

Quality Improvement (QI) Project Resources for Residents and Fellows at UC Davis Health

How should I design my project?

- A great place to start is using the SQUIRE 2.0 guidelines. These guidelines detail how QI projects should be written up for journals and are important to go thorough *before* beginning your project to ensure you are following appropriate QI methods.

<http://squire-statement.org/index.cfm?fuseaction=Page.ViewPage&PageID=471>

- Think carefully about which patients you are going to be evaluating and what specific outcomes you want to measure.
 - Will you identify patients using ICD diagnosis codes or other patient characteristics?
 - What quality measures will you use?

<https://www.ahrq.gov/talkingquality/measures/types.html>

- Discuss what you are planning on looking at with data analysts and statisticians. You want to make sure that your outcome can be collected reliably.

What training is available for QI?

- UC Davis has a 2-day interactive QI design workshop held virtually every Fall.
<https://health.ucdavis.edu/quality/workshop.html>
- Dr. Shaikh has made several very brief QI education videos on key QI concepts
<https://www.youtube.com/@healthcarequalityimprovement>
- The Institute for Healthcare Improvement has learning resources through the IHI Open School (when registering be sure to select that you are a resident at UC Davis to access for free)
<http://www.ihl.org/education/IHIOpenSchool/Pages/default.aspx>

Who can I talk to for advice?

- Dr. Ulfat Shaikh has office hours/takes appointments to give you feedback or help you troubleshoot your QI project ushaikh@ucdavis.edu
- Identify the chair/s of your department's quality committee. It is a good idea to let them know what your project is early on even if they are not going to be your primary faculty mentor. It is important to find out from them if someone else is working on or has already worked on a similar project.

Where can I get funding?

- Strongly recommend applying to the UC Davis Health GME High Value Competition. This provides funding and will connect you with resources (i.e. data extraction and analysis support) to complete your project. Even if you do not get funded through this award, if you apply, you can reach out to the coordinators, and they will be able to connect you with resources or provide you with advice on how to improve your project.
 - <https://intranet.ucdmc.ucdavis.edu/highvaluecare/>
 - Contact person for GME high value competition is Connor Reilly (creilly@ucdavis.edu)

- Applications are due in the fall

Do I need IRB approval?

- This depends on your specific project. More information is available here:

<https://research.ucdavis.edu/policiescompliance/irb-admin/researchers/irb-submissions/new-projects/do-i-need-irb-review/>

Where can I get statistical help/how should I collect data?

- The UC Davis Clinical and Translational Science Center (CTSC) holds online office hours.
<https://health.ucdavis.edu/ctsc/area/investigator-resources/office-hours>
 - Consider going to discuss your statistical plan early in the course of your project. It is easier to collect the correct data in the correct format than to try to go back and fix what you have collected later.
 - It is helpful if you go to these office hours with a specific question (for example, “I want to compare this group and this group, what is the best test to do this?” “I want to evaluate if this intervention positively impacts this outcome. Typically, this outcome occurs in x% of patients. How many patients will I need to include?”)
- RedCap: Setting up a RedCap project is a great way to collect data. It is secure, HIPAA compliant and can be accessed by multiple collaborators. The office hours link above has information on Red Cap support.

Where should I present my work?

- UC Davis has an annual Healthcare Quality Forum. This is a great place for the first presentation of your work. It is typically held in mid-March. <https://health.ucdavis.edu/quality/forum/>
- Look for regional meetings in your specialty. Many societies have Western chapters that have conferences that are perfect for residents and students to present at. <https://www.wsmrf.net/>

Where should I publish my work?

- First look at journals in your specialty. Many now have a QI section or accept QI projects.

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