoperability in Post-Acute Care (PAC) Settings

Centers for Medicare and Medicaid Services

Co-Investigator (2020—2021)

This contract provides Subject Matter Expert (SME) support for strategic planning and thought leadership on advancing electronic health record (EHR) adoption and interoperability in Post-acute Care (PAC), including alignment of PAC assessment data elements with existing and emerging national health information technology (HIT) standards to support interoperable health information exchange across the continuum of care.

Implementation of an Electronic Care Plan for People with Multiple Chronic Conditions

Agency for Healthcare Research and Quality

Co-Investigator (2020—present)

This project is pilot testing a SMART on FHIR electronic care plan application designed to improve care coordination for people with multiple chronic conditions. The pilot test is being conducted in settings across the care continuum, including in ambulatory care, specialty care, hospitals, long-term and post-acute care, dialysis, and community partners.

Evaluation of a FHIR Application to Automate Referrals to the Leukemia & Lymphoma Society

Leukemia & Lymphoma Society

Principal Investigator (2020—present)

This project uses continuous improvement activities and expert consultation to guide evaluation of a SMART on FHIR based application to automate referrals from the Sylvester Comprehensive Cancer Center to LLS's Information Resource Center.

Data Strategy Consortium for the NHLBI Cure Sickle Cell Initiative

National Heart, Lung, and Blood Institute (NHLBI)

Co-Investigator (2020—present)

The Cure Sickle Cell (CureSC) initiative was created to achieve the mission and support the future of sickle cell-related activities at NHLBI. The Data Strategy Consortium is establishing a data collection and management plan to create a federated data resource with agreed upon data standards across varied data systems for the collection and sharing of data across the CureSC Initiative.

Clinical Decision Support for Chronic Pain Management

Agency for Healthcare Research and Quality

Co-Investigator (2020—present)

The purpose of this project is to develop, implement, disseminate, and evaluate clinical decision support (CDS) for chronic pain management that is delivered through both clinician- and patient-facing SMART on FHIR applications that are interoperable and publicly-shareable.

Enhancing the Logical Observation Identifiers Names and Codes (LOINC®) Standard to Support U.S. Interoperability

Office of the National Coordinator for Health Information Technology

Principal Investigator (2018—2019)

The goals of this project were to produce updates and enhancements to LOINC's technical infrastructure for development, tools, and resources for the LOINC user community, and the expansion and enrichment of LOINC content.

Answer Set Expansion and Implementation Support for the Guide for Using LOINC® Microbiology Terms

Food and Drug Administration

Principal Investigator (2018—2019)

This project updated, published, and provided implementation support for an existing implementation guide called *Guide for Using LOINC® Microbiology Terms*.

National Kidney Disease Education Program Chronic Kidney Disease (CKD) Care Plan

National Institute of Diabetes and Digestive and Kidney Diseases

Principal Investigator (2017—2018)

This project helped develop an CKD care plan template. The process identified existing data standards, extended standards where needed, and provided technical guidance.

Linking Complex Disease and Exposure Data to Established Data Standards

RTI International

Subcontract on National Institute of Environmental Health Sciences award

Site Principal Investigator (2017—2019)

The goal of this RTI project was to use the community-based data standard consensus measures for Phenotypes and Exposures (PhenX) to link existing studies and to use the linked studies to assess environmental contributions to complex diseases and conditions.

In Vitro Diagnostic Device Infectious Disease LOINC Mapping Manual

Food and Drug Administration

Principal Investigator (2017—2018)

The goal of this project was to develop and publish an in vitro diagnostic (IVD) Device Infectious Disease LOINC Mapping Manual to provide definitive guidance on linking the test result output from infectious disease IVD tests to the appropriate LOINC codes.

Post-Acute Care

Centers for Medicare and Medicaid Services

Principal Investigator (2016—2019)

This contract ensured proper and timely representation of post-acute care assessments in the LOINC vocabulary. The Regenstrief LOINC team worked jointly with the Centers for Medicare and Medicaid Services (CMS), its advisors, and its contractors to ensure that the data elements used to construct IMPACT Act quality measures and in health information exchange activities are represented accurately and efficiently in LOINC.

Indiana Clinical and Translational Sciences Institute: Administrative Supplement to Create LOINC Equivalence Groups

National Center for Advancing Translational Sciences

Co-Investigator (2016—2018)

The goal of this project was to create a flexible, extensible, and computable mechanism for rolling up LOINC codes into clinically relevant equivalence groups that enable more efficient processing and aggregation of laboratory and other data from diverse health IT systems.

Health Care Systems Research Collaboratory—Administrative Supplement: ADAPTABLE

Duke University

Subcontract on Assistant Secretary for Planning and Evaluation award

Co-Investigator (2016—2018)

This project strengthened methods in the ADAPTABLE trial to collect and integrate patient-reported information with clinically-generated electronic health record (EHR) data.

Unification of the RadLex Playbook and LOINC into a Single Unified LOINC/Radlex Model: Phase II

Radiologic Society of North America

Subcontract on National Heart, Lung, and Blood Institute award

Principal Investigator (2015—2017)

This project unified LOINC Radiology and RadLex Playbook into a single integrated terminology. These two terminologies both served as standardized nomenclatures for naming radiology procedures. LOINC is a broader standardization that encompasses laboratory and other medical procedures, while Playbook focused on the domain of radiology. The harmonization effort provided a common information model and a single governance process for all terms that describe radiology orders and results.

Updating the LOINC® Representation of the National EMS Information System

University of Utah

Principal Investigator (2015—2016)

The overall goal of this project was to support interoperability of the latest version of NEMESIS with LOINC.

FHIRing Up LOINC Subsets

Regenstrief Foundation

Principal Investigator (2015)

This project leveraged emerging open-source HL7 FHIR standard to deliver key LOINC subsets as FHIR value sets. The value sets will be available in JSON and XML formats through a restful interface that complies with the FHIR standard.

Preparing the American Physical Therapy Association (APTA) Physical Therapy Outcomes Registry for Interoperable Data Exchange with LOINC

American Physical Therapy Association

Principal Investigator (2014—2015)

This project prepared the APTA Physical Therapy Outcome Registry for effective and efficient data exchange from many independent clinical systems using widely adopted data standards.

LOINC® Premium Membership Program

LOINC User Community

Principal Investigator (2014—2019)

The LOINC Premium Membership Program is a collection of premium LOINC resources and opportunities to bolster the global terminology for tests and observations.

Patient-Reported Outcomes (PRO) Capture Platform

Merck and Company, Inc.

Co-Investigator (2014—2015)

The goal of this academic-industry collaboration was to advance research in pharmacoepidemiology, medication adherence, and medication safety. The goal of this specific project was to create a flexible, scalable, and generalizable electronic platform for generating and storing PROs on an unlimited variety of topics.

Collaboration on Codification of IVD Tests with LOINC

bioMérieux

Principal Investigator (2014—2019)

The overall goal of this project was to support the LOINC® codification of bioMérieux IVD tests.

Creation, Maintenance and Distribution of Logical Observation Identifiers Names Codes (LOINC®)

National Library of Medicine

Principal Investigator (2014—2019)

The major goals of this project were to maintain and enhance the LOINC database as an openly developed standard for clinical observations and claims attachments, as needed for standard administrative health transactions, and for government and private sector computer-based patient records, as well as to develop software tools to facilitate the development and public use of this database, and to continue to distribute the database and supporting tools on a no-cost basis for public use.

Creation, Maintenance and Distribution of Logical Observation Identifiers Names Codes (LOINC®): LOINC Bridge II

National Library of Medicine

Principal Investigator (2014)

This project provided bridge funding for LOINC development. The major goals of this project were to maintain and enhance the LOINC database as an openly developed standard for clinical observations, to develop software tools to facilitate the development and public use of this database, and to continue to distribute the database and supporting tools on a no-cost basis for public use.

Unification of LOINC® Radiology and the RadLex Playbook: Phase I

Radiologic Society of North America

Subcontract on National Heart, Lung, and Blood Institute award

Principal Investigator (2013—2015)

This project was a first-phase effort to unify LOINC Radiology and RadLex Playbook into a single integrated terminology. These two terminologies both served as standardized nomenclatures for naming radiology procedures. LOINC is a broader standardization that encompasses laboratory and other medical procedures, while Playbook focused

on the domain of radiology. The harmonization effort provided a common information model and a single governance process for computed tomography orders and results.

Building an Empiric Common LOINC® Laboratory Orders Set for Ambulatory Care

California Healthcare Foundation

Principal Investigator (2013—2014)

This project provided critical data and analytics for creating a timely, empirically derived, and consensus-vetted revision of the LOINC Top Orders list. We mined data from the Indiana Network for Patient Care (INPC), the nation's longest tenured and most comprehensive HIE, added it to other data sources (not funded by this proposal), and fed into a consensus-based review by laboratory and clinical data standards experts coordinated by ONC's S&I Framework. By defining such a list in a standard nomenclature, LOINC, EHR systems can vastly reduce the complexity and cost of electronically ordering tests from clinical laboratories.

Analysis of Enhanced Automated Mapping of Local® Clinical Codes and Terms

Siemens Medical Solutions USA, Inc

Principal Investigator (2013)

This study developed and evaluated automated methods of identifying likely “best matches” between terms in local clinical systems and terms in standardized vocabularies. The goal of these automated methods is to improve the efficiency and consistency of the mapping process. These automated methods employed approximate string comparators, parsing algorithms, statistical methods, machine-learning techniques, and an enhanced scoring system. We used de-identified data extracted from INPC institutions as the substrate for these automated processing methods.

Interoperable Data Exchange with LOINC®: Learning from the Crowd

Indiana Clinical and Translational Sciences Institute

Co-Principal Investigator (2012—2014)

This project enhanced the RELMA mapping program with features that tap into the “wisdom of the crowd” of the LOINC community and also provided a peer-review feedback mechanism.

SHARP Area 4: Secondary Use of EHR Data

Mayo Clinic

Subcontract on Office of the National Coordinator for Health Information Technology award

Site-Principal Investigator (2012—2015)

This project focused on gathering, standardizing, and aggregating EHR data with an approach that facilitated secondary use of the data aims to improve care, generate new knowledge, and address population needs.

