



CLINICAL OUTCOMES IN PATIENTS FOR WHOM PRE-CERTIFICATION FOR MYOCARDIAL STRESS PERFUSION IMAGING WAS NOT OBTAINED USING ALGORITHMS BASED ON ACC/AHA/ASNC GUIDELINES AND APPROPRIATENESS CRITERIA

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INTRODUCTION

Rapid growth in outpatient radionuclide stress testing (MPI) volume has raised concerns regarding radiation exposure, cost and self-referral in increasing utilization. CareCore Cardiology recently showed that guideline-driven pre-certification for MPI results in lower approval rates (-24.8%) and a drop in requests. To identify correlates of approval rates, CareCore Cardiology examined their relationship to physician specialty, self-referral, patient age, gender and insurance type.

BACKGROUND

Pre-certification algorithms for outpatient myocardial stress perfusion imaging (sMPI) can limit utilization, but little data exists on outcomes in patients for whom sMPI is not approved using a pre-certification process.

METHODS

Algorithms for pre-certification of sMPI based on ACC/AHA/ASNC practice guidelines and appropriateness criteria were developed by CareCore Cardiology and applied in a population of 829,360 covered lives beginning 2/06. For patients whose MPI pre-certifications were not approved from 2/3/06 to 5/30/06, we reviewed all services provided to 9/01/06 using ICD9 and CPT codes to identify cardiac events, including acute myocardial infarction, revascularization, resuscitation from sudden death and coronary angiography. The Social Security Death Index and New York State Bureau of Vital Statistics records were also searched for deaths.

RESULTS

There were 9311 requests for sMPI of which 2056 (22.1%) were initially unapprovable. Appeals were made in 120 (5.8%) and of these 77 (64%) were then approved for sMPI. Thus 1979 patients were “at risk” and comprise the study group. Mean follow-up was 155.7 ± 34.0 days during which there were no deaths, acute myocardial infarctions or cardiac resuscitations. In 20 patients (1.0%) coronary angiography was subsequently performed and 6 of these (0.3% of the study group), underwent revascularization (4 PCI, 2 CABG). Angiography and revascularization occurred without intercurrent services or any appeal of the initial sMPI pre-certification disapproval in each within 1 week of initial denial in 3 patients and 21, 25 and 82 days after initial disapproval in the remainder. Thus no patient unapproved for sMPI had an adverse event and only 0.3% had subsequent revascularization.

CONCLUSIONS

Use of ACC/AHA/ASNC-based pre-certification algorithms reduced SMPI utilization, avoided unnecessary radiation exposure and resulted in a substantial reduction in healthcare costs without any major adverse cardiac events in this population.

ABOUT CARECORE CARDIOLOGY

Founded in 2006, CareCore Cardiology enables health plans to interface with physicians and patients to determine the optimal cardiologic procedure at the most appropriate time. Using clinical pathways devised of evidence-based guidelines, CareCore Cardiology makes appropriateness decisions concerning cardiac procedures to reduce unnecessary patient radiation exposure and duplication of services, resulting in reduced cost and streamlined patient care.

***REFERENCE**

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