Proceedings of the Sixth Annual

MIT Chief Data Officer & Information Quality Symposium

Massachusetts Institute of Technology
Cambridge, MA, USA

July 17-20, 2012

Edited by

Forea L. Wang

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Foreward

WELCOME to the **6th Annual MIT Chief Data Office and Information Quality Symposium (MIT 2012 CDO & IQS)**. The last ten years have proven exciting for data quality practitioners, as more and more organizations have come to understand the critical importance of high-quality data. The ever increasing focus on information and intelligence as strategic and tactical advantages by governments and private sectors requires advances in Information quality, creating new opportunities for data quality practitioners.

However, data quality efforts in large enterprises often fail to deliver on the expectations of the business. As with any service provision, the key to avoiding such disappointment is to look at the problem from the beginning through the eyes of the business. Data quality success allows organizations to focus on leveraging the opportunities to use data rather than the limits and disappointments imposed by poor quality data.

Many data quality pioneers have made vast improvements, serving as role models for others. The next ten years promise to be even more exciting. Leading organizations including the MIT Information Quality community are coming to realize that data, just like capital and people, are assets that must be explicitly managed. As any valuable corporate asset, successful data quality efforts would enable organizations to achieve the best return on their data investments. The MIT Information Quality Industry Symposium is committed to showcasing the achievements and opportunities for data quality in diverse industry settings as well as providing an international forum for professional data quality practitioner networking.

In order to produce an event that meets the needs of data and information quality practitioners, the MIT IQIS organizing committee has researched data quality developments extensively with experts in data management, data warehousing, business intelligence, customer information and information management, across a range of industries and sectors.

This year's symposium event is sponsored by the MIT Information Quality Program and in part, by Acxiom Corporation, Anlyan Consulting, CA Technologies, Data Blueprint, Informatica, Lockheed Martin, MITRE, Sandhill Consultants, Symbolic Systems, Inc., and Talend.

We are honored and privileged to have the HON Thomas Kelly, III & HON Michael Kirby, *FMR Deputy Undersecretary of the Army (DUSA), United States* to give the keynote address. We would like to express our gratitude to Tobin W. Curran, and other MIT staff for their assistance in producing the Symposium proceedings and managing the various aspects of the Symposium operations.

MIT 2012 Chief Data Officer & Information Quality Symposium Organizing Committee

Symposium Co-Chairs:

Richard Wang, *MIT Information Quality (MITIQ) Program*
Stuart Madnick, *MIT Sloan School of Management*
Yang Lee, *Northeastern University*

Program Co-Chairs:

Track A - Government: Annette Pence, *MITRE Corporation*
Track B - Healthcare: Michael Nix, *Fletcher Allen Health Care*
Track C - Business & Finance: Joe Maguire, *Data Quality Strategies*

Outreach Chair:

Laura Duvall, *Department of Homeland Security*

Proceedings Chair:

Forea Wang, *MIT Information Quality Program*

Agenda

The Sixth Annual MIT Chief Data Officer & Information Quality Symposium

Previously known as the MIT IQIS Symposium (2007 – 2011)

Location: **Massachusetts Institute of Technology**
Tang Building (E51), MIT East Campus
70 Memorial Drive, Cambridge, MA, USA 02139

Dress Code: Business casual

Dates: Tuesday, July 17 – Friday, July 20, 2012

Contact: **Richard Wang, MIT IQ Program**
rwang@mit.edu; (O): 617-324-4838; (M): 617-304-3120

TUESDAY July 17, 2012		
Time	**Event**	**Location**
8:00am - 4:30pm	**Chief Data Officer (CDO) Forum** *By invitation-only, Individual Members, and Corporate Sponsor Invitees.*	**MIT Faculty Club**
8:15-9:00am	**CONTINENTAL BREAKFAST & REGISTRATION**	**E51-345**
9:00am-4:30pm	Session 1-1 **UHC (University HealthSystem Consortium) Workshop** Contact Gary Schumacher, schumacher@uhc.edu	**MIT Faculty Club**
9:00am-12:30pm	Session 1-2 **EDM Council Meeting** Contact Michael Atkin, atkin@edmcouncil.org	**E51-345**
9:00am-12:30pm	Session 1-3 **Acxiom** Contact Dan Lackner, Dan.Lackner@acxiom.com	**E51-372**
1:00-2:00pm	Session 1-4 **Maximize Return On Data Through Holistic Data Governance** Contact Karen Scott, kscott@informatica.com	**E51-376**
2:00-3:00pm	Session 1-5 **Rosetta Stone for Information Quality, Version 2.y** Contact Jim Funk, jimfunk@mit.edu	**E51-376**
3:00-4:30pm	Session 1-6 **Implementing Data Standards – From Theory to Practice** Contact Robert Lutton, robert.lutton@sandhillconsultants.com	**E51-376**
5:00-6:30pm	**SYMPOSIUM RECEPTION AT MIT FACULTY CLUB**	

WEDNESDAY July 18, 2012		
8:15-9:00am	**CONTINENTAL BREAKFAST & REGISTRATION**	**E51-345**
9:00-10:30am Plenary Session	Session 2 **Opening Remarks** ▪ **Symposium Co-Chairs**: Richard Wang, Stuart Madnick, Yang Lee ▪ **Welcome**: Deborah Nightingale Director, MIT Sociotechnical Systems Research Center Professor of the Practice of Aeronautics and Astronautics and Engineering Systems Co-Director, MIT Lean Advancement Initiative ▪ **Program Co-Chairs**: Joe Maguire, Michael Nix, Annette Pence ▪ **Outreach Chair**: Laura Duvall ▪ **Awards Ceremony** Keynote ▪ Thomas E. Kelly, *FMR Deputy Undersecretary of the U.S. Army* Michael A. Kirby, *FMR Deputy Undersecretary of the U.S. Army*	**E51-345**
10:30-11:00am	**COFFEE BREAK**	
11:00am-12:30pm Parallel Sessions	Session 3A **Information Quality in the Homeland Community** ▪ **Session Chair**: Annette Pence, *MITRE Corporation* 1. James C. Meng, Ph.D. *MSM MIT Sloan Fellow, Office of Assistant Secretary of the Navy, Financial Management & Comptroller* **Navy-Wide Enterprise Cost Management Framework** 2. Justin Stekervetz, *U.S. Department of Homeland Security* **National Information Exchange Model (NIEM) Success Stories: Enabling Data Quality**	**E51-325**
	Session 3B **Health Information Exchange – Data Exchange Challenges** ▪ **Session Chair**: Elisa Horbatuk, *Stony Brook University Medical Center* 1. John Halamka, MD, *Harvard/ONC* **Connecting Patients, Providers, and Payers** 2. Laura Adams, *Rhode Island Quality Institute* **Data in the Driver's Seat of Healthcare Reform: A New Era for Data Quality, Management and Analytics**	**E51-345**
	Session 3C **Documents and Processes: Achieving Quality Goes Beyond Structured Data** ▪ **Session Chair**: Joe Maguire, *Data Quality Strategies* 1. Barbara von Halle, *Knowledge Partners International* **The Unanticipated Role of the Decision Model in Data Quality: Delivering DQ Logic Governance to the Business** 2. Lyn Robison, *Gartner* **Applying Information Quality to Semi-Structured Data**	**E51-372**

	Session 3D **Research Trends & Directions** ▪ **Session Chair:** Michael Nix, *Fletcher Allen Health Care* 1. Indra Neil Sarkar, *Director of Biomedical Informatics, UVM* **Leveraging Electronic Health Data for Quality: From Bedside to Claims** 2. Peter Aiken, Ph.D. *Virginia Commonwealth University & Data Blueprint* **IQ Research Issues: Three Elephants in the Room…**	**E51-376**
12:30-1:30pm	**SANDWICH BAG LUNCH**	
1:30-3:00pm Parallel Sessions	Session 4A **Open Source Data Quality Management for the Public Sector** ▪ **Session Chair**: David Becker, *MITRE Corporation* 1. John Jaster*, Chief Architect for Digital Prospectors, Corporation* **The Enterprise Data Quality Management Service (EDQMS) Open Source Project (OSP)** 2. John Talburt, Yinle Zhou, & Eric Nelson, *UALR* **An Open Source Entity Resolution System supporting MDM** 3. Steve Sarsfield, *Talend* **The Evolution of Data Management**	**E51-325**
	Session 4B **Meaningful Use of Data** ▪ **Session Chair**: Paul Prabhaker, *Associate Dean, College of Business, Northern Illinois University* 1. Ivy Baer, Jennifer Faerberg , & Lori K. Mihalich-Levin, JD, *Association of American Medical Colleges* **Meaningful Use, Quality, and Associated Risks: An AAMC Overview**	**E51-345**
	Session 4C **Innovation in Information Quality, Panel Discussion** ▪ **Session Chair**: Frank J. Ponzio, Jr., *President & CEO, Symbolic Systems, Inc.* **Panelists:** Michael Atkin, Managing Director, EDM Council Michael M. Gorman, President, Whitemarsh Information Systems Corp. George W. Handy, Managing Director, Activity for Innovation and Economic Growth COL Ronald Jacobs, Commander, US Army Electronic Proving Ground	**E51-372**
3:00-3:30pm	**COFFEE BREAK**	
3:30-5:00pm	Session 5A **The Big Data (Quality) Issues & Opportunities: Vendors' Perspective** • **Session Chair**: Dan Lackner, Acxiom • **Panel Moderator**: Joe Maguire, *Data Quality Strategies* **Panelists:** Peter Aiken, VCU/Data Blueprint Chad Fitz, VP of Product Management; Acxiom Rob Karel, VP of Product Strategy; Informatica Frank J. Ponzio, Jr., President & CEO; Symbolic Systems, Inc. Steve Sarsfield, Product Marketing Manager; Data Governance, Talend	**E51-325**

	Session 5B **Sponsor Vendors' "Roadshow" Presentations** Acxiom, Data Blueprint, Informatica, Symbolic Systems, & Talend	**E51-345**
	Session 5C **Sponsor Vendors' Exhibits** Acxiom, Data Blueprint, Informatica, Symbolic Systems, & Talend	**Outside E51-345**
5:00-6:30pm	**SYMPOSIUM RECEPTION AT MIT FACULTY CLUB**	
THURSDAY July 19, 2012		
8:15-9:00am	**CONTINENTAL BREAKFAST**	**E51-345**
9:00-10:30am	Session 6A **Data Quality and Data Governance – Management & Organization** ▪ **Session Chair**: Annette Pence, *MITRE Corporation* 1. LTC Joachim Sobota & CPT Christian Fürber, *Joint Support Command, German Armed Forces* **Using Semantic Mediawiki for Data Quality Management in the German Armed Forces** 2. Laura Duvall, *U.S. Department of Homeland Security* **I'm your new leader. Where are we going?**	**E51-325**
	Session 6B **Improved Use of Non-Discrete Data** ▪ **Session Chair**: Eric Hixson, *Cleveland Clinic Foundation* 1. Rick Siegrist & Susan Madden, *Press Ganey* **The New Science of Sentiment Analysis as applied to Healthcare Organizations** 2. Craig Rhinehart, *Director, ECM Strategy and Market Development, IBM Software Solutions Group* **Applying Advanced Text Analytics to Health Care Data to Reduce Readmssions and Improve Other Outcomes**	**E51-345**
	Session 6C **Business & Finance Track –A Recovery Using High Quality Data** ▪ **Session Chair**: Linda Kresl, *President, Tecnologia, Inc.* 1. Linda Kresl & Kammy Rogers-Holliday, *Bonneville Power Administration* **How to Create a Data Quality Management Team within the Bonneville Power Administration** 2. Antonio Arias & John Salazar, *Intellego* **The State of Data Quality in Latin America's Largest Bank** 3. Scott D. Stanton & Erick Cloward, *HCG Software LLC* **Big Data and Excel – Moving Data Analytics Back Into the CFO's Hands**	**E51-372**
10:30-11:00am	**COFFEE BREAK**	

11:00am-12:30pm Plenary Session	Session 7 **Challenges & Successes in Insurance Information Quality** ▪ **Session Chair:** Anne Marie Smith **Panelists:** Paul Ayoub, SVP & CIO, *FCCI Insurance* Alfred Goxhaj, CIO, *Philadelphia Insurance* Arne Herenstein, CIO, *Harleysville Insurance Company* William Jenkins, Analytics CEO, *Agile Insurance;* Fmr CIO, *Penn National Insurance;* Fmr. CIO, *General Accident Insurance* Deborah Smallwood, Founder, *SMA* Britta Schatz, CIO, *Penn National Insurance*	**E51-345**
12:30-1:30pm	**CHINESE BUFFET LUNCH**	**E51-345**
1:30-3:00pm Parallel Sessions	Session 8A **Data Quality in the Federal Finance Community** ▪ **Session Chair**: Annette Pence, *MITRE Corporation* 1. John Hill, *US Department of the Treasury* **Federal Financial Data Quality: Challenges and Approaches** 2. Jeff Butler, *US Internal Revenue Service* **Big Data and Information Quality in the IRS Research Community**	**E51-325**
	Session 8B **Improving Health Care – Data Warehousing** ▪ **Session Chair**: Michael Nix, *Fletcher Allen Health Care* 1. Jim Walker, *Talend* **The Butterfly Effect on Data Quality** 2. Christopher J. Donovan, *Cleveland Clinic Foundation* **Data Warehouse Integration and Governance**	***E51-345***
	Session 8C **Data Quality in Financial Reporting: Lessons From the Design and Use of Electronic Reporting Formats** ▪ **Session Chairs**: Joe Maguire & Harry (Hongwei) Zhu 1. Christine Tan, *Fordham University* **How the Design of the XBRL US GAAP Financial Reporting Taxonomy Impacts XBRL Data Consumption – Lessons Learned** 2. J. Louis Matherne, *Financial Accounting Standards Board* **TBD** 3. Robert Stowsky, *Northeastern University* **Capital Markets Transaction Reporting: DQ/IQ Lessons Learned**	**E51-372**
3:00-3:30pm	**COFFEE BREAK**	
3:30-5:00pm Parallel Sessions	Session 9A **MITRE's Session – Managing Quality – Critical Issues** ▪ **Session Chair**: Annette Pence, *MITRE Corporation* 1. Sarah Wentworth, *MITRE* **Just in Time Data Quality – Building Quality into Every Project** 2. **MITRE Panel: Root Causes, Practical Measures, and Tactical Approaches** Adrienne Chen-Young, Iris Dawkins, Tracy DeCanio, & Sarah Wentworth **Facilitator:** Annette Pence	**E51-325**

	Session 9B **Electronic Health Records (EHR): Benefits and Challenges** ▪ **Session Chair**: Allen Juris, *University HealthSystem Consortium* 1. Fengwei Zhong, Kajal Benipal, & Adol Esquivel, *St. Luke's Episcopal Health System* **The Perfect Storm: Addressing Current & Future Health Care Quality Challenges Using Health Information Technology** 2. Keith Figlioli, *Premier, Inc.* **Achieving and Measuring the "Triple Aim"™: Defining and obtaining the data needed to demonstrate value in a newly emerging healthcare delivery model**	**E51-345**
	Session 9C **Panel Discussion: The Human Factor in Information Quality** ▪ **Session Chair**: Joe Bugajski, *Gartner* **Panelists:** Eric Hixson, *Cleveland Clinic Foundation* Stuart Madnick, *John Norris Maguire Professor of Information Management at MIT Sloan School* Joe Maguire, *Data Quality Strategies* Mark Temple-Raston, *Global Lead for Data Management at Citi* Barbara von Halle, *Managing Partner & Founder, Knowledge Partners International*	**E51-372**
FRIDAY	July 20, 2012	
8:30-11:30am	Session 10-1 **Symbolic Systems, Inc.** ▪ Contact: Frank Ponzio, Jr., frank.ponzio@symbolic.com	**E51-325**
8:30-11:30am	Session 10-2 **Talend** ▪ Contact: Steve Sarsfield, stevesarsfield@yahoo.com	**E51-345**
8:30-11:30am	Session 10-3 **Data Blueprint** ▪ Contact: Peter Aiken, paiken@datablueprint.com	**E51-372**
8:30-11:30am	Session 10-4 **Pitney Bowes** ▪ Contact: Clarence W. Hempfield, Jr., Clarence.Hempfield@pb.com	**E51-376**
11:30am-12:00pm	**CLOSING REMARKS**	**E51-345**
End of the MIT 2012 CDO IQ Symposium		

Abstracts, Bios & Photos

Session 1-1 UHC (University HealthSystem Consortium) Workshop

Contact Steve Meurer at meurer@uhc.edu

Session 1-2 EDM Council Meeting

Contact Michael Atkin at atkin@edmcouncil.org

Session 1-3 Acxiom

Contact Dan Lackner at Dan.Lackner@acxiom.com

Session 1-4 Maximize Return On Data Through Holistic Data Governance

Robert Karel

Organizations prioritize strategies to ensure delivery of high quality, trusted enterprise data to the business, but struggle with the business case and engagement with business stakeholders to support and participate in traditionally IT-driven efforts. Increasing business demand for trusted data is forcing both business and IT leaders to recognize dependencies and conflicting perceptions on data's value that have never before been understood.

