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Abstract

In September 2015 the EDM Forum hosted AcademyHealth's newest national conference, Concordium. The 11 papers featured in the eGEMs "Concordium 2015" special issue successfully reflect the major themes and issues discussed at the meeting. Many of the papers address informatics or methodological approaches to natural language processing (NLP) or text analysis, which is indicative of the importance of analyzing text data to gain insights into care coordination and patient-centered outcomes. Perspectives on the tools and infrastructure requirements that are needed to build learning health systems were also recurrent themes.

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Keywords

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Concordium 2015: Strategic Uses of Evidence to Transform Delivery Systems

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ABSTRACT

In September 2015 the EDM Forum hosted AcademyHealth's newest national conference, Concordium. The 11 papers featured in the eGEMs "Concordium 2015" special issue successfully reflect the major themes and issues discussed at the meeting. Many of the papers address informatics or methodological approaches to natural language processing (NLP) or text analysis, which is indicative of the importance of analyzing text data to gain insights into care coordination and patient-centered outcomes. Perspectives on the tools and infrastructure requirements that are needed to build learning health systems were also recurrent themes.

Introduction: AcademyHealth's Newest National Conference

In September 2015 the EDM Forum hosted AcademyHealth's newest national conference, Concordium. With support from the Agency for Healthcare Research and Quality (AHRQ), the Robert Wood Johnson Foundation, California Healthcare Foundation, Kaiser Permanente, and Sanofi, among others, the inaugural Concordium conference brought together two established meetings: the Delivery System Meeting and the EDM Forum Stakeholder Symposium. The decision to launch Concordium was based on clear alignment between both meetings with respect to promoting innovative strategies to develop and use evidence to transform health systems.

During the conference (September 21-22, 2015), approximately 350 attendees from diverse

backgrounds came together at Concordium to consider approaches to quality improvement, health care data analytics and operations, population health, and comparative effectiveness research (CER). Presenters showcased emerging science, shared innovations and implementation strategies, and addressed new ways data collaboration can improve health. The meeting was explicitly designed to build connections across health disciplines and sectors through interactive session formats such as small breakout sessions and discussion-based plenaries.

Conference organizers worked hard to prioritize patient perspectives and patient involvement. As a result of this effort to engage patients, consumers, and caregivers throughout the program, Concordium 2015 was the first meeting in North America to be accredited by [Patients Included](#).

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Setting the Stage: The *EDM Forum Review*

To set the stage, AcademyHealth released the inaugural *EDM Forum Review* during the meeting. The *Review* is an interactive, web-based report that provides an overview of major events, initiatives, and discoveries using electronic health data (EHD) over the past year. The *Review* is designed to highlight important synergies across work in science, technology, policy, and the health care marketplace that are shaping system transformation.

The 2015 edition of the *EDM Forum Review* highlights four major themes that set the stage for an “innovation imperative” using EHD:

- 1) The impact of significant support from the public and private sectors investing in EHD infrastructure and science;
- 2) Widespread adoption of electronic health records (EHRs) as a result of the Health Information Technology for Economic and Clinical Health (HITECH) Act and Meaningful Use program;
- 3) Growing patient engagement and an emerging marketplace for mobile health technology; and
- 4) The move toward more value-based payment goals to ensure that Medicare and other payers are paying for care based on quality rather than volume.

Building on a series of prior literature reviews focused on clinical informatics and CER, and patient-centered outcomes research (PCOR),^{1,2,3} the *Review* provides an update on the literature as of 2014, including information on ways EHD is being used to drive health system improvement. The *Review* also addresses future workforce needs by identifying eight new job titles that promote strategic uses of evidence in health care and that open the door for new career options and opportunities within an increasingly diverse field.

Developing an Approach to the “Concordium 2015” Special Issue

The special issue was designed to present a cross-section of work at Concordium. To achieve this aim, we drew submissions from the set of 113 peer-reviewed abstracts submitted in response to the call for Concordium 2015 abstracts. Half of the submission authors in this group expressed interest in publishing their work with *eGEMs*. The subset of abstracts from interested authors were then evaluated by a set of internal and external peer reviewers on the basis of *eGEMs* criteria for publication and other factors such as the current stage of the work. Approximately one-fourth ($n=14$) of these authors were invited to submit manuscripts for the special issue.

Upon submission in the fall of 2015, each manuscript went through standard editorial review, including review and evaluation by a member of the *eGEMs* Editorial Board and, once deemed ready for external review, the double-blind peer review process. All submitted manuscripts underwent at least one round of author revisions before being accepted for publication. Ultimately, the 11 papers included as part of the “Concordium 2015” issue exemplify new approaches to using EHD to create learning health systems.

