PRACTICE BASED TEMPLATE

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MISSING FROM THE RECORD: A BASELINE AUDIT OF SCREENING DATA AVAILABILITY FOR WOMEN LIVING WITH HIV

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Background/Purpose:

Women living with HIV (WLWH) have increased risk of multiple comorbidities, including breast and cervical cancer, osteoporosis, bone fractures and cardiovascular disease (CVD). Despite screening recommendations for WLWH, many women have missing or out of date screening in their hospital medical records.

Approach:

An audit of screening data noted in clinical notes was conducted for WLWH (focused on assigned female at birth). Rule-based text search with manual review for categorisation was used to extract sentences containing key phrases for 4 tests and assessed for screening and date of last screen. The tests and key terms used were fracture risk (“FRAX”), breast screening (“mammogram”, “breast”), cervical cancer screening (“CST”, “cervical screen”, “LBC”, “liquid based, “pap”, “HPV Screen”, “liquid based”) and CVD risk (“CVD”, “Framingham”, “cardiovascular risk”). Records with unclear or non-estimable dates were excluded.

Outcomes/Impact:

There were 145 women reviewed, with a median age 49 years (IQR 42-56). 31 (21%) had a CST test documented in the last 3 years. Of the 114 women over 40 years old, 7 (6%) had a FRAX and 24 (21%) had a CVD risk estimate documented in the last year. Of the 72 women over 50, 18 (25%) had documentation of a mammogram in the last 2 years. The collection of this data took around 6 hours to generate using NLP (Natural Language Processing) and sentence review. Screening rates among WLWH are suboptimal and likely obscured by incomplete documentation.

Innovation and Significance:

Clinical audit is resource-intensive, but rule-based text search can accelerate the process and contribute to a training bank for NLP and machine learning automation. The labelled dataset generated through this audit represents the first step toward an automated NLP model. The next step is to incorporate this data into a Women's Health Dashboard to support clinicians in addressing this gap in care.

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