

EDITORIAL

Responding to the Call: a New *JGIM* Area of Emphasis for Implementation and Quality Improvement Sciences



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We are pleased to announce the publication of the special issue of the *Journal of General Internal Medicine* on implementation science (IS) and quality improvement (QI), an event which, marks the formal addition of IS/QI as an area of emphasis for *JGIM*. Why is this important? In the words of *JGIM* Editor-in-Chief Steven Asch, “We all love the research we publish in *JGIM*, but research without action always seems incomplete. Increasing our emphasis on research on how best to diffuse best practices and even publishing examples of improvement efforts completes that circle.” The articles in this special issue represent steps in that circle from knowledge to action.

This issue comes out at a point in time when both the strengths and vulnerabilities of our healthcare system have been exposed. The current COVID-19 crisis has presented unique opportunities to study accelerated implementation and challenges in pacing the organizational learning with practice needs in real time. The COVID-19 crisis has also focused attention on systemic racism in diagnosis and treatment of illness in people of color.

It reminds us of the importance of IS/QI research in developing a better prepared, more resilient healthcare system; to be prepared to pivot to respond to emergent challenges; and conversely to remain focused on the long-term work that will help create a better healthcare system tomorrow.

The scholarly communities of IS and QI have co-evolved to address the challenge of using the systematic rigor of science to help close quality gaps. Hallmarks of this work include attention to how the change process occurs; sensitivity to context; the interplay of implementation participants with the evidence-anchored innovations being implemented; and how generalizable knowledge is adapted to specific clinical contexts to improve a specific outcome^{1, 2}. In this *JGIM* Special Issue, our aim was to showcase research that advances actual

care delivery by applying and testing knowledge from these synergistic fields.

To achieve that aim, we sought innovative research that applied evidence across diverse delivery systems and settings. While we wanted theoretically grounded work, we favored papers that empirically illustrate the application of foundational knowledge and skills from QI and IS to improve general internal medicine, such as Rikin and colleagues’ stepped-wedge trial of an opt-in e-Consult program and its effect on specialty care visits³; and Keddem and colleagues’ rigorous qualitative study of implementation of patient-engagement toolkits⁴.

We wanted to include well-developed negative findings, like Mann and colleagues’ study, which used a cluster randomized design to test clinical decision support to reduce antibiotic prescribing for acute respiratory infections⁵. This type of disconfirming evidence is what leads us to question and revise our existing mental models, and ultimately develop a more accurate understanding of the problems we are trying to solve.

Inclusion of multi-site studies demonstrates how organizational and institutional context exert such profound influences on implementation outcomes and surface the complex effects of context in understanding how implementation varies across multiple settings. For example, Petrik and colleagues assessed implementation drivers that could explain differences among federally qualified community health centers in their success implementing FIT⁶.

We wanted to include work that addressed reducing or deimplementing low-value care, such as Presti and colleagues’ paper on reducing inappropriate PSA screening⁷. Deimplementing low-value care is an essential part of efforts to improve healthcare quality and one that has sometimes been too-little studied.

Directly addressing concerns of rigor in this research space, we sought examples of rigorous non-experimental designs, such as Coleman and colleagues’ observational study of institutionalizing collaborative care for depression⁸, and Rattray and colleagues’ rigorous QI project of a web-based hub for audit and feedback for improving care for transient ischemic attacks⁹.

Several selected papers aim to advance implementation science/rigorous QI methodology, such as Wagner’s paper proposing how cost can better be evaluated in

implementation studies¹⁰; Esmail and colleagues' proposed standards for conducting and reporting comparative health effectiveness for complex interventions¹¹; and Hernandez-Diaz and colleagues' proposed methods for extracting learning-health systems lessons from AHRQ studies¹². These methodology papers will help the field to continue to improve the validity and reliability of the findings we produce.

Finally, we wanted to include papers that provide high-level synthesis and wisdom on innovative, improvement efforts and to help us see both what this field has accomplished and where we can collectively advance. Kamath and colleagues' systematic review provides this type of synthesis of our knowledge for the specific issue of interventions to improve blood pressure management for patients with chronic kidney disease in primary care¹³. And Drs. Kilbourne, Glasgow, and Chambers provide a rich, higher-level overview of important contributions from IS with selected stories amplifying successes from the field¹⁴.

In sum, these papers illustrate how IS and QI can advance internal-medicine care delivery and ensure that the foundational knowledge generated by internal-medicine research finds its way into practice. Without the selfless dedication and thoughtful reviews of submitted manuscripts, this Special Issue would not have been possible. Service to our field is an important contributing factor that supports the overall health and completeness of our evidence base. With many competing demands including their own scientific endeavors, administrative and other work responsibilities, and an emerging global pandemic, these individuals were important contributors and we sincerely thank them.

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