Buttressing LOINC for Coming Growth

Regenstrief Foundation

Site-Principal Investigator (2011—2015)

LOINC has tangible and practical effects on the care system by facilitating the information flow needed to deliver and manage healthcare in real-world systems, with payoffs that will increase with growing adoption. To support the

continued rapid growth in LOINC adoption, including as a result of new federal initiatives, this project buttressed the LOINC standard by supporting software, infrastructure, and clinical content development.

Southeastern Minnesota Community Healthcare Information Technology Collaboration

Mayo Clinic

Subcontract on Office of the National Coordinator for Health Information Technology award

Co-Investigator (2011—2013)

The goal of the Southeastern Minnesota Beacon Community was to expand availability of EHRs and health information exchange to a) enhance patient involvement in the management of chronic illness; b) improve disease metrics and quality of life for patients diagnosed with diabetes or childhood asthma; c) reduce costs associated with hospitalization and emergency services for patients with diabetes or childhood asthma; and d) address health disparities for underserved populations and rural communities.

Regenstrief System Support Agreement for INPC Development

Indiana Health Information Exchange

Co-Investigator (2011—2012)

This project helped build, support, and maintain interfaces with health care data providers' systems (inbound and outbound) located within Dartmouth Atlas Hospital Referral Region 183 and (ii) map health care providers' data into a mutually agreed-upon standardized language and format for use in the INPC.

Indiana Prospective Outcome Systems Using Patient-Specific Electronic Data to Compare Tests and Therapies (PROSPECT)

Agency for Healthcare Research and Quality

Co-Investigator (2010—2013)

The PROSPECT grant focused on building a sustainable and flexible electronic infrastructure to drive decades of future comparative effectiveness research (CER) within busy clinical environments, supporting a wide array of study designs and priority conditions. The pilot CER study was centered on Alzheimer's disease.

NCRR Administrative Supplement to Advance Translational (T1 & T2) Research

National Center for Research Resources

Co-Investigator (2010—2012)

A fundamental challenge to interoperable health information exchange between clinical and research systems is the lack of a standardized representation of the data elements so that the systems understand their meaning and can store them appropriately. By representing the widely applicable variables of PhenX and PROMIS in LOINC, we enabled a shared "master catalog" among clinical and research systems.

Creation, Maintenance, and Distribution of the Logical Observation Identifiers Names Codes (LOINC®)

National Library of Medicine

Principal Investigator (2008—2014)

The purpose of this project was to ensure the continued maintenance of LOINC as a freely available and openly developed source of standard identifiers, names, and codes for clinical observations, clinical document types and claims attachments sets, and individual questions being asked as part of claims attachments for use in standard administrative health transactions and government and private sector computer-based patient records.

Indiana Clinical and Translational Sciences Institute

National Center for Research Resources

Co-Investigator (2008—2013)

This project established a new institute that facilitates clinical and translational biomedical research across the state of Indiana. This institute was established by the CTSA to Indiana and Purdue Universities.

Nationwide Health Information Network Trial Implementation (NHIN)

Office of the National Coordinator for Health Information Technology

Co-Investigator (2007—2010)

The purpose of this contract was for state, regional and nongeographic health information exchange consortia to become components of the “network of networks” that are the Nationwide Health Information Network (NHIN). Contractors will cooperatively develop specifications for, and trial implementations of, the NHIN and test these trial implementations with each other to ensure that they can all work together to implement an interoperable “network of networks” built on top of the Internet.

Standardizing Assessments and Supporting Health Information Exchange

Foundation of Research and Education (FORE)

Subcontract on Assistant Secretary for Planning and Evaluation award

Site Principal Investigator (2007—2010)

The federal government requires assessment instruments to be completed and electronically transmitted by specific post-acute care settings (e.g., nursing home, home care, and inpatient rehab). The goal of this project was to fit these assessment instruments with interoperability standards, which would identify and make available to providers and vendors the infrastructure needed to support interoperable health information exchange. The use of accepted data standards with federally required assessment instruments will enable post-acute and long-term care vendors and providers to develop and use HIT products that will be functional in the emerging interoperable NHIN standardized. In addition, this project creates a repeatable framework for making future assessment requirements interoperable.

Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research: Phase II

The Ohio State University

Subcontract on Department of Defense award

Site Principal Investigator (2007—2009)

Phase II of the Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research (1) continued initiatives in Phase I to nationally recruit Vietnam veterans with traumatic amputations to the registry, (2) designed appropriate survey instruments to gather data on continuity of care across the life span including comorbidities, health treatment and rehabilitation issues, psycho-social factors, prosthetic issues, and educational and occupational information, (3) conducted content validity, item reduction, reliability and validity analysis of the instrument, (4) pilot tested and

collected preliminary data for analysis to assure the viability of the data collection instruments (5) initiated strategies to inform veterans, caregivers, providers, researchers, and policy makers on amputation issues of veterans and (6) initiated strategic, collaborative relationships that maximize the evidence-based research opportunities of the database and lead to best practice guidelines for care of veterans with traumatic amputations.

Accelerating Public Health Situational Awareness Through Health Information Exchanges

Centers for Disease Control and Prevention

Co-Investigator (2008—2009)

The purpose of the contract was for state, regional and nongeographic health information exchanges to enable access to clinical care information at all levels of public health for the purposes of improved public health situational awareness and case reporting in the context of the emerging NHIN.

Creation, Maintenance and Distribution of Logical Observation Identifiers Names Codes (LOINC®): Interim Support

National Library of Medicine

Principal Investigator (2008)

The purpose of this support was to provide bridge funding for LOINC development. The major goals of this project are to maintain and enhance the LOINC database as an openly developed standard for clinical observations, to develop software tools to facilitate the development and public use of this database, and to continue to distribute the database and supporting tools on a no-cost basis for public use.

Enhancing the Interoperability of the Post-Acute Care Patient Assessment Instrument with LOINC

RTI International

Subcontract on Centers for Medicaid and Medicare Services award

Principal Investigator (2007—2012)

In the Deficit Reduction Act of 2005, the Secretary of Health and Human Services was directed to use a standardized patient assessment instrument across all post-acute care (PAC) sites, and began developing this instrument called CARE. LOINC® is a coding system developed by the Regenstrief Institute that provides universal identities and names for laboratory tests, clinical observations, and clinical reports used in electronic transactions between independent computer systems. The purpose of this work was to create a LOINC representation of the PAC/CARE tool and to provide CMS and associated contractors with key informatics expertise to inform the development of interoperable assessment systems, including PAC/CARE.

Creating an Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research

Department of Defense

Principal Investigator (2006—2008)

This project established the Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research (Indiana-Ohio Center) to promote outcomes research on a population with potentially unique rehabilitation needs for long-term health and welfare. The first phase created the Indiana-Ohio Center and established a nationwide database of Vietnam veterans with traumatic amputation as part of a multiple-year, three-phase approach to fully testing the overarching hypothesis. Phases 2 and 3 focused on collecting data pertaining to key outcomes indicators.

Creation, Maintenance and Distribution of Logical Observation Identifiers Names Codes (LOINC®)

National Library of Medicine

Co-Director (2003—2008)

The major goals of this project were to maintain and enhance the LOINC database as an openly developed standard for clinical observations and claims attachments, as needed for standard administrative health transactions, and for government and private sector computer-based patient records. Other goals were to develop software tools to facilitate the development and public use of this database and to continue to distribute the database and supporting tools on a no-cost basis for public use.

Books, Chapters, Reference Texts

1. Vreeman DJ, editor. Proposal for precise modeling of entities in the U.S. Core Data for Interoperability. RTI International; 2020. Available at: <https://www.rti.org/publication/proposal-precise-modeling-entities-us-core-data-interoperability>.
2. Giannangelo K, editor. Healthcare code sets, clinical terminologies, and classification systems. Fourth edition. Chicago, Ill: AHIMA, American Health Information Management Association; 2019. 265–297 p. (Chapter 10, Logical Observation Identifiers, Names, and Codes (LOINC®)).
3. Abhyankar S, Zabriskie M, Baorto D, Vreeman DJ. Guide for Using LOINC Microbiology Terms. Regenstrief Institute, Inc.; 2018. Available from: <https://loinc.org/guides/micro/>.
4. McDonald CJ, Huff SM, Deckard J, Armson S, Abhyankar S, Vreeman DJ, editors. LOINC Users' Guide. LOINC 2.64, Users Guide 2.64. 2018. Available from: <https://loinc.org/download/loinc-users-guide/>.
5. Vreeman DJ. LOINC Essentials. 1.0. Indianapolis, IN: Blue Sky Premise, LLC; 2016. 259 p. Available from: <https://danielvreeman.com/loinc-essentials>.
6. Finnell J, Dixon B, editors. Clinical Informatics Study Guide: Text and Review. Switzerland: Springer International Publishing; 2016. 233–253 p. (Chapter: Healthcare Data Standards and Exchange). Available from: <https://amzn.to/2Ck1eCS>.
7. Health Level 7 (HL7) International. HL7 Implementation Guide: LOINC Document Ontology, Release 1. 2015. Available from: http://www.hl7.org/implement/standards/product_brief.cfm?product_id=402.
8. Giannangelo K, editor. Healthcare code sets, clinical terminologies, and classification systems. Third edition. Chicago, Ill: AHIMA, American Health Information Management Association; 2015. 169–188 p. (Chapter 10, Logical Observation Identifiers, Names, and Codes (LOINC®)).
9. Regenstrief Institute, Inc. LOINC Mapper's Guide to the Top 2000+ Lab Observations.. 2012. Available from: <https://loinc.org>.
10. Giannangelo K, editor. Healthcare code sets, clinical terminologies, and classification systems. 2nd ed. Chicago, Ill: American Health Information Management Association; 2010. 151–163 p. (Chapter 10, Logical Observation Identifiers, Names, and Codes (LOINC®)). Available from: <https://amzn.to/2PqxCoO>.

