



# **DxQI Seed Grants**

**January 2021**



The DxQI Seed Grant Program is an initiative of the Society to Improve Diagnosis in Medicine with support from the Gordon and Betty Moore Foundation.

# Application at a Glance



## What is the purpose of the seed grant program?

The purpose of this program is to stimulate innovation in a field where quality improvement (QI) activity is lagging, and to elevate the importance of addressing diagnostic error within healthcare delivery systems. Each annual cohort, approximately 20 grantees, will receive up to \$1 million in budget-justified grants capped at \$50,000 each to support specific QI work directed towards improving diagnostic safety.

## Why should I seek a seed grant?

If awarded, the grantee will:

- Be involved in improving healthcare quality in an area that is becoming recognized as the biggest patient safety issue yet often receives little attention;
- Receive grant funding to identify, develop, and test quality improvement interventions aimed at achieving diagnostic excellence and reducing the harm from diagnostic error;
- Bring visibility to the topic of diagnostic quality and safety in your own institutions;
- Participate in an online community fostering peer-to-peer learning with other grantees;
- Learn from your peers at quarterly virtual meetings;
- Have support to submit manuscripts to SIDM's peer-reviewed journal, *Diagnosis*;
- Present project and findings at an annual QI Summit; and
- Become a member of the rapidly growing community focused on the number one patient safety problem in health care.

## What do I need to submit?

Please submit the following materials online **before March 25, 2021 11:59 pm EST**.

1. Responses to online application questions;
2. Letter of Support from an executive sponsor e.g., department chair or an equivalent senior leadership role within your organizations that addresses all seven elements specified on page 4;
3. Letter of Support from any third-party partner that is deemed critical to the success of the project, such as a vendor or other for-profit, entity, medical school, etc.; and
4. A bibliography of relevant citations that support the project rationale and intervention plan

## Who is eligible to apply?

**Healthcare entities that provide direct patient care\*** are eligible to apply and will typically come from the following list:

- Office-based primary care
- Office-based specialty care
- Clinic (e.g., urgent, acute)
- Other ambulatory centers (e.g., surgical/imaging)
- Community hospital
- Academic medical center
- Safety net hospital
- Critical access hospital
- VA & military centers
- Member of integrated delivery system
- Federally Qualified Health Centers
- Rehab facility
- Skilled nursing facility
- Psychiatric hospital

**\*PLEASE NOTE:** Organizations that do NOT provide direct patient care, such as medical equipment companies, educational institutions, physician management organizations, are **not** eligible to apply for a seed grant but can partner with an eligible entity as a supporting organization. While **international locations** are eligible to receive a grant, you will be asked to address the importance of the problem and its potential solution to the U.S. healthcare system in your proposal. Failure to demonstrate problem importance and intervention applicability will result in a denial.

### IMPORTANT DATES

**RFP Launch**  
January 22, 2021

**Informational Webinar**  
February 24, 2021  
12:00 pm EST

**Application Deadline**  
March 25, 2021 11:59  
pm EST

**Award Announcement**  
June 2021

**Site Start-up**  
June 2021

**Site Wrap-up**  
June 2022

# DxQI Seed Grant Program

## Program Background

Research has demonstrated that diagnostic errors are the most common, most catastrophic and most costly of all causes of preventable medical harm. In fact, errors in diagnosis are the most frequent cause of medical error reported by patients. In total, it's estimated that 12 million U.S. adults experience a diagnostic error every year in outpatient settings alone. It has also been reported that failures of diagnosis result in as many as 80,000 preventable deaths every year in U.S. hospitals. In research funded by the Society to Improve Diagnosis in Medicine (SIDM), through a grant from the Gordon and Betty Moore Foundation (the "Foundation"), researchers from John Hopkins University and CRICO Strategies analyzed more than 55,000 malpractice claims to determine how many were attributable to diagnostic error. The study found that 34 percent of all malpractice cases that result in death or permanent disability stem from an inaccurate or delayed diagnosis and resulted in \$1.8 billion in malpractice payouts over 10 years. Surprisingly, 74.1 percent of diagnostic error malpractice claims were attributable to just three categories of conditions: cancer (37.8 percent), vascular events (22.8 percent) and infection (13.5 percent), referred to as the "Big 3" (Newman-Toker D, et al. [Serious misdiagnosis-related harms in malpractice claims: The "Big Three" –vascular events, infections, and cancers](#). *Diagnosis* 2019; 6(3): 227–240).

