Establishing a PQI system for residents and faculty

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Learning Objectives

- Review current ABR/ACGME PQI requirements for faculty and residents
- Identify the major components and time-line of a PQI project
- Identify the major components of a departmental PQI system
  - Identifying what you have
  - Identifying what you still need
- Implementation of major system components
  - Assist in the identification and formulation of projects
  - Assist in the completion, outcome assessment and follow-up of projects
Current ABR guidelines

- Faculty requirement: Completion of Practice Quality Improvement projects per 10-yr MOC cycle
  - 3 projects for graduates after 2008 and after
  - 1 project for graduates 2002-2007

- Resident requirement: Completion of 1 SBP project during the 4 yr residency

- PQI projects to fit into 1 of 5 categories set forth by the ABR

http://www.theabr.org/moc/moc_dr/moc_dr_pqiguides.html
Major components of a PQI project

- Project considerations:
  - Project focus should be pertinent to individual’s specific practice
  - Scope of project needs to be achievable and realistic
  - Methods must fit within time and budget constraints

- Project approach:
  - Identify problem/issue
  - Baseline data collection
  - Formulate improvement plan
  - Implement improvement plan
  - Post-plan data collection
  - Outcome assessment
Model timeline of a PQI project

- Identify problem
- Craft project
  - Data collection
  - Data summary
  - Formulate improvement plan
- Implement Improvement plan
- Assess outcome of improvement plan

6 mos  1 yrs  1.5yrs  2+ yrs
Why establish a PQI system?

- “The overarching reasons for PQI are to improve the quality of care delivered, reduce errors, and improve safety.” – ABR
- To challenge and question the status quo of our practice
- To encourage inquiry, discovery and self/institutional improvement
- To develop research skills, especially in our trainees and young faculty
- But why set up a formal SYSTEM?

  To assist faculty and residents to meet MOC/ACGME requirements and ensure compliance
A PQI system as a component of an institutional Quality Program

- Quality as a current hot topic in Medicine
  - Initiatives to implement quality metrics in hopes to improve discrepancy between US health care costs and quality of care
  - Hospital systems want to see tangible evidence of quality improvement within their departments
    - PQI as concrete evidence of quality efforts and proven outcomes
    - Can serve as means for obtaining hospital-funded support for infrastructure
Creating a culture of Quality

- Departmental quality meetings/conferences
- Departmental and section M & M conferences
- Journal club, ethics roundtable
- Individual peer review
  - PACS integrated
  - ResReview
- Systems error tracking tool
  - Radtracker
    - Internal web-based, PACS integrated notification system for systems errors and QC issues
What goes into a PQI system?

The major components

- Major components:
  - Identification of individuals/committee to mentor and coordinate PQI system
  - Education of faculty and residents on the current requirements and guidelines for PQI and how to fulfill requirements
  - Identification of problems in need of Quality Improvement
  - Provision of resources and guidance to help individuals to craft acceptable, achievable projects and improvement plans
  - Monitoring projects through data acquisition, plan implementation and outcome assessment phases
  - Documentation of completion
Identification of a PQI leader/committee

- **Major roles:**
  - To design a system that is workable for the particular institution
  - To link faculty, residents, admin/IT contributors
  - To pinpoint specific knowledgable individuals that may provide guidance and support
  - To approve projects and ensure projects meet guidelines
  - To grant IT, funding support if necessary
Identification of a PQI leader/committee

- Who? Some ideas . . .
  - Residency program director(s)
  - Chair of clinical affairs
  - Senior faculty mentor
  - Junior faculty representation
  - Chief resident(s)
  - Systems administrator
  - IT support staff
  - Anyone with particular interest and desire to oversee PQI!
### Education of faculty/residents of PQI/SBP requirements

- **Educate faculty and residents of ABR/ACGME requirements**
  - 3 projects per faculty/10-yr MOC cycle
  - 1 project during 4 yr radiology residency
- **Review guidelines for PQI/SBP projects**
- **Provide resources**
  - Repository of past projects within the institution
  - Inter-institutional compilation of past projects
  - Helpful websites, links, articles, etc.
    - On department website, binder/notebook of resources
- **Integration:**
  - As part of new faculty/resident orientation
  - As component of formal faculty MOC program
  - As part of quality meetings/conferences
Identification of issues/problems needing quality improvement

- Many problems will be identified on the individual level, based on a personal event, interaction, complaint

