

A Quality Verification Tool to Assure Complete Pre-Treatment Electronic Medical Records (EMR) for Patients Undergoing Radiation Therapy

Tim Barnes, B. S.(R)(T), Eleanor Harris, M.D., Hyder Arastu, M.D., Clinton Leinweber, D.O., Andrew Ju, M.D., James Naves, C.M.D., Michael Holloman, R.T. (R)(T)

Tim Barnes, RTT(R)(T)B.S., Manager
Vidant Radiation Oncology
Leo Jenkins Cancer Center at East Carolina University
Greenville, North Carolina 27858
252.551.6314
Timothy.barnes@vidanthealth.com

BACKGROUND

Complete medical records are a central quality component for patients undergoing radiation therapy. These records are required for each part of the evaluation and planning processes; and are critical for correct implementation of the intended care plan. Sentinel items include pathological reports, tumor staging, complete history and physical, pre-treatment performance and pain assessment, documented informed consent, and written directive/plan of care. Moreover, complete and timely medical records are a key component in evaluations for accreditation by the American College of Radiology (ACR). The radiation oncology community has historically used various methods to review "hard copy" medical records for completeness, most often thru weekly chart rounds.

PROJECT AIM

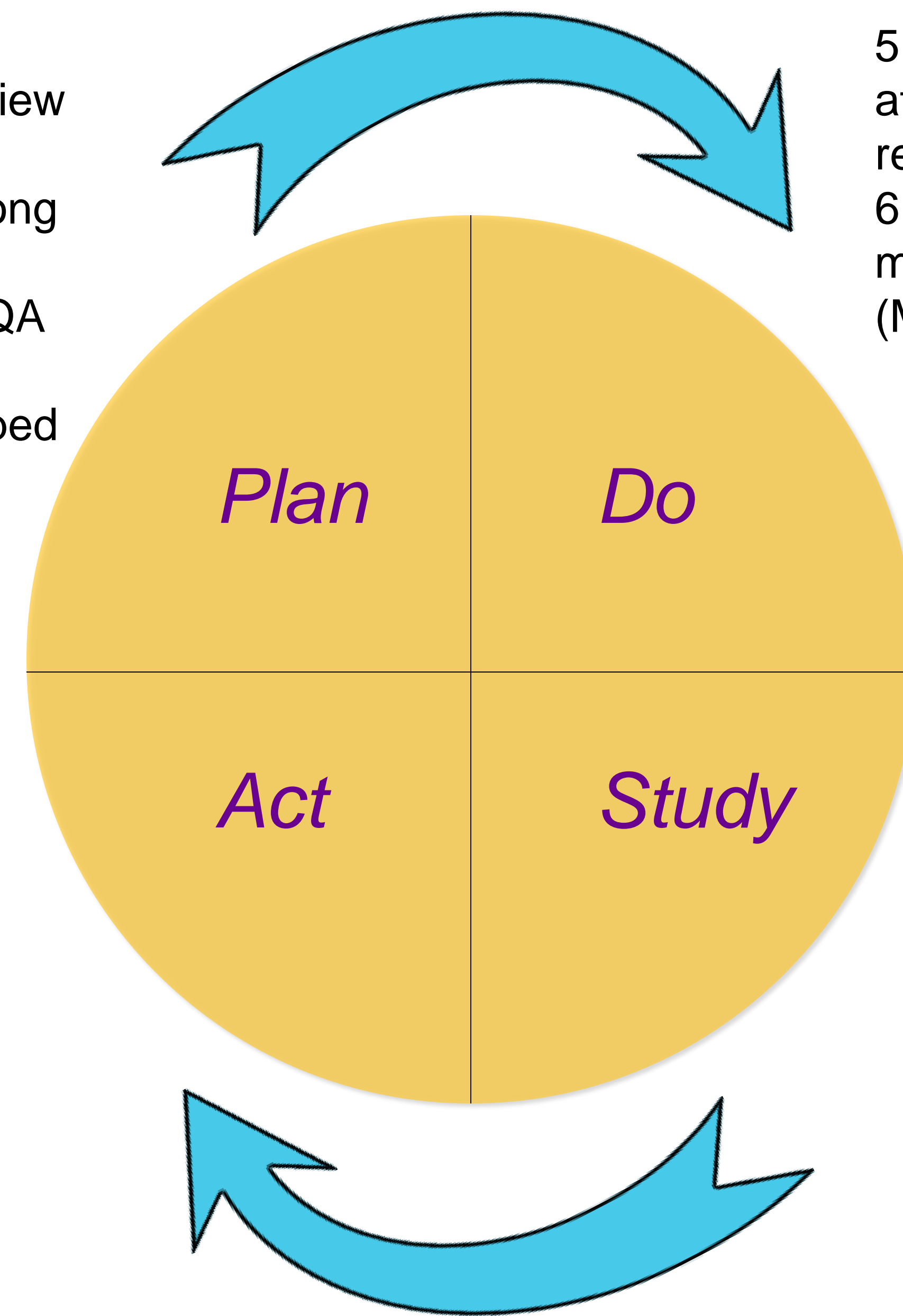
The advent of electronic medical records and expanded use of technology have necessitated a more timely and robust methodology to assure medical record completeness and quality. This is particularly true since the technical portions of radiation oncology practice require unique EMR systems (LANTIS/ARIA) that are often used in addition to other institutional systems (EPIC). The complete patient record is the aggregate of all systems.