Given the magnitude of diagnostic error burden, SIDM advocates for increased attention by health systems to improving the quality of their diagnostic process. This goes beyond avoiding errors and includes consideration of accuracy, timeliness, cost, and patient convenience. Designing an optimal diagnostic process will require a careful balancing among these competing demands. Given the dearth of solutions, we believe catalyzing a 'bottom up' approach, whereby frontline health professionals and patients are engaged in meaningful QI work to develop and test plausible solutions, will most likely produce the best outcomes.

## Areas for Improvement

- **THE BIG THREE:** see Newman-Toker D., et al. [Serious misdiagnosis-related harms in malpractice claims: The "Big Three" – vascular events, infections, and cancers](#). *Diagnosis* 2019; 6(3): 227–240
- **DIAGNOSTIC QUALITY DISPARITIES:** Proposals that seek to reduce the risk of diagnostic error or delayed treatment and improve diagnostic quality outcomes related to health disparities associated with age, race/ethnicity, sex, and/or other social determinants of health.

Forty percent of the total awards will be directed to QI projects that target improvement in one of the "Big 3" categories. Forty percent of the total awards will be directed to QI projects that target reduction in diagnostic errors associated with disparities. Twenty percent of total awards will be directed to the OPEN category, i.e., not one of the priority areas. We encourage proposals to address both areas of improvement: Big 3 and Diagnostic Quality Disparities. For more information on addressing health disparities refer to the [FAQs](#).

## Program Requirements

Each organization selected will be expected to:

- Attend a cohort kick-off webinar
- Assure appropriate team members are actively engaged in the QI Project Core Team
- Demonstrate ongoing leadership commitment by an Executive Sponsor
- Submit bi-monthly status reports describing:
  - » What barriers/challenges have you faced?

- » What unanticipated consequences did you encounter with this month's tests?
- » How did you overcome those?
- Submit formal six-month mid-project and year-end final reports
- Participate in quarterly calls
- Participate in the online community
- Attend two annual QI Summits and SIDM annual conferences
- Ensure the IRB is aware of the proposed project, if required by your organization, and appropriate authorization is obtained prior to the start of the project.

## What are we looking for?

A qualifying QI proposal will meet the following criteria:

1. The organization and project lead represent an eligible healthcare entity where direct patient care is provided.
2. The proposed intervention can be described by one of the four categories below:
  - a. A well-defined problem and discovery period (maximum six months) followed by adequate time for a to-be-defined intervention that will be tested and improved
  - b. A well-defined intervention that will be tested and improved
  - c. An implemented, but unevaluated intervention with a well-defined evaluation plan and an opportunity to improve
  - d. An implemented, evaluated intervention that will be tested and improved in a novel setting or with a novel population
3. We are looking for interventions to reduce important sources of diagnostic error using QI methodologies that might include but are not limited to:
  - a. Cognitive interventions in patient care settings such as clinical decision support tools;
  - b. Systems interventions to change diagnostic processes or workflow in practice;
  - c. Educational interventions where the targeted outcomes of the study are improvements in diagnosis by clinicians; or
  - d. Other novel/innovative approaches that have the opportunity to be scaled and spread across the broader field.

Additional ideas about what to improve can be found in the [FAQ](#).

