Are Weight Bearing CT Systems Cost Effective for Ortho Practices?

Cost Analysis and Utilization of Weight Bearing CT at a Tertiary Referral Foot and Ankle Practice

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BACKGROUND:
- WBCT is an imaging modality that is gaining popularity for a variety of foot and ankle pathologies.
- Has demonstrated value in accurately evaluating 3D relationships of osseous structures under physiologic load.
- Based on Cone-Beam CT protocol.
- To date, no US-based study has evaluated financial implications of acquiring such a device.

RESULTS:
- 34.6 scans per month
- $8377 average gross income based on payor mix
- $5657.10 average gross income based on Medicare reimbursement
- 25 Months to pay off device using payor mix at study institution
- 37 Months to pay off device using Medicare-only reimbursement
- 1704 Patients
- 920 Male
- 784 Female
- 44 (6-92) Age

Payor
- Medicare: 34.6% $143.60
- Medicaid: 14.2% $93.74
- Private: 51.2% $294.30
- WC: 0.1% $294.30
- Self Pay: 0.2% $294.30

Average reimbursement: $242.11

CONCLUSIONS:
- WBCT can be financially viable in large multidisciplinary group.
- Payor mix and reimbursement agreement with private insurers affect cost effectiveness.
- Future focus of study is to include use of WBCT for templating, assessment of fusion/healing, development of standardized scheme for evaluating 3D relationships between osseous structures of foot and ankle with and without physiologic load.

- 5 Fellowship-trained foot and ankle surgeons ordered 79.7% of WBCT.
- Foot and ankle staff ordered 65.3% of bilateral WBCT.
- Average of 26 scans per month.
- Most imaged anatomic region - ankle.
- Most common reason for imaging - traumatic injury.