Editorial

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The imperative to address diagnostic safety

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Introduction

During the September 2016 Research Summit at the Agency for Healthcare Research and Quality (AHRQ), attendee after attendee walked up to the microphone to share personal and family stories of misdiagnoses and diagnostic errors. This was not, however, a room filled with patient advocates. Almost everyone who spoke that morning worked within the health care system. The people who spoke were neither unique nor unusually unlucky. As we know, diagnostic errors are likely to impact most of us in our lifetime [1].

Unfortunately there is little hard data on the full extent of the problem or its human toll. Two studies point to the vastness of the challenge and the urgency to act now. One study estimated the annual cost of misdiagnosis of stroke at US$1 billion annually [2]; a second study analyzed medical malpractice claims data from 1986 to 2010 and found that diagnostic error was the leading type of paid claim and accounted for the highest proportion of total payments (35.2%). The inflation-adjusted, 25-year sum of diagnosis-related payments was US$38.8 billion, with a median per-claim payout of US$386,849 [3].

Understanding systems of care

Understanding and addressing the causes and consequences of diagnostic error is not just good practice – it is an economic, health, and moral imperative. So why has diagnostic safety been so hard to address?

Diagnosis is hard to define and quantify precisely because it is not a single event. The diagnostic process is embedded in the work system, so getting it right involves tackling a wide range of interrelated issues. That is why the National Academies outlined the many factors they so correctly noted in their 2015 report, “Improving Diagnosis in Health Care”, and in other work on the subject [1]. It is not enough to gather information and make a diagnosis, or order the right test, or follow a procedural checklist, and pinpointing an error is rarely a cause for assigning fault.

Improving diagnosis in the United States will require private and public parties working together to ensure that our health care systems are designed at all points to consistently deliver the best care for patients. Further, we think that the themes emphasized in AHRQ’s summit – patient engagement, education, measurement, health information technology, organizational factors, and training – are the foundation needed to move ahead.

That said, research on diagnostic safety is certainly in its infancy, and we have far more questions than answers. But we can draw on our experience with patient safety research when it was in its infancy.

Leading the way on patient safety

When the Institute of Medicine’s landmark report, *To Err is Human*, was released, it galvanized the health care industry’s attention on medical errors and the systems, processes, and conditions that work for or against a culture of patient safety. That report also led to a new statutory mission for AHRQ as the lead Agency in conducting and supporting research to improve patient safety.

AHRQ has embraced its role as a leader in creating a culture of patient safety. Over the past two decades, the Agency has invested in research to understand how to make health care safer across the US health care system. From 2010 to 2015 alone, reductions in hospital-acquired conditions contributed to an estimated 125,000 fewer patient deaths and more than US$28 billion in health care costs saved [4].

The Agency’s playbook of investments in research, tools, and measures in our patient safety framework can be applied to diagnostic safety. We also can build on some of the existing patient safety tools that are transferrable to diagnostic care. In particular, the Agency is uniquely positioned to make contributions in using data, deploying health information technology, and addressing organizational factors affecting diagnostic safety.

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AHRQ funding also has resulted in practical resources to address elements of diagnostic safety, such as Improving Your Office Testing Process, a toolkit that helps staff in medical offices use proven methods to improve how office-based diagnostic tests are handled [5]. And there is Questions Are the Answer, a public service campaign featuring real people explaining the important role of patient engagement in the diagnostic process [6]. AHRQ funding also also helped launch and supports the annual Diagnostic Error in Medicine Conference organized by the Society to Improve Diagnosis in Medicine, where clinicians and researchers have focused on moving the needle on diagnostic safety, in addition to the September 2016 Research Summit, whose proceedings are detailed in this issue.

AHRQ currently has two dedicated research opportunities on diagnostic safety: one to look at the incidence and causes of diagnostic errors in ambulatory care, and the second to look at improvement strategies and interventions. We invite researchers to submit applications at https://grants.nih.gov/grants/guide/pa-files/PA-15-180.html.

Collaborating with stakeholders

Until now, AHRQ has tackled discrete pieces of the diagnostic safety puzzle. But as this Research Summit made clear, we need to look broadly at all the pieces: how and what to measure; the organizational factors affecting diagnostic safety and shaping the cognitive work of medicine; the role of education, training, and continuous feedback loops; and last, but not least, the role of patients within this process. We need to understand how these pieces fit together, and how best to adapt and build practical tools to help clinicians understand how to make the health care system safer for all Americans.

Getting the correct diagnosis is critical because it is at the crux of everything that happens in the health care setting. If the diagnosis is wrong, then the treatment is wrong. The follow-up is wrong. Everything that happens across the health care system depends on getting this first piece right. Diagnostic safety is an issue that affects us all.

AHRQ plans to begin the immense task of improving diagnosis by leveraging the work that has already shown promise in improving patient safety more broadly. Specifically, the Agency will focus on (1) adapting AHRQ’s patient safety tools to address diagnostic safety, (2) using clinical decision support to bring evidence to practice in a way that supports clinicians’ cognitive requirements, and (3) exploring further diagnostic measure development and improved data utilization and analysis.

We are grateful to the participants of the Research Summit for sharing their expertise, and we invite all our stakeholders to join us as we commit ourselves to making this next critical leap in patient safety.

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References