We are **NOT** looking for studies that:

- Measure the burden or causes of diagnostic error without an intervention;
  - Develop new interventions in a "lab" setting without testing them for patient care outcomes;
  - Focus on new diagnostic tests without a QI intervention that emphasizes reduction in diagnostic error;
  - Are retrospective case studies with no planned QI intervention;
  - Evaluate the efficacy of a medical treatment or modality; or
  - Are primarily scientific research with no direct impact on patient outcome by improving diagnostic error safety
4. The interdisciplinary project team should include stakeholders with the skills, competencies, and authority to execute the project plan. In addition, the team should include one or more members with qualifications and experience in QI. Projects involving IT should include appropriate operational support staff.
  5. The team includes meaningful patient or family engagement (PFE) or an adequate explanation of why the team would not benefit from PFE on the proposed project. Additional guidance on meaningful PFE can be found in the [FAQs](#).

6. The executive sponsor provides a letter of support that attests to EACH of the following elements (**NOTE:** lack of any of these elements in the Executive Sponsor letter may result in disqualification of the application):
- Will assure timely execution of grant agreement, if funded
  - There is organizational support for the project Aims
  - The team is appropriate to meet the project Aims
  - The budget is sufficient to meet project Aims on time and within scope
  - Required people and resources to meet project Aims will be available
  - Data necessary for project completion will be accessible and available
  - The sponsor will assist in overcoming unanticipated barriers/challenges that pose a threat to project completion

## Program Funding

Stipend disbursement for grantees, described in the contract, will be divided into two payments with 50% up-front and 50% after submission and acceptance of a six-month report.

## Program Support for Grantees

- SIDM will moderate an online community established for grantees which will serve two purposes:
  - » Support shared learning across sites as challenges and barriers are identified by individual QI teams
  - » Allow participating sites to download/upload documents and engage with the SIDM QI Program Manager who will act as a virtual improvement advisor to the community for the lifecycle of the program
- Educational resources on QI techniques applied to the diagnostic field will be made available as needed.
- Limited support will be made available through ad hoc calls to help grantees overcome potential QI barriers.

## How to Apply

### STEP 1 | VIEW INFORMATIONAL WEBINAR (OPTIONAL)

Interested applicants are encouraged to participate in a webinar on Wednesday, February 24, 2021 at noon EST. [Questions](#) submitted by noon EST on February 22<sup>nd</sup> will be given priority on the call. All questions received by February 26<sup>th</sup> will be posted with answers on the DxQI [site](#) by March 2, 2021.

- Register for [webinar](#)
- Submit a [question](#) for webinar

### STEP 2 | APPLY ONLINE

**Applications must be submitted online by March 25, 2021 11:59 pm ET.**

To submit application, please go to [www.improvediagnosis.org/dxqi](http://www.improvediagnosis.org/dxqi).

Applications should include complete responses to application questions, project team roster and roles, budget explained in the narrative, a bibliography with relevant citations, and an uploaded Letter of Support from the Executive Sponsor addressed to The Society to Improve Diagnosis in Medicine. (PDF format).

**Awards will be announced June 2021.**

## Resources to assist in completing the application

For a step-by-step guide to completing the application, FAQs, and additional resources visit [www.improvediagnosis.org/dxqi](http://www.improvediagnosis.org/dxqi).



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SOCIETY to  
IMPROVE  
DIAGNOSIS in  
MEDICINE

### **About the Society to Improve Diagnosis in Medicine (SIDM)**

The Society to Improve Diagnosis in Medicine catalyzes and leads change to improve diagnosis and eliminate harm from diagnostic error. We work in partnership with patients, their families, the healthcare community and every interested stakeholder. SIDM is the only organization focused solely on the problem of diagnostic error and improving the accuracy and timeliness of diagnosis. In 2015, SIDM established the Coalition to Improve Diagnosis to increase awareness and actions that improve diagnosis. Members of the Coalition represent hundreds of thousands of healthcare providers and patients—and the leading health organizations and government agencies involved in patient care. Together, we work to find solutions that enhance diagnostic safety and quality, reduce harm, and ultimately, ensure better health outcomes for patients. Visit <http://www.improvediagnosis.org> to learn more.