LESSONS FROM ACCREDITATION ACTION PLANS:
Common Areas for Quality Improvement in the Cardiac Cath Lab

What are common areas for process and quality improvement in cardiac cath labs, and what strategies are most commonly used by healthcare institutions seeking accreditation to achieve quality improvement goals?

**Background**
- Accreditation for Cardiovascular Excellence (ACE, founded in 2005) has accredited over 60 organizations, reviewing 4186 cardiac catheterization cases. Many quantitative studies have been undertaken confirming the value of accreditation.
- Accreditation reviews frequently highlight areas where organizations fail to meet accreditation standards necessary for accreditation.
- When an organization fails to meet accreditation standards, they must submit a ‘Corrective Action Plan’ for review and follow-up, which becomes the basis for ongoing processes for improvement with ACE assistance.
- Of the ~60 organizations ACE has accredited, 14 failed to initially meet standards for ACE’s Cath PCI Accreditation.

**Methods**
- Cath/PCI accreditation standards that were not met or only partially met were assessed for the 19 institutions that initially did not achieve accreditation.
- Relevant accreditation standards were quantified and separated into 9 distinct categories.
- Areas where institutions ‘did not meet’ standards were then isolated from areas where they ‘partially met’ or did not meet’ standards.
- Qualitative review was conducted across corrective action plans submitted by all 42 institutions initially not achieving accreditation.
- Common strategies for improvement were highlighted.

**Results**
- There were 557 instances where standards were not met. (Figure 1 shows these broken into categories within in publicly available ACE Cath PCI Accreditation.)

**Discussion**
- Widespread shortcomings indicate randomized and peer-driven quality assurance review could improve processes.
- Facilities could improve quality through greater adherence to evidence-based guidelines.
- Reduced variability correlates quality improvement, suggesting shortcomings in structured reporting may lead to poor patient outcomes and failure to meet ACE standards (Figure 2).
- Operator improvements may simply require stronger communication including rationales for maintenance of standards.

**Conclusion**
- Organizations seeking to improve card areas for improvement, including structuring and documenting reporting.
- Corrective action plans focused on increasing quality confidence to discuss hospital results against outcome/registry benchmarks were noted as one strategy for meeting Outcomes and Quality Assurance Standards.
- Case meetings providing physicians with a scorecard regarding specific topic areas (e.g., Appropriately Use Criteria; ACC-NCDR Cath PCI Registry); data radiation use, etc) were used to give physicians a more accurate understanding of their performance.
- Meetings of multidisciplinary care teams outlined quality improvement initiatives and met at scheduled times to ACE standards.
- Quality improvement relies heavily on comprehensive and standardized documentation, resulting in improved communication.
- Improvements in structured reporting are crucial to facilitate quality improvements.
- Methods to improve documentation include the implementation of hard stops in EHR systems.
- Education of team members regarding policies and procedures improved form reviews and reinforced rationales for processes. It was especially important for radiation safety matters and contrast induced nephropathy protocols.

**References**

**Affiliations & Disclosures**
- Bonnie H. Weiner, MD, FACC, FSCAI, Accreditation for Cardiovascular Excellence. Structural Reporting in Improve Quality
- Laura B. Weimer, FACC, FSCAI, Accreditation for Cardiovascular Excellence. Structural Reporting in Improve Quality

**Appendix**
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**Figure 1: All Instances of Shortcomings** on ACE Accreditation Standards (by category)

**Figure 2: Locations Where Facilities Did Not Meet ACE Accreditation Standards** (by category)

**Table 1: ACE Accreditation Standards with the Most Observed Shortcomings Across Reviews**

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