Peer-Reviewed Journal Articles

1. Hosseini M, Faiola A, Jones J, Vreeman DJ, Wu H, Dixon BE. Impact of document consolidation on healthcare providers' perceived workload and information reconciliation tasks: a mixed methods study. *J Am Med Inform Assoc*. 2019 Feb 1;26(2):134–142. PMID: PMC6804409

2. Peng P, Beitia AO, Vreeman DJ, Loo GT, Delman BN, Thum F, Lowry T, Shapiro JS. Mapping of HIE CT terms to LOINC®: analysis of content-dependent coverage and coverage improvement through new term creation. *J Am Med Inform Assoc.* 2019 Jan 1;26(1):19–27. PMID: 30445562
3. Zhang XA, Yates A, Vasilevsky N, Gourdine JP, Callahan TJ, Carmody LC, Danis D, Joachimiak MP, Ravanmehr V, Pfaff ER, Champion J, Robasky K, Xu H, Fecho K, Walton NA, Zhu RL, Ramsdill J, Mungall CJ, Köhler S, Haendel MA, McDonald CJ, Vreeman DJ, Peden DB, Bennett TD, Feinstein JA, Martin B, Stefanski AL, Hunter LE, Chute CG, Robinson PN. Semantic integration of clinical laboratory tests from electronic health records for deep phenotyping and biomarker discovery. *NPJ Digit Med.* 2019;2. PMCID: PMC6527418
4. Bodenreider O, Cornet R, Vreeman DJ. Recent Developments in Clinical Terminologies - SNOMED CT, LOINC, and RxNorm. *Yearb Med Inform.* 2018 Aug;27(1):129–139. PMCID: PMC6115234
5. Vreeman DJ, Abhyankar S, Wang KC, Carr C, Collins B, Rubin DL, Langlotz CP. The LOINC RSNA radiology playbook - a unified terminology for radiology procedures. *J Am Med Inform Assoc.* 2018 May 29; PMID: 29850823
6. Beitia AO, Lowry T, Vreeman DJ, Loo GT, Delman BN, Thum FL, Slovis BH, Shapiro JS. Standard Anatomic Terminologies: Comparison for Use in a Health Information Exchange-Based Prior Computed Tomography (CT) Alerting System. *JMIR Med Inform.* 2017 Dec 14;5(4):e49. PMCID: PMC5746622
7. Campbell WS, Karlsson D, Vreeman DJ, Lazenby AJ, Talmon GA, Campbell JR. A computable pathology report for precision medicine: extending an observables ontology unifying SNOMED CT and LOINC. *J Am Med Inform Assoc.* 2017 Sep 13; PMID: 29024958
8. Hosseini M, Jones J, Faiola A, Vreeman DJ, Wu H, Dixon BE. Reconciling Disparate Information in Continuity of Care Documents: Piloting a System to Consolidate Structured Clinical Documents. *J Biomed Inform.* 2017 Sep 10; PMID: 28903073
9. Wang KC, Patel JB, Vyas B, Toland M, Collins B, Vreeman DJ, Abhyankar S, Siegel EL, Rubin DL, Langlotz CP. Use of Radiology Procedure Codes in Health Care: The Need for Standardization and Structure. *Radiographics.* 2017 Aug;37(4):1099–1110. PMCID: PMC5548452
10. Vreeman DJ, Hook J, Dixon BE. Learning from the crowd while mapping to LOINC. *J Am Med Inform Assoc.* 2015 Nov;22(6):1205–1211. PMCID: PMC479557
11. Deckard J, McDonald CJ, Vreeman DJ. Supporting interoperability of genetic data with LOINC. *J Am Med Inform Assoc.* 2015 Feb 5; PMID: PMC5566197
12. Dixon BE, Hook J, Vreeman DJ. Learning From the Crowd in Terminology Mapping: The LOINC Experience. *Lab Med.* 2015;46(2):168–174. PMCID: PMC4832593
13. Dixon BE, Vreeman DJ, Grannis SJ. The Long Road to Semantic Interoperability in Support of Public Health: Experiences from Two States. *J Biomed Inform.* 2014 Mar 25; PMCID: PMC4083703
14. Vreeman DJ, Richoz C. Possibilities and Implications of Using the ICF and Other Vocabulary Standards in Electronic Health Records. *Physiother Res Int.* 2013 Jul 30; PMCID: PMC3907616
15. Fidahussein M, Vreeman DJ. A corpus-based approach for automated LOINC mapping. *J Am Med Inform Assoc.* 2013 May 15; PMCID: PMC3912728
16. Wu J, Finnell JT, Vreeman DJ. Evaluating Congruence Between Laboratory LOINC Value Sets for Quality Measures, Public Health Reporting, and Mapping Common Tests. *AMIA Annu Symp Proc.* 2013;2013:1525–1532. PMID: 24551424

17. Vreeman DJ, Chiaravalloti MT, Hook J, McDonald CJ. Enabling international adoption of LOINC through translation. *J Biomed Inform.* 2012 Aug;45(4):667–673. PMID: PMC3376691
18. Lin MC, Vreeman DJ, McDonald CJ, Huff SM. Auditing consistency and usefulness of LOINC use among three large institutions - Using version spaces for grouping LOINC codes. *J Biomed Inform.* 2012 Aug;45(4):658–666. PMID: PMC3374914
19. Kroth PJ, Daneshvari S, Harris EF, Vreeman DJ, Edgar HJH. Using LOINC to link 10 terminology standards to one unified standard in a specialized domain. *J Biomed Inform.* 2012 Aug;45(4):674–682. PMID: PMC3288380
20. Pan H, Tryka KA, Vreeman DJ, Huggins W, Phillips MJ, Mehta JP, Phillips JH, McDonald CJ, Junkins HA, Ramos EM, Hamilton CM. Using PhenX measures to identify opportunities for cross-study analysis. *Hum Mutat.* 2012 May;33(5):849–857. PMID: PMC3780790
21. Gichoya J, Gamache RE, Vreeman DJ, Dixon BE, Finnell JT, Grannis S. An evaluation of the rates of repeat notifiable disease reporting and patient crossover using a health information exchange-based automated electronic laboratory reporting system. *AMIA Annu Symp Proc.* 2012;2012:1229–1236. PMID: PMC3540527
22. Gamache RE, Dixon BE, Grannis S, Vreeman DJ. Impact of selective mapping strategies on automated laboratory result notification to public health authorities. *AMIA Annu Symp Proc.* 2012;2012:228–236. PMID: PMC3540490
23. Rajda J, Vreeman DJ, Wei HG. Semantic interoperability of Health Risk Assessments. *AMIA Annu Symp Proc.* 2011;2011:1134–1143. PMID: PMC3243143
24. Lin MC, Vreeman DJ, Huff SM. Investigating the semantic interoperability of laboratory data exchanged using LOINC codes in three large institutions. *AMIA Annu Symp Proc.* 2011;2011:805–814. PMID: PMC3243154
25. Lin MC, Vreeman DJ, McDonald CJ, Huff SM. A characterization of local LOINC mapping for laboratory tests in three large institutions. *Methods Inf Med.* 2011;50(2):105–114. PMID: PMC3034110
26. Grannis S, Vreeman D. A vision of the journey ahead: using public health notifiable condition mapping to illustrate the need to maintain value sets. *AMIA Annu Symp Proc.* 2010 Nov 13;2010:261–265. PMID: PMC3041316
27. Wilkinson SG, Chevan J, Vreeman DJ. Establishing the Centrality of Health Informatics in Physical Therapist Education: If Not Now, When? *Journal of Physical Therapy Education.* 2010;24(3):10–15.
28. Vreeman DJ, McDonald CJ, Huff SM. Representing Patient Assessments in LOINC®. *AMIA Annu Symp Proc.* 2010;2010:832–836. PMID: PMC3041404
29. Vreeman DJ, McDonald CJ, Huff SM. LOINC® - A Universal Catalog of Individual Clinical Observations and Uniform Representation of Enumerated Collections. *Int J Funct Inform Personal Med.* 2010;3(4):273–291. PMID: 22899966
30. Sothmann M, Wilson SL, Vreeman DJ. Forming partnerships: Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research. *J Allied Health.* 2010;39(4):301–305. PMID: 21184027
31. Lin MC, Vreeman DJ, McDonald CJ, Huff SM. Correctness of Voluntary LOINC Mapping for Laboratory Tests in Three Large Institutions. *AMIA Annu Symp Proc.* 2010;447–451. PMID: PMC3041457
32. Robbins CB, Vreeman DJ, Sothmann MS, Wilson SL, Oldridge NB. A review of the long-term health outcomes associated with war-related amputation. *Mil Med.* 2009 Jun;174(6):588–592. PMID: 19585770

33. Vreeman DJ, Stark M, Tomashefski GL, Phillips DR, Dexter PR. Embracing change in a health information exchange. *AMIA Annu Symp Proc.* 2008;768–772. PMID: PMC2656094
34. Vreeman DJ, Finnell JT, Overhage JM. A rationale for parsimonious laboratory term mapping by frequency. *AMIA Annu Symp Proc.* 2007;771–775. PMID: PMC2655785
35. Vreeman DJ. Keeping up with changing source system terms in a local health information infrastructure: running to stand still. *Stud Health Technol Inform.* 2007;129(Pt 1):775–779. PMID: 17911822
36. Vreeman RC, Madsen KA, Vreeman DJ, Carroll AE, Downs SM. Compliance with guidelines for ADHD: a pilot study of an evaluation tool. *J Pediatr.* 2006 Oct;149(4):568–571. PMID: 17011336
37. Vreeman DJ, Taggard SL, Rhine MD, Worrell TW. Evidence for electronic health record systems in physical therapy. *Phys Ther.* 2006 Mar;86(3):434–446; discussion 446–449. PMID: 16506879
38. Vreeman DJ, McDonald CJ. A comparison of Intelligent Mapper and document similarity scores for mapping local radiology terms to LOINC. *AMIA Annu Symp Proc.* 2006;809–813. PMID: PMC1839677
39. Vreeman DJ. Maintaining mappings from source systems in a local health information infrastructure. *AMIA Annu Symp Proc.* 2006;1131. PMID: 17238750
40. Vreeman DJ, McDonald CJ. Automated mapping of local radiology terms to LOINC. *AMIA Annu Symp Proc.* 2005;769–773. PMID: PMC1560555

Letters to the Editor

1. Abhyankar S, Vreeman DJ, Westra BL, Delaney CW. Letter to the Editor-Comments on the Use of LOINC and SNOMED CT for Representing Nursing Data. *Int J Nurs Knowl.* 2017 Aug 30; PMID: 28856826
2. Vreeman DJ, Abhyankar S, McDonald CJ. Re: Unit conversions between LOINC codes Published June 19, 2017. *J Am Med Inform Assoc.* 2017 Aug 23; PMID: 29025119
3. McDonald CJ, Vreeman DJ, Abhyankar S. Comment on “time to integrate clinical and research informatics.” *Sci Transl Med.* 2013 Apr 3;5(179):179le1. PMID: 23552367
4. Vreeman DJ. Clinical prediction rules. *Phys Ther.* 2006 May;86(5):761–762. PMID: 16649900

