A Pilot Study Examining the Usefulness of a Quality Improvement (QI) Self-Assessment Tool for the Evaluation of Diagnostic Imaging Case Studies and Reports

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Objectives

A robust Quality Improvement (QI) program is an integral, and required, component for accredited health care facilities providing services in one or more imaging modalities. An accreditation application may result in a delayed grant decision when QI measures are not routinely performed or are missing from a facility’s QI program. In this survey, the Intersocietal Accreditation Commission (IAC) asked representatives from participating pilot facilities to evaluate the usefulness of an online QI self-assessment tool as it applied to the evaluation of their diagnostic imaging case studies and interpretive reports. The aims of this survey were:

1. to evaluate the usefulness of the QI self-assessment tool, in the review of diagnostic imaging studies and the final interpretative reports;
2. to determine the level of staff satisfaction with the QI self-assessment process;
3. to determine if facilities thought that completing the QI self-assessment process was worthwhile;
4. to determine if facilities thought that completing the QI self-assessment process encouraged staff to think critically about their work; and
5. to determine if facilities thought that completing the QI self-assessment process improved the quality of their work.

Methods

The Intersocietal Accreditation Commission (IAC) contracted the services of an independent survey researcher to develop, administer and report on surveys analyzing the pilot process of the IAC QI Self-Assessment Tool. The surveys were designed to learn how facilities perceived the QI Self-Assessment process and evaluated three QI process components:

- Phase 1: Facility Entry of Case Study Data
- Phase 2: Facility Completes Review of Randomly Selected Cases
- Phase 3: Facility Receives and Reviews IAC Feedback on the QI Self-Assessment

One survey was administered after Phase 1 and a second survey was administered after Phases 2 and 3. The surveys were made available to facilities following their completion of the QI Self-Assessment process via a web-based survey software. Average percent agreement for each item was calculated from responses received.

Respondents were categorized based on their staff type (Medical Director, Technical Director, medical staff, technical staff, IT specialist and consultant), facility type (hospital, imaging center, mobile only and physician practice), imaging modality (computed tomography, echocardiography, magnetic resonance imaging, nuclear medicine, positron emission tomography and vascular ultrasound) and accreditation cycle (first, second, third, etc.).

Results

Of the 23 facilities participating in the pilot, 16 facilities (69.6%) responded to the first survey and 10 facilities (43.5%) responded to the second survey.

As seen in Table 1 (below), all respondents agreed that the facility staff were satisfied with the QI self-assessment process; 100% agreed that completing the QI self-assessment process was worthwhile and encouraged staff to think critically about their work; and 93.8% agreed that by completing the QI self-assessment process, the quality of their work will improve.

### Table 1. QI Self-Assessment Tool Survey Responses

<table>
<thead>
<tr>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, our staff were satisfied with the quality improvement self-assessment process.</td>
<td>100.0%</td>
</tr>
<tr>
<td>Completing the quality improvement self-assessment process was worthwhile.</td>
<td>100.0%</td>
</tr>
<tr>
<td>Completing the quality improvement self-assessment process encouraged staff to think critically about our work.</td>
<td>93.8%</td>
</tr>
<tr>
<td>Completing the quality improvement self-assessment process will improve the quality of our work.</td>
<td>93.8%</td>
</tr>
</tbody>
</table>

Conclusion

This survey presents anticipated results: Independent of staff or facility type, diagnostic imaging modality or accreditation cycle, facilities found that the ability to review case studies and reports through the use of a directed online QI self-assessment tool was useful, encouraged critical thinking and improved work quality.