Ironically, the ultimate objective of data governance should not be to ensure high quality data. Instead, to maximize your return on data, your data governance efforts must enable what business leaders care most about: growing revenue, reducing costs and inefficiencies, mitigating risk and providing great customer experiences as a competitive differentiator. How can data governance do this? By identifying the most critical business processes, decisions and interactions for your business and investing in the policies, processes, roles, responsibilities and architectures that can ensure only the most trustworthy data is used.

Robert Karel, VP Product Strategy
Informatica

Rob is a VP Product Strategy and looks across Informatica's products to advance its breadth in data management. He has more than 20 years of data management experience, working in both business and IT roles to develop solutions that provide better quality of, confidence in, and usability of critical enterprise data. Most recently, Rob spent six years with Forrester Research as a Principal Analyst and Research Director, and was a leading expert in how companies deliver trusted information across the enterprise to enable mission critical business processes, customer interactions and decisions. Rob's research focus included master data management, data quality, metadata management, data integration, data architecture, and data governance best practices.

Prior to joining Forrester, he managed Intuit's enterprise data quality initiatives and supported the implementation of Intuit's customer master. Prior to Intuit, Rob managed the design and development of customer master and attribute management solutions for Cisco Systems. Earlier, Rob was Research Manager for the global mergers and acquisitions product group at Thomson Financial Securities Data (now Thomson Financial Investment Banking).

Session 1-5 RS4IQ – Rosetta Stone for Information Quality, Version 2.y

Contact Jim Funk at jimfunk@mit.edu

Session 1-6 Implementing Data Standards – From Theory to Practice

Hamilton Hayes & Robert Lutton

The problem with Data Standards is that everyone has them, or believes so, and those standards are rarely consistent. When you look at what is available there is a lot of theory on how one could achieve higher levels of Information Quality (IQ). The often unfilled hope is that these higher levels can lead to increased interoperability of information systems, along with consequential improvements in enterprise performance. But to realize the maximum benefits from an IQ process, that process should exhibit the following properties across the span of the enterprise: consistency, visibility, implementability and manageability.

Why should you attend this session: In our decades of experience, implementing data standards should and can be a repeatable process involving the following categories: Policy, Business, Standards, Procedures, Forms and Technology. Throughout this presentation, attendees will be offered practical strategies and techniques on how to use a consistent methodology for the implementation of effective data standards.

Hamilton Hayes, Senior Consultant
Sandhill Consultants

Hamilton Hayes is a Senior Consultant for Sandhill Consultants Ltd. Over time, Ham has led much of the evolution of the CA ERwin product suite and its supporting education courses. He has provided his extensive expertise in information, process and enterprise modeling to numerous major North American corporations and government agencies.

Ham has authored articles and delivered presentations to industry groups on enterprise modeling and its role in improving performance. The focus of his consulting and teaching has helped enterprises bridge the space between technical modeling and business success. He is also researcher in modeling, using the ERwin products to model non-linear social interactions.

Robert Lutton, VP of Business Development
Sandhill Consultants

Robert Lutton is Vice President of Sales and Marketing for Sandhill Consultants – North America and is directly responsible for building the business in Canada and the USA. During the past 6 years at Sandhill, Robert has grown Sandhill Consultants to become the #1 CA ERwin technical partner in Canada and the US.

During the past 20 years of solving client's issues has led Robert to have a unique perspective on the issues that clients are experiencing and how to solve them. Roberts past experience in the technical world has provided him with an understanding on bridging the gap between the technical and business community. Prior to joining Sandhill he held Sales, Marketing, Management and Technical positions at CA, Sterling Software, Synon and Nikon in the UK, as well as running a consulting company in the UK.

Session 2 Welcome from the Symposium Chairs

- Symposium Chairs: Richard Wang, Stuart Madnick, Yang Lee
- Welcome: Debbie Nightingale, Director of MIT Sociotechnical Systems Research Center
- Program Co-Chairs: Joe Maguire, Michael Nix, Annette Pence
- Outreach Chair: Laura Duvall
- Awards Ceremony

Keynote Title TBD

Thomas E. Kelly, III & Michael A. Kirby, FMR Deputy Undersecretary of the United States Army

Abstract Pending

Thomas E. Kelly, III FMR Deputy Undersecretary of the Army (DUSA)
United States Army
VP, *Lockheed Martin*

Tom Kelly is the Vice President for Strategic Initiatives with Lockheed Martin Missiles and Fire Control (M & FC). Prior to joining Lockheed Martin M & FC in August 2009 he served in the Department of the Army as the Deputy Under Secretary for Secretaries of the Army Fran Harvey and Pete Geren. He was responsible to the Secretary of the Army for IT Portfolio Governance and Congressional Compliance. In that role he created and ran the management system for the Army's complex ERP development process and created the requirement for the Army Chief Data Officer and Army Chief Data Quality Officer. Together with the Director of DARPA he also created the Wireless Network After Next (WnAN) Program.

In his previous tour as a Department of the Army Civilian, Tom Kelly was the founder and Director of the Army's Artificial Intelligence Center, the only software development center in the Pentagon. The center developed management decision support tools for the Army's senior leaders. Between his two tours in the Pentagon Mr. Kelly had a had a number of senior industry assignments with Ford Aerospace Corporation where he managed the Space Missions Group's IRAD portfolio and with Maxwell Technologies where he was Vice President for Strategy and New Business Development. During this time frame he was also a consultant to the Army Science Board. As an enlisted soldier he served on the staff of the Army War College where he lectured on foreign policy issues. He has a Masters degree from the MIT Sloan School of Management.

Michael A. Kirby FMR Deputy Undersecretary of the Army (DUSA)
United States Army
VP*, U.S. Army Account Executive, Computer Sciences Corporation*

Mike Kirby is Vice President and Army Account Executive for CSC. From 2005 to 2008, he served as Deputy Under Secretary of the Army for Business Transformation (DUSA - BT). In this role, he was responsible for implementing the U.S. Army's business transformation initiatives, which included continuous process improvement, business situational awareness, organizational analysis and design, and professional development. Previously, he was the Business Development Deputy of Mission Systems for Northrop Grumman. Additionally, he served as a member of the U.S. Army Science Board. During service in the Army, Mike was a combat arms officer and commanded a tank battalion during the first Persian Gulf conflict. He received a Bachelor of Science degree in engineering from the U.S. Military Academy at West Point, a Master of Science in national security strategy from the National War College and a Master in Business Administration from the Harvard Business School.

Session 3A Information Quality in the Homeland Community

Session Chair: Annette Pence

Annette Pence, Senior Principal, Information Systems Engineer
MITRE Corporation

Annette Pence has more than 30 years of experience with the application of information technology–enabling solutions supporting aerospace, finance, classified command and control, and manufacturing. Her experience with managing data spans the entire data lifecycle and includes system design, development, and integration. Ms. Pence is the head of the Information and Data Management Department at The MITRE Corporation's Center for Connected Government. As a Senior Principal, Information System Engineer, with the MITRE Corp., Ms. Pence is responsible for the strategic development and delivery of a targeted set of objectives for government customers, which includes the IRS, DHS, HHS, GPO, Department of Education, HHS and Centers for Medicare and Medicaid. Prior to MITRE, Ms. Pence served as Vice President, Data Management Services Division at Science Applications International Corporation (SAIC), Department Manager, Software Integration, Sr. Manager, Data Management, for the Reserve Component Automation Systems (RCAS), at Boeing Information Services, and Manager Database Administration for the National Aeronautics and Space Administration, Technical and Management Information Systems (TMIS). Her focus is raising the awareness and furthering the implementation of data management at the enterprise level for government agencies and enabling and facilitating the sharing of information across government agencies. A native of Washington, D.C., Ms. Pence earned a master's degree in Technology Management from George Mason University. During the Technology Management curriculum she was fortunate to study at the Kellogg College at Oxford University.

3A-1: Navy-Wide Enterprise Cost Management

James C. Meng, Ph.D.

Abstract Pending

James C. Meng, Ph.D., MSM MIT Sloan Fellow
Office of Assistant Secretary of the Navy, Financial Management & Comptroller

Dr. Meng reports to Provider Enterprise Executive Steering Group for VCNO/ASNRDA's Data Standardization initiative across the Navy.

Previously he was the Science Technology Engineering & Mathematics Executive, reporting to the Principal Civilian Deputy, Assistant Secretary of the Navy, Research Development & Acquisition. His tasks were to reestablish the Science & Engineering foundations for the Navy. Where he initiated the Navy Open Innovation practice, established an Analytic Assessment Architecture and hierarchical structure Navy wide to provide Navy leadership transparency. Additionally, Dr. Meng implemented the Navy Chief Technology Officer CONOPs across Naval Research and Technology Enterprise and Integrated Strategic Planning of Navy STEM programs, including synergy across Navy, delegation of educational grant authorities, consolidated STEM curricula and metrics.

As the Director, Warfare Systems Engineering in Naval Sea Systems Command (NAVSEA) and dual-hatted as Director, Test, Evaluation & Analysis, Dr. Meng served as the Battle Force Systems Engineer and was responsible for warfare systems engineering test and evaluation across a wide spectrum of Navy and joint programs. He was the Deputy Warrant Officer of warfare systems engineering: from sensors, C4I, combat systems processing, tracking and control, joint warfare architectures and interoperability, interior communications, weapons launchers, weapons, through test & evaluation for carriers, surface combatants, littoral mine, amphibious and auxiliary ships. Dr. Meng was also the Navy's certifying authority of the Strike Force Interoperability.

Dr. Meng served as Executive Director, Warfare Systems Engineering Directorate, NAVSEA, Washington, DC, from July 2005 – February 2007, where he held similar responsibilities in warfare systems. He also managed the Navy's directed energy and SURFTECH, and Foreign Military Sales over $3 billion.

He previously served as the NAVSEA Warfare Centers Work Assignment Executive, Washington, DC, from April 2003 to June 2005, and was dual-hatted as the NAVSEA Warfare Centers Business Executive for the last year of that tour. In those capacities, he oversaw assignment of $6 billion annually to more than 25,000 man-years of government and contract work across eight Divisions and 11 geographic sites. Updated 04/11

Dr. Meng served as Executive Director of the Naval Undersea Warfare Center Division, Keyport, from January 2000 to March 2003 with a workforce of 2,000 and annual TOA of $400M. From April 1995 to December 1999, Dr. Meng was both the Head of the Torpedo Systems Technology Department and the Chief Scientist of the Submarine Weapons Directorate at NUWC Division, Newport, RI. His department's mission included being the "gateway to the Fleet" for all technology insertions for submarine weapons systems, including torpedoes, unmanned undersea vehicles, mobile targets, and countermeasures. He was the Director of Thermo Hydrodynamics Technology for the Ocean Systems Division of Gould (now Northrop Grumman Naval Systems), Newport, RI.

Dr. Meng entered the Senior Executive Service in June 1998. He was selected as the Federal Manager of the Year in 2002 and presented with the Meritorious Civilian Service Award in March 2000. Other awards received during his career include the Bronze Medal Award from the American Defense Preparedness Association in 1997, Employee of the Year- professional category from the Rhode Island Federal Executive Council in 1991, and a Naval Underwater Systems Center Significant Achievement - Secretary of the Navy Citation in 1988.

Dr. Meng was elected a Fellow of ASME in 1996 and is a member of IEEE, AIAA, and ASNE. He co-chaired the ASME Superconductivity Technical Committee from 1989-1992. He has authored more than 20 refereed journal articles in the Journal of Fluid Mechanics, the Journal of American Institute of Aeronautics and Astronauts, the Journal of Applied Optics, and the Journal of Computational Physics. He earned his bachelor's of science degree in mechanical engineering from the National Taiwan University, Taipei, Taiwan; his master's of science in engineering physics from the University of California, Berkley; and his doctorate in aeronautical engineering from the University of California, Berkley. In 1994, he received a master's of science degree in management from the Massachusetts Institute of Technology's Sloan School of Mana Management.

3A-2: National Information Exchange Model (NIEM) Success Stories: Enabling Data Quality

Justin Stekervetz

A federally supported, government-wide initiative, the National Information Exchange Model (NIEM) connects communities of people who share a common need to exchange information in order to advance their missions. NIEM provides a data model, governance, methodologies, training, technical assistance, and an active community to assist users in adopting a standards-based approach to exchanging information. Most importantly, NIEM makes it possible for organizations to share critical data; as a result, people are empowered to make informed decisions that improve efficiency and help organizations advance their missions.

This presentation will outline case studies focused on data quality improvements through the use of NIEM-conformant information exchange standards across all levels of government. An update on current program activities and future initiatives will also be provided.

Justin Stekervetz, NIEM NTAC Liason and NIEM Information Architect
Deparment of Homeland Security

Justin Stekervetz is the National Information Exchange Model (NIEM) Technical Architecture Committee (NTAC) Liaison and NIEM Information Architect for the NIEM Program Management Office at the U.S. Department of Homeland Security. Mr. Stekervetz has an extensive and diverse background in technical implementations, programming, data modeling and systems integration. Currently, he is leading efforts to develop a NIEM Tools Strategy to enhance tooling capabilities for the NIEM community and to act as a conduit between the NIEM PMO and industry partners. He has also led the

development of a standardized UML Profile for NIEM in close collaboration with Office of the Program Manager for the Information Sharing Environment (PM-ISE), Object Management Group (OMG) and the NTAC which was finalized as an OMG standard in June 2012.

Mr. Stekervetz also represented NIEM program efforts in creating NIEM-conformant schemas for the Recovery.gov data architecture. As part of this effort, he collaborated with the General Services Administration (GSA) and the Office of Management and Budget (OMB) in fulfilling the reporting requirements of the American Recovery and Reinvestment Act (ARRA) of 2009. In addition to coordinating with these agencies, he worked closely with DHS personnel on the creation of numerous NIEM-conformant schemas supporting Financial Activity Report Submissions, Funding Notification Submissions, and Recipient Reporting Submissions for ARRA.

Mr. Stekervetz graduated from the Pennsylvania State University with a Bachelor's of Science degree in Computer Science. He is also certified as a Project Management Professional (PMP) through the Project Management Institute (PMI).

Session 3B Health Information Exchange – Data Exchange Challenges

Session Chair: Elisa Horbatuk

Elisa Horbatuk, Data Manager
Stony Brook University Medical Center

Elisa Horbatuk is a Data Manager in Decision Support Services at Stony Brook University Medical Center in Long Island, New York. Ms. Horbatuk has worked in health services research for three years and in healthcare quality improvement for ten years, including four years at New York State's Quality Improvement Organization and External Quality Review Organization. Current responsibilities include data quality management, analysis, and reporting for a variety of public reporting databases, including the Joint Commission/Center for Medicare and Medicaid Services core measures, New York State cardiac registries, American College of Cardiology registries, and American Heart Association's Get With The Guidelines Heart Failure registry. She works closely with Stony Brook's Clinical Informatics and Information Technology groups and with clinical service areas to develop tools and processes to facilitate the delivery of quality care as well as for the accurate capture of data required for public reporting and guiding quality improvement efforts.

3B-1: Connecting Patients, Providers, and Payers

John Halamka, MD

There will be more healthcare regulatory change in the next 5 years than in the past 20. New requirements for meaningful use, ICD-10 and healthcare reform will require significant information technology innovation. In this presentation, we will review the electronic health record, health information exchange, and analytics projects necessary to support accountable-care organizations, patient centered medical homes, and patient/family engagement.

John Halamka, MD, Professor
Harvard/ONC

John D. Halamka, MD, MS, is a Professor of Medicine at Harvard Medical School, Chief Information Officer of Beth Israel Deaconess Medical Center, Chief Information Officer of Harvard Medical School, Chairman of the New England Healthcare Exchange Network (NEHEN), co-Chair of the national HIT Standards Committee, and a practicing Emergency Physician.

As Chief Information Officer of Beth Israel Deaconess Medical Center, he is responsible for all clinical, financial, administrative and academic information technology serving 3000 doctors, 14000 employees and two million patients. As Chief Information Officer of Harvard Medical School, he oversees all educational, research and administrative computing for 18000 faculty and 3000 students. As Chairman of NEHEN he oversees clinical and administrative data exchange

in Massachusetts. As co-Chair of the HIT Standards Committee he facilitates the process of electronic standards harmonization among stakeholders nationwide.

3B-2: Data in the Driver's Seat of Healthcare Reform: A New Era for Data Quality, Management and Analytics

Laura Adams

Providers are charting their path forward in an era of payment reform and preparing to be paid on the basis of value rather than volume. There is a dawning realization of what it truly takes to drive the metrics that will determine an organization's financial success. Significantly reducing unnecessary hospitalizations and ED visits, for example, involves more than just what goes on in the hospital and the physician office. The best results are coming from activated communities where new types of data flow from new sources. "Come and get care" is becoming a thing of the past and a new and long-overdue respect for patient-reported data is emerging. "Crowd-sourced" data, for example, becomes critical when a community sets a goal to reduce to zero preventable asthma ED visits in children. The work of data management and analytics leaders is becoming an essential business strategy in health care organizations of all sizes and types—not just a support function to meet regulatory requirements. In many ways, the data needs are evolving more rapidly than any other aspect of health care transformation. For those leaders of data management and analytics who are willing to look into the future, this is your time.

