Monitoring and Improving the Appropriateness of PCI

Scope of the Problem: Evidence based medicine mandates constant examination of the appropriateness of care. The ACC/AHA/SCAI have published PCI guidelines and will soon be publishing revascularization guidelines. Geographic variation in the utilization of PCI raises questions about procedural appropriateness and may lead to payers requesting documentation of appropriateness as a condition of payment.

Goal: To measure and report on the appropriateness of PCI, improving data collection where needed. To improve the concordance between guidelines and our clinical practice. To participate in the national discussion on defining, measuring, and improving appropriateness.

Strategies:

1. Pilot project on measuring appropriateness in the routine process of care.
2. Use the data in the PCI Registry to develop an algorithm to assess appropriateness based on the PCI guidelines.
3. Improve the data collection to enhance the ability to assess appropriateness.
4. Work with professional organizations and payers to make guidelines and coverage decisions "living documents" that provide guidance for measuring appropriateness in the routine process of care.

Activities:

1. At CMC and MMC operators were asked, while in the catheterization lab but prior to obtaining vascular access, to specify the indication for the procedure and the evidence supporting its appropriateness, and their answers recorded. Of 1179 consecutive patients, 25 (3.0%) were of questionable appropriateness, most because relevant information was not readily available. CMC continues to collect this data.
2. We evaluated 16,670 consecutive patients undergoing PCI in 2005-2006 at 10 hospitals contributing data to our regional PCI registry. As per the guidelines, we categorized patients into 5 groups (asymptomatic/CCS I-II angina, CCS III angina, UA/NSTEMI, STEMI, patients with prior CABG) and classified procedural appropriateness based on clinical and angiographic data. We were able to assign 16,350 patients (98.1%) to a clinical subgroup and within subgroups, to classify 98.9% of procedures. Class I procedures totaled 38.1%; Class IIa 56.0%; Class IIb 0.7%; Class III 4.1%; unclassifiable 1.1%. Of the 664 Class III procedures, 64.6% were asymptomatic/CCS I-II angina, 32.5% UA/NSTEMI, and 2.9% CCS III angina.
3. We have worked with the NCDR on Version 4 of the Cath/PCI form to insure that additional data will be collected that facilitates assessment of appropriateness.

Progress:

1. A PCI Appropriateness Report will now be included in the standard PCI Report.
2. We are changing our data collection instrument (adopting the NCDR Cath/PCI instrument) to include additional data elements that will facilitate the assessment of appropriateness.
3. A process of Really Informed Consent is being piloted to more reproducibly inform patients of the indications for the procedure, its risk, and the option for alternative treatment