Perspectives from the Field Interview Series

Interview with Bianca Frogner, PhD.

Associate Professor and Health Economist, University of Washington Department of Family Medicine

October 13, 2015

Interviewer: Jane Hyatt Thorpe

Questions:

1) Would you please tell us a little bit your work and how it intersects with health information exchange?

2) Besides using information directly for patient care, what other potential benefits are there in health information exchange for the health care system?

3) What are some barriers or challenges to fully realizing the benefits of health information exchange?

4) What do you see as the most promising long-term solutions to these challenges?

5) In the meantime, do you recommend any strategies that health care providers and policymakers can use to maximize the use and exchange of health information, both for patient care and for overall improvement of the health care system?

Transcript:

Question 1

JHT: Welcome to the Health Information and the Law Perspectives from the Field Interview Series. Today we're speaking with Bianca Frogner, PhD, who is an Associate Professor and Health Economist in the Department of Family Medicine at the University of Washington. Dr. Frogner is also the Director of the Center for Health Workforce Studies. Welcome, Bianca. Thank you so much for joining us today.

BF: Thank you for having me

JHT: We're thrilled. We're going to launch right into our questions here. Would you please tell us a little bit about your work and how it intersects with health information exchange?

BF: Sure. So, I'll approach this from two different angles. One is my role as a Health Economist. In my work, I do a lot with data. My own research interest has been about trying to better understand the patient's experience with care at all different levels. As part of that, I have had some interest in mobile

health applications (apps) and what has been coming out onto the market that helps patients better connect with the health system. In trying to understand which mobile health apps are the best for patients to use, one needs to figure out an evaluation mechanism by which one can pick out the best apps from the ones that are just clicking information with no meaningful use. I've had some ongoing research interest in trying to develop a rapid evaluation system of the mobile health apps out there that take into account how mobile health applications might actually connect back to the system as one criteria to figure out the best quality apps out there. My other role as a Health Economist and an educator is trying to figure out how to train people to understand the data that they get into their hands. Actually, when I was spending some time at George Washington University in my prior job as an Assistant Professor there, I trained Health Administrators in the area of quantitative data or quantitative methods for them to understand the information that could potentially come of a system of health information exchange. In my role as the Director of the Center for Health Workforce Studies, or CHWS, as we call it, we have a couple of projects that are ongoing that think about emerging skills that might be related to health information exchange. Specifically, we have an ongoing study where we are looking at job search engine data to understand and identify how often health information technology (health IT) skills are being requested among different health care occupations. One challenge is trying to figure out what health IT skills we should be picking. Among the skills that we are going to focus on are data analytic skills, as well as skills about trying to manage different information systems. What we want to know is in which occupations these skills are being requested and in which different settings these skills are being requested. Those are just a couple of ways in which I see where my current work is intersecting with health information exchange.

Question 2

JHT: That's wonderful. Clearly, you focus a lot on patient engagement, use of information, and making the mobile health tools useful and accessible as well as training people to work in this field. So we've talked a lot about benefits for health information exchange beyond just direct care of the patient. Could you elaborate more on your perspective on the expanded potential set benefits in health information exchange for the broader health care system?

BF: Sure. So, as you mentioned, health information exchange, there's this hopeful promise that it will improve patient health. I think the real importance of the use of health information exchange is to help the health system perform better. With all of this information that is coming, I think health systems, which would include hospitals as well as physician offices, can connect better so that they can better account for each other's performance. I think with the Accountable Care Organization concept that came under the Affordable Care Act, there is this movement with financial incentives in place to have these different providers who didn't work together before to work more closely together. The challenge for them is trying to figure out how to move the data across the different systems. The real opportunity here is that once they get the systems in place, they can really share how each place is doing in a more real-time manner while before, people would have to pull together paper in order to communicate across the different kinds of providers. Hopefully, as the systems become more sophisticated over time, providers can use this information in a way that helps them strategize how best to target their program improvement efforts in order to identify the patients that need the best care at the right time. It also allows these providers to communicate better with insurance companies to identify what is working and what is not. Specifically, it would be to say, "OK these types of treatments are leading to better improvements versus those are not." Also, I think that these health information systems have a real potential to help improve population health, not just the patients'. At the end of the day, these systems would allow different providers and insurance companies to look at all the patients that they serve in

aggregate and allows them to learn from one patient population and maybe apply those learnings to another.