Laura Adams, President & Chief Executive Officer
Rhode Island Quality Alliance

Laura Adams is the President and CEO of the Rhode Island Quality Institute (RIQI), a collaboration of the top leadership of health care stakeholders working together to transform the health care system in the state. RIQI was the only organization in the nation to win all three of the major ARRA health IT awards. The grants totaled $27M in federal grant funding to build an infrastructure to support health care transformation in the state. The grants funded health information exchange, the RI Regional Extension Center and the RI Beacon Community.

Laura served on the Office of the National Coordinator's Health IT Policy Committee's Governance Panel for the Nationwide Health Information Network in 2010. She is the immediate past Chair of the Board of the National eHealth Collaborative (NeHC), initiated by former HHS Secretary Michael Leavitt. Also in 2010, Laura chaired the Institute of Medicine's (IOM) Planning Committee for the "Digital Infrastructure for Population Health and a Learning Healthcare System" workshop series.

She is a faculty member of the Institute for Healthcare Improvement (IHI) in Boston and has been since its inception. She directed the IHI Idealized Design of the Intensive Care Unit project and served as faculty in the VHA's 70-hospital ICU improvement collaborative, specializing in patient and family centered care. She currently teaches clinical quality improvement system-wide for Sutter Health, based in Sacramento, CA. Laura led the governance consulting for the Improving Performance in Practice (IPIP) Initiative, a RWJF-funded collaborative initiative of the American Board of Medical Specialties, and the Boards and Societies of Internal Medicine, Family Physicians and Pediatrics.

Laura was Founder, President and CEO of Decision Support Systems, a New York-based company specializing in Internet-based health care decision support. She was among the first to bring the principles of healthcare quality improvement to the Middle East, in conjunction with Donald M. Berwick, MD and the Harvard Institute for Social and Economic Policy in the Middle East. She traveled in the U.S. and Europe with Dr. W. Edwards Deming as a student in the study of statistical-based quality improvement.

Her publications include co-authoring with Gustafson, et al, Developing and Testing a Model to Predict Outcomes of Organizational Change, Health Services Research, 38(2), 751-776 and co-authoring Collaborating with Consumers to Advance Health Knowledge and Improve Practice in Herzlinger, R, Consumer-Driven Health Care: Implications for Providers, Payers and Policymakers, 2004" She also co-authored "A Draft Framework for Measuring Progress Towards the Development of a National Health Information Infrastructure, BMC Medical Informatics Decision Making, June, 2005. Laura co-authored

"Improving comfort and communication in the ICU: a practical new tool for palliative care performance measurement and feedback", Nelson, J., Mulkerin, C., Adams, L. and Pronovost, P.; Quality and Safety in Health Care, Aug 2006. She co-authored with Peter Pronovost, MD, et.al. is The Rhode Island ICU Collaborative: A Model for Reducing Central line-associated Bloodstream Infection and Ventilator-associated Pneumonia Statewide, Quality and Safety in Health Care 2010;19:555-561. Her most recent co-authored publication with M. Vigorito and B. Sexton is Collaborative Improvement in Sepsis Identification & Treatment, JQPS, Vol. 37, No. 11, Nov. 2011

Laura's experience in healthcare at the senior management level included her position as Vice President of Patient Services at Parkview Episcopal Medical Center in Colorado and Assistant Administrator for the Universal Health Services' New Orleans area hospitals. In 2007, she received a Congressional citation from Congressman Patrick Kennedy for her visionary leadership and contributions to improving the health care system in Rhode Island. Laura also received University of Northern Colorado's 2010 Distinguished Alumni award.

Session 3C Documents and Processes: Achieving Quality Goes Beyond Structured Data

Session Chair: Joe Maguire

Joe Maguire
Data Quality Strategies

A 30-year veteran of the computer industry, Joe Maguire is an analyst and consultant specializing in data management and requirements analysis. His hard-won perspective is informed by broad experience including twelve years in product development for software vendors (Digital, Lotus, Microsoft, Bachman Information Systems); thirteen years as a consulting data modeler, process modeler, and requirements analyst for clients (ranging from small startups to Fortune-10 behemoths); and five years as an industry analyst (including stints at Burton Group and Gartner) specializing in best practices in data management. He is a much-published author whose books have been praised by a wide range of media outlets including The Mathematica Journal, The Data Access Newsletter, The Boston Sunday Globe, and National Public Radio. He is co-author of Mastering Data Modeling: A User Driven Approach (Addison-Wesley, 2000). A frequent public speaker, Mr. Maguire returns to MIT IQIS for the fourth consecutive year.

3C-1: The Unanticipated Role of the Decision Model in Data Quality: Delivering DQ Logic Governance to the Business

Barbara von Halle

In 2009, some people predicted the Decision Model might initiate a new generation of systems. Today, business people create, test, and change decision models in automated systems with minimal or no IT intervention. However, no one expected it to fill a void in DQ!

Most often, DQ logic is in technical code managed by IT. Yet, it changes frequently, for example in fraud detection. However, in some organizations, business people now manage these changes with minimal IT intervention using decision models.

The presentation explores a DQ framework enhanced for decision models. It also includes three ways to include DQ decision models within business processes. Sample decision model templates illustrate the details. The presentation closes with actual DQ productivity metrics, ROI and insight into actual automation of business governance of DQ logic.

Barbara von Halle, Managing Partner and Founder
Knowledge Partners International, LLC (KPI)

Barbara von Halle is Managing Partner and Founder of Knowledge Partners International, LLC (KPI). She is co-inventor of The Decision Model and co-author of The Decision Model: A Business Logic Framework Linking Business and Technology,

Taylor and Francis 2009. The fifth recipient of the Outstanding Individual Achievement Award from International DAMA, she was inducted into the Hall of Fame in 1995. She is an early pioneer in data architecture and business rules.

Barbara coauthors the monthly Decision Model column in www.Tdan.com and www.ModernAnalyst.com, serving as QA Consultant on KPI's Decision Modeling and Requirements projects and Sapiens DECISION software.

Her first book, Handbook of Relational Database Design has sold over 21,000 copies. She was the most popular in Database Programming and Design magazine for years. An article in Intelligent Enterprise Magazine placed in top 20 of the year, featuring case studies from Oregon State, Freddie Mac, Dell Financial Systems, and Pershing LLC.

3C-2: Applying Information Quality to Semi-Structured Data

Lyn Robison

The process of measuring data quality in structured data has its challenges, but semi-structured data takes those challenges to a whole new level. Yet, in most enterprises, high quality semi-structured data is just as critical to the business as high-quality structured data, and measuring its quality is vital. Fortunately, semi-structured data has the virtue of highly flexible metadata, and this metadata can be employed to benchmark, measure, and maintain the quality of semi-structured data. Learn the techniques that Lyn Robison, senior analyst and Research Director of Gartner's Data Management Strategies team, recommends for measuring data quality beyond structured data.

Lyn Robison, Research VP
Gartner, Inc.

Lyn Robison is the research director for Burton Group's Data Management Strategies group within Gartner Research. Mr. Robison provides guidance on topics including data cloud, information quality, data strategy, data integration, and the upcoming information-based revolution in solution delivery in enterprise IT.

In previous roles, Mr. Robison's responsibilities included application portfolio management and information management. He has previously held positions at the LDS Church, Burton Group, and Portland General Electric

Session 3D Research Trends and Directions

Session Chair: Michael Nix

Michael Nix, Measurement Leader
Fletcher Allen Health Care

Michael Nix is Leader of the Clinical and Operations Measurement Group of the James M. Jeffords Institute for Quality and Operational Effectiveness at Fletcher Allen Health Care, Burlington Vermont. With an academic background in Industrial Management (University of Alabama) and Systems Management (University of Southern California) he has worked for over 30 years in healthcare including quantitative analysis, quality management, clinical operations analysis, consulting, material management as well as general hospital data collection and distribution. He has also taught a variety of business, management and finance courses at the college level for over 25 years and is currently a Graduate Faculty member at Champlain College in Burlington Vermont teaching Financial and Economic Modeling their MBA programs.

3D-1: Leveraging Electronic Health Data for Quality: From Bedside to Claims

Indra Neil Sarkar

The increased availability of data associated with health, from clinical data in Electronic Health Records to claims data in multi-payer claims data sets offer a great opportunity for a new cadre of quality

studies. This presentation will describe the fundamental challenges in melding these types of data towards meeting this promise. Particular attention will be given to implementation of standards, semantic harmonization, and demonstration of the potential studies that are possible with the amalgamation of clinical and claims data.

Indra Neil Sarkar PHD, MLIS, Director of Biomedical Informatics
Center for Clinical and Translational Science,
Assistant Professor of Microbiology & Molecular Genetics, &
Assistant Professor of Computer Science
University of Vermont

Indra Neil Sarkar, PhD, MLIS, is the Director of Biomedical Informatics at the Center for Clinical and Translational Science, Assistant Professor of Microbiology & Molecular Genetics, and Assistant Professor of Computer Science at the University of Vermont. After receiving his Bachelor of Science degree in microbiology from the Lyman Briggs College at Michigan State University, he was a National Library of Medicine pre-doctoral fellow in Biomedical Informatics at Columbia University's College of Physicians and Surgeons. Subsequently, Dr. Sarkar attained a Master's Degree in Library and Information Science, along with a Certificate of Advanced Study in Digital Libraries, from Syracuse University. Prior to joining the University of Vermont, he held scientific appointments at the American Museum of Natural History and the Marine Biological Laboratory. His research has involved the application and development of biomedical informatics techniques to semantically integrate disparate sources of knowledge to facilitate the generation of testable biomedical hypotheses. He has received funding from the National Science Foundation, the Ellison Medical Foundation, the Medical Library Association, and the National Library of Medicine at the National Institutes of Health. As an active member of the bioinformatics community, he serves on the meetings committee of the International Society for Computational Biologists and is the current Chair of the Steering Committee of the Data Analysis Working Group for the Barcode of Life Initiative. Within the biomedical informatics community, he was a founding track chair (2008), was the Vice-Chair (2009), and was the Scientific Program Committee Chair for the 2011 American Medical Informatics Association (AMIA) Summit on Translational Bioinformatics. Dr. Sarkar was the founding chair for the AMIA Regional Informatics Action Working Group, is the current Chair of the AMIA Education Committee, and a member of the AMIA Public Policy Committee. Dr. Sarkar has been an author over 45 peer-reviewed articles, which span topics from comparative genomics using phylogenetic approaches to development of standards associated electronic health records. Dr. Sarkar has also served as a Guest Editor for both the Journal of Biomedical Informatics and BMC Bioinformatics. He currently serves as a member of the editorial board for 8 journals, including the Journal of Biomedical Informatics, Briefings in Bioinformatics, Journal of the American Medical Informatics Association, and Methods of Information in Medicine (for which he is an Associate Editor).

3D-2: IQ Research Issues: Three Elephants in the Room…

Peter Aiken

Research into information quality indicates the problem is likely getting worse. While computer engineering/information systems/computer science programs all have some IQ initiatives, it is likely that more productive results will be achieved by addressing some rather large elephants in the room. These include: 1) admitting that in spite of good efforts to date - the problem is getting worse; 2) addressing the inability of researchers (in general) to address ""real world"" challenges; and 3) agreeing that ultimate responsibility for IQ is not IT. If we acknowledge these three elephants, then we can move to the next step - figuring out how to address this revised information quality worldview.

Peter Aiken, Ph.D., Founding Director
Data Blueprint
Professor
Virginia Commonwealth University

Dr. Peter Aiken is consistently named as one of the top ten data management thought leaders. He is the founding director of Data Blueprint, a Richmond, Virginia-based data management and IT consulting firm, Associate Professor at Virginia Commonwealth University's Department of Information Systems, and President of DAMA International. With over 30 years of experience in more than 500 data management practices across 20 countries, Peter is a highly desired keynote speaker at conferences and workshops around the world. He previously held the position of Computer Scientist with the Offices of the CIO of the U.S. Defense Information Systems Agency and has consulted with numerous organizations to help them improve the value of their data. Various initiatives from outsourcing to extreme systems development to business engineering increasingly rely on good quality data exchanges. Peter's research methods, associates, and projects increase the effectiveness with which data assets are focused in support of organizational strategy.

To date, Peter has authored and co-authored seven books and numerous other publications that have appeared in Communications of the ACM, IEEE Computer, the IBM Systems Journal, Information Week and numerous others. His achievements have resulted in recognition as one of 2000 Outstanding Intellectuals of the 21st Century and bibliographic entries in Who's Who in Science and Engineering, Who's Who in American Education and other biographical compilations. He is the recipient of multiple national and international awards, including the 2010 International Stevens Award.

Session 4A Data Open Source Data Quality Management for the Public Sector

Session Chair: David K. Becker

David K. Becker, Principle Information Systems Engineer
MITRE Corporation

David Becker is a Principal Information Systems Engineer with the MITRE Corporation working for the USAF out of the Dayton, OH site at Wright-Patterson AFB. He is currently engaged in projects involving enterprise architecture, information quality, data strategy, data management and program acquisition. David has over 30 years of experience in software development and information technology. While working as an employee, consultant, and senior technical officer for several public, private and academic organizations, he has had a broad range of assignments, including senior level IT and business consulting, technical leadership and management, project management, product research & development, seminar and workshop development, college level computer science course development and instruction, industrial liaison, international standards development, systems administration, and systems analysis, design and implementation. David's particular areas of strength include business, application, data and technology architectures, systems dynamics, project management, quality management, statistical process control, information search and retrieval, and artificial intelligence.

4A-1: The Enterprise Data Quality Management Service (EDQMS) Open Source Project (OSP)

John Jaster

The Enterprise Data Quality Management Service (EDQMS) provides a free-standing, vendor-neutral, downloadable data quality management tool set that will enable domains and business area owners across a DoD enterprise to establish their own independent instances of data quality management capability at minimal cost. EDQMS includes a wizard for constructing and maintaining DQ metric definitions, tools for capturing and displaying business rule violations, a vendor-neutral data quality metrics database, and a dashboard for displaying DQ metrics. EDQMS also establishes and employs a data quality metadata exchange (DQME) XML language. The purpose of the EDQMS Open Source Project (OSP) is to create, deploy and sustain the EDQMS tool suite to work within established end-to-end DQ

lifecycle processes and governance structures. The project uses DISA's Forge.mil environment to provide a CM code repository, as well as to support project management and issue tracking.

John Jaster, Chief Architect
Digital Prospectors, Corporation

John Jaster is the Chief Architect for Digital Prospectors, Corporation. Currently he works as the lead architect for the Air Force Global Force Management program located at Wright-Patterson AFB and Maxwell-Gunter AFB. John has a Masters degree in computer science and has worked in the information technology business for 25 years. The companies he has worked for include Paramount Pictures, Fox Studio, AOL, Sun, Loral Aerospace, Northrop Grumman, and Lockeed Martin. For the past 6 years he has been working as the lead architect for the Air Force Enterprise Data Warehouse, where he lead the technical team that developed the Enterprise Data Quality Management Service.

4A-2: An Open Source Entity Resolution System Supporting MDM

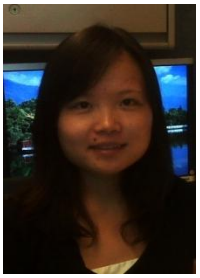
John Talburt, Yinle Zhou, Eric Nelson

The inability to properly integrate the same information coming from multiple sources is one of the leading causes of poor data quality in an organization. Whether it is the failure to recognize the same customer making transactions through different sales channels or to aggregate sales of the same product, the negative impact on business can be significant. This session provides an introduction to current practices for data-matching and record-linking that are foundational to building an effective strategy to improve data integration and managing master data.

- Major points include:
- Creating and analyzing matching rules
- Strengths and weaknesses of commonly used approximate match algorithms
- Relationship and asserted resolution
- Four major types of entity resolution systems
- How to maintain persistent master data identifiers
- Evaluating and monitoring entity resolution results.

John Talburt, Professor
University of Arkansas at Little Rock

Dr. John R. Talburt is Professor of Information Science and Acxiom Chair of Information Quality at the University of Arkansas at Little Rock (UALR) where he is the Coordinator for the Information Quality Graduate Program and the Executive Director of the UALR Center for Advanced Research in Entity Resolution and Information Quality (ERIQ). Prior to his appointment at UALR he was the leader for research and development and product innovation at Acxiom Corporation, a global leader in information management and customer data integration. Professor Talburt is an inventor for several patents related to customer data integration and the author of numerous articles on information quality and entity resolution, and is the author of Entity Resolution and Information Quality (Morgan Kaufmann, 2011). He also holds the IAIDQ Information Quality Certified Professional (IQCP), the Certified Data Management Professional (CDMP), and is a certified Master Data Quality Manager for the ISO 8000-110:2009 Data Quality Standard.



