Background
Rhode Island Quality Institute (RIQI) is a center for collaborative innovation that advances health and care transformation in the state. RIQI’s initiatives align leading-edge healthcare improvement strategies with needs and opportunities in its community. As a catalyst for change, RIQI leverages deep expertise in health information exchange to enable provider interoperability, and in quality improvement science and quality data analytics to drive cutting-edge practice transformation.¹

Problem
RIQI recognized a need to reduce emergency medicine imaging for low back pain. “Emergency physicians sometimes don’t have a full history for a patient, so we are afraid we might be missing something,” said William H. Sabina, MD, FACEP, former Director of the Emergency Department and Chief of Emergency Medicine at South County Hospital in Rhode Island.²

Solution
RIQI and the American College of Emergency Physicians’ (ACEP) Emergency Quality Network (E-QUAL);⁴ “formed a statewide collaborative to implement Choosing Wisely recommendations about back pain across emergency departments.” The collaborative was implemented at seven of the state’s eleven hospitals, ranging from rural hospitals to large trauma units. A multi-pronged Choosing Wisely approach was implemented with a goal of reducing imaging for non-traumatic back pain in low-risk patients by 30% by December 2017.² The collaborative was supported through the Centers for Medicare & Medicaid Services’ Transforming Clinical Practice Initiative (TCPI), which aides clinical practices nationwide to develop comprehensive quality improvement strategies.⁵

The initiative began with widespread distribution of ACEP’s Choosing Wisely recommendations and patient materials to emergency departments, clinicians and patients. Clinician leaders developed scripts that clinicians could use to speak with patients seeking imaging for low-back pain. Through partnership with E-QUAL’s Support and Alignment Network (SAN) Avoidable Imaging Initiative, baseline data were gathered from chart reviews of patients with atraumatic back pain across each organization. Three emergency departments collaborated to tailor quality improvement interventions to reduce avoidable imaging at each site. Changes to order entry systems, continuous monitoring of avoidable imaging rates and monthly data review check-in calls were implemented.²⁶
Results\(^5\)

- Statewide collaboration among 7 of 11 emergency departments to promote *Choosing Wisely* conversations and patient materials
- 34% reduction in avoidable imaging for back pain as a chief complaint at South County Hospital
- 3 systems implemented formal QI processes and reduced avoidable imaging over a 14 month period
- Savings of $192,791 from January 2017 to March 2018 among 3 systems

Patient Engagement

- As the collaborative was ending, JoEllen M. Golberg, RN, BSN, CCM, Sr. Clinical Practice Advisor, Rhode Island Quality Institute, embedded herself in South County Hospital and called back an estimated 100 patients who had not received imaging tests for their lower back pain. The majority of patients expressed understanding of Choosing Wisely materials and why they had not undergone testing. “Of note, most patients seemed satisfied with their care, understood the reason for no imaging for that visit, and were grateful for the call,” explained Golberg.\(^7\)
  - “Personally, I have found that talking about imaging with patients opens up a conversation on chronic back pain. We can ask them what brought them in and what they need help with, and discuss what options and treatments are available,” said Dr. Sabina.\(^2\)
  - Scripts that support conversations between patients and physicians and standard patient education and decision aid materials across all EDs provides consistent messaging that emphasizes explaining the evidence and reasoning behind not imaging, the potential harm of imaging, and the role of the patient in shared decision making.\(^6\)

Challenges

- **Limited Time.** Varied schedules among clinicians from seven different organizations inevitably limited time and complicated communication logistics.\(^6\)
  - **Staying Engaged.** “In the teaching hospitals residents change in the summer, so it was essential to retrain as necessary to remain consistent with the intervention,” said Golberg.\(^7\)
  - **Changing Public Perception.** “Patients often desire to have the most testing possible done, particularly when they are in pain. Clinicians also do not want to miss a potentially critical diagnosis. This combination creates a culture that is difficult to begin to change. The fear of malpractice and the notion that you need to make a perfect diagnosis each time is heightened in the health care atmosphere,” said Golberg.\(^7\)
  - **Imaging From Other Community Sources.** Of the patients surveyed, 30% reported that after not receiving imaging, they went to community specialists such as orthopedists or physiatrists and obtained an imaging test.\(^6\)

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Core Interventions\(^2,6\)

- Interventions to reduce avoidable imaging tailored to each emergency department
- Widespread distribution of ACEP’s Choosing Wisely recommendations to emergency departments, clinicians and patients
- Scripts for clinicians to facilitate conversations, for example: “In my experience, I would like to spare you from having this test. Here is what we can do instead. Does this sound reasonable for you?”
- Partnership with E-QUAL SAN Avoidable Imaging Initiative via data uploads to portal
- Gathering of baseline data from chart reviews of patients with atraumatic back pain across each organization and continuous monitoring of avoidable imaging rates
- Monthly data review check-in calls
- Changes to order entry system
Keys to Success

1. **Clinical Champions.** “Identifying clinical champions early on who are well-respected is key. We went to the emergency department directors, and they were immediately interested,” said Golberg.⁷

2. **The Support of Choosing Wisely.** “The physicians used Choosing Wisely materials with great success in the emergency departments; they felt very comfortable using these materials, knowing they had scientific evidence that had been vetted by several different specialties,” said Golberg.⁷

3. **Communication & Relationship Building.** “We kept the lines of communication open and would often visit emergency department staff to remind them of our initiative. Relationship building through quality improvement is essential,” said Golberg.⁷

4. **Additional Clinical Opportunities.** Implementing overuse reduction initiatives in emergency medicine opened opportunities to explore overuse in primary care imaging. Dr. Sabina and physician leaders were invited to speak about the TCPI grant with a statewide group of primary care physicians.²

5. **Continued Efforts.** “Emergency department directors must continue to educate all providers in appropriate imaging for the chief complaint of back pain. Providers must continue to educate patients on health risks of unnecessary imaging. PCPs and specialists should also reduce unnecessary imaging in their private practices,” said Golberg.⁷

References

1. Who We Are. Rhode Island Quality Institute. https://riqi.org/who-we-are

Choosing Wisely® is an initiative of the ABIM Foundation.