Question 3

JHT: That's wonderful. You mention in particular the financial incentives, which, I think, have been a great assistance to hospitals and eligible physicians in particular. Obviously the progress, I think, has moved slower than everyone would have hoped. There are clearly some barriers or challenges to fully realizing the potential that you described. What, in your mind, are some of the primary barriers or challenges that still exist to realizing these benefits?

BF: Right. So, there are a few major barriers that exist that do make peoples' motivation to use health information exchange and health IT in general a little daunting. One, is that interoperability is still a challenge. Especially when connecting personal health devices like a Fitbit back into an electronic health record (EHR) system. I think patients are very excited to be able to monitor their own health but then they get a little bit discouraged if they bring this information to their providers and they don't have a good way to show this information to a provider or the provider doesn't know how to integrate that information back into their system to keep a record of it so that they can come back to it over time. Another barrier is for smaller providers, especially out in rural areas. The smaller physician offices, practices with less than 20 people in it, probably even less than 10, some of those places are still struggling to get an electronic health record system into place that can actually communicate with a hospital or other providers. The investment cost for a small provider to adopt an EHR system is quite heavy and while the HITECH Act of 2009 did help to alleviate some of those financial pressures, there are still quite a few challenges around maintaining and getting the right skills in place to actually use these systems. I think another area of challenge is that there is a bit of an information overload. While it is great to have all of this data, I think sometimes there is almost too much information. We, being researchers and people in the field of collecting this kind of data, haven't quite figured out how best to leverage this data to be meaningful to a provider or to patients to be of use. To link with that, our workforce isn't really trained yet to understand this data or know how to interpret it. Maybe, most people who work in the workforce have had at least one course in statistics along the way but that's not quite the same as learning over time how to manipulate data, how to interpret graphs and tables in a way that can really provide meaningful health guidance back to the patient.

Question 4

JHT: I think that's all very, very telling. Oftentimes when we talk about barriers or challenges there is a focus on finances or operational structure but I think your comment about information overload is quite perceptive, actually. There is so much information, this whole concept of big and small data; how do we work with it and how do we interpret it both for research purposes and clinical purposes and for patient engagement I think has been a challenge. From your perspective, thinking about how we will continue to tackle these challenges, what do you see as the most promising long-term solutions to these challenges?

BF: Well, I do hear that community colleges came to be very keen on the fact that health information technology, health information exchange, these different solutions to the improvement of patient

health are coming out here but, the workers are lagging in the skills to leverage these new tools. So, community colleges are really seeing an opportunity here to train workers, especially those that already have a job. In other words, they are training incumbent workers to actually get the right skills to train up the workforce to best use this information. They're really seeing this as a call that is coming from the employers, such as hospitals or other major providers. They're going to the community colleges and saying "Can you please help create a curriculum for us to address how to take data to that next stage?" So it sounds like, for some community colleges out there, they already started thinking about this early on under the HITECH Act and under the American Recovery and Reinvestment Act, where they got some money to actually develop curriculum, to think about health IT. At that time, in 2009-2010, the focus was more on just trying to get the systems up and running. Now, I can hear on the ground that the educators are realizing they need to move the conversation to that next step of; how do you take all of this information and make it usable? There are some federal acts out there, such as the Workforce Investment and Opportunities Act, WIOA, that help provide some financial incentives to help colleges and even employers to think about ways to train up the workforce to be able to have the skills that are most needed today, among them being able to use health IT. The long term solution here is to educate our workers that are already in place rather than training up a brand new workforce. So, it is taking people who we already have, who already know a lot about healthcare, and trying to give them those extra sets of skills to better understand how to integrate health IT and data analytics into their job. I think that the conversation is moving away from saying "We need people who just do health IT" to "Everybody needs to have some skills around data and knowing how to use it and manage it." I think the software issue around interoperability will sort itself out over time. I think some of the information overload will also sort itself out over time as there are different entrepreneurs out there who are trying to find more user friendly and creative ways to display data. I think some of that will sort itself out in the next 5-10 years. In the meantime, we need to train up a workforce that will be able to take that information once it is displayed all nicely.