Yinle Zhou, Student
University of Arkansas at Little Rock

Yinle Zhou is a student and teaching assistant in the Integrated Computing PhD Program at the University of Arkansas at Little Rock (UALR). She earned her Bachelor of Business Administration majoring in Electronic Commerce at Nanjing University, China, in 2008 and completed her Master of Science in Information Quality at UALR in 2010. She has published several research papers in areas of information quality and entity resolution, is the winner of the Donaghey College of Engineering and

Information Technology Outstanding Research Award in Information Quality for the 2010-11 Academic Year, and holds the Information Quality Certified Professional (IQCP) certification. Her doctoral dissertation topic is "A Model for Entity Identity Information Management in Entity Resolution Systems".

Eric Nelson, Consultant
Acxiom Corporation

Eric Nelson holds a PhD degree in Information Quality and MS degrees in Computer Science and in Information Quality. Dr. Nelson is a Consultant within Acxiom's Global Consulting Group where he has worked for over seven years. Prior to coming at Acxiom he worked for seven years in various law-enforcement agencies. Dr. Nelson is skilled in software development designing and writing code to produce an end product for business value. He understands the decisive importance between a strong structural design and data architecture and how the two will produce a successful implementation. In addition, he is skilled in analyzing the measurements of data and in determining solutions to ensure that the data quality remains at an acceptable level. Dr. Nelson has extensive experience helping clients reach optimum business opportunities through the use of integrated database and software applications.

4A-3: The Evolution of Data Management

Steve Sarsfield

Thirty years ago, mainframes were the most popular way to manage data. Yet, technology offers constant innovation to the data steward. Today, we live in a world where users are accustomed to greater access to applications, tools and reference data. In this session, Steve Sarsfield will take a brief look at where we've been in the data management world, and perhaps more importantly, where we are going.

Steve Sarsfield, Product Marketing Manager
Talend

Steve Sarsfield is the author of the "The Data Governance Imperative", a book that explores data governance from the business perspective. Steve runs an award winning and world recognized blog called the Data Governance and Data Quality Insider. He works with his colleagues at Talend and its customers as they venture into their own data governance projects.

Session 4B Meaningful Use of Data

Session Chair: Paul R. Prabhaker, Ph.D

Paul R. Prabhaker, Ph.D, Associate Dean
College of Business, Northern Illinois University

Paul Prabhaker is an Associate Dean & Professor at Northern Illinois University's College of Business. His areas of expertise are in the areas Business Strategy and Management of technology. Paul has a PhD in Business Administration and a Master's degree in Econometrics from the *Graduate School of Management, University of Rochester (NY).* He also has an MBA and an undergraduate degree in Engineering.

Paul is recognized for his research on the interface between business strategy and technology. Professor Prabhaker is well known for his research in the fields of marketing / technology interface, Information Integrity and Business Strategy and Value-based marketing. Dr.Prabhaker has published over fifty articles in leading journals such as the *Journal of Consumer Marketing*, *Journal of Marketing Research*, the *Journal of Advertising Research*, the *Journal of Psychology and Marketing*, the *Journal of Business & Industrial Marketing* and others. He has presented his research in numerous academic conferences in the US and in several European and Asian countries. His research on the interaction between advertising and price levels was given the outstanding Paper of the Year Award by the Midwest

Business Association. He is the principal author of a chapter in a textbook titled *Global and Multinational Advertising*. He has also authored a chapter on e-Marketplaces for the Internet Encyclopedia published by John Wiley.

In addition to his academic pursuits, Dr. Prabhaker is involved in a large number of professional assignments. Paul has had extensive professional experience in applying Information Integrity concepts to business environments and has also conducted numerous contract Marketing Research work. Paul has reviewed over a dozen textbooks in marketing, for publishers such as Prentice-Hall. He is a member of The Institute of Management Sciences, the American Marketing Association, the Decision Sciences Institute, the Academy of Marketing Science and the Production & Management Society.

Based on his scholarly contributions in academia and his professional contributions to management practitioners, Dr. Prabhaker has been nominated and listed in *Who's-Who in the East* (1987), *Who's-Who in Advertising* (1990) and *Who's-Who in the World* (1991).

Meaningful Use, Quality, and Associated Risks: An AAMC Overview

Ivy Baer, Jennifer Faerberg, & Lori K. Mihalich-Levin

This presentation will focus on provider experiences with Meaningful Use Stage 1, as well as on a comparison of Meaningful Use Stages 1 and 2 (proposed or final, depending on the Centers for Medicare and Medicaid Services (CMS) schedule) for hospitals and eligible professionals. Discussion will include a consideration of data elements CMS has required, an indication of future data elements being considered by the Office of the National Coordinator for Health Information Technology (ONC), and attendant risks for inaccurate reporting. The presentation will include a brief overview of other CMS and the Department of Health and Human Services Office of Inspector General (HHS OIG) data mining activities and the types of risks these activities pose for institutions. Presenters will consider the link between Meaningful Use and value based purchasing (VBP), including issues and pitfalls of VBP data collection.

Ivy Baer, Director and Regulatory Counsel
Association of American Medical Colleges (AAMC)

Ivy Baer is Director and Regulatory Counsel at the Association of American Medical Colleges. She heads the Association's Medicare and Medicaid regulatory group which is responsible for monitoring, educating, and advocating on regulations issued by the Centers for Medicare and Medicaid Services (CMS), the HHS Office of Inspector General (OIG), and other HHS agencies. Ms. Baer works closely with members to advise and educate them on a broad range of regulatory and legal issues. She serves as primary staff to the AAMC's Group on Faculty Practice, composed of the physician and non-physician leadership of many of the nation's major faculty practice plans, and the Compliance Officers Forum, the only organization devoted to the compliance issues faced by academic institutions. She is a member of the American Health Lawyers Association and served as co-chair of the American Health Lawyers Association annual meeting on *Legal Issues Affecting Academic Medical Centers and Other Teaching Institutions* from 2004-2009. Prior to working at the AAMC, Ms. Baer worked for the Mid-Atlantic Region of Kaiser Permanente, a federal regulatory agency, and a public interest group.

Ms. Baer holds a Bachelor's degree with honors from Johns Hopkins University; a law degree from Emory University; and Masters of Public Health degree from the Harvard School of Public Health's Department of Health Policy and Management.

Jennifer Faerberg, Director of Division of Health Care Affairs
Association of American Medical Colleges (AAMC)

Jennifer Faerberg MHSA is currently a Director in the Division of Health Care Affairs at the Association of American Medical Colleges. Ms. Faerberg is responsible for regulatory and policy issues related to quality and patient safety in academic medical centers with a primary focus on performance-based payment programs.

Ms. Faerberg previously held the position of Director for GME Track at the Association where she was responsible for the operation of a web-based application for collection and reporting of graduate medical education workforce data.

Prior to joining the AAMC, Ms. Faerberg was the Practice Administrator at the Virginia Neuroscience Center (VNC). Ms. Faerberg received her BS from Ithaca College and an MS in Health Services Administration from the George Washington University.

Lori K. Mihalich-Levin, JD, Director of Hospital and GME Payment Policies
Association of American Medical Colleges (AAMC)

Lori K. Mihalich-Levin, JD, is the Director of Hospital and GME Payment Policies at the Association of American Medical Colleges (AAMC). At the AAMC, Ms. Mihalich-Levin works on regulatory policy issues on behalf of members of the AAMC's Council of Teaching Hospitals (COTH), including issues relating to graduate medical education reimbursement, health information technology, and inpatient and outpatient hospital payment policies.

Prior to joining the AAMC, Ms. Mihalich-Levin worked as a healthcare attorney at Vinson & Elkins, LLP and King & Spalding, LLP. While in private practice, Ms. Mihalich-Levin advised hospitals, hospital systems, and academic medical centers on Medicare reimbursement and other regulatory matters. She holds a law degree from the Georgetown University Law Center and completed her undergraduate studies at Princeton University's Woodrow Wilson School of Public and International Affairs. Before beginning her health law career, she served as a law clerk to the Hon. Neal E. Kravitz of the Superior Court of the District of Columbia.

Session 4C Innovation in Information Quality

Session Chair: Frank J. Ponzio, Jr.

Frank J. Ponzio, Jr., President & CEO
Symbolic Systems, Inc

Frank Ponzio, Jr., President and CEO of Symbolic Systems, Inc., founded the company in 1968 to design and develop software for government and industry. Since then, Frank has expanded the company to become a premier provider of information technology (IT) solutions. The company applies innovative, technology-based solutions to help its clients achieve their business goals. With more than 40 years of experience, Symbolic understands that technology is the backbone of a company and IT expertise can support and strengthen an organization.

Data management is one of Symbolic's core businesses. Mr. Ponzio works with clients to ensure that their data management goals are achieved from data strategy to implementation to maintenance. Through his company, he provides expertise in: data governance, data quality, data integration, metadata management, data interoperability, and data architecture, analysis and design.

Mr. Ponzio holds patents for two data analysis products, DATAMRI and DATATIVITY.

PANEL: Michael Atkin, Michael Gorman, George Handy, Ronald Jacobs

Innovation, in brief, is the process by which an idea or invention is translated into goods or services, with the overarching objective of being useful. It is applicable to all aspects of business, government, and education. The importance of innovation is recognized globally; for example, there are currently innovation initiatives sponsored through the White House and through the European Union.

Our diverse panel and the attendees, leveraging their respective expertise, will explore the application of innovation to information quality. Lessons learned from applying innovation in other areas will be included in the discussions. The intent is to build upon the results of this session in subsequent sessions, in order to continue identifying areas needing Innovation in IQ.

PANELISTS

Michael Atkin, Managing Director
EDM Council

Mike has been a professional facilitator and financial information industry advocate for over 20 years. He is currently the Managing Director for the Enterprise Data Management Council – a business forum for financial institutions, data originators and vendors on the strategy and tactics of managing data as an enterprise-wide asset.

Mike is an active in industry initiatives, provides consultation to global market authorities on the data implications of financial regulatory reform and is recognized as an expert in global reference data standards. He is currently a member of the LEI Steering Committee; the CFTC's Data Standardization Subcommittee; ISO TC68/SC4 and ANSI/S9D. He has also been involved with many organizations including the Reference Data Coalition (REDAC), the Securities and Financial Information Markets Association (SIFMA), the Association of National Numbering Agencies (ANNA) and the UK Reference Data User Group (RDUG). Mike has been the Managing Director of the EDM Council since February 2006.

Michael M. Gorman, President
Whitemarsh Information Systems Corp.

Michael Gorman has extensive enterprise, function, and project-centered expertise spanning more than 40 years, including: data management, project management, independent verification and validation, enterprise architectures, data architectures, data warehouses, metadata management, ANSI database language standardization, and data-centric application development. He is the author of a wide range of books, courses, seminars, and articles on these topics.

Mr. Gorman has provided consulting support to a wide range of industry and government clients, including over 30 Federal agencies. Among his achievements is the development of policies, procedures, seminars, workshops and other material supporting the establishment of data management for both industry and government clients and a collection of similar metadata management work products and a supporting software system that he has used in his practice for almost 30 years. Mr. Gorman has also engineered and deployed a set of data architecture classes to bring clarity across collections of databases within the enterprise and has developed strategies to understand and specify architectures within an enterprise, a functional area and a project.

Mr. Gorman has practiced data-centric business information system development since the middle 1980s. He has participated in the standardization of database languages since the founding of the ANSI committee and has functioned as its only secretary since 1978.

George Handy, Managing Director
Activity for Innovation and Economic Growth (AIEG)

Mr. Handy founded and organized the nonprofit organization AIEG in 2007 to undertake practical projects impacting economic and security improvements in Central and Eastern Europe and the Black Sea Region through improved policies and programs and the creation of new ventures with emphasis on government and private sector cooperation. With a network of 1100 leaders in 30 countries, 20 completed projects have focused on issues of innovation and high technology, health care, infrastructure modernization, trade, national security and cross border cooperation.

Mr. Handy's career has included Director of Long Range Assessments for United Technologies Corporation, where he identified opportunities for new products and markets through the organization of cross-corporate teams and Director of International Action Commissions for the Center for Strategic and International Studies. In this position, Mr. Handy organized and led government-private sector cooperative Commissions in Russia, Poland, Argentina, Romania, Slovakia, Bulgaria, Slovenia, the Czech Republic, Hungary, Lithuania, Latvia and Estonia; and completed 180 projects supporting economic and security transformation in these countries. He was also an Advisor to World Pensions Forum, Inc, a role in which he organized and moderated 14 conferences in Asia, the US and Europe for senior executives to assist their decisions on international investment of American pension fund assets.

COL Ronald Jacobs, Commander
US Army Electronic Proving Ground

Pending

Session 5A The Big Data (Quality) Issues & Opportunities: Vendors' Perspective

Session Chair: Dan Lackner; Panel Moderator: Joe Maguire

Dan Lackner, Industry Executive
Acxiom

Dan Lackner is a seasoned software and data analytics veteran, with experience in both enterprise and software-as-a-service offerings. He has a wealth of sales and marketing expertise, along with intimate experience working with data-intensive industries. Dan spent 10 years working for Information Resources, Inc., a leading supplier of market intelligence to consumer package goods companies. Following IRI, he worked for Siebel Systems, where he was Vice President of Marketing Automation and Analytic Products. He moved into the non-profit sector when he joined Avectra, a provider of CRM solutions for associations and non-profits. Immediately before joining Acxiom, Dan held a variety of sales and marketing roles at comScore. Dan lives and works in the metropolitan DC area, and currently runs Acxiom's Government and Non-Profit business units.

Joe Maguire
Data Quality Strategies

A 30-year veteran of the computer industry, Joe Maguire is an analyst and consultant specializing in data management and requirements analysis. His hard-won perspective is informed by broad experience including twelve years in product development for software vendors (Digital, Lotus, Microsoft, Bachman Information Systems); thirteen years as a consulting data modeler, process modeler, and requirements analyst for clients (ranging from small startups to Fortune-10 behemoths); and five years as an industry analyst (including stints at Burton Group and Gartner) specializing in best practices in data management. He is a much-published author whose books have been praised by a wide range of media outlets including The Mathematica Journal, The Data Access Newsletter, The Boston Sunday Globe, and National Public Radio. He is co-author of Mastering Data Modeling: A User Driven Approach (Addison-Wesley, 2000).

Panel: Peter Aiken, Chat Fitz, Robert Karel, Frank J. Ponzio, Jr., Steve Sarsfield

In the headlong rush toward all things "Big Data," some less trendy realities of data management can get overlooked. Hear vendor perspectives on the interactions between the new new thing and some long-recognized fundamentals of data management. How should Big Data initiatives interact/coexist with existing initiatives and best practices in Data Quality, Data Governance, Information Lifecycle Management, Data Security, and Information Architecture? What ramifications will Big Data have for organizations atuned to best practices in information hygiene? What ramifications will there be for those organizations that are not so atuned?

Panelists:

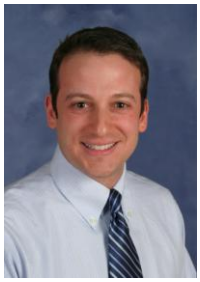
Peter Aiken, Ph.D., Founding Director
Data Blueprint
Professor
Virginia Commonwealth University

Dr. Peter Aiken is consistently named as one of the top ten data management thought leaders. He is the founding director of Data Blueprint, a Richmond, Virginia-based data management and IT consulting firm, Associate Professor at Virginia Commonwealth University's Department of Information Systems, and President of DAMA International. With over 30 years of experience in more than 500 data management practices across 20 countries, Peter is a highly desired keynote speaker at conferences and workshops around the world. He previously held the position of Computer Scientist with the Offices of the CIO of the U.S. Defense Information Systems Agency and has consulted with numerous organizations to help them improve the value of their data. Various initiatives from outsourcing to extreme systems development to business engineering increasingly rely on good quality data exchanges. Peter's research methods, associates, and projects increase the effectiveness with which data assets are focused in support of organizational strategy.

To date, Peter has authored and co-authored seven books and numerous other publications that have appeared in Communications of the ACM, IEEE Computer, the IBM Systems Journal, Information Week and numerous others. His achievements have resulted in recognition as one of 2000 Outstanding Intellectuals of the 21st Century and bibliographic entries in Who's Who in Science and Engineering, Who's Who in American Education and other biographical compilations. He is the recipient of multiple national and international awards, including the 2010 International Stevens Award.
Bio

Chad Fitz, VP of Product Management
Acxiom

As vice president of product management for Acxiom's Global Products and Solutions, Chad Fitz is responsible for areas including data manufacturing and real-time data services. In addition to product management and strategy, his background includes leading product engineering areas focused on real-time data access, customer data integration, and marketing data products.



