The use of advanced imaging for staging of low risk prostate cancer patients

**BACKGROUND**

Many research studies have shown that ordering PET, CT, MRI, or bone scans for men with low-risk prostate cancer provides no benefit. Prostate cancers are considered low risk when Gleason scores and PSA level results fall below specific thresholds, indicating it is highly unlikely that the cancer has spread to other organs.

Unnecessary imaging can lead to patient harm when they lead to unnecessary invasive procedures, overtreatment, misdiagnosis, and increased cost. The 2012 ABIM/ASCO Choosing Wisely recommendation #2 identifies prostate cancer staging as an opportunity to improve care.

**POPULATION**

N = 1391

Inclusion criteria:
- Local stage prostate cancer diagnosis
- Diagnosis January 1, 2007 to May 31, 2014
- Enrolled +/- 2 months of diagnosis
- First primary tumor
- <= T1c/T1a or T2NOS

Exclusion criteria:
- Known high risk patients (Gleason>6 or PSA>10)

**DEFINITIONS**

- Advanced imaging: PET, CT, or radionuclide bone scans
- Time period: 2 months prior to diagnosis through 2 months following diagnosis

**RESULTS**

Clinic variation in use of advanced imaging for staging of low risk prostate cancer patients ranges from no use at all to use in 100% of patients.

**UTILIZATION BY CLINIC**

Clinic volume
- High
- Medium
- Low

Regional average: 24%

**UTILIZATION BY IMAGING TYPE**

There was very little PET used during the staging of prostate cancer, however both CT and radionuclide bone scans were used in 15% or more of patients.

**UTILIZATION BY AGE**

There is very little variation in imaging across age, with a slight increase in the over 60 population.