Refereed Presentations and Abstracts

1. Vreeman DJ. The LOINC/RSNA Radiology Playbook. RSNA 2019 Scientific Assembly and Annual Meeting; 2019 Dec; Chicago, IL. Available from: <https://danielvreeman.com/presentation/the-loinc-rsna-radiology-playbook-rsna-2019-version/>
2. Vreeman, DJ, Briscoe T, Hook J, Wagers S, Agnew J, Abhyankar S. An API for LOINC release content using FHIR Terminology Services. AMIA 2019 Annual Symposium; 2019 Nov; Washington, D.C.
3. Vreeman DJ, Abhyankar S. Introduction to LOINC. AMIA 2019 Annual Symposium; 2019 Nov; Washington, D.C. Available from: <https://danielvreeman.com/presentation/an-introduction-to-loinc-amia-2019-version/>
4. Vreeman DJ. Introduction to LOINC, the global vocabulary for tests, measurements, and observations in healthcare. MedInfo 2019 World Congress on Health and Biomedical Informatics; 2019 Aug; Lyon, France. Available from: <https://danielvreeman.com/presentation/an-introduction-to-loinc-medinfo-2019-version/>
5. Zhang XA, Yates A, Vasilevsky N, Gouridine JP, Carmody LC, Danis D, et al. Semantic Integration of Clinical Laboratory Tests from Electronic Health Records for Deep Phenotyping and Biomarker Discovery. AMIA 2019 Informatics Summit; 2019 Mar; San Francisco, CA.

6. Vreeman DJ, Zabriskie M, Abhyankar S, Allen K. Improving LOINC Mapping through Targeted Subsets. AMIA Annual Symposium 2018; 2018 Nov; San Francisco, CA.
7. Vreeman DJ, Hook J, Briscoe T, Abhyankar S. Improving Mapping Accuracy with a Guide for LOINC Microbiology Terms. AMIA Annual Symposium 2018; 2018 Nov; San Francisco, CA.
8. Vreeman DJ, Abhyankar S. Introduction to LOINC: The global vocabulary for identifying health measurements, observations, and documents. AMIA Annual Symposium; 2018 Nov; San Francisco, CA.
9. Vreeman DJ. Introduction to LOINC. AMIA 2018 Annual Symposium; 2018 Nov; San Francisco, CA.
10. Abhyankar S, Zabriskie M, Hook J, Briscoe T, Finnell JT, Vreeman DJ. LOINC Groups: A novel tool for data aggregation. AMIA Annual Symposium 2018; 2018 Nov; San Francisco, CA.
11. Beitia A, Lowery T, Vreeman DJ, Delman B, Loo G, Thum F, et al. Poster: Mapping of HIE CT Codes to LOINC - Analysis of Inconclusive Codes and Quantification of Mapping Times. AMIA 2018 Informatics Summit 2018; 2018 Mar; San Francisco, CA.
12. Hoover J, Kluding P, Vreeman DJ, Waitman L. Partnering With Informatics to Enhance Participant Recruitment for Trials. APTA Combined Sections Meeting 2018; 2018 Feb; New Orleans, LA.
13. Vreeman DJ, Wang K, Carr C, Collins B, Abhyankar S, Deckard J, et al. The LOINC/RSNA Radiology Playbook: A unified terminology for radiology procedures. AMIA Annual Symposium 2017; 2017 Nov; Washington, D.C.
14. Vreeman DJ, Abhyankar SA. Tutorial: Introduction to LOINC. AMIA Annu Symp, Washington, DC, Nov. 2017.; 2017 Nov; Washington, D.C.
15. Vreeman DJ. The LOINC/RSNA Radiology Playbook. RSNA 2017 Scientific Assembly and Annual Meeting; 2017 Nov; Chicago, IL. [Available from: https://danielvreeman.com/presentation/loincrsna-radiology-playbook/](https://danielvreeman.com/presentation/loincrsna-radiology-playbook/)
16. Taylor A, Vreeman DJ, Puro J, Verzola M. Panel: Social and Behavioral Determinants of Health: Fundamental Informatics Challenges for Enriching Health IT Systems. AMIA Annual Symposium 2017; 2017 Nov; Washington, D.C.
17. Beitia A, Lowry T, Vreeman DJ, Delman B, Loo G, Thum III F, et al. Mapping CT Codes from a Health Information Exchange to LOINC. AMIA Annual Symposium 2017; 2017 Nov; Washington, D.C.
18. Allen K, Armson S, Vreeman DJ. Poster: SDOH in INPC. AMIA Annual Symposium 2017; 2017 Nov; Washington, D.C.
19. Abhyankar S, Schluter P, Bennett K, Vreeman DJ, McDonald CJ. Enabling Interoperability between Healthcare Devices and EHR Systems. AMIA Annual Symposium 2017; 2017 Nov; Washington, D.C.
20. Vreeman DJ. Introduction to LOINC, the global vocabulary for tests, measurements, and observations in healthcare. MedInfo 2017 World Congress on Health and Biomedical Informatics; 2017 Aug; Hangzhou, China.
21. Vreeman DJ, Armson SA, Abhyankar SA. Best practices for using LOINC in Commercial HIT Systems. LOINC in Commercial HIT Systems. LTPAC HIT; 2017 Jun; Baltimore, MD.
22. Vreeman DJ, Armson A. LOINC for assessment instruments. LTPAC HIT 2017; 2017 Jun; Baltimore, MD.
23. McDonald CJ, Lynch P, Ludet C, Mericle L, Hook J, Vreeman DJ, et al. NLM - Forms: a “well-connected” data capture widget and sister modules for capturing and tuning health data. AMIA Annual Symposium 2016; 2016 Nov; Chicago, IL.
24. Beitia A, Lowery T, Vreeman DJ, Delman B, Slovis B, Loo G, et al. Constructing Diagnostic CT Exam Lists for Sites across an HIE. AMIA Annual Symposium 2016.; 2016 Nov; Chicago, IL.

25. Abhyankar S, Deckard J, Armson S, Vreeman DJ. LOINCing for Precision Medicine. Regenstrief Institute Conference 2016; 2016 Oct; Turkey Run, IN.
26. Vreeman DJ. Squaring The Circle: Managing local healthcare terminologies in the age of standardization. AMIA Annual Symposium Panel, San Francisco, CA, Nov. 2015.; 2015 Nov; San Francisco, CA.
27. Vreeman DJ. Guidelines for Using LOINC and SNOMED CT Together. International Health Terminology Standards Development Organization (IHTSDO); 2015 Oct; Montevideo, Uruguay.
28. Vreeman DJ. LOINC: International Perspectives and Strategies for LOINC Adoption. MedInfo 2015 World Congress on Health and Biomedical Informatics; 2015 Aug; São Paulo, Brazil.
29. Vreeman DJ. LOINC: Approaches to LOINC Adoption Around the Globe. MedInfo 2015 World Congress on Health and Biomedical Informatics; 2015 Aug; São Paulo, Brazil.
30. Latz R, Vreeman DJ. Integrating Technology into Specialty Practice. APTA Combined Sections Meeting 2015; 2015 Feb; Indianapolis, IN.
31. Vreeman DJ. LOINC and SNOMED CT. SNOMED CT Implementation Showcase; 2013 Oct; Arlington, VA.
32. Vreeman DJ, Elrod M, Latz R, Wilkinson SG. Electronic Health Records - health care system chicken soup or rotten egg. APTA Combined Sections Meeting 2012; 2012 Feb; Chicago, IL.
33. Escorpizo R, Bemis-Dougherty A, Davenport T, Feliciano H, Vreeman DJ, Riddle DL. The ICF and Physical Therapy: 10 years later. APTA Combined Sections Meeting 2012; 2012 Feb; Chicago, IL.
34. Chiaravallotti MT, Vreeman DJ. LOINC Learns to Speak Italian: Translation and Mapping of LOINC in Italy. AMIA Annual Symposium 2011; 2011 Oct; Washington, D.C.
35. Hamilton CM, Pan H, Huggins W, Phillips MJ, Strader LC, Tryka KA, et al. The PhenX Toolkit: Enhancing Cross-study Analysis in Genomic Studies. The 12th International Meeting on Human Genome Variation and Complex Genome Analysis; 2011 Sep; Berkley, CA.
36. Vreeman DJ. Multi-Stakeholder Collaborative Development, Usage and Maintenance of ELR Reportable Condition Mapping Table (RCMT) - LOINC. Public Health Informatics 2011 Conference; 2011 Aug; Atlanta, GA.
37. Vreeman DJ. Meaningful Use Messaging and Vocabulary Standards: Licensing and Redistribution Challenges - LOINC. Public Health Informatics 2011 Conference; 2011 Aug; Atlanta, GA.
38. Vreeman DJ. LOINC: An Introduction to the Universal Catalog of Laboratory and Clinical Observations. Public Health Informatics 2011 Conference; 2011 Aug; Atlanta, GA.
39. Vreeman DJ. Are you ready for EHRs? Chicken soup or rotten egg? APTA Annual Conference 2011; 2011 Jun; National Harbor, MD.
40. Grannis SJ, Vreeman DJ. Notifiable case detection systems are dependent upon maintaining value sets. Indiana Center of Excellence in Public Health Informatics 2010 Symposium; 2010 Sep; Indianapolis, IN.
41. Bircher S, Latz R, Chong Lee A, Timmerberg J, Vreeman DJ. Expert panel: The Effect of Technology on Vision 2020 - The Train is Leaving the Station and We are Asking You to Please Get on Now. APTA Combined Sections Meeting 2010; 2010 Feb; San Diego, CA.
42. McDonald CJ, Fung KW, Wang Y, Lynch P, Hook J, Vreeman DJ. Towards a standardized HL7 clinical data capture tool - a trial implementation in the US National Library of Medicine's Personal Health Record. 10th International HL7 Interoperability Conference; 2009 May; Kyoto, Japan.