- Mechanisms/tools to identify problems in need of Quality Improvement
  - Should be accessible, easy to use, timely, and reliable
  - Solicit feedback from support staff (techs, nurses, students) as well as referring clinicians
  - Ex) Anonymous suggestions box; Radtracker/PACS link

- Identify and document problems during routine meetings
  - Resident/faculty meetings
  - Quality meetings
  - Systems/operations meetings
  - Section chiefs/administrative meetings

- Creation of list/repository
  - Departmental website, binder/notebook
Criteria for PQI project

- Project should address a specific problem
- Project should be realistic and achievable
  - Reasonable time-line
  - Fit within budget, IT, resource constraints
- Project must fulfill criteria set forth by ABR/ACGME
  - [http://www.theabr.org/moc/moc_summit_pqio8.html](http://www.theabr.org/moc/moc_summit_pqio8.html)

Resources: [https://www.abronline.org/MOC/DR/advanced/PQIReqs.cfm](https://www.abronline.org/MOC/DR/advanced/PQIReqs.cfm)
Guidance for PQI project development

- Link residents, junior faculty, and operations staff
  - Mentorship
  - Help individuals to fulfill requirements

- Collaborate with referring services
  - Identify issues in need of Quality Improvement → potential projects

- Utilize senior faculty (grandfathered) as advisors

- Approval process:
  - Consider requiring proposal/application to be reviewed by PQI committee
    - Scope of project, major steps
    - Time-line
    - Anticipated funding/IT support required

- Assures project:
  - Will be compliant with ABR guidelines
  - Project will receive necessary funding/support
  - Opportunity for advisement/guidance on project planning
Monitoring projects through to completion

- Consider methods to help project progress
  - Individual project updates, statement of progress
  - Frequency of updates necessary
  - Reassess timelines, necessary resources
  - Must assess outstanding projects in order to enable approval of future projects requiring IT/funding

- Examples:
  - (Semi)Annual meetings w/committee
  - Written updates
  - Running website with current projects/checklist
Documentation of project completion

- Faculty: ABR attestation and documentation within MOC profile
  - Consider departmental documentation of PQI completion
  - Consider encouraging faculty to present projects at department meetings

- Residents: documentation in resident portfolio

- Resident requirement
  - Required presentation at institutional, local or national meeting
PQI: an example

• Problem:
  - Inappropriate/incorrect exams ordered by the house-staff

• Question:
  - How can we better educate house-staff residents on ordering the correct exams for common clinical indications?
PQI in action

- Project originated from personal experience and recognition of a needed improvement in referring physician orders
- Project category as designated by the ABR: Practice guidelines and technical standards

Component Four: Practice Quality Improvement

Please note: The ABR’s published articles on PQI for diagnostic radiologists are available here.

The ABR’s Practice Quality Improvement (PQI) program addresses Part IV requirements. For diagnostic radiology, five categories of PQI projects have been defined:
- Patient safety
- Accuracy of interpretation
- Report timeliness
- Practice guidelines and technical standards
- Referring physician surveys
PQI in action

“Understanding the problem”

- 8-question survey distributed to IM, EM & Sx housestaff
- Sample questions:
  - Are you aware of ACR appropriateness criteria?
  - How independent are you when ordering exams?
  - What is your confidence level that you have ordered the correct study?
  - How often do you employ a radiologist’s help in ordering a study?
  - What types of exams/radiology subspecialties are the most difficult to order for?
  - How can radiology assist you in improving your imaging choices?
PQI in action

- 75 responses
- High percentage of house-staff favored creation of a pocket-sized manual with instruction on ordering of basic imaging studies

Creation of a pocket-sized guide for house-staff
The “Skalachi Manual”
PQI in action

• Mass production for current house-staff and incoming house-staff, given at orientation July 2011
• Re-survey house-staff Fall/Winter 2011
  • Is the manual useful? Are we changing ordering habits of the house-staff?
  • Are we addressing the need appropriately? What else can we do?
• Future ideas:
  • Automatic pop-up through Powerchart
  • i-Phone app
• Specific consideration for this project:
  • Funding for manual production
    • Sought approval from program directors of clinical specialties
    • Manual approved by SOM and CEO of the hospital → funding for manual production
Conclusion

• Institutional PQI system
  • Relevant and specific to the institutional practice
  • Major considerations:
    • Formation of PQI leaders/committee
    • Education of faculty and residents
    • Provision of guidance and resources
    • Monitoring system and documentation of completion

• Utilizing IT, personnel resources to create efficient and “user-friendly” system

• Integrate PQI into faculty trainings, routine practice, and quality programs
Thank you!

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