**DECREASED DUPLICATE TESTING WITH ELECTRONIC MEDICAL RECORDS. A STUDY OF 7,400 NUCLEAR MEDICINE STRESS TESTS**

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*Objective*: Duplicate testing increases health care costs and exposes patients to unnecessary harms of testing. The electronic medical record (EMR) has been widely accepted and utilized to reduce duplicate testing. Nevertheless, there are institutions that have reported an increase in repeat testing. This has been attributed to the ease of ordering and usage of electronic order sets. We sought to evaluate the difference in the number of duplicate nuclear medicine stress tests (NST) before and after the implementation of an EMR at our urban medical center.

*Methods*: This is a single center retrospective analysis of all NST’s performed at our institution in the period of 1 year prior to, and 1 and 2 years after the implementation of EMR. The NST’s were reviewed to assess the number of patients who underwent duplicate testing within 6 and 12 months of the index NST (Table 1).

*Results*:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | July 2011 – June 2012  (Pre-EMR) | July 2013 – June 2014  (EMR year 1) | July 2014 – June 2015  (EMR year 2) | P Value  (for comparison of pre-EMR to both 1 and 2 years post-EMR) |
| Number of NST | 2876 | 2467 | 2103 |  |
| Repeat NST 6 months of unique NST | 46  (1.6%) | 25  (1.2%) | 20  (0.9%) | *p* < 0.001 |
| Change in duplicate testing at 6 months from 2012 |  | -45.6% | -56.5% |  |
| Repeat NST 12 months of unique NST | 148  (5.2%) | 76  (3.1%) | 72  (3.5%) | *p* < 0.001 |
| Change in duplicate testing at 12 months from 2012 |  | -40.6% | -51.4% |  |

Table 1

*Conclusion*: After the implementation of EMR, there was a significant reduction in duplicate testing of NST’s. These results were significant at both 1 and 2 years after implementing EMR. We hypothesize that electronic notifications and ease of accessibility to previous results attributed to this decrease. We found no significant difference between duplicate testing at years 1 and 2 post-EMR.