43. Vreeman DJ. An informatics infrastructure supporting outcomes research in the Indiana - Ohio Center for Traumatic Amputation Rehabilitation Research. ATA Annual Conference 2009, Las Vegas, NV, April 2009.; 2009 Apr; Las Vegas, NV.
44. Vreeman DJ, Robbins CB, Oldridge NB, Wilson S, Sothmann MS. Creating an Informatics Infrastructure to Support a Participant Registry and Outcomes Research in the Indiana - Ohio Center for Traumatic Amputation Rehabilitation Research. APTA Annual Conference 2008; 2008 Jun; San Antonio, TX.
45. Robbins C, MacKinnon J, Oldridge N, Sothmann M, Wilson S, Vreeman DJ. Indiana - Ohio Center: Long-terms outcomes of war-related traumatic amputations. AcademyHealth 2008 Annual Research Meeting; 2008 Jun; Washington, D.C.
46. Robbins C, Sothmann M, Wilson S, Vreeman DJ. Examining the Long-Term Health Outcomes of Traumatic Amputation to Better Educate Young War Veterans. Eighth Annual American Academy of Health Behavior Conference 2008; 2008 Mar; Oxnard, CA.
47. Vreeman DJ, Herbold J, Hall M, Brooks G. Information Technology in Physical Therapy - A Journey, Not a Destination. APTA Combined Sections Meeting 2008; 2008 Feb; Nashville, TN.
48. Robbins CB, Morley S, Oldridge NB, Sothmann MS, Vreeman DJ, Wilson S. Creating the Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research – Findings from an Initial Survey. 10th Annual Force Health Protection Conference; 2007 Aug; Louisville, KY.
49. Robbins CB, Oldridge NB, Sothmann MS, Vreeman DJ, Wilson S. Creating the Indiana - Ohio Center for Traumatic Amputation Rehabilitation Research. 12th World Congress of the International Society for Prosthetics and Orthotics 2007; 2007 Jul; Vancouver, BC Canada.
50. Vreeman DJ, Eng J, Herbold J. Using Information Technology to Develop and Implement Evidence-based Practice. APTA Combined Sections Meeting 2007; 2007 Feb; Boston, MA.
51. Vreeman DJ. Maintaining mappings from source systems in a local health information infrastructure. AMIA Annual Symposium Proceedings 2006; 2006 Nov; Washington, D.C.
52. Vreeman DJ, Taggard SL. On the Road to a National Health Information Network: Implications for Physical Therapy. APTA Combined Sections Meeting 2006; 2006 Feb; San Diego, CA.
53. Vreeman DJ, Taggard SL, Rhine MD, Worrell TW. Implementation of Electronic Health Record Systems in Physical Therapy - A Systematic Review. APTA Annual Conference 2005; 2005 Jun; Boston, MA.
54. Vreeman RC, Madsen KA, Vreeman DJ, Downs SM. Evaluating Compliance with Guidelines for ADHD Diagnosis and Treatment. Pediatric Academic Societies' Meeting; 2004 May; San Francisco, CA.

Invited Presentations

1. DeSilvey, S, Vreeman DJ, Savage M. Gravity Project: Consensus-driven Standards on Social Determinants of Health. Gravity Project Community Meeting; 2021 Oct 14; Virtual.
2. DeSilvey, S, Vreeman DJ, Savage M. Gravity Project: Consensus-driven Standards on Social Determinants of Health. Gravity Project Community Meeting; 2021 Sep 30; Virtual.
3. Vreeman DJ, Schrotter F, Hallenbeck L. Panel: Lessons Learned from National Standards Coordination (Functions and Processes). National Committee on Vital and Health Statistics, Subcommittee on Standards, Listening Session on Healthcare Standards Development, Adoption, and Implementation; 2021 Aug 25; Virtual. Available from: <https://ncvhs.hhs.gov/meetings/standards-subcommittee-listening-session/>

4. Vreeman DJ. Unlocking meaning from health data messes. Institute for Augmented Intelligence in Medicine, Big10AIBowl Educational Series; 2021 Aug 20; Virtual.
5. Vreeman DJ. Augmenting PhenX for computable, open science with LOINC, FHIR, and HPO. PhenX Steering Committee Meeting; 2021 Jun; Virtual.
6. Vreeman DJ. Proposal for precise modeling of entities in the U.S. Core Data for Interoperability. Regenstrief Institute, LOINC Conference Fall 2019; 2020 Oct; Virtual.
7. Vreeman DJ, Latz R, Elrod M. Time to Act: New Interoperability Regulations Have Functional Limitations that Physical Therapy Can Address. American Physical Therapy Association: HPA The Catalyst Webinar Series; 2020 Sep 3; Virtual. Available from: <https://www.aptahpa.org/store/viewproduct.aspx?id=17034054>
8. Vreeman DJ, Dougherty M. Electronic Health Record Data for Research: Standardization of Social Determinants Data. Internal presented at: eQUA Speaker Series; 2020 Jun 11; Indianapolis, IN.
9. Vreeman DJ, Popovic J. Electronic Health Record Data for Research: A Guided Tour of EHR Data. Internal presented at: eQUA Speaker Series; 2020 Mar 30; Indianapolis, IN.
10. Vreeman DJ. Data Standards at RTI International. Health Standards Collaborative Meeting; 2020 Mar 5; Arlington, VA.
11. Vreeman DJ. The Role of FHIR in Health Data Interoperability. eQUA Speaker Series; 2019 Dec 12; Indianapolis, IN.
12. Vreeman DJ. Using LOINC with FHIR. FHIR DevDays Europe 2019; 2019 Nov; Amsterdam, Netherlands. Available from: <https://danielvreeman.com/presentation/using-loinc-with-fhir-devdays201911/>
13. Vreeman DJ. LOINC: New Developments in the LOINC API. Regenstrief Institute, LOINC Conference Fall 2019; 2019 Oct; Mataró, Spain.
14. Vreeman DJ. LOINC: LOINC for Beginners. Regenstrief Institute, LOINC Conference Fall 2019; 2019 Oct; Mataró, Spain.
15. Vreeman DJ. LOINC: Leadership changes & Strategic planning. Regenstrief Institute, LOINC Conference Fall 2019; 2019 Oct; Mataró, Spain.
16. Vreeman DJ. Data as “ATP” Fuel for Intellectually Fearless Leaders. Keynote lecture for Arcadia University; 2019 Sep; Philadelphia, PA. Available from: <https://danielvreeman.com/presentation/data-atp-fuel-for-intellectually-fearless-leaderdata-atp-fuel-for-intellectually-fearless-leaders/>
17. Vreeman DJ. LOINC: Review of implementations and lessons from the field. bioMérieux Invited Presentation; 2019 Aug; La Balme-Les-Grottes, France.
18. Vreeman DJ. Using LOINC with FHIR. FHIR DevDays USA 2019; 2019 Jun; Redmond, WA. Available from: <https://danielvreeman.com/presentation/using-loinc-with-fhir/>
19. Vreeman DJ. LOINC: Welcome and Introduction. Regenstrief Institute, Public Laboratory LOINC Conference; 2019 Jun; Indianapolis, IN.
20. Vreeman DJ. LOINC: RELMA Part 2. Regenstrief Institute, Public Laboratory LOINC Conference; 2019 Jun; Indianapolis, IN.
21. Vreeman DJ. LOINC: RELMA Part 1. Regenstrief Institute, Public Laboratory LOINC Conference; 2019 Jun; Indianapolis, IN.
22. Vreeman DJ. LOINC: Director’s Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2019 Jun; Indianapolis, IN.

23. Vreeman DJ. LOINC: A Vital Tool for Electronic Exchange of Clinical Data. Invited Webinar for Health Care Systems Research Network; 2019 May; Webinar. Available from: <https://danielvreeman.com/presentation/loinc-a-vital-tool-for-electronic-exchange-of-clinical-data/>
24. Vreeman DJ. Introduction to LOINC. Invited Webinar for Office of the National Coordinator for Health Information Technology; 2019 Apr; Webinar. Available from: <https://danielvreeman.com/presentation/an-introduction-to-loinc-onc-loinc-101-version/>
25. Vreeman DJ. Overview of Health Data Standards Development at the Regenstrief Institute, Inc. Health Standards Collaborative Meeting; 2019 Mar; Arlington, VA.
26. Vreeman DJ. LOINC: Welcome and Introduction. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2019 Feb; Salt Lake City, UT.
27. Vreeman DJ. LOINC: RELMA Part 2. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2019 Feb; Salt Lake City, UT.
28. Vreeman DJ. LOINC: RELMA Part 1. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2019 Feb; Salt Lake City, UT.
29. Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2019 Feb; Salt Lake City, UT.
30. Vreeman DJ. LOINC: A Quarter Century Old Standard That's Just Getting Started. Regenstrief Institute, Work in Progress Speaker Series; 2019 Feb; Indianapolis, IN.
31. Vreeman DJ. Enabling interoperability for social and behavioral determinants of health data. Centers for Disease Control and Prevention (CDC), Electronic Health Records (EHR) Forum; 2019 Jan; Webinar.
32. Vreeman DJ. LOINC: Welcome and Introduction. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Dec; Indianapolis, IN.
33. Vreeman DJ. LOINC: RELMA Part 2. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Dec; Indianapolis, IN.
34. Vreeman DJ. LOINC: RELMA Part 1. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Dec; Indianapolis, IN.
35. Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Dec; Indianapolis, IN.
36. Vreeman DJ. LOINC Use Around the World Today: A brief tour of LOINC implementations and a few tips for success. Workshop on LOINC and its use in the Catalan Health System; 2018 Nov; Barcelona, Spain.
37. Vreeman DJ. Introduction to LOINC: The global vocabulary for identifying health measurements, observations, and documents. Workshop on LOINC and its use in the Catalan Health System; 2018 Nov; Barcelona, Spain.
38. Vreeman DJ. LOINC: Welcome and Introduction. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Oct; Salt Lake City, UT.
39. Vreeman DJ. LOINC: RELMA Part 2. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Oct; Salt Lake City, UT.
40. Vreeman DJ. LOINC: RELMA Part 1. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Oct; Salt Lake City, UT.
41. Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Oct; Salt Lake City, UT.