Robert Karel, VP Product Strategy
Informatica

Rob is a VP Product Strategy and looks across Informatica's products to advance its breadth in data management. He has more than 20 years of data management experience, working in both business and IT roles to develop solutions that provide better quality of, confidence in, and usability of critical enterprise data. Most recently, Rob spent six years with Forrester Research as a Principal Analyst and Research Director, and was a leading expert in how companies deliver trusted information across the enterprise to enable mission critical business processes, customer interactions and decisions. Rob's research focus included master data management, data quality, metadata management, data integration, data architecture, and data governance best practices.

Prior to joining Forrester, he managed Intuit's enterprise data quality initiatives and supported the implementation of Intuit's customer master. Prior to Intuit, Rob managed the design and development of customer master and attribute management solutions for Cisco Systems. Earlier, Rob was Research Manager for the global mergers and acquisitions product group at Thomson Financial Securities Data (now Thomson Financial Investment Banking).

Frank J. Ponzio, Jr., President & CEO
Symbolic Systems, Inc

Frank Ponzio, Jr., President and CEO of Symbolic Systems, Inc., founded the company in 1968 to design and develop software for government and industry. Since then, Frank has expanded the company to become a premier provider of information technology (IT) solutions. The company applies innovative, technology-based solutions to help its clients achieve their business goals. With more than 40 years of experience, Symbolic understands that technology is the backbone of a company and IT expertise can support and strengthen an organization.

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Mr. Ponzio holds patents for two data analysis products, DATAMRI and DATATIVITY.

Steve Sarsfield, Product Marketing Manager
Talend

Steve Sarsfield is the author of the "The Data Governance Imperative", a book that explores data governance from the business perspective. Steve runs an award winning and world recognized blog called the Data Governance and Data Quality Insider. He works with his colleagues at Talend and its customers as they venture into their own data governance projects.

Session 5B Sponsor Vendors' "Roadshow" Presentations

Acxiom, Data Blueprint, Informatica, Symbolic Systems, & Talend

Session 5C Sponsor Vendors' Exhibits

Acxiom, Data Blueprint, Informatica, Symbolic Systems, & Talend

Session 6A Data Quality and Data Governance – Management & Organization

Session Chair: Annette Pence

Annette Pence, Senior Principal, Information Systems Engineer
MITRE Corporation

Annette Pence has more than 30 years of experience with the application of information technology–enabling solutions supporting aerospace, finance, classified command and control, and manufacturing. Her experience with managing data spans the entire data lifecycle and includes system design, development, and integration. Ms. Pence is the head of the Information and Data Management Department at The MITRE Corporation's Center for Connected Government. As a Senior Principal, Information System Engineer, with the MITRE Corp., Ms. Pence is responsible for the strategic development and delivery of a targeted set of objectives for government customers, which includes the IRS, DHS, HHS, GPO, Department of Education, HHS and Centers for Medicare and Medicaid. Prior to MITRE, Ms. Pence served as Vice President, Data Management Services Division at Science Applications International Corporation (SAIC), Department Manager, Software Integration, Sr. Manager, Data Management, for the Reserve Component Automation Systems (RCAS), at Boeing Information Services, and Manager Database Administration for the National Aeronautics and Space Administration, Technical and Management Information Systems (TMIS). Her focus is raising the awareness and furthering the implementation of data management at the enterprise level for government agencies and enabling and facilitating the sharing of information across government agencies. A native of Washington, D.C., Ms. Pence earned a master's degree in Technology Management from George Mason University. During the Technology Management curriculum she was fortunate to study at the Kellogg College at Oxford University.

6A-1: Using Semantic MediaWiki for Data Quality Management in the German Armed Forces

LTC Joachim Sobota & CPT Christian Fürber

Efficient ways to capture quality-relevant knowledge and create consensual agreement about the quality perception is mission critical for any data quality management project. The capturing process is challenging, since this knowledge is often distributed. The German Armed Forces (GAF) use Semantic Mediawiki, a Semantic Web-based technology, to capture quality-relevant knowledge for data quality monitoring and assessment in the data quality management process. Moreover, the wiki integrates master data process manuals with the captured quality-relevant knowledge and thereby mitigates the creation of poor data at its root. The presentation gives an outline about the conception and application of the wiki in GAF.

LTC Joachim Sobota
Joint Support Command, German Armed Forces

Joachim is currently working for the logistics division of the Joint Support Command of the German Armed Forces (GAF). He is GAF's leading expert for logistical master data and head of the data governance office. He is responsible for the quality strategy of the logistical master data in the SAP systems environment of the GAF. From 2001 until 2007, he was head of the master data management team in several SAP implementation projects of the GAF and leading architect of the SAP material master data systems landscape. Before 2001 he has held several leading positions in the IT and logistics domain of GAF and NATO. Joachim holds a bachelor in business administration (Diplom-Kaufmann (FH)) from the Bundeswehr University in Munich (Germany).

CPT Christian Fürber
Joint Support Command, German Armed Forces

Christian is currently working as a senior manager in the data governance office of the Joint Support Command of the German Armed Forces (GAF). Among his responsibilities is the implementation of the data quality management strategy in the logistics domain of GAF. From 2005 until 2008, he was working as a project manager of a large data warehouse project of GAF where he has dealt with the integration of data from over 30 heterogeneous information systems. Since 2008, he is also a researcher and PhD student at the E-Business & Web Science Research Group of the Bundeswehr University Munich investigating how we can use semantic technologies for data quality management. In line with his research studies, he has published several papers and given talks at scientific conferences. Christian holds a master degree in business administration (Diplom-Kaufmann) from the Bundeswehr University in Munich (Germany).

6A-2: I'm your new leader. Where are we going?

Laura Duvall

One of the many challenges facing a federal organization endeavoring to implement an enterprise Data Governance framework involves the occasional need to "kick start" the effort before the appropriate level of maturation is achieved. This is typically the result of turnover in key government personnel (e.g., data stewards, executive leadership). The task of establishing Data Governance is daunting enough, but is made even more difficult when government personnel and contractors who have already accepted the benefits of and role for Data Governance transition from the federal organization, taking with them the knowledge and understanding of their roles and responsibilities. It is time to take a look around you, determine what and who you have to work with and then create your team.

My team had gone through several instances of dealing with and overcoming this challenge to achieve its current level of Data Governance maturation. In presenting how this challenge was met, the following topics will be discussed:

- Discovering your team – who are they, what drives and motivates them
- Creating a safe environment - Questions, Questions, Questions
- Asking the right questions - the Value Add, the elevator speech
- Working with the Data Governance team to focus efforts on the top mission priorities, to quickly show value
- Educating the Educators. Utilizing "lessons learned" practices to ensure that opportunities for implementation and improvement are not wasted
- Having fun and what that means. Off sites, Training, Interactive Teaming
- Teaching them how to fish

Laura Duvall, Program Director - Data Governance and Data Management
Department of Homeland Security

Laura Duvall is currently a program manager in the Federal arena. She has served as the Program Director responsible for implementing enterprise Data Governance and Data Management within US-VISIT, a program within the Department of Homeland Security. In addition to her position as head of enterprise Data Governance and Data Management, she served as the Data Architect and has served on the DHS HQ National Information Exchange Model (NIEM) Blue Team that is tasked with review of all new Information Exchange Package Documents (IEPD) for DHS. She has served as the chair for the program's enterprise data management office as well as for its data stewardship working group, both of which she helped to establish. She has, among other accomplishments, overseen the adoption of an enterprise Data Governance strategic plan as well as the creation of the program's first enterprise conceptual data model. She is a featured speaker at Information Management's 7th annual MDM & Data Governance Summit San Francisco conference. The MDM Institute provides research advisory services on master data management (MDM), customer data integration, and data governance solutions. She is a chair for the MIT Chief Data Officer and Information Quality Symposium. This is a world wide symposium dedicated to advancing the practices of information quality across organizations, focusing on the role of the Chief Data Officer as the main influencer of improvement in all aspects of information management. Additionally, Ms. Duvall has over 14 years experience in the Information Technology sector, supporting the Federal Government in a variety of technical consulting capacities.

Session 6B Improved Use of Non-Discrete Data

Session Chair: Eric Hixon

Eric Hixson, Director of EVI Quality Data
Cleveland Clinic Foundation

Eric Hixson PhD, MBA is currently the Director, EBI Quality Data in Medical Operations Business Intelligence and has 14 years experience in the development and implementation of quality measurement and reporting initiatives, infrastructure development, and clinical registry implementation and operations.

Currently, Eric directs the Cleveland Clinic's University Healthsystem Consortium (UHC) program overseeing 12 hospitals participation in Core Measures and national comparative databases. He also manages development, implementation, and reporting of short-cycle clinical performance measures – an initiative that synthesizes the capabilities of the electronic medical record with business intelligence technologies. Additionally, he participates in a number of health services, outcomes, and clinical research related activities.

Eric has been part of two project teams winning the Joint Commission Ernest A. Codman Award for Quality in 2001 for heart failure care and 2003 for acute stroke care; and the Enterprise Business Intelligence group winning the 2011 The Data Warehousing Institute (TDWI) Best Practice Award for Performance Management.

The success of Cleveland Clinic's Enterprise Business Intelligence is featured as a case study by Howard Dresner in Profiles in Performance: Business Intelligence Journeys and the Roadmap to Change.

He received his PhD from Case Western Reserve University in Epidemiology and Biostatistics and MBA from Cleveland State University in Healthcare Administration.

6B-1: The New Science of Sentiment Analysis as applied to Healthcare Organizations

Richard B. Siegrist & Susan Madden

Wall Street has employed sentiment analysis of tweets to predict individual stock price movement and companies such as Marriott, Walmart and JetBlue have analyzed customer feedback also using sentiment analysis to improve service and gain a competitive edge. Healthcare organizations have access to perhaps the most meaningful and actionable feedback information through patient satisfaction surveys. Press Ganey, using Clarabridge's natural language processing software, has applied sentiment analysis to millions of patient comments from approximately half of the hospitals in the United States. This presentation will review the implementation process, conclusions and insights gained from this in-depth application of sentiment analysis in healthcare.

Richard B. Siegrist, MS, MBA, CPA, Chief Innovation Officer
Press Ganey Associates, Inc.
Adjunct Lecturer on Management
Harvard School of Public Health

Richard Siegrist is chief innovation officer of Press Ganey Associates, South Bend, IN and a member of the company's board of directors. He was previously the company's CEO for over two years. Prior to joining Press Ganey, he was founder, president and chief executive officer of PatientFlow Technology, a provider of patient flow consulting and software solutions to hospitals, which was acquired by Press Ganey in January 2009.

Richard Siegrist is also adjunct lecturer on management at the Harvard School of Public Health where he teaches physician, graduate, and executive education courses on financial management, cost accounting, and management control. He is currently the interim academic director of the masters in healthcare management program for physicians at HSPH. He received the Roger L. Nichols Excellence in Teaching Award for 2008.

Richard was previously senior vice president of WebMD Health Services and senior vice president and general manager of WebMD Quality Services. WebMD acquired the company he co-founded, HealthShare Technology, in March 2005. He was president and chief executive officer of HealthShare Technology, Inc., a health information company that provided decision support software and tools to hospitals, health plans, employers, and consultants. Richard also co-founded Transition Systems, Inc. (TSI), a for-profit subsidiary of Tufts New England Medical Center in Boston that later became part of Eclipsys. TSI was a leading provider of hospital cost accounting and decision support software.

Richard began his career in health care at New England Medical Center. He holds an MBA from the Harvard Business School, an MS in Accounting from the New York University Graduate School of Business, and a BA in Political Economy from Williams College. He is also a CPA.

Susan Madden, VP of Product Analytics
Press Ganey Associates, Inc.

Susan L. Madden, MS, Vice President for Product Analytics, Press Ganey, has over twenty years of experience with private, government and non-profit healthcare organizations. She serves as the project director for the sentiment analysis project, overseeing the refinement of the software to process free text comments from hospital patient satisfaction surveys, analyzing the results and designing reporting templates to meet client needs. She also serves as analytic director for hospital patient flow improvement projects, overseeing data acquisition and analysis and the application of operations research tools in healthcare settings.

Before joining Patient Flow Press Ganey, Ms. Madden was Manager of Clinical Data Policy and Analysis at the Massachusetts Division of Health Care Finance and Policy where she was responsible for all clinical databases, ensuring the quality of the data and overseeing analytic projects for the hospital industry, government, and payors. Previous to this, she was a senior consultant at John Snow, Inc., a public health consulting firm, and led projects in program development and assessment, strategic planning and hospital financial analysis.

In addition, Ms. Madden has extensive experience as a medical and public health writer, and has written numerous teaching cases for the strategic planning course in the Executive Education program at the Harvard School of Public Health. She is the author of The Preemie Parents' Companion: The Essential Gide to Caring for Your Premature Baby in the Hospital, at Home, and Through the First Years (Harvard Common Press, Boston, MA; 2000).

Ms. Madden has a BA from Harvard University and an MS in Health Policy and Management from the Harvard School of Public Health.

6B-2: Applying Advanced Text Analytics to Health Care Data to Reduce Readmssions and Improve Other Outcomes

Craig Rhinehart

IBM will present and discuss a recent case study of how an organization is using advanced text analytics to bring measurable value to the field of Healthcare by showing how patient care is improved. By sharing and discussing how advanced use of text analytics and other technologies can directly benefit Healthcare providers, payers and patients. Technologies such as IBM Watson for Healthcare and IBM Content and Predictive Analytics will also be discussed. In this session you will:

Case Study: Understand how a healthcare provider was able to unleash the content traditionally locked in doctor's notes, clinical records, journal articles, and many other medical content sources; for increased insight and decision making.

See how this information is used to enhance disease management research, improve clinical treatment effectiveness, and automate performance and quality reporting while simultaneously reducing costs.

Get a real life example of how advanced text analytics revolutionized the day-to-day activities of a healthcare facility needing reduce the cost and frequency of patient readmissions.

Craig Rhinehart, Director
Market Development and Strategy, IBM Enterprise Content Management
IBM Software Solutions Group

Craig Rhinehart is the Director of Market Development and Strategy for Enterprise Content Management (ECM) which is part of IBM's Software Solutions Group. He has more than 20 years executive experience bringing innovative and successful products and solutions to market in the areas of enterprise content management including records management, electronic discovery and content analytics. Craig is also helping to lead IBM's efforts to commercialize Watson, the breakthrough technology recently showcased on Jeopardy!

Craig comes to IBM through the 2006 acquisition of FileNet, where he served as Vice President of Product Marketing. Prior to joining FileNet, Craig was Vice President of Marketing for Tarian Software, which was also acquired by IBM in 2002.

Considered an expert in ECM, content analytics, electronic records and the US Department of Defense 5015.2-STD certification program he has led, and served as an advisor, on several key industry initiatives.

Session 6C Business & Finance Track – A Recovery Using High Quality Data

Session Chair: Linda Kresl

Linda Kresl, President
Tecnologia, Inc.

Ms. Linda Kresl has held a variety of professional and management positions with world-class companies such as The Boeing Company, Hewlett Packard, PriceWaterhouseCoopers, and Yahoo! From 2001-Present Ms. Kresl established her own consultancy specializing in BI & Enterprise Data Architecture. Her professional experience of more than 20 years includes development of enterprise Business Intelligence, Enterprise Information Management and Data Quality Improvement. Ms. Kresl previously held the position of the Data Warehouse Manager for the Global Customer Care Division

at Yahoo! She is currently implementing a Data Quality Management function within the Bonneville Power Administration. The Bonneville Power Administration is a federal nonprofit agency based in the Pacific Northwest. BPA markets wholesale electrical power from 31 federal hydro projects in the Columbia River Basin, one nonfederal nuclear plant and several other small nonfederal power plants.

Ms. Kresl has been a speaker on Information Quality Management at conferences such as the MIT IQ Industry Forum and the Information & Data Quality Conference. She is a member of theData Warehouse Institute (TDWI), & is a certified DW 2.0 Architect. She sits on the board of DAMA International (Global Chapter). She has published in DMReview, and her articles have also appeared in Oracle Toolbox).

6C-1: How to Create a Data Quality Management Team within the Bonneville Power Administration

Linda Kresl & Kammy Rogers-Holiday

This presentation stresses a pragmatic approach to creating/implementing a Data Quality Management (DQM) team. The principles/approaches outlined will enable the attendee to utilize practice aids to create an DQM function responsible for data quality management now. Key deliverables include, policies on data definition, design, and change control. Methods to develop collaborative processes will be demonstrated. This presentation will outline:

- How to select the right people to steward the data.
- How to train/develop stewards to develop required deliverables.
- How to move from several teams responsible for data decisions, definition and cleansing, to one consolidated team.
- How to monitor/measure success, which isattaining the highest quality data possible.

Linda Kresl, President
Tecnologia, Inc.

