

# Quality Improvement Projects and Clinical Research Studies

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Every day, I witness firsthand the amazing things that advanced practitioners and nurse scientists accomplish. Through the conduct of quality improvement (QI) projects and clinical research studies, advanced practitioners and nurse scientists have the opportunity to contribute exponentially not only to their organizations, but also towards personal and professional growth.

Recently, the associate editors and staff at JADPRO convened to discuss the types of articles our readership may be interested in. Since we at JADPRO believe that QI projects and clinical research studies are highly valuable methods to improve clinical processes or seek answers to questions, you will see that we have highlighted various QI and research projects within the Research and Scholarship column of this and future issues. There have also been articles published in JADPRO about QI and research (Gillespie, 2018; Kurtin & Taher, 2020). As a refresher, let's explore the differences between a QI project and clinical research.

## QUALITY IMPROVEMENT

As leaders in health care, advanced practitioners often conduct QI

projects to improve their internal processes or streamline clinical workflow. These QI projects use a multidisciplinary team comprising a team leader as well as nurses, PAs, pharmacists, physicians, social workers, and program administrators to address important questions that impact patients. Since QI projects use strategic processes and methods to analyze existing data and all patients participate, institutional review board (IRB) approval is usually not needed. Common frameworks, such as Lean, Six Sigma, and the Model for Improvement can be used. An attractive aspect of QI projects is that these are generally quicker to conduct and report on than clinical research, and often with quantifiable benefits to a large group within a system (Table 1).

## CLINICAL RESEARCH

Conducting clinical research through an IRB-approved study is another area in which advanced practitioners and nurse scientists gain new knowledge and contribute to scientific evidence-based practice. Research is intended for specific groups of patients who are protected from harm through the IRB and ethical principles. Research can potentially ben-

**Table 1. Contrasting QI and Research**

QI project	Clinical research
Intended for a specific group or program <ul style="list-style-type: none"> <li>• Example: Decrease hospital readmissions in a cancer center</li> </ul>	Intended for future groups or future patients <ul style="list-style-type: none"> <li>• Example: A prospective trial to decrease post-op infections</li> </ul>
Aligns with patient interest <ul style="list-style-type: none"> <li>• Example: A process to decrease chemotherapy wait times</li> </ul>	Benefit to patient is not known <ul style="list-style-type: none"> <li>• Example: A study to determine the efficacy of subcutaneous vs. intravenous chemotherapy in a group of patients</li> </ul>
All patients/participants are welcome to participate <ul style="list-style-type: none"> <li>• Example: Every patient who visits the outpatient cancer center during a set period of time</li> </ul>	Patients/participants can opt out (consent), sampling <ul style="list-style-type: none"> <li>• Example: Patients with a specific tumor type who meet eligibility criteria are invited to participate of their own accord</li> </ul>
Arises from responsibility to patients <ul style="list-style-type: none"> <li>• Patients/caregivers deserve the best care, given in a timely manner</li> </ul>	Can arise from history of scandal <ul style="list-style-type: none"> <li>• Patients/caregivers invited to participate to answer a clinical question</li> </ul>
Strategic processes derived from existing data	Systematic research generates new data

efit a larger group, but benefits to participants are often unknown during the study period.

Clinical research poses many challenges at various stages of what can be a lengthy process. First, the researcher conducts a review of the literature to identify gaps in existing knowledge. Then, the researcher must be diligent in their self-reflection (is this phenomenon worth studying?) and in developing the sampling and statistical methods to ensure validity and reliability of the research (Higgins & Straub, 2006). A team of additional researchers and support staff is integral to completing the research and disseminating findings. A well-designed clinical trial is worth the time and effort it takes to answer important clinical questions.

So, as an advanced practitioner, would a QI project be better to conduct than a clinical research study? That depends. A QI project uses a specific process, measures, and existing data to improve outcomes in a specific group. A research study uses an IRB-approved study protocol, strategic methods, and generates new data to hopefully benefit a larger group.

## IN THIS ISSUE

Both QI projects and clinical research can provide evidence to base one's interventions on and enhance the lives of patients in one way or another. I hope you will agree that this issue is filled with valuable infor-

mation on a wide range of topics. In the following pages, you will learn about findings of a QI project to integrate palliative care into ambulatory oncology. In a phenomenological study, Carrasco explores patient communication preferences around cancer symptom reporting during cancer treatment.

We have two excellent review articles for you as well. Rogers and colleagues review the management of hematologic adverse events of immune checkpoint inhibitors, and Lemke reviews the evidence for use of ginseng in the management of cancer-related fatigue. In Grand Rounds, Flag and Pierce share an interesting case of essential thrombocythemia in a 15-year-old, with valuable considerations in the pediatric population. May and colleagues review practical considerations for integrating biosimilars into clinical practice, and Moore and Thompson review BTK inhibitors in B-cell malignancies. ●

## Reference

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