10-9-2014

eGEMs' Early Adventures in Open Access Publishing

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eGEMs **to Date**: As of the end of September 2014 *eGEMs* has published 59 manuscripts and received nearly 150 submissions. These early findings demonstrate *eGEMs* is filling a need for dissemination outlets that bridge the gap between the health research and practice communities. Published papers are distributed across the EDM Forum's four thematic domains: governance (n=5), informatics (n=14), methods (n=13) and learning health systems (n=27). While system design issues are a consistent theme, papers addressing priority health topics such as diabetes, asthma, and obesity are frequently submitted. Authors include more than two hundred experts in the field representing nearly all of the EDM Forum's core stakeholder groups: research/QI, nonprofit/policy, healthcare delivery, government, industry, and patients/consumers.

What's Next: With the help of our diverse community, *eGEMs* will continue to expand its depth and reach. Forthcoming special issues on community-level transformation using Health IT, and ways to improve user-experience and system design will add to the journal's robust portfolio of work identifying and addressing shared challenges using EHD. The EDM Forum, working closely with our partners at the Agency for Healthcare Research and Quality, will work diligently to ensure *eGEMs* is accelerating the pace at which the community translates and disseminates key lessons, with the ultimate goal of helping transform knowledge into actions that can improve health and health care.

eGEMs' Early Adventures in Open Access Publishing

Erin Holve, PhD, MPH, MPP[i]

Abstract

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Introduction

On the occasion of publishing our 50th paper in *eGEMs*,[1] I paused and realized I had not stopped over the past year to provide any comments on our amazing journey to date.

I am finding out just how quickly the world of electronic publishing moves, and that in our peer-reviewed, publish-on-demand model of open access, there are no hard deadlines for issues, nor clear prompts to editorialize. In the day-to-day experience of editing, publishing, and promoting papers, it is easy to miss opportunities to highlight the emerging threads I see in this growing body of literature and to provide context for the unique work we are disseminating, as well as to encourage readership of some of the "gems" that our readers may have inadvertently missed. Furthermore, editorializing in response to major milestones such as publishing our 50th paper provides an opportunity to update the community and to thank the many people who are contributing to *eGEMs'* important, collaborative effort.

Moving forward I intend to publish regular, quarterly editorials to synthesize the lessons we are learning and the innovative and useful ways the field is using electronic health data to generate the evidence we need to improve health for patients and populations. Rapid transformations in health care delivery and research require new ways to communicate, learn, and collaborate; *eGEMs* is one mechanism the EDM Forum has developed to address this issue. Many of these editorials will focus on the challenges that have been identified and solutions the field is developing to meet these needs. There is no better time to underscore the groundswell of innovative and productive lessons we are learning together.

A Thumbnail Sketch of *eGEMs* to Date

To contextualize specific topics that will be the subject of future editorials, it is useful to start by reviewing our experiences with *eGEMs* to date.

eGEMs was developed to address topics that often do not receive coverage in traditional journals, such as governance and systems perspectives including issues of sustainability. As a result, we have been pleased to see that manuscripts are well distributed across the four domains the EDM Forum addresses: governance (n=5), informatics (n=14), methods (n=13), and ways these strategies come

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together to create learning health care systems (n=27), which comprise nearly half of the papers published (Figure 1). While system design issues are a consistent theme, papers addressing priority health topics such as diabetes, asthma, and obesity are frequently submitted. Based on these data and interest from our readership in finding papers based on priority populations and conditions, *eGEMs* will soon be revising our keyword tagging to enhance the searchability and accessibility of papers on our site by key topics and conditions.

Figure 1. *eGEMs* Publications by Domain (n=59)
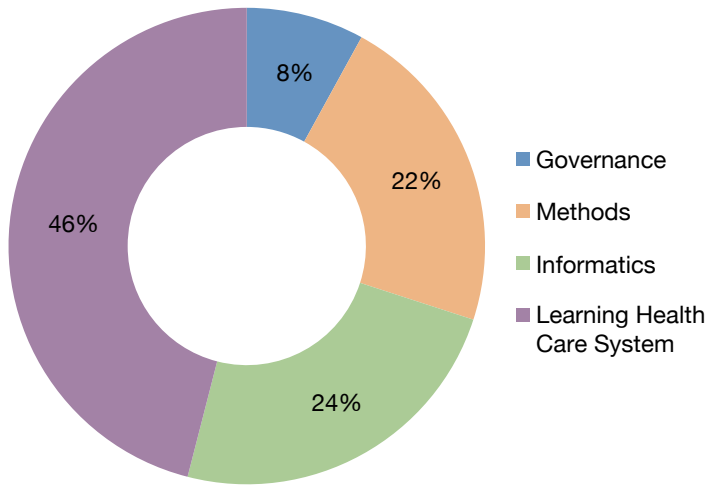
Since January 2013, *eGEMs* has engaged several hundred researchers, analysts, policymakers, patients, and others in the journal. To date we have received nearly 150 submissions from unique authors. Of these, nearly two-thirds have been unsolicited submissions in response to open calls for papers or the general issue. Decisions have been reached for 94 manuscripts, approximately two-thirds of which have been accepted for publication. To continue to ensure the quality of *eGEMs* submissions and improve the efficiency of the review process, editorial staff has worked closely with our Senior Editors to revise the eGEMs Instructions for Authors so that the papers we receive are well targeted for the journal's unique niche, structure, and audience.

