Background

- The Puerto Rico Central Cancer Registry (PRCCR) annually performs different audits including case finding and re-abstracting in a group of hospitals. These audits are part of the PRCCR quality assurance program, in compliance with the National Program of Cancer Registries (NPCR) Standards.

- The main goal of these audits is to detect potential inconsistencies when abstracting cases and to evaluate the case-finding methods to avoid under-reporting of cases. In the case-finding audit, the auditor evaluates the current procedure in place to detect missed cases, using different sources of information including: disease index, radiation oncology, surgery log, pathology reports, among others.

- For re-abstracting cases, the auditor examines the medical records and prepares an abridged abstract using rules in compliance with standard setter organizations. The abstract prepared by auditor is compared against the original abstract produced by registrar’s hospital, and discrepancies are evaluated to calculate an agreement score.

- Analysis, evaluation, scoring, and writing of audit results is time consuming and requires feedback from the audited institution.

- The final audit results must be presented to the audited institution along with its performance evaluation and recommendations of the corrective actions to be considered in the future.

Aims

- To develop an automated audit tool (AT) that provides a complete and detailed evaluation for re-abstracted cases.

- To produce a dashboard with several panels with tables and charts, showing, dynamically, the audit results. The dashboard includes overall score and specific scores by the primary site on each audited field.

- To produce an abridged abstract using rules in compliance with standard setter organizations. The abstract prepared by auditor is compared against the original abstract produced by registrar’s hospital, and discrepancies are evaluated to calculate an agreement score.

Methods

A Re-abstracting audit consists of the following steps:

1. Select random sample
2. Send patient list to reporting facility
3. Auditor asks for medical record
4. Reabstracted cases
5. Import NAACCR file
6. Evaluation by round
7. Justify discrepancies
8. Confirm errors
9. Prepare final evaluation
10. Prepare dashboard
11. Final evaluation
12. Present final audit results

The AT produces a random selection of cases to be audited, searching cases reported by the institution with a diagnostic date in the year to be audited. The sample size is established by users depending on case load.

- The AT can be configured to include different NAACCR fields and weight of each field in the evaluation score.

- The AT has been used successfully in 5 audits conducted in 2019, reducing drastically the time required to conduct the audit.

- The AT performs a complete analysis of audits.

- The AT provides information to prepare an audit report, highlighting common errors and showing opportunities to improve the quality of data.

- The AT is an automated tool that reduces the risk of human error.

- Future plans include updates of AT and AbstractPlus when new NAACCR versions are released.

- Some updates must be done when PRCCR wants to add a field to be audited or when field weights need to be changed.

Results

- The AT produces a random selection of cases to be audited, searching cases reported by the institution with a diagnostic date in the year to be audited. The sample size is established by users depending on case load.

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Conclusion and Future Plans

- The AT performs a complete analysis of audits.

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Disclaimer

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