42. Vreeman DJ. LOINC and FHIR. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Oct; Salt Lake City, UT.
43. Vreeman DJ. Making LOINC computable for open science. National Center for Data to Health (CD2H) LOINC Pitch; 2018 Sep; Webinar.
44. Vreeman DJ. Comments and Recommendations on the Interoperability Standards Priorities Task Force Draft Recommendations. Health Information Technology Advisory Committee (HITAC); 2018 Sep; Webinar.
45. Vreeman DJ. Advancing Interoperability with LOINC. Interoperability Standards Priorities Task Force Meeting; 2018 Sep; Webinar.
46. Vreeman DJ. Advancing the interoperability of social and behavioral determinants of health. Regenstrief Institute, LOINC Webinar Series; 2018 Aug; Indianapolis, IN.
47. Vreeman DJ. LOINC and FHIR. CMS Post Acute Care Health IT Workgroup; 2018 Jul; Indianapolis, IN.
48. Vreeman DJ. Health Terminologies and Vocabularies Environmental Scan. National Committee on Vital and Health Statistics(NCVHS); 2018 Jul; Washington, D.C.
49. Vreeman DJ. Using LOINC with FHIR. FHIR DevDays USA 2018; 2018 Jun; Boston, MA.
50. Vreeman DJ. Making Data Elements Interoperable with LOINC. Long Term Post-Acute Care and HIT Summit (LTPAC), Baltimore, MD; 2018 Jun; Baltimore, MD.
51. Vreeman DJ. LOINC: Welcome and Introduction. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Jun; Indianapolis, IN.
52. Vreeman DJ. LOINC: RELMA Part 2. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Jun; Indianapolis, IN.
53. Vreeman DJ. LOINC: RELMA Part 1. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Jun; Indianapolis, IN.
54. Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Jun; Indianapolis, IN.
55. Vreeman DJ. LOINC and FHIR. Regenstrief Institute, Public Laboratory LOINC Conference; 2018 Jun; Indianapolis, IN.
56. Vreeman DJ. Advancing Interoperability in Post Acute Care. Long Term Post Acute Care and Health IT Summit; 2018 Jun; Washington, D.C.
57. Vreeman DJ. Advancing Lab Data Interoperability with LOINC: An update on current standardization initiatives. Clinical Laboratory Improvement Advisory Committee (CLIAAC); 2018 Apr; Silver Spring, MD.
58. Vreeman DJ. LOINC: Welcome to LOINC. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Mar; Salt Lake City, UT.
59. Vreeman DJ. LOINC: RELMA Part 2. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Mar; Salt Lake City, UT.
60. Vreeman DJ. LOINC: RELMA Part 1. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Mar; Salt Lake City, UT.
61. Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Mar; Salt Lake City, UT.
62. Vreeman DJ. LOINC: Clinical Documents in LOINC. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2018 Mar; Salt Lake City, UT.

63. Vreeman DJ. LOINC: Welcome and Introduction. Regenstrief Institute, Public Laboratory LOINC Conference; 2017 Dec; Indianapolis, IN.
64. Vreeman DJ. LOINC: RELMA Part 2. Regenstrief Institute, Public Laboratory LOINC Conference; 2017 Dec; Indianapolis, IN.
65. Vreeman DJ. LOINC: RELMA Part 1. Regenstrief Institute, Public Laboratory LOINC Conference; 2017 Dec; Indianapolis, IN.
66. Vreeman DJ. LOINC: LOINC for Beginners. Regenstrief Institute, Public Laboratory LOINC Conference; 2017 Dec; Indianapolis, IN.
67. Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Conference; 2017 Dec; Indianapolis, IN.
68. Vreeman DJ. LOINC and FHIR. Regenstrief Institute, Public Laboratory LOINC Conference; 2017 Dec; Indianapolis, IN.
69. Vreeman DJ. FHIR and LOINC. FHIR DevDays 2017; 2017 Nov; Amsterdam, Netherlands.
70. Vreeman DJ. An Introduction to LOINC. Standards for Semantic Interoperability in Health Informatics for bioMerieux; 2017 Oct; Lyon, France.
71. Vreeman DJ. Data Standardization in Physical Therapy – Analytics Interoperability and the Registry. HPA Webinar Series; 2017 Sep; Indianapolis, IN.
72. Vreeman DJ. LOINC RSNA Playbook Overview. Department of Defense (DoD) and National Institutes of Health (NIH), online webinar; 2017 Aug; Indianapolis, IN.
73. Vreeman DJ. Context Is Important but Consistency and Quality is Critical - Creating Standards Around SDoH Data Collection. Health Insights; 2017 Jul; Arlington, VA.
74. Vreeman DJ. Taming the Wicked Problem of Health Data Interoperability. Regenstrief Institute, Work in Progress Speaker Series; 2017 Jun; Indianapolis, IN.
75. Vreeman DJ. Making Data Elements Interoperable with LOINC. Long Term Post-Acute Care and HIT Summit (LTPAC), Baltimore, MD; 2017 Jun; Baltimore, MD.
76. Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2017 Jun; Indianapolis, IN.
77. Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2017 Jun; Indianapolis, IN.
78. Vreeman DJ. LOINC: Addressing LOINC Code Challenges. FDA/NIH/CDISC Workshop on Promoting Semantic Interoperability of Laboratory Data; 2017 Jun; Silver Spring, MD.
79. Vreeman DJ. Clinical Terminology Standards required for US Health Data Exchange: SNOMED CT, LOINC, RxNorm. National Committee on Vital and Health Statistics(NCVHS); 2017 Jun; Washington, D.C.
80. Vreeman DJ. LOINC: Radiology Studies. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2017 Mar; Salt Lake City, UT.
81. Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2017 Mar; Salt Lake City, UT.
82. Vreeman DJ. LOINC: Overview and Introduction. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2017 Mar; Salt Lake City, UT.
83. Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2017 Mar; Salt Lake City, UT.

84. Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2017 Mar; Salt Lake City, UT.
85. Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2016 Dec; Indianapolis, IN.
86. Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2016 Dec; Indianapolis, IN.
87. Vreeman DJ. LOINC: Addressing LOINC Code Challenges. CDC/FDA/NLM/ONC/CMS Workshop on Promoting Semantic Interoperability of Laboratory Data; 2016 Nov; Bethesda, MD. Available from: <https://danielvreeman.com/presentation/addressing-loinc-coding-challenges/>
88. Vreeman DJ. LOINC: More Data, More Problems. Regenstrief Institute Conference Precision Medicine: Putting the Pieces Together; 2016 Oct; Turkey Run, IN.
89. Vreeman DJ. LOINC: Radiology Studies. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Aug; Salt Lake City, UT.
90. Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Aug; Salt Lake City, UT.
91. Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Aug; Salt Lake City, UT.
92. Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Aug; Salt Lake City, UT.
93. Vreeman DJ. LOINC: Tutorial LOINC Essentials: A Step by Step Workshop on Getting your Local Codes Mapped to LOINC. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2016 Jun; Indianapolis, IN.
94. Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2016 Jun; Indianapolis, IN.
95. Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2016 Jun; Indianapolis, IN.
96. Vreeman DJ. Technopalooza "Practicality of Wearable Technology in Physical Therapy." American Physical Therapy Association APTA Combined Sections Meeting (APTA); 2016 Feb; Indianapolis, IN.
97. Vreeman DJ. LOINC: Radiology Studies. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Feb; Salt Lake City, UT.
98. Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Feb; Salt Lake City, UT.
99. Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Feb; Salt Lake City, UT.
100. Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Feb; Salt Lake City, UT.
101. Vreeman DJ. LOINC: An Introduction to LOINC. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2016 Feb; Salt Lake City, UT.
102. Vreeman DJ. PCORnet Best Practices Sharing Session: Best Practices for Using LOINC. PCORnet; 2016 Jan; Webinar.
103. Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2015 Dec; Indianapolis, IN.

- 104.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2015 Dec; Indianapolis, IN.
- 105.Vreeman DJ. Update on LOINC and Radlex Unification. Icahn School of Medicine at Mount Sinai; 2015 Oct; New York, NY.
- 106.Vreeman DJ. Challenges and Successes in Managing Local Healthcare Terminologies in a Community-wide HIE. Icahn School of Medicine at Mount Sinai; 2015 Oct; New York, NY.
- 107.Vreeman DJ. LOINC Introduction and Use for Interoperability. FDA/CDC/NLM Workshop on Promoting Semantic Interoperability of Laboratory Data; 2015 Sep; Silver Spring, MD. Available from: <https://danielvreeman.com/2015-09-29-loinc-introduction-and-use-for-interoperability/>
- 108.Vreeman DJ. LOINC: Radiology Studies. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Aug; Salt Lake City, UT.
- 109.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Aug; Salt Lake City, UT.
- 110.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Aug; Salt Lake City, UT.
- 111.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Aug; Salt Lake City, UT.
- 112.Vreeman DJ. LOINC: An Introduction to LOINC. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Aug; Salt Lake City, UT.
- 113.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2015 Jun; Indianapolis, IN.
- 114.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2015 Jun; Indianapolis, IN.
- 115.Vreeman DJ. Why Use Standards for Semantic Interoperability. Standards for Semantic Interoperability in Health Informatics for bioMerieux; 2015 May; La Balme-Les-Grottes, France.
- 116.Vreeman DJ. Data Standards at the Regenstrief Institute, Inc. Data Standards at the Regenstrief Institute, Inc. presented at: Regenstrief Institute Open House; 2015 May; Indianapolis, IN.
- 117.Vreeman DJ. An Introduction to LOINC. Standards for Semantic Interoperability in Health Informatics for bioMerieux; 2015 May; La Balme-Les-Grottes, France.
- 118.Vreeman DJ. How to Make your Project an Overnight Success (in Twenty Years). Regenstrief Institute, Work in Progress Speaker Series; 2015 Apr; Indianapolis, IN.
- 119.Vreeman DJ. Regenstrief Institute Overview Presentation. American Physical Therapy Association Combined Sections Meeting; 2015 Feb; Indianapolis, IN.
- 120.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Feb; Salt Lake City, UT.
- 121.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Feb; Salt Lake City, UT.
- 122.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2015 Feb; Salt Lake City, UT.
- 123.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2014 Dec; Indianapolis, IN.
- 124.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2014 Dec; Indianapolis, IN.