Question 5

JHT: That's really interesting and in our prior interviews we never looked at this from a workforce perspective. I think that is critical. How do we use that information? How do we make sure people on the ground are trained and able to work with information and collect information? So as you're thinking about hospitals, other major providers, community colleges, some funding, in terms for colleges and employers to train their workforce, from a workforce perspective what do you think are the best strategies that will continue to foster the creation of new programs or onsite training of current work force to really think about evolving the workforce towards a place where there is better use, recognition, understanding, etc. of health information technology and exchange?

BF: Sure. I think generally in the field of healthcare as we're in this post Affordable Care Act era, there is definitely a conversation of how can we get our health workers out into the field and helping the population where they live rather than trying to bring them in to the health care system. I think as far as improving that conversation we really should also be having that conversation of: what kinds of data skills can we give these individuals to go out there and talk to their patients and help them work with these different monitoring tools that these patients and individuals are adopting? For example, long term care is a growing area and in terms of both health care demand and it is also where there are a lot of job opportunities. We see a lot of Home Health Aides that are being demanded these days and among the health workers out there. What we need to think is "OK- if that's where the jobs are and

that's where the patients are, what are the data skills or what are the information skills that we need to give these individuals that can help them keep the patients out of the hospital and in the community?" I know there has been some discussion around focusing on community health workers and better understanding what their skills and capabilities are. Are there opportunities there that they can be trained in a way to manage patient health using all the data out there, in the community, without necessarily using big electronic health record system? I think it is important to focus on how we can really connect all of this individual level of data that's being collected by folks out in the community and make it connect back to the larger health system. But we shouldn't have the patient wait to get back into the hospital figure out how to interpret that information. We need to have them not only connect in that way and have that information given back to the provider, but I think that we need to deliver back messages to individuals while they're in their home; how they're doing, and give them some sense that they're doing well without necessarily just waiting until they see a provider. I think part of this means that we need to have conversations with providers at every level. Not just physicians but talking to the pharmacists, medical assistants, home health aides, and community health workers to ask them what are the barriers that they're facing when approached with information through these individual monitoring systems like Fitbit. What do they want to do with this data and what do they think they can do with this data? I think we need to talk to the patients more and have a conversation and ask, well, what do you hope to get out of the data? What is it that you really want to learn? Right now, a lot of the conversation around collecting data is driven by people like me who are researchers, who have our own questions to answer. Or, it is driven by people who are actually programming these different software or devices and they have their own beliefs about how information should be used. We really need to talk more to the actual providers and patients, the users of this data, to understand what they want, what they need and what kinds of barriers they face and to figure out what kind of training do we need to give both patients and health care workers.

JHT: Wonderful, Bianca. This has been incredibly insightful and we really appreciate your time and your expertise.

BF: Thank you, well I enjoyed this very much.

Further Resources:

- To learn more about the projects at the Center for Health Workforce Studies (CHWS):
    - http://depts.washington.edu/uwchws/
- The Workforce Investment and Opportunities Act (WIOA)
    - https://www.doleta.gov/wioa/
- Health Information and the Law Brief: Overview on HITECH's Meaningful Use Provisions
    - http://www.healthinfolaw.org/article/overview-final-regulations-implementing-hitech%E2%80%99s-meaningful-use-provisions
- The importance of interoperability and information sharing (Bipartisan Policy Center brief)
    - http://www.healthinfolaw.org/article/bpc-releases-brief-titled-improving-health-through-interoperability-and-information-sharing