Ms. Linda Kresl has held a variety of professional and management positions with world-class companies such as The Boeing Company, Hewlett Packard, PriceWaterhouseCoopers, and Yahoo! From 2001-Present Ms. Kresl established her own consultancy specializing in BI & Enterprise Data Architecture. Her professional experience of more than 20 years includes development of enterprise Business Intelligence, Enterprise Information Management and Data Quality Improvement. Ms. Kresl previously held the position of the Data Warehouse Manager for the Global Customer Care Division at Yahoo! She is currently implementing a Data Quality Management function within the Bonneville Power Administration. The Bonneville Power Administration is a federal nonprofit agency based in the Pacific Northwest. BPA markets wholesale electrical power from 31 federal hydro projects in the Columbia River Basin, one nonfederal nuclear plant and several other small nonfederal power plants.

Ms. Kresl has been a speaker on Information Quality Management at conferences such as the MIT IQ Industry Forum and the Information & Data Quality Conference. She is a member of theData Warehouse Institute (TDWI), & is a certified DW 2.0 Architect. She sits on the board of DAMA International (Global Chapter). She has published in DMReview, and her articles have also appeared in Oracle Toolbox).

Kammy Rogers-Holliday, Public Utilities Specialist, Business Strategy & Analysis
Bonneville Power Administration

Kammy Rogers-Holliday is the manager of the BPA Business Strategy and Analysis group. For the last three years, Ms. Rogers-Holliday has been part of a team charged with implementing new systems for BPA's newly completed 20-year power contracts. Ms Rogers-Holliday has been a BPA employee since 1985 and has held a variety of management positions. Ms. Rogers-Holliday is a graduate of Western Montana College and lives in Boring, Oregon with her husband and two children.

6C-2: The State of Data Quality in Latin America's Largest Bank

Antonio Arias & John Salazar

Mexico's financial banks gradually introduced several financial product innovations to the Mexican market including savings accounts (in 1929), personal credit lines (in 1958), credit cards (in 1968), and ATM banking (in 1972). In the midst of a severe economic crisis (1982), President Jose Lopez Portillo announced a major devaluation of the peso and nationalized all private banks in Mexico. For the next nine years Banamex operated as a government owned national credit association. In 1991, the banking industry was reprivatized and data quality became of paramount importance.

For the next four years the Mexican private banks presided over an unprecedented expansion of private credit in Mexico. This expansion occurred in an environment characterized by: i) the lack of a credit culture at the newly privatized banks, which had been bought at rich multiples by individuals and organizations without lending experience, and ii) lax oversight by regulatory authorities, which led in some instances to the occurrence of irregular transactions (such as related party transactions).

Antonio Arias, Consulting Principal Partner
Intellego

Antonio Arias graduated as an Industrial Engineer from the ITESM in Monterrey, México in 1991. In 1998 he received a Digital Strategy & Innovation certificate from the University of Chicago. He joined The London Consulting Group, a business consulting firm, in 1996 and was named Sales & Operations Principal for the Andean region in April 2000. Throughout his career in London he worked with more than 40 companies implementing process solutions designed to improve performance and achieve tangible results. In 2004 Antonio started his own consulting company in Colombia, maintaining a solid customer base and growing the company's revenue to more than 2 million USD a year. In 2007 he decided to join forces with Intellego, a consulting company which holds the largest Information Management practice in Mexico and hires more than 750 consultants in Latin America. He currently is the Principal Partner for Intellego's Information Management practice. Antonio has been a speaker on Information Management at conferences such as "Gartner, The Future of IT Conference", "SAP Latin America Forum" and "Oracle, The Future of Information Management in México".

John Salazar, Associate
Intellego

Currently John Salazar is an Associate at Intellego, the largest Information Management Consulting firm in Mexico and one of the largest in Latin-America.

He has work most of his consulting years as a Business Consultant involved in projects for Insurance and Banking companies all over Latin-America. For the past seven years John has been working for Intellego, where he has directed the Operation for Colombia and Venezuela, Implemented the Business and Process Optimization practice for the Mexico region, and for the past 4 years has been in charge for the Financial Sector vertical.

John has been participating as a speaker for the ECCMA for the past year in topics like Data Governance and Data Quality, developing different presentations on the west and east coast of the United States.

6C-3: Big Data and Excel – Moving Data Analytics Back Into the CFO's Hands

Scott D. Stanton & Erick Cloward

With computer storage at historically low costs and easy to come by, there is a growing demand not only to access this data easily, but to also pull valuable, real-time data analytics for better tracking of the organizations metrics and performance measures. However most tools we associate with data quality and analysis - stand alone spreadsheets, Access tables, SQL relational databases, and off-the-shelve SaaS models - are ill-equipped to handle the demands of Big Data. And with ease of use and functionality

surpassing traditional IT's requirement of standards and controls, Big Data, data analytics, and predictive modeling is quickly coming under the control of the CFO and COO in progressive organizations.

From the viewpoint of operational and financial executives, this session will address the requirements, architecture, and implementation of Business Intelligence and Big Data models including:

- Balancing volume, variety, and velocity of Big Data
- Technological advances including in-database analytics, massively parallel processing (MPP), NoSQL DBMS, in-memory database, MapReduce, Hadoop Distributed File System (HDFS) and data visualization
- Utilizing Excel in a Big Data environment
- Advanced analytics including data mining, statistical analysis, and predictive modeling
- Effective co-mingling of disparate operational-centric data for true analytics
- Large data sets and applied analytics through the application, practice and leverage of Big Data, decision support, data analytics and decision science will create opportunity and advancements in the business world.

Scott D. Stanton, Chief Executive Officer
HCG Software LLC

Mr. Stanton posses over 20 years experience in enterprise-level Business Intelligence and Enterprise Performance Management solutions, Scott Stanton is an accomplished business leader with proven capabilities in the design and development of Big Data, Data Analytics, and Predictive Modeling solutions in a wide variety of environments. As Founder and CEO of HCG Software, LLC, Mr. Stanton has worked with hundreds of clients within the healthcare, pharmaceutical, financial, insurance, manufacturing, utilities, and public sector industries. His management experience in both Fortune 1000 companies and pioneering start-ups include business development opportunities in Europe, Canada, Central and South America, and the Caribbean with a successful track record in driving new product revenue through build, buy and partner strategies. Mr. Stanton is a graduate of both the University of Southern California and the University of Nevada at Reno.

Erick Cloward, Chief Technology Strategist
HCG Software LLC

Mr. Cloward's focus has been on convergence of leading-edge technologies and real-world business practices. Mr. Cloward has extensive experience advising and leading start up technology firms. Additionally he has provided oversight of advanced enterprise level BI and EPM applications within a variety of sectors including the manufacturing, finance, energy and healthcare industries. Mr. Cloward is frequent speaker at industry events and has conducted several workshops related to data performance. He has been a contributor to numerous published articles in the areas of data architecture and deployment of strategic technologies. Erick is a native of Salt Lake City, Utah and a graduate of Westminster College.

Session 7 Challenges & Successes in Insurance Information Quality

Session Chair: Anne Marie Smith

Anne Marie Smith, Co-Founder/President, and Principal Consultant
Alabama Yankee Systems, LLC

Anne Marie Smith, Ph.D. is an Information Management professional and consultant with broad experience across industries. She has exceptional, demonstrated skills in enterprise information/data management strategy and implementation, business requirements gathering and analysis, data governance and stewardship program development and implementation, data architecture, data and process modeling, meta data management, data quality management, master data management, data warehouse planning and design.

Anne Marie holds a Ph.D. in Management Information Systems, as well as an MBA in MIS and in Risk Management. She has earned the designations of Certified Data Management Professional (CDMP) and Certified Business Intelligence Professional (CBIP). Anne Marie serves on the faculty of Northcentral University and has been a faculty member of other recognized universities. She is an accomplished educator and renowned lecturer in her fields of expertise. Anne Marie is a frequent contributor to various IS publications, with numerous articles to her credit and was a major contributing author for the *DAMA Data Management Body of Knowledge* (DAMA-DMBoK © 2008).

Panel: Paul Ayoub, Alfred Goxhaj, Arne Herenstein, William Jenkins, Britta Schatz, Deborah Smallwood

Data and information quality challenges abound in every organization in every industry, however, few industries rely more on data and information than the insurance industry. Over the years, this field has seen a myriad of issues and problems with data management and the quality of data and information from sources both internal and external. Additionally, the insurance industry has been the focus of several successful efforts at data and information quality improvement that should be examined by other industries for valuable lessons.

This keynote panel, comprised of CIOs from major insurance companies and researchers in insurance analytics, will discuss historical challenges to data and information quality within the industry, offer some observations on the causes of the problems and highlight some actual success stories from their organizations.

Topics will include, but will not be limited to:

- Overview of challenges faced by each organization in data quality
- Examination of research performed to assess data quality in the insurance industry
- Opportunities for improving data quality in the insurance industry

Questions and discussions will be solicited from the audience for what is expected to be a very interesting and informative session for all those interested in data and information quality improvement.

PANELISTS

Paul Ayoub, Senior VP & CIO
FCCI Insurance

Paul Ayoub has been Vice President and Chief Information Officer of Hastings Mutual Insurance Company since June 2010. Prior to joining Hastings Mutual, Ayoub was Senior Vice President and Chief Information Officer for Employers Insurance Company of Nevada since 2004 and Senior Vice President and Chief Information Officer for PMA Capital Insurance Company from 2000 to 2004. Previously, he spent 16 years in various technical and IT management positions at CIGNA Corporation culminating in a Divisional CIO role in the corporate area.

Paul has authored a chapter in a book titled "Implementing a Successful Technology Strategy", participated in a Harvard Business School case study, has been quoted in multiple technology magazines and has spoken at multiple conferences on subjects ranging from knowledge management to service oriented architecture to software quality assurance to data warehousing/business intelligence. He was named CIO of the Year for the state of Nevada by the Nevada Center for Entrepreneurship & Technology in 2009.

Paul holds a B.S. degree in Mathematics from Grove City College in Pennsylvania.

Alfred Goxhaj, CIO
Philadelphia Insurance Companies

Alfred Goxhaj is an information technology professional with over 18 years' experience in a variety of industries as a developer, analysts, architects and manager. During his career he developed hands-on and management experience in large-scale enterprise architecture, application development, business intelligence, data management, ERP and e-commerce projects.

Alfred became the Chief Information Officer (CIO) for Philadelphia Insurance Companies on November 2009. As the CIO, he acquired and maintained all of the corporate mission critical information system resources. He is currently managing Philadelphia Insurance Companies' Information Technology Department and acquiring, developing, deploying and maintaining all enterprise-wide information technology. Among other achievements , Alfred has eestablished the vision and strategy for the integrated enterprise architecture including back-office application, data, business process around the policy administration technology

During his stint as the CIO of Philadelphia Insurance Companies and prior to that as the VP of Technology and Architecture, Alfred achieved a high degree a success with achievements such as:

Recently, Alfred was assigned the additional role of Tokio Marine North America Services, a new shared services organization servicing Tokio Marine operations in North America.

Prior to joining Philadelphia Insurance, Alfred served as the Director of Technology and Architecture (acting CTO) for AON Affinity . He oversaw the technology strategy definition and implementation, application development, Technology acquisition and implementation, business analysis, architecture design and testing.

Previously, Alfred held IT officer positions with Harleysville Insurance, AON Affinity, served as data and BI practice director for DecisionPath Consulting as well as owned a small consulting practice specialized in data and business intelligence.

Alfred holds degrees in Physics, Mathematics and a MBA/MIS from University of Pittsburgh, Pennsylvania.

Arne Herenstein, Senior VP & CIO
Harleysville Insurance Company

Arne Herenstein is senior vice president and chief information officer. In this position, he directs the company's ongoing information technology strategy, integration and development efforts. He is responsible for the ongoing integration of all automated systems, including corporate management information systems, agency interface systems, policy processing systems, claims systems and emerging technologies. He also is responsible for our technology infrastructure and security.

Before joining Harleysville this year, Arne was vice president of information technology for OneBeacon Insurance. Prior to that, he served in IT leadership roles at CIGNA, PriceWaterhouseCoopers and Royal Insurance. He has 35 years of insurance industry experience.

Arne has earned a bachelor's degree from The City College of New York and a master's in business administration from St. John's University.

William Jenkins, CEO
Agile Insurance Analytics
Former CIO, *Penn National Insurance*; Former CIO, *General Accident Insurance*

Bill Jenkins possesses over 30 years experience in the insurance business in a number of various executive management positions. He has 15 years experience as a CIO and also has held the positions of Human Resources executive, Strategic Planning Officer and Data Management Officer. He created and led a major insurance carrier's Project Management Office and has significant hands-on system development experience and expertise. Bill was on the General Accident Group Worldwide IT leadership team, charged with consolidating/standardizing the worldwide IT operations of the organization, which included the development of an enterprise data warehouse.

Bill was on ACORD's board of directors for eight years and was chairman of the board in 1999 and 2000. Bill serves on a number of IT advisory boards including Oracle's Strategic Insurance Advisory Board, Fiserv's Insurance Advisory Board, Pitney Bowes' Insurance Business Insight Board and IDP's Advisory Board and First Best's board of directors.

Bill uses technology as a key for transforming the business and, under his leadership, Penn National's IT department has received numerous awards including: Computerworld's "Best 100 IT Places to Work" five times in six years. Also during his tenure as CIO, Penn National won Celent's Model Carrier Award twice, he received A.M. Best's E-Fusion award, the OMG SOA Consortium award and Ektron Best

Insurance Web-Site award. Bill was elected as an "Elite 8" insurance technology leader in 2008 by "Insurance and Technology" magazine and was named a 2011 Insurance IT AllStar by "Tech Decisions" magazine.

Bill is a frequent speaker at industry conferences and has served for several years as a technology judge at A.M. Best's E-Fusion Conference. He is leading an industry effort in the development of a standard insurance business glossary and data model for the Object Management Group (OMG).

Bill earned a BA from Temple University, a Master's of Science from Drexel University and an MBA in Finance from St. Joseph's University. He also holds the CPCU designation.

Deborah Smallwood, Founder
SMA

Deb is the founder of Strategy Meets Action, a strategic advisory firm offering a unique blend of advisory, research and project-based consulting services to both insurance companies and solution providers. She is widely recognized for her expertise in helping insurance companies re-think, re-energize, and re-tool their IT plans and technology investments to enable profitable growth and experience innovation. Those seeking an edge in today's highly competitive world turn to Deb to capitalize on her deep industry knowledge and experience and her specialized understanding of business and IT strategy linkage, development of IT plans and roadmaps. Her functional area of expertise is distribution, underwriting automation and core systems.

Prior to launching Strategy Meets Action, Deb held a variety of leadership roles as the VP of TowerGroup Insurance Practice, Chief Transformation Officer (CIO) at Insurance Company of the West (ICW), Partner at KPMG LLC and Head of Application Development at Liberty Mutual Commercial Lines.

Deb is a frequent author to leading insurance publications including I&T, and is often found as a keynote speaker at leading conferences such as ACORD/LOMA Forum, ACE, NAMIC, ISOTECH, and IASA.

Britta Schatz, CIO
Penn National Insurance

Britta Schatz is the Vice President of Information Technology and Chief Information Officer for Penn National Insurance. She has held various leadership positions in the IT departments of P&C insurance companies for over 25 years. Her expertise includes strategic planning, IT operations, project management, and application design/development. She also has experience in enterprise architecture, business process management, data management and business intelligence. Britta holds a B.S. degree in computer science from Juniata College. She can be reached at bschatz@pnat.com.

Session 8A: USMC and Cross DoD Service

Session Chair: Annette Pence

Annette Pence, Senior Principal, Information Systems Engineer
MITRE Corporation

Annette Pence has more than 30 years of experience with the application of information technology–enabling solutions supporting aerospace, finance, classified command and control, and manufacturing. Her experience with managing data spans the entire data lifecycle and includes system design, development, and integration. Ms. Pence is the head of the Information and Data Management Department at The MITRE Corporation's Center for Connected Government. As a Senior Principal, Information System Engineer, Ms. Pence is responsible for the strategic development and delivery of a targeted set of objectives for government customers, which includes the IRS, DHS, HHS, GPO, Department of Education, HHS and Centers for Medicare and Medicaid. Prior to MITRE, Ms. Pence served as Vice President, Data Management Services Division at Science Applications International Corporation (SAIC), Department Manager, Software Integration, Sr. Manager, Data Management, for the Reserve Component Automation Systems (RCAS), at Boeing Information Services, and Manager Database

Administration for the National Aeronautics and Space Administration, Technical and Management Information Systems (TMIS). Her focus is raising the awareness and furthering the implementation of data management at the enterprise level for government agencies and enabling and facilitating the sharing of information across government agencies. A native of Washington, D.C., Ms. Pence earned a master's degree in Technology Management from George Mason University. During the Technology Management curriculum she was fortunate to study at the Kellogg College at Oxford University.

8A-1: Federal Financial Data Quality: Challenges and Approaches

John Hill

Federal financial data is processed by dozens of accounting systems as an expenditure flows from a spending bill in Congress to its final disbursement to a beneficiary. The challenge of data quality is immense – but the benefits are equally significant. Improved data quality will increase taxpayer visibility into Federal expenditures and make agency accounting systems more efficient. Mr. Hill will discuss the challenges that the US Treasury Department faces and the solutions it is pursuing as it standardizes key data elements to improve financial data quality.