- 125.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2014 Sep; Salt Lake City, UT.
- 126.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2014 Sep; Salt Lake City, UT.
- 127.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2014 Sep; Salt Lake City, UT.
- 128.Vreeman DJ. LOINC and RELMA for Diagnostic Imaging. Canada Health Infoway, Standards Collaborative Working Group 10 for Diagnostic Imaging; 2014 Sep; Toronto, Ontario, Canada.
- 129.Vreeman DJ. Special Topics in LOINC Mapping and Submissions. Malaysia Ministry of Health, LOINC Workshop; 2014 Aug; Kuala Lumpur, Malaysia.
- 130.Vreeman DJ. LOINC: Overview and Introduction. Malaysia Ministry of Health, LOINC Workshop; 2014 Aug; Kuala Lumpur, Malaysia.
- 131.Vreeman DJ. LOINC Panels and Answers. Malaysia Ministry of Health, LOINC Workshop; 2014 Aug; Kuala Lumpur, Malaysia.
- 132.Vreeman DJ. Introduction to RELMA for Mapping to LOINC. Malaysia Ministry of Health, LOINC Workshop; 2014 Aug; Kuala Lumpur, Malaysia.
- 133.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2014 Jun; Indianapolis, IN.
- 134.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2014 Jun; Indianapolis, IN.
- 135.Vreeman DJ. Learning with LOINC: A 20 - year project looks ahead. Regenstrief Institute, Work in Progress Speaker Series; 2014 Jun; Indianapolis, IN.
- 136.Vreeman DJ. LOINC: Panels, Forms, and Patient Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2014 Feb; Salt Lake City, UT.
- 137.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2014 Feb; Salt Lake City, UT.
- 138.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2014 Feb; Salt Lake City, UT.
- 139.Vreeman DJ. EHRs - Can they save lives without stealing your sunshine? American Physical Therapy Association, Combined Sections Meeting; 2014 Feb; Las Vegas, NV.
- 140.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2013 Dec; Indianapolis, IN.
- 141.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2013 Dec; Indianapolis, IN.
- 142.Vreeman DJ. LOINC and SNOMED CT. National Library of Medicine, National Institutes of Health, VA-NLM Interagency Agreement Face to Face Kick-off; 2013 Nov; Bethesda, MD.
- 143.Vreeman DJ. Using RELMA and Advanced Mapping Topics. Regenstrief Institute, Site Visit from Malaysian Ministry of Health; 2013 Oct; Indianapolis, IN.
- 144.Vreeman DJ. LOINC: Introduction and Mapping Best Practices. Regenstrief Institute, Site Visit from Malaysian Ministry of Health; 2013 Oct; Indianapolis, IN.
- 145.Vreeman DJ. LOINC: A Universal Catalog of Clinical and Laboratory Observations. Consiglio Nazionale Delle Ricerche, Evoluzione e interoperabilità tecnologica del Fascicolo Sanitario Elettronico; 2013 Oct; Sorrento, Italy.

- 146.Vreeman DJ. Cooperation Agreement between IHTSDO and Regenstrief Institute on SNOMED CT & LOINC. Health Level 7 (HL7) International, HL7 Board of Directors Meeting; 2013 Sep; Cambridge, MA.
- 147.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2013 Aug; Salt Lake City, UT.
- 148.Vreeman DJ. LOINC: Introduction and Overview. dbMotion Clinical Vocabulary Forum; 2013 Aug; Webinar.
- 149.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2013 Aug; Salt Lake City, UT.
- 150.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2013 Aug; Salt Lake City, UT.
- 151.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2013 Jun; Indianapolis, IN.
- 152.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2013 Jun; Indianapolis, IN.
- 153.Vreeman DJ. Strategies for Mapping Local Lab Tests to LOINC That Aren't a Pig in a Poke. Regenstrief Institute, Work in Progress Speaker Series; 2013 Apr; Indianapolis, IN.
- 154.Vreeman DJ. Vocabulary Standards for Electronic Claims Attachments. National Committee on Vital and Health Statistics, Standards Subcommittee Meeting; 2013 Feb; Washington, D.C.
- 155.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2013 Feb; Salt Lake City, UT.
- 156.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2013 Feb; Salt Lake City, UT.
- 157.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2013 Feb; Salt Lake City, UT.
- 158.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2012 Dec; Indianapolis, IN.
- 159.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2012 Dec; Indianapolis, IN.
- 160.Vreeman DJ. Essentials of Health Data Standards for Health Care Delivery. World Health Organization, Forum on Health Data Standardization and Interoperability; 2012 Dec; Geneva, Sweden.
- 161.Vreeman DJ. Meeting Terminology Requirements for Order Entry and Result Reporting. International Health Terminology Standards Development Organisation, SNOMED CT Implementation Showcase; 2012 Oct; Stockholm, Sweden.
- 162.Vreeman DJ. A Reflection on a Profession of Conviction, A Discipline You've Barely Heard of, and How The World is Changed. Indiana Chapter, American Physical Therapy Association, Central District Meeting; 2012 Oct; Indianapolis, IN.
- 163.Vreeman DJ. Why Using EHRs Might Save Lives but Steal your Sunshine. West Virginia University, Fall 2012 Visiting Scholar Lecture; 2012 Sep; Morgantown, WV.
- 164.Vreeman DJ. Proposed Collaboration of IHTSDO with Regenstrief on SNOMED CT & LOINC. Health Level 7 (HL7) International, HL7 Board of Directors Meeting; 2012 Sep; Baltimore, MD.
- 165.Vreeman DJ. Electronic Health Records: chicken soup or rotten egg? Gentiva Home Health; 2012 Sep; Indianapolis, IN.

- 166.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2012 Aug; Salt Lake City, UT.
- 167.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2012 Aug; Salt Lake City, UT.
- 168.Vreeman DJ. LOINC: Director's Update. LOINC: Director's UpdateIntermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2012 Aug; Salt Lake City, UT.
- 169.Vreeman DJ. Use of LOINC in Electronic Quality Measures. National Quality Forum, Health Information Technology Advisory Committee Meeting; 2012 Jul; Washington, D.C.
- 170.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2012 Jun; Indianapolis, IN.
- 171.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2012 Jun; Indianapolis, IN.
- 172.Vreeman DJ. Challenges and Successes in Building a Community-wide EHR. Mayo Clinic, 2012 SHARPN Summit "Secondary Use"; 2012 Jun; Rochester, MN.
- 173.Vreeman DJ. Maybe is Not a Wary Word. Arcadia University, Graduate Colloquium Keynote; 2012 May; Glenside, PA.
- 174.Vreeman DJ. Mapping Local Laboratory Codes to LOINC with RELMA - Practicum. Health Systems Research Institute, International (HSRI) Workshop on Logical Observation Identifiers Names and Codes (LOINC); 2012 Mar; Bangkok, Thailand.
- 175.Vreeman DJ. LOINC: Grown locally. Consumed Worldwide. Regenstrief Global Health Informatics, Quarterly Meeting; 2012 Mar; Indianapolis, IN.
- 176.Vreeman DJ. LOINC: An Introduction to the Universal Catalog of Laboratory and Clinical Observations. American Medical Informatics Association Knowledge Representation and Semantics Working Group, Webinar Series on Standard Biomedical Terminologies; 2012 Mar; Webinar.
- 177.Vreeman DJ. LOINC: An Introduction to LOINC. Health Systems Research Institute, International (HSRI) Workshop on Logical Observation Identifiers Names and Codes (LOINC); 2012 Mar; Bangkok, Thailand.
- 178.Vreeman DJ. Health Information Interoperability and LOINC. Thai Health Information Network (THINK) Consortium Meeting; 2012 Mar; Bangkok, Thailand.
- 179.Vreeman DJ. Electronic Health Records: chicken soup or rotten egg? Gentiva Home Health; 2012 Mar; Indianapolis, IN.
- 180.Vreeman DJ. RELMA: the Regenstrief LOINC Mapping Assistant. Hong Kong eHealth Record Office, Seminar on Standardization of Laboratory data with LOINC, Hong Kong; 2012 Feb; Hong Kong, SAR.
- 181.Vreeman DJ. RELMA: Advanced Topics and Practicum. Hong Kong eHealth Record Office, Seminar on Standardization of Laboratory data with LOINC, Hong Kong; 2012 Feb; Hong Kong, SAR.
- 182.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2012 Feb; Salt Lake City, UT.
- 183.Vreeman DJ. LOINC: Overview and Introduction. ong Kong eHealth Record Office, Seminar on Standardization of Laboratory data with LOINC, Hong Kong; 2012 Feb; Hong Kong, SAR.
- 184.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2012 Feb; Salt Lake City, UT.
- 185.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2012 Feb; Salt Lake City, UT.

- 186.Vreeman DJ. LOINC: An Introduction to the Universal Catalog of Laboratory and Clinical Observations. Sysmex America; 2012 Feb; Webinar.
- 187.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2011 Dec; Indianapolis, IN.
- 188.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2011 Dec; Indianapolis, IN.
- 189.Vreeman DJ. Maybe is Not a Wary Word. American Physical Therapy Association, Exploring the Future of Physical Therapy Symposium; 2011 Nov; King of Prussia, PA.
- 190.Vreeman DJ. Challenges and Successes with Community-wide Laboratory Data Exchange: corralling creativity with standards. International Quality and Productivity Center, 9th Forum on Laboratory Informatics; 2011 Nov; San Diego, CA.
- 191.Vreeman DJ. LOINC: An Introduction to the Universal Catalog of Laboratory and Clinical Observations. BloodCenter of Wisconsin; 2011 Sep; Milwaukee, WI.
- 192.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2011 Aug; Salt Lake City, UT.
- 193.Vreeman DJ. LOINC: Introduction and Mapping Boot Camp. Centers for Disease Control and Prevention (CDC), Public Health Informatics 2011 Conference; 2011 Aug; Atlanta, GA.
- 194.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2011 Aug; Indianapolis, IN.
- 195.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2011 Aug; Salt Lake City, UT.
- 196.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2011 Jun; Indianapolis, IN.
- 197.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2011 Jun; Indianapolis, IN.
- 198.Vreeman DJ. LOINC: Introduction and Mapping Boot Camp. Chicago Health Information Technology Regional Extension Center, Laboratory LOINC Workshop; 2011 May; Chicago, IL.
- 199.Vreeman DJ. LOINC: Grown locally. Consumed Worldwide. Regenstrief Institute, Work in Progress Speaker Series; 2011 Mar; Indianapolis, IN.
- 200.Vreeman DJ. Terminology Mapping in the INPC: overview and lessons learned. HHS Office of the National Coordinator for Health IT (ONC), Beacon Community Meeting; 2011 Feb; Indianapolis, IN.
- 201.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Indian Health Service, Public Clinical LOINC Tutorial and Committee Meeting; 2011 Jan; Tucson, AZ.
- 202.Vreeman DJ. LOINC: Documents. Indian Health Service, Public Clinical LOINC Tutorial and Committee Meeting; 2011 Jan; Tucson, AZ.
- 203.Vreeman DJ. LOINC: Director's Update. Indian Health Service, Public Clinical LOINC Tutorial and Committee Meeting; 2011 Jan; Tucson, AZ.
- 204.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2010 Dec; Indianapolis, IN.
- 205.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2010 Dec; Indianapolis, IN.
- 206.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2010 Jul; Salt Lake City, UT.

