

Purpose/Objectives

- American College of Radiology, Quality Research in Radiation Oncology (QRRO), formerly Patterns of Care (PCS), aims to provide an evidence base for quality of care in radiation oncology.
- Through process surveys, QRRO aims to:
 - Conduct surveys allowing documentation of process of care and quality assurance
 - Collect data
 - Define a core set of process measures for major cancers
 - Document the effects of clinical trials results, practice guidelines and appropriateness criteria
 - Identify factors associated with higher compliance with clinical standards
 - Describe patient and practice-based parameters
 - Benchmark and track the distribution and utilization of advanced radiotherapy technology
 - Disseminate information and educate target audiences
- Facility participation in QRRO process surveys and quality improvement activities will be accepted as a Practice Quality Improvement Initiative (PQI) for accrediting agencies.
- Gastric cancer was selected as one of 5 disease sites for study to evaluate the penetrance of clinical trial results establishing postoperative chemoradiation as a validated standard-of-care in North America.

Study Design

Clinical Performance Measures

- The QRRO Gastrointestinal Cancers Committee defined a core set of process measures based on results of clinical trials and national practice guidelines which can be used to measure performance:
 - Use of postoperative (adjuvant) chemoradiotherapy
 - Extent of surgical resection (D1 v. D2)
 - Completion of planned RT course within the prescribed time frame
- Emerging process of care measures were defined based on best available evidence and expert consensus:
 - Use of CT-based simulation and treatment planning
 - Use of Dose volume histograms (DVH) to evaluate normal tissue doses to the kidneys, liver, and spinal cord
 - Use of preoperative (neoadjuvant) chemoradiotherapy
 - Use of image-guided tools, other than computed tomography scans, for radiation therapy target delineation

Study Design

Practice Quality Improvement Project (PQI)

- Radiation Oncology practices planning to use the QRRO survey as a PQI initiative as part of their Survey participation will need to:
 - Choose the indicator(s)/measure(s) for improvement
 - Complete quality improvement activities (CQI Process)
 - Collect data for a 2nd measurement within one year of receipt of the first data set from QRRO
 - Complete the analysis of the 2nd remeasurement data
 - If action taken resulted in improved performance, standardize the actions for improvement
 - If action taken had little to no effect or resulted in decreased performance, repeat the quality improvement activities (CQI Process)
 - Collect data for a 3rd measurement within one year of finalization of the 2nd measurement data set from QRRO to obtain improvement or sustain the gain
 - Prepare the activity for presentation to the accrediting agency