PROJECT DESIGN/STRATEGY

Using ACR and other professional guidelines, the Department of Radiation Oncology developed a comprehensive list of sentinel items that compose a complete pre-treatment radiation oncology medical record. This list was developed into an electronic spreadsheet and is recorded for each patient and his/her attending radiation oncologist. This tool is completed at the pre-treatment peer-review presentation and recorded for completeness and deficiencies. Any deficiencies are noted for resolution and tracked as a continuous quality improvement (CQI) activity to identify deficit root cause, interventions, and effectiveness of action(s). CQI reports are supplied to the department's quality committee and chair.

CHANGES MADE (PDSA CYCLES)

1. Deficits noted in pre-accreditation chart review (February 2015)
2. Forty-four defects among 280 variables (16%)
3. Project nominated to QA committee
4. Collection tool developed



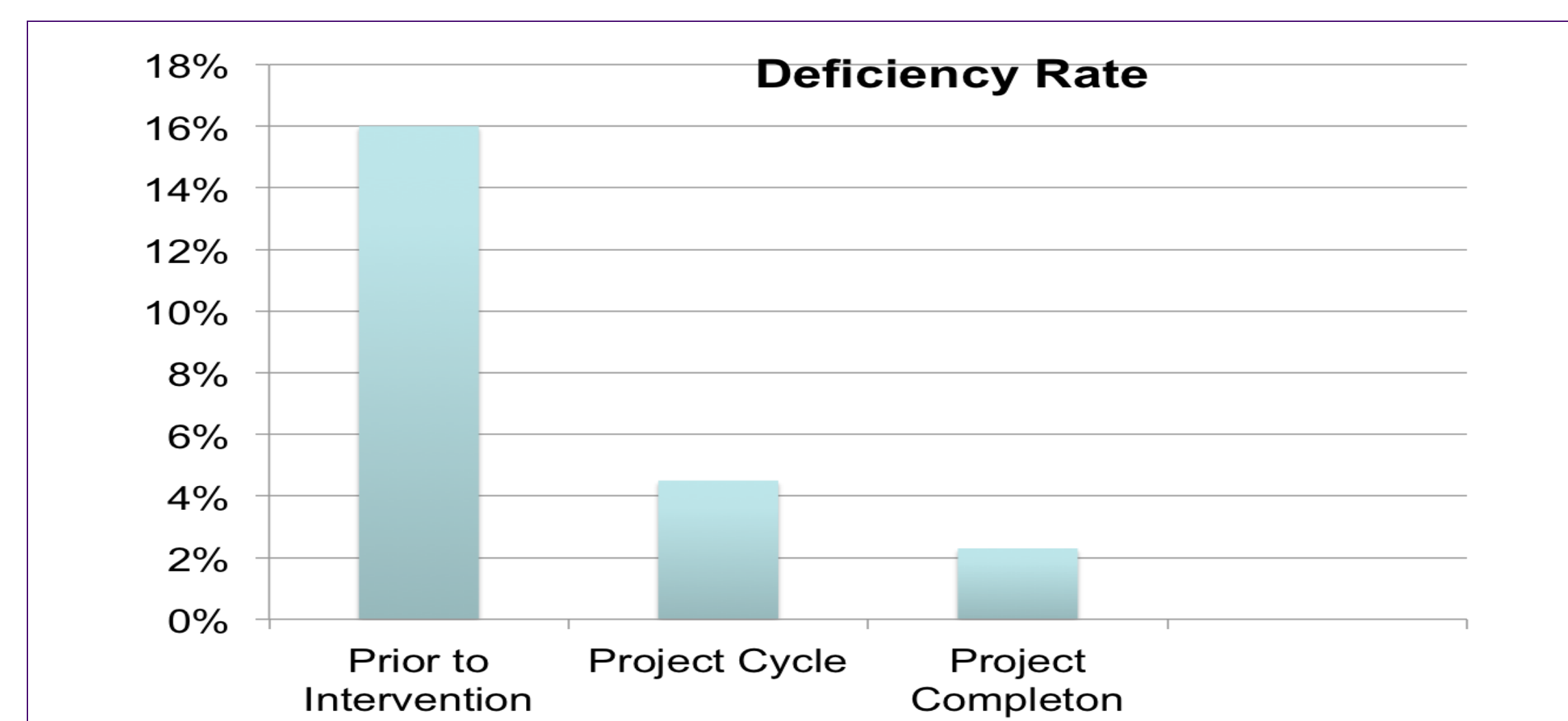
5. Intervention introduced at pre-treatment peer review
6. Data reported at monthly QA committee (March-November 2015)

9. Continue monitoring and reporting to QA committee.
10. Nominate another project

7. Post intervention data revealed 105 defects among 2,338 variables (4.5%)
8. Final variance 2.3% (November 2015)

RESULTS/OUTCOMES

Accumulative data showed the number and percentage of variances (deficiencies) from standard practice as recorded at the time of initial peer review case presentation. Generally, the data showed improvement in completeness of the pre-treatment EMR by physician for the period February, 2015- November 2015. Initial review revealed 44 deficiencies out of 280 variables (16%). The subsequent period from March-November 2015 showed 105 variances out of 2,338 cumulative variables (4.5%). The variance rate was recorded and reported each month, with a final variance rate of 2.3% recorded in November, 2015.



LESSONS LEARNED

Ongoing monitoring is an important strategy to assure complete pre-treatment medical records. The reasons for deficits are multi-factorial. Physician compliance and data availability, particularly for patients referred from outside facilities, were especially notable, but resolution strategies have improved the system's performance. These lessons will be part of the implementation plan for new EMRs over the upcoming months.

NEXT STEPS

These data are reported for improvement at the monthly department quality committee meeting. Major deficits are ameliorated before the first patient treatment to avoid possibility for deviations from the intended plan of care. Data will be compared annually to prior years for the physician group, current and new physicians.

ACKNOWLEDGEMENTS

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