John Hill, Director of Special Projects
US Department of the Treasury

John Hill is the Director of Treasury's Office of Financial Innovation and Transformation (FIT). Treasury's FIT Office promotes government-wide solutions to improve the efficiency and transparency of Federal financial management.

John has over 30 years of experience in developing and operating of large governmental financial systems. He began his career as a programmer building the student financial aid system for New York State. Since joining Treasury in the mid-1980s, he has served as Deputy Assistant Commissioner for Securities and Accounting Services for $400 billion in marketable securities. Later, as Director of Trade Systems for the US Customs Service, he prepared the nation's second largest revenue system for NAFTA, Y2K and challenges of post-911.

Before returning to Treasury in 2009 to help establish the Office of Financial Stability and the Small Business Lending Fund, John was Executive Vice President of Computech, a $26 million IT services firm in Bethesda, Maryland.

John holds a Bachelors and Masters degree in Operations Research from Rensselaer Polytechnic Institute and a Masters in Public Administration from Harvard University. He lives in Alexandria with his wife and three children.

8A-2: Big Data and Information Quality in the IRS Research Community

Jeff Butler

With a petabyte-sized sandbox supporting advanced analytics in the Internal Revenue Service (IRS), the Compliance Data Warehouse (CDW) manages information quality on a massive scale. This presentation provides an overview of the IRS business environment, sources and models of data for CDW, and methodologies used to manage data quality for the largest database in the IRS. Strategies for monitoring and reporting quality measures are outlined, and the role of metadata and data profiling is discussed. Additional topics include the impact of IRS data modernization, antipatterns of data stewardship, and the use of crowd-sourcing to achieve better information quality.

Jeff Buttler, Director of Research Databases
Internal Revenue Service

Jeff Butler is Director of Research Databases in the IRS Research, Analysis, and Statistics organization. Prior to returning to the IRS in 2004, he was Associate Director, Office of Statistical Computing in the Bureau of Transportation Statistics. Jeff holds a Master's degree in Economics from Penn State and completed work toward a Master's degree in Statistics from George Mason University.

Session 8B Improving Health Care – Data Warehousing
Session Chair: Michael Nix

Michael Nix, MS, Measurement Leader
Fletcher Allen Health Care

Michael Nix is Leader of the Clinical and Operations Measurement Group of the James M. Jeffords Institute for Quality and Operational Effectiveness at Fletcher Allen Health Care, Burlington Vermont. With an academic background in Industrial Management (University of Alabama) and Systems Management (University of Southern California) he has worked for over 30 years in healthcare including quantitative analysis, quality management, clinical operations analysis, consulting, material management as well as general hospital data collection and distribution. He has also taught a variety of business, management and finance courses at the college level for over 25 years and is currently a Graduate Faculty member at Champlain College in Burlington Vermont teaching Financial and Economic Modeling their MBA programs.

8B-1: The Butterfly Effect on Data Quality
Jim Walker

Abstract Pending

Jim Walker, *Position*
Talend

Biography Pending

8B-2: Data Warehouse Integration and Governance
Christopher J. Donovan

Abstract Pending

Christopher J. Donovan, Executive Director Fiscal Services
Cleveland Clinic Foundation

Chris Donovan is Executive Director of Fiscal Services at the Cleveland Clinic where he has worked for over eighteen years. During that tenure Chris has worked with multiple aspects of the operation including the Cleveland Clinic physician practice and all of the Cleveland Clinic hospitals. This work has included service line analysis, utilization and length of stay initiatives, financial planning and budgeting, decision support and enterprise business intelligence, revenue cycle initiatives, chargemaster strategy and pricing and operational and financial performance management at the organizational and business unit levels. Chris holds a B.S. in Business Administration from Miami University and an M.B.A. from Cleveland State University.

Session 8C Data Quality in Financial Reporting: Lessons From the Design and Use of Electronic Reporting Formats

Session Co-Chairs: Joe Maguire & Harry Zhu

Joe Maguire
Data Quality Strategies

A 30-year veteran of the computer industry, Joe Maguire is an analyst and consultant specializing in data management and requirements analysis. His hard-won perspective is informed by broad experience including twelve years in product development for software vendors (Digital, Lotus, Microsoft, Bachman Information Systems); thirteen years as a consulting data modeler, process modeler, and requirements analyst for clients (ranging from small startups to Fortune-10 behemoths); and five years as an industry analyst (including stints at Burton Group and Gartner) specializing in best practices in data management. He is a much-published author whose books have been praised by a wide range of media outlets including The Mathematica Journal, The Data Access Newsletter, The Boston Sunday Globe, and National Public Radio. He is co-author of Mastering Data Modeling: A User Driven Approach (Addison-Wesley, 2000). A frequent public speaker, Mr. Maguire returns to MIT IQIS for the fourth consecutive year.

Harry (Hongwei) Zhu, Assistant Professor of Information Technology
Old Dominion University

Hongwei Zhu received the Ph.D. in Technology, Management and Policy from MIT. He is an Assistant Professor of Information Technology at the College of Business and Public Administration, Old Dominion University. Prior to that, he was a Research Scientist at the MIT Information Quality Program. He has also worked in industry as a consultant and a senior software engineer. His research interests include semantic data integration, data mining, data reuse, quality of data standards, information quality management, and information policy. His research has been published in such journals as Data and Knowledge Engineering, Journal of Management Information Systems, Communications of the ACM, and MIT Sloan Management Review. He is a member of XBRL US and the XBRL Best Practice Committee.

8C-1: How the Design of the XBRL US GAAP Financial Reporting Taxonomy Impacts XBRL Data Consumption – Lessons Learned

Christine Tan

This presentation will outline the data modeling challenges faced by taxonomy modelers of the US GAAP Financial Reporting Taxonomy (UGT). Topics covered include taxonomy architecture design, modeling dimensions, and the conceptual framework for modeling a financial reporting taxonomy. In addition, this presentation will address how the design of the UGT impacts the way in which analysts and investors consume the XBRL-tagged data.

Christine Tan, Professor
Fordham University

Christine Tan is a professor in accounting at Fordham University. She was the XBRL Project Manager at the Financial Accounting Standards Board (FASB) for two years from 2010-2011. She led the team that was responsible for updating the US GAAP Financial Reporting Taxonomy for new accounting pronouncements, common reporting practices and for ongoing taxonomy architectural developments. Christine was also a core member of the XBRL US taxonomy team that created and updated the 2008 and 2009 US GAAP Financial Reporting taxonomies, respectively. Before joining the FASB, Christine was an Assistant Professor at Fordham University and previously taught at New York University, Baruch College - City University of New York, and the University of Melbourne. Christine holds a PhD in Accounting and Finance and a Bachelor of Commerce (First Class

Honors) from the University of Melbourne. Her research in financial reporting has been published in a number of accounting journals, including The Accounting Review and Journal of Accounting Research, and presented at conferences globally. In addition to her work in the XBRL field, she has consulted with government, industry and corporate executives on issues related to financial reporting and financial statement analyses. Currently, as Director of Product Development at Prime Aim, Christine is working with analysts and software developers to consume the XBRL-tagged data.

8C-2: Title TBD

J. Louis Matherne

Abstract Pending

J. Louis Matherne, Chief of Taxonomy Development
Financial Accounting Standards Board

As FASB Chief of Taxonomy Development, Mr. Matherne is responsible for all aspects of the ongoing development and maintenance of the US GAAP Financial Reporting Taxonomy in support of the annual taxonomy release as required for use by Securities and Exchange Commission registrants. Prior to joining the FASB, Louis was Director of XBRL Services at Clarity Systems where he was responsible for providing XBRL leadership and subject matter expertise to Clarity Systems' clients as well as sales and product development teams. Prior to joining Clarity Systems, Louis was a member of the Securities and Exchange Commission's XBRL project team that developed the US GAAP taxonomy. Prior to joining the SEC project, Louis was a Director with the American Institute of CPAs, most recently as Director XBRL. In that capacity, Louis also served as the Founding President of XBRL International. Prior to joining the AICPA, Louis achieved more than 15 years of accounting, auditing and related experience at Grant Thornton while based in New Orleans, Philadelphia, the UK Accounting and Auditing Group in London, and ultimately landing in the US Accounting and Auditing Group in New York. Louis has been deeply involved with XBRL from its inception in 1999 and has been referred to as one of the Founding Fathers of XBRL.Biography pending

8C-3: Capital Markets Transaction Reporting: DQ/IQ Lessons Learned

Robert Stowsky

I examine the use of FIX, FpML and SWIFT messages for reporting daily capital markets trading activity. These messages are used by investment managers, broker/dealers, custodian banks, exchanges and clearing houses to report trades to each other as well as to regulators. The regulations coming out of the Dodd-Frank law have placed increased reliance on FIX and FpML for reporting to the SEC and CFTC. I present both existing and new reporting requirements in the context of how the information is aggregated and transformed into the specific message formats. In particular I focus on areas where data quality issues have arisen in the past and may arise in the future. I address industry initiatives around these issues that approach the data quality challenges either semantically, or syntactically, and examine the strengths and weaknesses of the arguments for and against each of these approaches, respectively.

Robert Stowsky
Northeastern University

Robert Stowsky is an investment industry veteran with over twenty years of experience in operations and technology. Robert's career has primarily focused on the use of data standards and protocols throughout the capital markets' trade and settlement lifecycle. He has been a member of the FIX Protocol Global Technical Committee Governance Board, the ISDA/FpML Coordination Committee and the ISO 20022 Technical Support Group. He has also participated on the ISITC Derivatives Market Practice Working Group and the SIFMA AMF Derivatives Operations

Committee. In 2001, he cofounded the consulting firm Brook Path Partners, Inc. where his clients have included investment managers, broker/dealers, custodians, exchanges and clearing houses as well as software and service providers. He received an MBA in High Technology from Northeastern University in Boston, MA and is completing a Doctorate in Law and Policy (LP.D.) also from Northeastern University. His doctoral research focuses on the use of over-the-counter derivatives in the U.S. mutual fund industry.

Session 9A Data Governance, Data Quality, and Master Data Management – The Integration

Session Chair: Annette Pence

Annette Pence, Senior Principal, Information Systems Engineer
MITRE Corporation

Annette Pence has more than 30 years of experience with the application of information technology–enabling solutions supporting aerospace, finance, classified command and control, and manufacturing. Her experience with managing data spans the entire data lifecycle and includes system design, development, and integration. Ms. Pence is the head of the Information and Data Management Department at The MITRE Corporation's Center for Connected Government. As a Senior Principal, Information System Engineer, Ms. Pence is responsible for the strategic development and delivery of a targeted set of objectives for government customers, which includes the IRS, DHS, HHS, GPO, Department of Education, HHS and Centers for Medicare and Medicaid. Prior to MITRE, Ms. Pence served as Vice President, Data Management Services Division at Science Applications International Corporation (SAIC), Department Manager, Software Integration, Sr. Manager, Data Management, for the Reserve Component Automation Systems (RCAS), at Boeing Information Services, and Manager Database Administration for the National Aeronautics and Space Administration, Technical and Management Information Systems (TMIS). Her focus is raising the awareness and furthering the implementation of data management at the enterprise level for government agencies and enabling and facilitating the sharing of information across government agencies. A native of Washington, D.C., Ms. Pence earned a master's degree in Technology Management from George Mason University. During the Technology Management curriculum she was fortunate to study at the Kellogg College at Oxford University.

9A-1: Just in Time Data Quality – Building Quality into Every Project

Sarah Wentworth

Data quality is a subjective term. Everyone has an opinion for what it is; how it looks and what risks exist when data is not treated as an asset. Data quality serves as one of several horizontal programs in the enterprise data management technology stack and has long been misunderstood as inherently enabled by systems development lifecycles and ongoing business operations. The game changer is to recognize is that data quality has an earned value which is not realized by one technology or application. Data Quality is technology agnostic and will make every project successful depending upon the measurement. Continually measured data quality is the ultimate driver for improvement. The presentation will describe how to weave a data quality program into every project and how to integrate a sustainable quality program across your enterprise.

Sarah Wentworth
MITRE Corporation

Sarah has a data passion helping corporations and government make sense of the massive and disparate streams of digital information they collect every day; data from internally generated transactional call center data to dissatisfied customer tweets. Sarah believes that data tells a story, including the story of misinterpretation due to low-quality data and the creative visualization of that story can deliver a misinterpretation all its own. Sarah was hired into the Information & Data Management Department at Mitre Corporation in 2011 as a technology leader, specializing in sophisticated data solutions such as Master Data Management and Metadata Management (MDM),

Sarah has spent the last quarter of a century as a technology solutions provider; specializing in Information Management (IM) with a broad background in BI, MDM, advanced data modeling, massive/ disparate data querying, semantic technologies (i.e. ontologies) and analytical solutions. Sarah's background ranges from to lead roles at the program, project, strategist, technical and data architecture. She was also a business owner of a technology consulting company. Sarah holds certifications in various software tools ranging from design to business intelligence; has spoken at technical conferences and is a published author on various data topics.

Sarah's business acumen includes healthcare, insurance, finance, life sciences, telecommunications, retail/mail order, logistics planning, transportation, CRM, state and federal government and government surveillance/intelligence.

9A-2: MITRE Panel: Root Causes, Practical Measures, and Tactical Approaches

Adrienne Chen-Young, Iris Dawkins, Tracy DeCanio, & Sarah Wentworth

Identifying critical success factors for data quality and delivering impact that matters can be a real challenge to an organization. Understanding how to gather information requirements the correct currency of data is important to making data quality a core operation of business and IT operations. Data quality programs initiatives can be independently chartered or implemented as a program across the enterprise. in order to improve data inside an application or as it's being moved into another application. Data quality in parallel with an enterprise data management strategy can enable clean up and standardized data across multiple applications strategy ensures that the right information is being measured, just in time.

Panel members will discuss sponsor data quality experiences; share information about how to develop a various DQ programs; how to align the program initiatives to organizational priorities in anticipation of delivering long-lasting impact; how to make DQ matter to executives and how to build quality into the systems development life cycle.

Learn how a data quality focus enables limited IT budgets to be more effectively allocated to meet critical goals.

Organizations can be effective with Just in Time Data Quality by starting small, creating metrics, and adjusting programs as performance feedback indicates.

Adrienne Chen-Young
MITRE Corporation

Adrienne has over 15 years of data-focused systems engineering experience successfully bridging the gap between the business and IT over the full software development lifecycle: collaborating on requirements; conducting technical designs; developing, implementing, and operationally supporting data-specific solutions in multiple industries (dot.com, healthcare marketing, and travel). Her Data Management areas of concentration include: Data Architecture, Analysis and Design; Data Security; Data Strategy and Planning; Governance and Stewardship; Data Quality; Database Administration; Database Performance Tuning.

Adrienne is currently providing Data Management technical quality oversight and long-term Data Strategy advice to the Department of Homeland Security (DHS).

Iris Dawkins
MITRE Corporation

Iris Dawkins has over 30 years of experience in data architecture, data management, data strategy and planning, and data governance. She is a Lead Information Systems Engineer in the Information and Data Management Department at The MITRE Corporation's Center for Connected Government. She consults with federal government sponsors, helping them establish and execute enterprise-wide data management strategies. Iris works extensively with data governance frameworks and she has authored procedures to establish governing boards. She also advises sponsors on the

development, socialization, and enforcement of data stewardship programs for sustaining the quality, accessibility and relevance of data. Iris has served as a technical adviser to the General Services Administration (GSA), the Department of Navy, Office of the Assistant Secretary of Defense (Health Affairs), and most recently the Department of Homeland Security addressing data governance, standards and quality issues.

Tracy DeCanio
MITRE Corporation

Tracy DeCanio is a Senior Information Systems Engineer for the MITRE Corporation where she supports government agencies in the areas of data governance, data architecture, and business intelligence. Prior to joining MITRE, Tracy worked at The Nature Conservancy where she was the Manager of Business Intelligence. Her role was to manage requirements for analytics projects institution-wide and to support the organization's marketing functions through predictive modeling. Tracy is a certified SAS programmer and holds a Masters in Systems Engineering from UVa.

Sarah Wentworth
MITRE Corporation

Sarah has a data passion helping corporations and government make sense of the massive and disparate streams of digital information they collect every day; data from internally generated transactional call center data to dissatisfied customer tweets. Sarah believes that data tells a story, including the story of misinterpretation due to low-quality data and the creative visualization of that story can deliver a misinterpretation all its own. Sarah was hired into the Information & Data Management Department at Mitre Corporation in 2011 as a technology leader, specializing in sophisticated data solutions such as Master Data Management and Metadata Management (MDM),

Sarah has spent the last quarter of a century as a technology solutions provider; specializing in Information Management (IM) with a broad background in BI, MDM, advanced data modeling, massive/ disparate data querying, semantic technologies (i.e. ontologies) and analytical solutions. Sarah's background ranges from to lead roles at the program, project, strategist, technical and data architecture. She was also a business owner of a technology consulting company. Sarah holds certifications in various software tools ranging from design to business intelligence; has spoken at technical conferences and is a published author on various data topics.