Manuscripts to Reflect the Times: New Ideas, Innovations, and Challenges

In all, the 11 papers featured in the *eGEMs* “Concordium 2015” special issue successfully reflect the major themes and issues discussed at the meeting. Many of the papers address informatics or methodological approaches to natural language processing (NLP) or text analysis, which is indicative of the importance of analyzing text data to gain insights into care coordination and patient-centered outcomes. Perspectives on the tools and



infrastructure requirements that are needed to build learning health systems were also recurrent themes.

Five papers contribute to the informatics domain. Of these, two address the potential benefits of implementing more automated case finding approaches to support individualized, or precision, treatment. The first of these, from Dr. Patterson (University of Missouri) and colleagues, [focuses](#) on identifying individuals with heart failure who are at higher risk of readmission following hospitalization.⁴ The second, by Dr. Knighton and colleagues at Intermountain Healthcare, [proposes an informatics strategy](#) to support active surveillance for patients with prostate cancer as an alternative to more aggressive treatment.⁵

The third paper is a case study from Dr. Sorondo and colleagues at the Eastern Maine Medical Center, which [considers perspectives](#) on using a patient portal to foster more meaningful communication between patients and providers, and identifies persistent challenges from the perspective of clinicians with respect to the use of portals.⁶ Dr. Hernandez-Boussard and colleagues from Stanford University [present a study](#) to evaluate the extent to which patient-centered outcomes, such as urinary incontinence following prostatectomy, are captured in structured fields compared to free text, emphasizing new opportunities to use EHR data to investigate outcomes of interest to patients.⁷ The final informatics paper addresses a new paradigm for security and privacy in which Dr. Meyer (UNC Lineberger Comprehensive Cancer Center) and colleagues [present](#) concepts outlining deployment of a Secure Data Analysis Platform (SeDAP), which could help promote multidisciplinary study within databases.⁸

Another set of four papers share methodological approaches, two of which focus on NLP and text analysis. Dr. Divita and colleagues [share the experiences](#) and framework used by the Department

of Veterans Affairs to bring several NLP programs together (such as MetaMap and cTAKES) to create a more scalable pipeline for processing and analyzing free text.⁹ Dr. Szlosek (University of Southern Maine) and colleagues [evaluated](#) an automated approach to assessing clinical decision support (CDS) using a combination of NLP and machine learning to improve the efficiency of identifying mild traumatic brain injury. Dr. Zachary and colleagues [propose a new method](#), coordination process diagramming, for which microanalyses of care processes are used to identify root causes of care coordination problems.¹⁰ Finally, Dr. Knighton and colleagues from Intermountain Healthcare [show](#) how the area deprivation index (ADI) was used in Utah to provide a standardized measure of social determinants of health, which can be applied to tailor patient interventions and improve health care delivery.¹¹

The two remaining papers in the special issue focus on system-level issues and infrastructure needed to build learning health systems. First, Dr. Psek and colleagues from Geisinger Health System [reflect](#) on priorities and resources needed to build learning health systems, based on the perspectives of 41 health care leaders from across the country.¹² Second, Dr. Richesson and colleagues from Duke University present a framework for restructuring and creating computable phenotypes (EHR-based condition definitions) that can be shared and reused between systems to help patient information transfer more easily between providers.¹³

Each of the papers covers a unique perspective on EHD and presents new ways to understand dimensions of leadership and care coordination, and approaches to achieve patient-centered outcomes. The authors exemplify the diversity of the Concordium audience—representing delivery systems, academic medical centers, state and federal government agencies, academia, patient groups, technology companies, and clinical research organizations, among others.

What's Next for Concordium

September 12–13, 2016, at the Hilton Crystal City in Virginia, the EDM Forum will host [Concordium 2016](#). The 2016 conference plenaries anticipate several key themes we believe will be important for the coming year including managing measurement, leadership's role in setting the right tone for transformation, data integration across communities, and new ways to present data to diverse audiences. The first of these plenaries will deal with the role of quality measurement in supporting system transformation with an explicit set of questions regarding how best to right-size measurement. The second will share the keys to system transformation from the perspective of leaders in the field. The third will present a discussion on new strategies to blend data from across sectors to ensure there is no wrong door to accessing health services and community supports to achieve health. Finally, the closing plenary will feature a discussion about how we integrate all forms of evidence, from narrative and personal experience to big data.

Complemented by more than 100 peer-reviewed sessions, Concordium 2016 will bring together many organizations and perspectives on evidence, with the goal of working collaboratively to design and execute strategies for health system transformation. As Henry Ford said, "Coming together is a beginning, keeping together is progress, working together is success."¹⁴ Each year, Concordium begins a new cycle of opportunities to be together and work together to progress and achieve new successes.

We hope you'll join us this coming year! And we hope you will stay engaged for the release of our special issue on Concordium 2016 (due winter of 2016), and will find new ways to participate and work with us to be part of the EDM Forum and AcademyHealth's commitment to move new evidence into action.

Acknowledgements

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