**PCI AND TAVR PERFORMANCE MEASURES: ONSITE VERSUS OFFSITE MONITORING**

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Objective: To compare Off-site versus On-Site Monitoring of PCI and TVT Risk Registry Data Background: With over 48,000 PCIs and 500 TAVRs performed in California each year, California Registry Data offers a window to compare quality and performance Registry Data from both Onsite and Offsite audit monitoring.

Methods: 1805 PCI and 10 TAVR procedures were reviewed by both Offsite (Registry Fields) and Onsite (hospital, imaging, and intervention recording) audits. The Registries contained 240 PCI fields (NCDR: PCI/Cath v4.4+) and 350 TAVR fields (STS/ACC TVT v1.0). The audit affected changes in data fields were recorded as mis-codes.

The audit changes that altered the multivariate risk adjustment model were recorded as mis-risks.

Results: Offsite PCI Audits revealed low rates for mis-coding (0.7/pt), and mis-risk (0.05 /pt) adjustments. Onsite PCI Audits revealed higher rates for mis-coding (4.5/pt), and mis-risk (0.7 /pt) adjustments. Typical PCI mis-risk adjustments included TIMI flow, lesion complexity, and %stenosis adjustments. Both PCI and TAVR Onsite Audits revealed additional significant variations in stent position, expansion, and inflow and outflow shape that may affect Target Vessel Revascularization rates and future replacements that are not recorded in current Registry data.

Conclusions: Onsite Monitoring detects more mis-coding (OR 6.4) and risk adjustment (OR 14) changes compared to Offsite Monitoring of Registry Data for PCI. Further Onsite analysis of stent deployment, expansion, inflow, and outflow provides additional performance data not available in Registry data. Onsite auditing of data entry, medical records, and imaging improves coding and the accuracy of risk adjusted performance for these cardiac interventions.