Our published authors are leading experts in the field representing nearly all of the EDM Forum's core stakeholder groups (Figure 2). Not surprisingly, the vast majority (74%) of authors for early papers are individuals with scientific backgrounds in health research and quality improvement. Over time, one of our explicit goals is to encourage more authors from diverse backgrounds to submit papers, and track which papers include multidisciplinary teams that include research as well as patient or policy leaders, engineers, operations researchers, and business and financial experts.

Figure 2. Author Distribution for Published Papers across Stakeholder Groups (n=209)
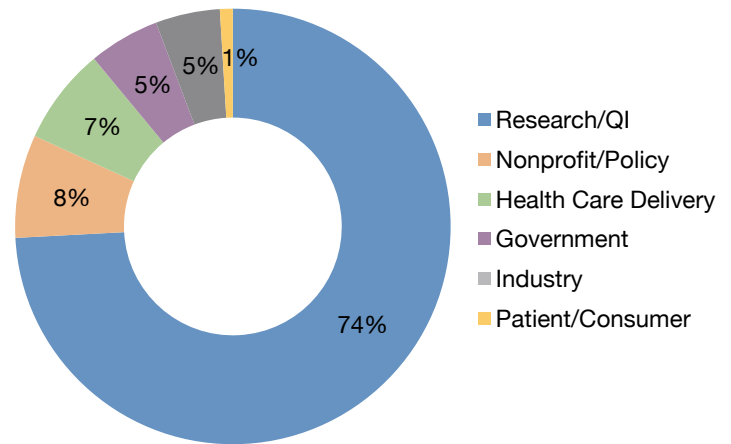
The experience and diversity of the institutions represented are testaments to AcademyHealth's and *eGEMs'* mission to bridge the research and practice communities. Overall, the total number of authors publishing in *eGEMs* (n=209) underscores the collaborative nature of many of these topics. Although there is a high proportion of papers with single authors (largely due to several single author commentaries published in the first year), *eGEMs* papers include an average of 4.2 authors per paper (Figure 3).

Reader response to the papers has been fantastic. With a total of more than 26,000 downloads to date, our average download rate hovers around 500 downloads per paper. It has been interesting to reflect on the characteristics of our papers that have been downloaded more than 1,000 times.[2,3,4,5,6,7] At first glance these papers do not appear to have much in common, but that may in fact be the takeaway point. In *eGEMs*, it will likely be the case that papers are not drawing an audience based on their topical appeal, but rather, based on the focus on key issues many communities find challenging. For example, the most highly downloaded papers include such topics as achieving the goal of "data in once;"[8] finding workable yet privacy-preserving strategies to conduct community level surveys with tablets such as the iPad;[9] and shared lessons to achieve strong governance[10] for research and QI networks using EHR data.

Thus far, data on citations is limited, but we are working closely with staff at bepress, our electronic publishing system, to track downloads across Google Analytics and PubMed. *eGEMs'* recent inclusion in the National Library of Medicine (NLM) Catalog is another positive step toward broader recognition, which provides a nice way to browse nearly all *eGEMs* articles. And we have already begun the process of applying for inclusion and indexing in MEDLINE and PubMed through the NLM.

Figure 3. Number of Authors per Publication

Distribution of Authors
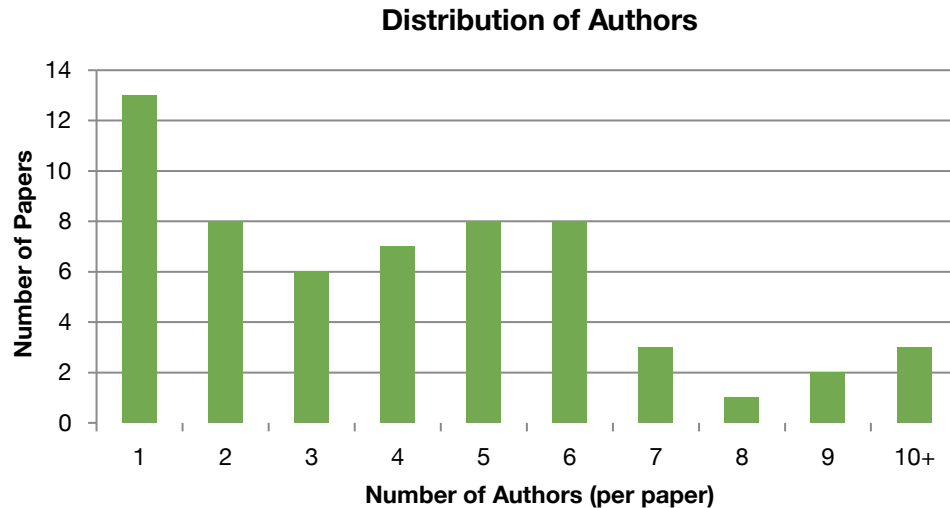
Note: This graph represents 59 papers with a total of 249 authors.

