Electronic Data Methods for Healthcare Research

Wolters Kluwer Health

Supplement to Medical Care presents 'lessons learned' on using electronic clinical data to improve patient care

Research using electronic clinical data (ECD) has the potential to make major contributions to health care research and improve patient outcomes. However, many complex issues remain unanswered. A special August supplement to Medical Care [1] presents an update from the Electronic Data Methods (EDM) Forum [2], with a commissioned set of papers discussing "challenges and innovations from the research and QI community using ECD." Medical Care is published by Lippincott Williams & Wilkins [3], a part of Wolters Kluwer Health [4].

The supplement "highlights a set of useful and important lessons for building infrastructure to generate evidence and improve patient outcomes," according to an introduction by Erin Holve, PhD, MPH, MPP, of Academy Health [5], Washington, DC, and Ned Calogne, MD, MPH of the Colorado Trust, Denver. The EDM Forum is an initiative of AcademyHealth, the leading national organization serving the fields of health services and policy research, and is supported by the Agency for Health Care Research and Quality (AHRQ).

'Early Lessons Learned' on Using Electronic Health Data for Research
The goal of the EDM Forum is to advance knowledge and practice on the use of ECD for comparative effectiveness research (CER), patient-centered outcomes research (PCOR), and quality improvement (QI). The supplement is divided into sections corresponding to the four EDM Forum domains.

The section on Analytic Methods leads off with a paper on different approaches to adjusting for confounding variable in ECD—a key problem in performing CER in research networks. Other contributions discuss standard methods for defining the critical issue of medication adherence and approaches to checking the quality of data used for CER.

Topics in the Clinical Informatics section include caveats for using invaluable—but potentially flawed—data from electronic health records. Another paper discusses some challenges and "best practices" for using these diverse and increasingly complex data sets for CER. An article comparing various standard formats for electronic exchange of clinical data concludes that, so far, none of the proposed models meets the complex data mapping requirements.

The section on Governance addresses ethical and informed consent issues related to the use of electronic data; the authors suggest that consent requirements could be loosened for some types of randomized trials with low risks of patient harm. Effective approaches to data sharing are reviewed, including the role of state-of-the-art privacy protection methods. A real-world experience with developing a

multistate CER network emphasizes the need for a flexible, rather than a "one size fits all" approach.

The section Learning Health Systems discusses the use of patient-reported outcomes for PCOR truly and summarizes a real-world experience with using electronic health records for CER in four health systems. The final supplement paper looks toward the transformation from "evidence-based" to "evidence-generating medicine" in learning health systems.

The EDM Forum plays a leading role in efforts to share ideas and lessons learned among those involved in using electronic clinical data for continuous health care improvement. The EDM Forum's new open access journal eGEMs [6] provides an ongoing source of peer-reviewed information, Drs. Holve and Calogne point out. They conclude, "By sharing these early lessons learned, we hope the national dialog facilitated by the EDM Forum is advancing the scientific evolution of multisite research using ECD in the service of improving patient outcomes."

For more information, visit Wolters Kluwer Health [7].

Source URL (retrieved on *04/19/2015 - 10:54am*):
http://www.mdtmag.com/news/2013/07/electronic-data-methods-healthcare-research

Links:
[1] http://www.lww-medicalcare.com/
[2] http://www.edm-forum.org/publicgrant/Home/
[3] http://lww.com
[4] http://wkhealth.com
[5] https://www.academyhealth.org/index.cfm
[6] http://repository.academyhealth.org/egems/
[7] http://www.lww.com