



# Identifying an Indicator of Clinical Suspicion of Elder Abuse in VA Electronic Medical Records



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## Background

- Health care visits are critical opportunities to identify elder abuse (EA) and initiate intervention
- EA interventions in healthcare settings are usually based on suspicion rather than confirmed or “diagnosed” EA
- Information about such clinical suspicion rarely exists in the electronic medical record (EMR) in a standardized fashion
- Limits population-level EA research in healthcare settings

## Objective

To identify an optimal indicator of clinical suspicion of EA within the EMR of the Veterans Health Administration (VA), a large, national healthcare system.

## Approach

**Design:** Cohort selection cross-sectional study

### Candidate Administrative markers (AMs):

- 1) Positive screen for abuse/neglect indicator;
- 2) Social work consultation for “abuse/neglect” indicator;
- 3) Positive screen or EA social work consultation indicator.

### Two-part Reference Standard (RS):

- 1) Natural language processing (NLP) program that searches for EA-specific language in progress notes;
- 2) Manual review of relevant text excerpts for those cases in which the indicator and NLP are discordant.

**Data Source:** VA medical records data

**Sample:** Random cohort of 10,000 VA patients age ≥60 with at least one primary care visit in 2019 will be selected from VA sites (N=8) where all 3 candidate AMs are observed (cohort selection)

## Summary

**An informatics approach leveraging unique electronic medical record data may help identify patients with clinical suspicion for elder abuse and facilitate future population-level research**

## Approach

**Evaluation (Figure):** The RS and each AM will be extracted for the cohort in a single year (cross-sectional), 2019. For each AM, every patient will receive an RS status (RS+/RS-) and an AM status (AM+/AM-)

**Analysis:** Positive predictive value, negative predictive value, sensitivity and specificity for clinical suspicion of EA will be calculated for each AM. PPV will be prioritized.

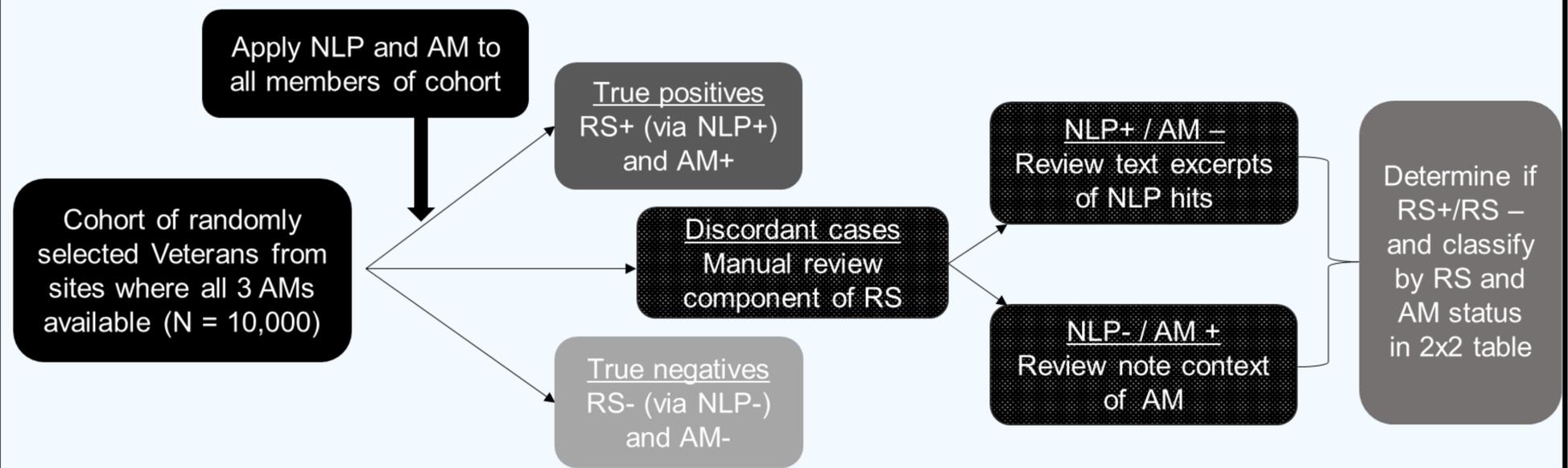
## Strengths and Limitations

- Strengths: unique administrative data elements in VA, large population level health system data, novel use of NLP
- Limitations: inconsistent use of data indicators across VA sites, unclear how data indicators applied by providers, uncertainty of how good of an AM is “good enough” for future research

## Future Directions and Implications

- We will use the highest performing indicator to create a national cohort of patients with clinically suspected EA for use in future research to improve understanding of EA detection and intervention in healthcare settings.
- We plan to use this cohort to develop a novel tool that indicates level of concern for possible EA to aid in clinician decision-making around EA assessment and intervention/prevention strategies.
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**Figure: Study design to select best performing EA outcome marker for clinical EA suspicion**



AM = administrative marker; NLP = natural language processing; RS = reference standard; EA = elder abuse

