Disclosure Statement
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Consultant:
Lantheus Medical Imaging
Astellas Pharm US
Stealth Peptides

Off-label uses: none
Inappropriate PCI (2009 AUC)
144,737 Non-Acute PCIs (7/1/09 – 9/30/10)

Hospital rate of inappropriate PCI procedures (%)

Chan, JAMA 306:53, 2011
Inappropriate heart procedures are expensive and risky. And studies show thousands happen every year.
Summary of Study
5.5 Years (7/1/09-12/31/14)

- Acute PCI unchanged
- Non-acute PCI ↓ by 34%
- Non-mappable PCI ↓ by 68%
- Angina, meds, and high-risk features all ↑ by > 50%
- Multi-vessel disease ↑ minimally (9%)
- Rate of inappropriate studies ↓ from 26% to 13%
- The hospital rate of inappropriate studies remained highly variable – median 12.6 [5.9/22.9]
Explanation #1--Better Documentation

• Non-mappable PCI (due to missing data) ↓ by 68%
  2009  14%
  2014  5%

• ↑ in multiple anti-anginals from 19% to 35%
  likely reflects better documentation
Explanation #2--Up-Coding/Gaming

- Angina, meds, and high-risk features all $\uparrow$ by $> 50$
- Multi-vessel disease $\uparrow$ minimally (9%)

- Up-coding detected in prior study of SPECT AUC (Hendel et al)

  clinicians entered 32% of pts as low-risk

  source documents - 66% of pts were low-risk
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Explanation #3--Quality Improvement

• 2010 audit of original source documents (JACC 2012) – 93% accuracy for selected data elements (“most important in recording and risk-adjusting outcomes”)

• Non-acute PCI 2010 89,704
   2014 59,375

• Rate of inappropriate studies ↓ by 51%
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Room for Improvement

- 21% of the non-acute pts are asymptomatic
- 49% of the non-acute pts have no stress tests, unavailable stress tests or low-risk stress tests
- Wide spectrum of hospital rates of inappropriate studies
- 2012 AUC increased the rate of inappropriate PCI

2009-10 (2009 AUC--Chan)  12%
2009-10 (2012 AUC--Desai) 25%
2014 (2012 AUC--Desai) 13%
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Future Directions

- ↑ dissemination and support of registries
- More rapid feedback to hospitals and interventionalists
- Public disclosure
- Further updates of AUC for revascularization
- Extension of CathPCI audit process to AUC elements
- Additional high-quality research studies like this one