Improved HIV markers and decreased emergency room usage and hospital admission with initiation of a pilot specialty pharmacy at a southeastern Ryan–White–funded clinic over a three year period

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1335. HIV Risk Assessment using Longitudinal Electronic Health Records
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Methods. 181 individuals who received care at an academic medical center in New York City prior to a confirmatory HIV diagnosis were included in the study cohort. 543 HIV contacts with similar utilization patterns were selected using propensity score matching. Demographics, laboratory tests, and diagnosis codes were extracted from longitudinal records. Clinical notes were preprocessed using both topic modeling and a n-grams approach. We fit 3 predictive models using Random Forests including a baseline model which included only structured EHR data, the baseline model plus topic modeling, and baseline model plus clinical keywords.

Results. Predictive models demonstrated a range of performance with F-measures of 0.59 for the baseline model, 0.63 for the baseline plus topic modeling and 0.74 for the baseline plus clinical keyword model. The baseline plus topic model displayed low precision but high recall while the baseline plus clinical keyword model displayed high precision but low recall. Clinical keywords including 'smok', 'unprotected', 'hiv', and 'methamphetamine' were indicative of elevated risk.

Conclusion. Clinical notes improved the performance of predictive models for automating risk assessment.

Disclosures. All authors: No reported disclosures.

1334. Linkage to HIV Outpatient Care Following an Inpatient Stay
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Background. Immediate linkage to outpatient HIV follow-up care after hospitalization is a crucial opportunity to review treatment plan and coordinate necessary and additional services. The purpose of this review is to evaluate potential gaps in transition from inpatient to outpatient care services in persons with HIV. Data from multiple electronic medical records and billing systems were used to assess the rate of follow-up care at HIV outpatient facilities within the Mount Sinai Health System (MSHS), among patients hospitalized in four of the largest hospitals within MSHS.

Methods. ICD-10 codes were utilized to capture all hospitalized patients in 2016 with a primary or secondary diagnosis of HIV and their discharge date, across various electronic medical systems used by MSHS hospitals. Additional visit data was pulled from the EMR used by the five HIV outpatient facilities in order to determine the linkage to care rate. Linkage to HIV care was defined as the proportion of patients who attended an appointment at one of five HIV outpatient clinics within 30 days of discharge.

Results. A total of 3,992 inpatient discharges were associated with the diagnosis of HIV at the Mount Sinai Health System in 2016. Among these, 2,760 (69%) were male and 1,970 (49%) were African Americans while 56% were in the range of 50–69 years. The average length of stay was 6.6 days (SE=0.6). Out of these discharges, 1,020 (25%) were discharged with HIV as the primary reason for hospital admission with initiation of a pilot specialty pharmacy at a southeastern Ryan – Waite funded clinic.

Conclusion. The data shows a smaller proportion of the inpatient discharges is linked to care within the system in addition to low appointment compliance rate. Further efforts to optimize early linkage to care and retention may help to affect patient outcomes. Interventions focusing on chronic disease management may assist to further improve these rates. At the systems level, enhanced and increased discharge planning and coordination is required between inpatient units and outpatient clinics in addition to 37% (37%) failure by outpatient clinic immediately upon discharge.

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