- 207.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2010 Jul; Salt Lake City, UT.
- 208.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2010 Jul; Salt Lake City, UT.
- 209.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2010 Jun; Indianapolis, IN.
- 210.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2010 Jun; Indianapolis, IN.
- 211.Vreeman DJ. A Proposal for Interoperable Health Information Exchange with Two Esperantos: ICF and LOINC. WHO North American Collaborating Center, 2010 Conference on ICF: Enhancing our Understanding of the ICF; 2010 Jun; Bethesda, MD.
- 212.Vreeman DJ. An Overview and Introduction to LOINC: the universal catalog of laboratory observations. American Society for Clinical Laboratory Science, Clinical Laboratory Management Association, and American Association of Clinical Chemistry, Ohio 2010 Collaborative Laboratory Conference; 2010 Apr; Cleveland, OH.
- 213.Vreeman DJ. Challenges and Successes with Community-wide Health Information Exchange: corralling the creativity with standards. BC Children's Hospital and BC Women's Hospital and Health Centre Department of Pathology and Laboratory Medicine Distinguished Lecturer Series; 2010 Mar; Vancouver, BC Canada.
- 214.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2009 Dec; Indianapolis, IN.
- 215.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2009 Dec; Indianapolis, IN.
- 216.Vreeman DJ. LOINC and RELMA: Introduction and Tutorial. Centers for Disease Control and Prevention (CDC), Public Health Information Network Vocabulary and Messaging Community of Practice Meeting; 2009 Dec; Atlanta, GA.
- 217.Vreeman DJ. LOINC: Panels, Forms, and Patient Assessment Instruments. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2009 Aug; Salt Lake City, UT.
- 218.Vreeman DJ. LOINC: Documents. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2009 Aug; Salt Lake City, UT.
- 219.Vreeman DJ. LOINC: Director's Update. Intermountain Healthcare, Public Clinical LOINC Tutorial and Committee Meeting; 2009 Aug; Salt Lake City, UT.
- 220.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2009 Jun; Indianapolis, IN.
- 221.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2009 Jun; Indianapolis, IN.
- 222.Vreeman DJ. LOINC Representation of Diagnostic Genetics, Molecular Biology, and Surgical Pathology Testing. National Health Information Standards Committee of the Korean Ministry of Health and Welfare and HL7 Korea; 2009 May; Seoul, Korea.
- 223.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, site visit from National Health Information Standards Committee of the Korean Ministry of Health and Welfare; 2009 Mar; Indianapolis, IN.

- 224.Vreeman DJ. LOINC: Overview and Introduction. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2008 Dec; Indianapolis, IN.
- 225.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2008 Dec; Indianapolis, IN.
- 226.Vreeman DJ. Developing Information Systems to Inform Change. Duke University Doctor of Physical Therapy Program, Research Symposium 2008; 2008 Oct; Durham, NC.
- 227.Vreeman DJ. The Indiana Network for Patient Care: a central Indiana health information network with a national impact. Indiana Chapter, American Physical Therapy Association, Central District Meeting; 2008 Jan; Indianapolis, IN.
- 228.Vreeman DJ. LOINC: The Master Catalog of Clinical Observations. Regenstrief Institute, Work in Progress Speaker Series; 2008 Jan; Indianapolis, IN.
- 229.Vreeman DJ. LOINC: Using RELMA for Mapping Local Laboratory Tests to LOINC. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2007 Dec; Indianapolis, IN.
- 230.Vreeman DJ. LOINC: Director's Update. Regenstrief Institute, Public Laboratory LOINC Committee Meeting and Workshop; 2007 Dec; Indianapolis, IN.
- 231.Vreeman DJ. Essential Informatics for Private Practice Physical Therapists. American Physical Therapy Association Private Practice Section, Annual Conference and Exposition 2007; 2007 Nov; San Diego, CA.
- 232.Vreeman DJ. LOINC: The Master Catalog of Clinical Observations. Interagency Committee on Disability Research (ICDR), ICDR State-of-the-Art Conference 2007: New Federal Applications of ICF; 2007 Jun; Arlington, VA.
- 233.Vreeman DJ. Reducing Barriers to Health Information Exchange: challenges and successes with managing terminology. Agency for Healthcare Research and Quality (AHRQ), State and Regional Demonstration Project Meeting Pre-conference Session; 2007 May; Indianapolis, IN.
- 234.Vreeman DJ. Reducing Barriers to Health Information Exchange: Challenges and Successes with Automated Term Mapping. Regenstrief Institute, Work in Progress Speaker Series; 2007 Jan; Indianapolis, IN.
- 235.Vreeman DJ. The Indiana - Ohio Center for Traumatic Amputee Rehabilitation Research. Regenstrief Institute, Work in Progress Speaker Series; 2006 Nov; Indianapolis, IN.
- 236.Vreeman DJ. Evidence-based Practice: Resources for the Busy Clinician. Indiana Chapter, American Physical Therapy Association, Central District Meeting; 2006 Nov; Indianapolis, IN.
- 237.Vreeman DJ. The Indiana - Ohio Center for Traumatic Amputee Rehabilitation Research. VA HSR&D Center on Implementing Evidence-based Practice, Work in Progress Speaker Series; 2006 Jun; Indianapolis, IN.
- 238.Vreeman DJ. Evidence-based Practice: Resources for the Busy Clinician. Indiana Chapter, American Physical Therapy Association, Central District Meeting; 2005 Nov; Indianapolis, IN.
- 239.Vreeman DJ. Reducing Barriers to Data Aggregation with Automated Tools for Term Mapping: Challenges, Successes, and Future Directions. Regenstrief Institute, Work in Progress Speaker Series; 2005 May; Indianapolis, IN.
- 240.Vreeman DJ. Where Angels Fear to Tread: Developing an Automated Method of Mapping Legacy Radiology System Codes to LOINC. Regenstrief Institute, Work in Progress Speaker Series; 2004 Jun; Indianapolis, IN.

241. Vreeman DJ. Developing an Automated Method of Mapping Legacy Radiology System Codes to LOINC. National Library of Medicine, Training Directors Meeting; 2004 Jun; Indianapolis, IN.

Other Publications

1. Vreeman DJ, Dougherty M, Armson S. Social Determinants of Health Data Standards: The Building Blocks for Communication, Interaction, and Sharing Social and Behavioral Data in Value-Based Care. RTI International Insights Blog. 2020. Available from: <https://www.rti.org/insights/social-determinants-of-health-data-standards>
2. Vreeman DJ. Strengthening our Health Information Foundation with the U.S. Core Data for Interoperability. RTI International Insights Blog. 2020. Available from: <https://www.rti.org/insights/us-core-data-interoperability>
3. Vreeman DJ. Proposal for precise modeling of entities in the U.S. Core Data for Interoperability. RTI International; 2020 Oct. Available from: <https://www.rti.org/publication/proposal-precise-modeling-entities-us-core-data-interoperability/fulltext.pdf>
4. Vreeman DJ. Defragmenting Healthcare with FHIR. RTI International Insights Blog. 2019. Available from: <https://www.rti.org/insights/defragmenting-healthcare-fhir>
5. Vreeman DJ. For Interoperability, Not all Juice is Worth the Squeeze. HIMSS News. 2017. Available from: <http://www.himss.org/news/interoperability-not-all-juice-worth-squeeze-0>

Media Features

1. Daniel Vreeman to Serve as Technical Director for the Gravity Project. RTI. 2021. Available from: <https://www.rti.org/announcements/daniel-vreeman-serve-technical-director-gravity-project>
2. Daniel Vreeman Appointed to U.S. Core Data for Interoperability Task Force. RTI. 2021. Available from: <https://www.rti.org/announcements/daniel-vreeman-appointed-us-core-data-interoperability-task-force>
3. Kwok R. You can get that paper, thesis or grant written — with a little help. Nature. 2020 Apr;580(7801):151–3.
4. Vreeman Joins RTI's eHealth Quality & Analytics Division to Lead Health Data Standards and Interoperability. RTI. 2019. Available from: <https://www.rti.org/announcements/vreeman-joins-rti-ehealth-quality-analytics-division>
5. Regenstrief Institute investigator elected to medical informatics honor society. Regenstrief Institute. 2017. Available from: <https://www.regenstrief.org/article/regenstrief-institute-investigator-elected-medical-informatics-honor-society/>
6. Goedert J. LOINC and SNOMED CT Codes to be Linked. HealthData Management; 2013 Jul.
7. Aisen CF. New Regenstrief and IHTSDO agreement to make EMRs more effective at improving health care. IU School of Medicine News Release; 2013 Jul.
8. Mace S. Lab Tech Standards, With Benefits. HealthLeaders Media; 2013 Apr.
9. Sherwin J. Feature – Contemporary Topics in Health Care: Electronic Health Records. PT in Motion. CINAHL AN: 2011537965.; 2012 Apr.
10. Aisen CF, Barr S. HL7 and Regenstrief Institute Sign Statement of Understanding. IU School of Medicine News Release; 2011 Nov.
11. Aisen CF. Lingua Franca Critical for Electronic Medical Records and Health Information Exchange. IU School of Medicine News Release; 2011 Jun.

12. Aisen CF. Regenstrief Releasing Updated Lingua Franca for Electronic Health Info Exchange. IU School of Medicine News Release; 2010 Jun.
13. Angelucci DD. Taking a Special Interest in SIGs. PT in Motion. 2(10):26-35. CINAHL AN: 2010852497.; 2010.
14. Stephens S. 21st Century Marketing for Physical Therapists. PT Magazine. 16(4):30-35. CINAHL AN: 2009924265.; 2008.
15. Beaver E. Going digital: Implementing electronic records in your practice. Briefings on Outpatient Rehab Reimbursement and Regulations. 13(8):4-7; 2008.
16. Aisen CF. The Dirty Work of Healthcare Information Technology: Developing a Lingua Franca or The Devil Is In the Details. IU School of Medicine News Release; 2007 Dec.