Sarah's business acumen includes healthcare, insurance, finance, life sciences, telecommunications, retail/mail order, logistics planning, transportation, CRM, state and federal government and government surveillance/intelligence.

Session 9B Electronic Health Records (EHR): Benefits and Challenges

Session Chair: Allen Juris

Allen Juris, Director CDI Implementation and Data Services
University HealthSystem Consortium

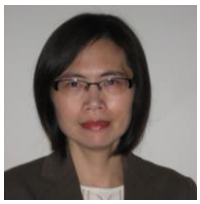
Allen Juris is the Director CDI Implementation and Data Services at the University HealthSystem Consortium (UHC) where he has worked since 1990. During this time Allen brought the data intake and processing system from tapes and binders to fully automated processing with web reporting. Allen works closely with UHC database participants and the clinical experts at UHC to ensure the timeliness and integrity of the data feeds as well as the application of the risk adjustment models and algorithms for the UHC clinical data products.

9B-1: The Perfect Storm: Addressing Current & Future Health Care Quality Challenges Using Health Information Technology

Fengwei Zhong, Kajal Benipal, & Adol Esquivel, JD

The Health Information Technology for Economic and Clinical Health Act of 2009, and the Health Care Reform signed into law in 2010 called for, among other things, increased accountability in patient care. Some of the challenges include a series of national strategies to emphasize meaningful use of electronic health records and reimbursement based on performance and quality of care. A critical component of such strategies are a number of quality measures designed to track and monitor the quality of care. These measures require hospitals to quickly develop sophisticated reporting capabilities for public reporting and internal decision support for both clinical and business activities. The St. Luke's Episcopal Health System (SLEHS) has deployed multiple systems for quality reporting and decision support in order to meet the current and future quality reporting challenges. SLEHS is currently deploying a comprehensive clinical data warehouse and business intelligence environment to support health care delivery, clinical effectiveness and performance measurement. In parallel with the use of our electronic health record (EHR), all available data will be utilized for decision support, quality reporting and comparative effectiveness research. To ensure data standardization, integrity and reusability across applications, SLEHS has developed and is implementing a health care data governance model to manage enterprise data assets. This model enforces the use of structures and processes in business units throughout the enterprise to standardize and maintain the quality of data captured across all our systems

Fengwei Zhong, Manager of Health Informatics
St. Luke's Episcopal Health System (SLEHS)



Fengwei Zhong currently works as the director of health informatics in the department of clinical effectiveness and performance measurement at St. Luke's Episcopal Health System (SLEHS). Since Fengwei joined in SLEHS in 2008, she has been taking a role of establishing system operation/clinical dashboard using several business intelligent tools; and received 2010 SLEHS annual award to team leader for the teamwork and presented her work at several conferences. Also Fengwei leads her team responsible for study design, data mining and clinical/statistical analysis consecutively at two major teaching hospitals at Texas Medical Center for 8 years.

Before moving to USA, Fengwei practiced in diagnostic radiology at Shanghai Sixth People's hospital in China, which is a 1,000 beds major teaching hospital with level I trauma center. Also she received Medical Doctor degree at Shanghai First Medical University in 1990; the Master Degree in Biometry at UT-Houston, School of Public Health in 2004 where she received the award of academic excellence in biometry. Fengwei is currently in the graduate certification program at UT-Houston, School of Biomedical Informatics.

Kajal Benipal, Manager of Data Governance
Department of Clinical Effectiveness & Performance Measurement
St. Luke's Episcopal Health System (SLEHS)

Kajal Benipal is the Manager of Data Governance within the department of clinical effectiveness and performance measurement at St. Luke's Episcopal Health System (SLEHS). She is currently facilitating the development and execution of an enterprise approach to data governance across all departments and facilities within the healthcare system. Prior to her current role, Kajal has held SLEHS administrative fellowship, supply chain management, financial, and information technology positions in the healthcare sector.

She received a Bachelor of Business Administration in Management Information Systems and a Bachelor of Arts in Government from the University of Texas at Austin as well as a Masters Degree in Healthcare Administration from Trinity University in San Antonio, TX.

Adol Esquivel, Director of Clinical Effectiveness and Performance Measures
St. Luke's Episcopal Health System (SLEHS)

Adol Esquivel completed his medical training in Mexico and his national social service as a research fellow in 2003.He obtained a Master's degree in Health Informatics in 2005 at The UTHealth School of Biomedical Informatics (SBMI) while conducting, and publishing, important work to validate the use of digital imagery for diabetic retinopathy screening using telemedicine. Dr. Esquivel then continued his post graduate education and earned a Doctoral degree in Health Informatics also at UTHealth SBMIin 2008 focusing on characterizing communication between primary care providers and specialists using electronic health records to coordinate outpatient referrals.During his time as a graduate student at UTHealth SBMI, Dr. Esquivel led a variety of health informatics, education and health technology related projects and graduated from the UTHealth MD Anderson Cancer Center Clinical Safety & Effectiveness Education Program in 2007. As a research associate at the Patient Safety Center of Inquiry (PSCI) housed at Baylor College of Medicine and the Houston VA Health Services Research & Development Center of Excellence he expanded on his doctoral dissertation and published a series of articles aimed at further understanding electronic communication using electronic health records.

Adol Esquivel currently works as the Assistant Vice President of Performance Measurement systems & Comparative Effectiveness Research at The St. Luke's Episcopal Health System (SLEHS) at the Texas Medical Center in Houston, TX. Adol joined SLEHSin September 2010. In his current position, Adol oversees the management, integration, and coordination of all St. Luke's Episcopal Health System clinical performance measurement systems. He is responsible for clinical abstraction services, clinical databases, and quality/statistical analysis of priority populations. He ensures the use of analytic methodologies integral to the development and transmission of internal and external clinical quality performance reports and the creation of hospital and safety trending systems.

9B-2: Achieving and Measuring the "Triple Aim"™: Defining and Obtaining the Data Needed to Demonstrate Value in a Newly Emerging Healthcare Delivery Model

Keith Figlioli

Fueled in part by the emergence of Accountable Care Organizations (ACOs), but rooted in an understanding that today's purchasers are demanding a better demonstration of value for their healthcare dollar, a new model for measuring the effectiveness of the healthcare system is emerging. This new model requires the documentation and perhaps transparent reporting of three domains simultaneously: Measures of population health, measures of the total experience of care and a measure of the total cost of care for the entire population that the organization serves. Institutions within the healthcare delivery chain have been traditionally "siloed", each concerned with measuring its particular domain, e.g., inpatient care, ambulatory care, the health plan's expenses. As such, data sources and models have reflected that same siloed perspective and are not therefore adequate to the new task of measuring care across an integrated continuum.

At the end of this session participants will:

- Understand the current state of the art with respect to metrics that attempt to document the "Triple Aim"™
- Gain awareness of the gap between our current state of measures / available data and a desired future state.
- Consider the implications and challenges this new perspective raises for those charged with implementing a health system's data strategy.

Keith Figlioli, Senior Vice President, Healthcare Informatics
Premier, Inc.

Keith Figlioli is Premier's senior vice president of Healthcare Informatics. In this role, he oversees the company's enterprise technology and data initiatives spanning strategy, development, delivery and operations. Since joining Premier, Figlioli has

focused on integrating the company's performance improvement informatics offerings across the continuum of care. He co-chairs Premier's Quality Improvement Committee, a subcommittee of Premier's board of directors that plays a vital role in setting direction for the alliance by collaborating with members to improve care delivery and the health of communities.

Prior to Premier, Figlioli was with Eclipsys as its senior vice president of Enterprise Solutions, where he was responsible for all go-to-market activities, market planning and solution strategic direction across clinical, financial and operational product offerings. During his tenure at Eclipsys, he served in several roles. He was vice president and general manager of revenue cycle/departmental solutions, where he managed the growth of the Eclipsys revenue cycle, decision support and departmental solution portfolio, including business growth and market planning, and coordination of functional leadership to drive solution outcomes and customer satisfaction. He was vice president of operations, during which time he built the company's first international operation. And he served as vice president of corporate development where he owned the annual strategic planning process, mergers and acquisitions, strategic partnership development, and spearheaded new business initiatives focusing on performance management, clinical trials and clinical content markets.

Earlier in his career, Figlioli was the senior business development executive at a management consulting and systems integration company focusing on Fortune 1000 companies. Clients included General Motors, Procter & Gamble and Continental Airlines. Prior to this role, he served in a variety of business development and marketing roles for the health information technology industry including work for Per-Se Technologies, Medaphis and NEC.

Figlioli earned his Master of Business Administration degree from Boston University with a concentration in finance and healthcare, and his Bachelor of Arts degree in economics from Wheaton College. He is a current board member of Global Healthcare Exchange LLC (GHX), a healthcare technology and services company, which helps reduce the cost of doing business in healthcare by enabling better supply chain management. He has served on the board of directors for Good Sports, a nonprofit dedicated to increasing the participation of low-income, urban youth in sports, fitness and recreational programs, and MassBike, a nonprofit organization focused on Massachusetts bicycle advocacy.

Session 9C Panel Discussion: The Human Factor in Information Quality

Session Chair: Joseph M. Bugajski

Joseph (Joe) M. Bugajski, Research VP
Gartner, Inc.

Joe manages Gartner's IT research team who guide CIOs, CTOs, CDOs (chief data officers), and department heads in the design and build of mobile, cloud, UX and web computing systems. Joe is an expert in data governance and big data analytics. He cofounded and co-chairs MIT's CDO Forum and the Information Quality Industry Symposium (MIT IQIS). In addition, Joe is chair emeritus of the Object Management Group. Prior to Gartner, Joe served as Visa's CDO where he ensured the global interoperability and near faultless operation of VisaNet, the world's largest payment system. Prior to Visa, Joe was CEO of a global analytics software firm, Triada, Ltd. He has 4 patents, 45 publications, and contributions to two books dealing with data management and governance issues.

Panel: Eric Hixson, Stuart Madnick, Joe Maguire, Mark Temple-Raston, & Barbara von Halle

In this panel discussion, five richly experienced experts in data management will extemporaneously grapple with the open-ended topic "The Human Side if Information Quality." Unrehearsed but not unprepared—their aggregate experience is closer to two centuries than to one—the panelists bring lessons and wisdom from business, IT, academia, and product development for software vendors. Imposing order will be an equally experienced moderator.

Topics might include, some, all, or none of the following:

- Human consequences of bad data
- Perceptions of data reliability that are erroneous, but deeply ingrained in our civic and social institutions
- Cynical manipulations of data-quality principles when it is convenient or advantageous
- Human capacities and incapacities for perceiving and responding to information
- Naive IT models of the human experience of information
- Naive human models about the human experience of information
- Professional indifference to DQ problems and DQ programs
- Lessons learned about any of the above

PANELISTS:

Eric Hixson, Director, EBI Quality Data
Cleveland Clinic Foundation

Eric Hixson PhD, MBA is currently the Director, EBI Quality Data in Medical Operations Business Intelligence and has 14 years experience in the development and implementation of quality measurement and reporting initiatives, infrastructure development, and clinical registry implementation and operations.

Currently, Eric directs the Cleveland Clinic's University Healthsystem Consortium (UHC) program overseeing 12 hospitals participation in Core Measures and national comparative databases. He also manages development, implementation, and reporting of short-cycle clinical performance measures – an initiative that synthesizes the capabilities of the electronic medical record with business intelligence technologies. Additionally, he participates in a number of health services, outcomes, and clinical research related activities.

Stuart Madnick, John Norris Maguire Professor of Information Management
MIT Sloan School

Professor Stuart Madnick has been a faculty member at M.I.T. since 1972. He has served as the head of MIT's Information Technologies Group for more than twenty years. During that time the group has been consistently rated #1 in the nation among business school information technology programs (U.S. News & World Reports, BusinessWeek, and ComputerWorld). He has also been an affiliate member of MIT's Laboratory for Computer Science, a member of the research advisory committee of the International Financial Services Research Center, and a member of the executive committee of the Center for Information Systems Research.

Dr. Madnick is a prolific writer and is the author or co-author of over 250 books, articles, or reports including the classic textbook, Operating Systems (McGraw-Hill), and the book, The Dynamics of Software Development (Prentice-Hall). He has also contributed chapters to other books, such as Information Technology in Action (Prentice-Hall).

His current research interests include connectivity among disparate distributed information systems, database technology, software project management, and the strategic use of information technology. He is presently co-Director of the PROductivity From Information Technology (PROFIT) Initiative and co-Heads the Total Data Quality Management (TDQM) research program.

He has been the Principal Investigator of a large-scale DARPA-funded research effort on Context Interchange which involves the development of technology that helps organizations to work more cooperatively, coordinated, and collaboratively. As part of this effort, he is the co-inventor on the patents "Querying Heterogeneous Data Sources over a Network Using Context Interchange" and "Data Extraction from World Wide Web Pages."

He has been active in industry, making significant contributions as a key designer and developer of projects such as IBM's VM/370 operating system and Lockheed's DIALOG information retrieval system. He has served as a consultant to many major corporations, such as IBM, AT&T, and Citicorp. He has also been the founder or co-founder of several high-tech firms, including Intercomp (acquired by Logicon),

Mitrol (acquired by General Electric's Information Systems Company), Cambridge Institute for Information Systems (subsequently re-named Cambridge Technology Group), iAggregate (acquired by ArsDigita which was subsequently acquired by Red Hat), and currently operates a hotel in the 14th century Langley Castle in England.

Dr. Madnick has degrees in Electrical Engineering (B.S. and M.S.), Management (M.S.), and Computer Science (Ph.D.) from MIT. He has been a Visiting Professor at Harvard University, Nanyang Technological University (Singapore), University of Newcastle (England), Technion (Israel), and Victoria University (New Zealand).

Joe Maguire,
Data Quality Strategies

A 30-year veteran of the computer industry, Joe Maguire is an analyst and consultant specializing in data management and requirements analysis. His hard-won perspective is informed by broad experience including twelve years in product development for software vendors (Digital, Lotus, Microsoft, Bachman Information Systems); thirteen years as a consulting data modeler, process modeler, and requirements analyst for clients (ranging from small startups to Fortune-10 behemoths); and five years as an industry analyst (including stints at Burton Group and Gartner) specializing in best practices in data management. He is a much-published author whose books have been praised by a wide range of media outlets including The Mathematica Journal, The Data Access Newsletter, The Boston Sunday Globe, and National Public Radio. He is co-author of Mastering Data Modeling: A User Driven Approach (Addison-Wesley, 2000). A frequent public speaker, Mr. Maguire returns to MIT IQIS for the fourth consecutive year.

Mark Temple-Raston, Senior VP
Citigroup

Mark is a Senior Vice President at Citigroup with responsibility for running Data Management globally in Enterprise Architecture and IT Governance. Prior to this assignment, Mark was the Global Head for Technology Standards at Citigroup, and operated as an enterprise architect for Citigroup's Corporate IT Systems (compliance, risk and finance, including Basel II). Mark has over 20 years' experience in IT, with 15+ years in financial services.

Barbara von Halle, Managing Partner and Founder
Knowledge Partners International, LLC (KPI)

Barbara von Halle is Managing Partner and Founder of Knowledge Partners International, LLC (KPI). She is co-inventor of The Decision Model and co-author of The Decision Model: A Business Logic Framework Linking Business and Technology, Taylor and Francis 2009. The fifth recipient of the Outstanding Individual Achievement Award from International DAMA, she was inducted into the Hall of Fame in 1995. She is an early pioneer in data architecture and business rules.

Barbara coauthors the monthly Decision Model column in www.Tdan.com and www.ModernAnalyst.com, serving as QA Consultant on KPI's Decision Modeling and Requirements projects and Sapiens DECISION software.

Her first book, Handbook of Relational Database Design has sold over 21,000 copies. She was the most popular in Database Programming and Design magazine for years. An article in Intelligent Enterprise Magazine placed in top 20 of the year, featuring case studies from Oregon State, Freddie Mac, Dell Financial Systems, and Pershing LLC.

Session 10A Sponsor Presentation: Symbolic Systems, Inc.

Frank Ponzio, Jr., frank.ponzio@symbolic.com

Session 10B Sponsor Presentation: Talend

Steve Sarsfield, stevesarsfield@yahoo.com

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Peter Aiken, paiken@datablueprint.com

Session 10D Sponsor Presentation: Pitney Bowes

Clarence W. Hempfield, Jr., Clarence.Hempfield@pb.com

Abstract pending

Clarence Hempfield, Director and Principal Product Manger
Pitney Bowes

Clarence Hempfield is Director and Principal Product Manager for Pitney Bowes Software. Hempfield has over 15 years of experience in the high tech industry with extensive experience in product management, product marketing, sales and communications. Hempfield currently leads global product strategy for Pitney Bowes Software in the data quality and data governance domains. Hempfield holds BAs in Political Science & Economics and a MBA. Hempfield also is a certified information management professional (CIMP) and a certified industry analyst relations professional (CIARP).