So We'd Like to Thank…

The journal's successes to date are due to the noteworthy contributions of many individuals. My heartfelt thanks to the stellar EDM Forum Steering Committee, eGEMs Senior Editors, and our talented and hardworking panel of more than 150 volunteer reviewers, who have helped to create high-quality, useful, and innovative content.

A special thanks to our guest editors for three special issues over the last year. Dr. Wade Aubry from the University of California, San Francisco, edited the issue on ways decision makers use (or would like to use) evidence generated by EHRs in learning health systems. Wade's special issue generated a series of interesting conversations, particularly among a subset of participants from the public and population health community who are now meeting regularly to discuss methodological issues and shared challenges.[11] Dr. Mike Stoto's special issue on methods highlights a number of pragmatic approaches to study designs and analytic methods that can help improve practice in this burgeoning area of work.[12] Mike's successful issue is a great resource for methods courses and workshops focused on approaches to using electronic health records (EHRs) data for comparative effectiveness research (CER) and patient-centered outcomes research (PCOR). As a companion to the special issue I hope you will refer to Mike's recent webinar, featuring colleagues from Intermountain Healthcare, Baylor Scott and White Health, and Kaiser Permanente and the VA, which is a practical guide to current methods in Delivery System Science.[13] Three weeks ago the EDM Forum released a special issue on approaches to sustain the data infrastructure for research and quality improvement using EHR data, with special editor Dr. Adam Wilcox from Intermountain Healthcare. The special issue has initiated important conversations about how project maturity, commercialization activities, and stakeholder support inform successful sustainability efforts.[14]

Last but certainly not least, our terrific *eGEMs* team has grown over the past year. Many individuals at AcademyHealth deserve thanks for their ongoing contributions, but I would be remiss if I did not specifically acknowledge the yeoman's work that Nina Bhattacharya and Elizabeth Cole do every day. If you have the good fortune to work with either of these wonderful, smart women, please be good to them; they do a terrific job managing a ton of competing demands! And of course, Beth Johnson, our managing editor, and Courtney Segal—who have been with the project from the beginning—are invaluable resources and are always working at the cutting edge of open access. As always, we are grateful to the Agency for Healthcare Research and Quality and our project officer Dr. Gurvaneet Randhawa for their ongoing support and guidance.

What's Next?

In October, *eGEMs* will release our special issue on health IT-enabled community-based transformation, sponsored by the Commonwealth Fund, with guest editors Drs. Hadi Kharrazi and Jonathan Weiner from the Center for Population Health Information Technology at the Johns Hopkins Bloomberg School of Public Health. Some papers from this issue are already posted. Papers from the 2014 EDM Forum Symposium will start to roll out soon, and there will be a new infusion of methods papers and discussions of the methods and data needed for public health systems and services research, which we will publish with *Frontiers in Public Health Services and Systems Research*, a sister open-access journal.

AcademyHealth and the EDM Forum are also making some major changes to our annual symposium to more closely link research and quality improvements using EHRs with the evidence needed by delivery system leaders. More information on the 2015 EDM Forum Symposium call for abstracts and structure of that meeting will be coming in the next few months.

We appreciate your continued interest in and engagement with the EDM Forum. Our ongoing goal is to help identify and address shared challenges across the community using electronic health data to improve health for patients and populations, so please let us know how we can help you in your work!

Stories of your successes, challenges, and the generalizable lessons that are learned in the process of generating rigorous science and evidence provide the oxygen and encouragement to innovate and collaborate. Sharing your work by contributing to *eGEMs* will accelerate the pace at which the community translates and disseminates key lessons, in turn helping to transform knowledge into actions that can improve health and health care.

50 is Just the Beginning

It was the publication of our 50th *eGEMs* paper that inspired my desire to write this editorial. Now, a few weeks later with the forthcoming release of our new special issue, we've just published our 60th paper. Your shared commitment to getting important lessons learned into the published literature is clearly outpacing my ability to keep up with the occasion!

As a result, I'm accepting that what we lack in pomp and circumstance to celebrate anniversaries, we make up in productivity. The result, we anticipate, is that much better for science and our collaborative efforts to improve the health of patients and populations.

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