Conclusion

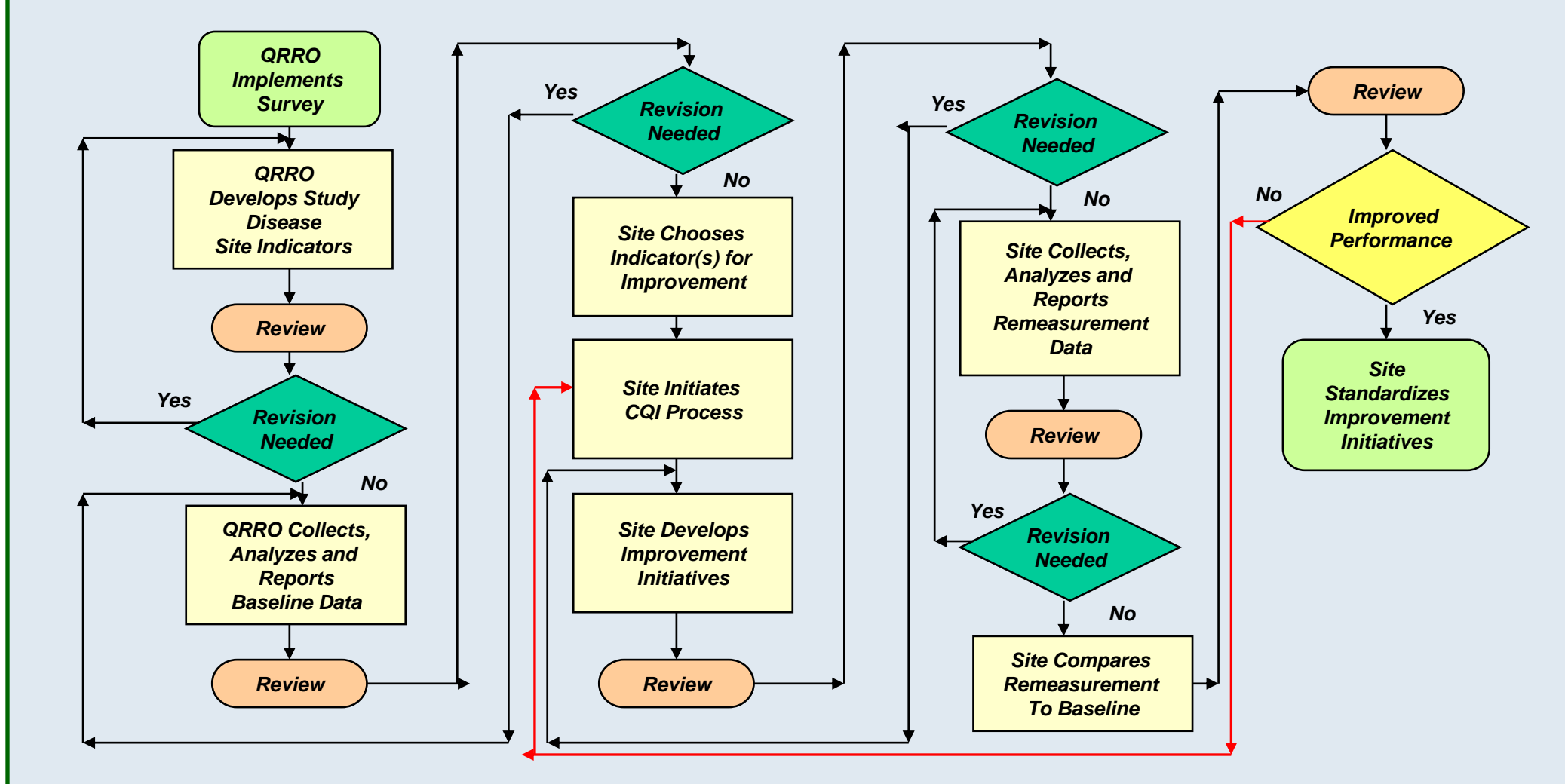
- As radiation oncologists incorporate new technology and clinical guidelines into their practice, re-assessment of quality of care is necessary to inform practitioners of their professional performance
- QRRO's Survey Data will provide national benchmark data for numerous quality indicators, including those that would not have data from clinical trials
- QRRO's quality improvement activities will allow for continuous feedback to improve the quality of the management of gastric cancer
- The American Board of Radiology (ABR) has notified QRRO that the Process Survey is "fully" qualified as a Practice Quality Improvement (PQI) project under its Maintenance of Certification (MOC) requirements for radiation oncology

Study Design

National Process Survey

- A National Process Survey has been developed for gastric cancer to measure:
 - Patient demographics
 - Geographic region
 - Practice setting
 - Insurance status
 - Workup and Studies
 - Medical History and Comorbidities
 - Staging and Extent of Disease
 - Treatment Course (Surgery, Radiotherapy, and Chemotherapy details)
- Two-stage stratified random sample of:
 - 80 Radiation oncology facilities nationwide (first stage)
 - Eligible cases within those facilities (second stage)
- Facility Survey Data & Process Survey Data used to calculate national averages and make statistically valid inferences for national process measures
- Survey data collected via retrospective review of patient charts and records
- Time period
 - 2005 - 2007

PQI Process Flow Chart



PQI – A Continuous Quality Improvement

- Plan:** Collect data and establish a baseline
- Do:** Take action to correct or improve a situation
- Study:** Study the effect of the changes. Collect data on the new process & compare to baseline
- Act:** If the result is successful, standardize the improvement. If the result is unsuccessful seek other causes and or actions to implement.

