



# Development of an HIV dashboard to identify Veterans at risk for loss to follow-up and improve the HIV care continuum at a Veterans Affairs Medical Center



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## Background

- The introduction and use of antiretroviral medications (ART) has been estimated to have prevented 5.2 million AIDS-related deaths worldwide from 1995-2010 and there has been a 34% decrease in new infections in 2012 compared to 2000.<sup>1</sup>
- In Veterans infected with HIV, research shows that those who are adherent to treatment, maintain undetectable viral loads, and remain engaged with their healthcare providers sustain longer lives with reduced transmission of HIV.<sup>2,3</sup>
- The United Nations Aids Programme (UNAIDS) has established a 90-90-90 goal for 2020: 90% of people living with HIV know their status; of whom 90% are on treatment; of whom 90% are virally suppressed (90-90-90).<sup>4</sup> As of 2017, global statistics were at approximately 75-79-81, and only Sweden has reported achieving the 90-90-90 goal thus far.<sup>5,6</sup>
- Currently, there is no routine process to identify Veterans who are at risk for loss to follow-up. The development of a clinical tool that detects vulnerable Veterans early in the process of falling out of care may improve outcomes by increasing the number of Veterans whom are on treatment and whom are virally suppressed in accordance with UNAIDS' goals in this quality-improvement project.

## Objectives

- Develop an HIV patient dashboard to help in the detection of Veterans at-risk for loss to follow-up in regards to their HIV care.
- Implement the use of an HIV patient dashboard for regular review by the Infectious Diseases (ID) Clinical Team.
- Collect preliminary statistics on dashboard utilization and number of interventions initiated.

## Methods

- The Veterans Health Administration utilizes the Corporate Data Warehouse (CDW) to store standardized clinical data in the form of a relational database.
- Tool was designed using data-rich environment to capture at-risk Veterans as defined below:

### Definition of At-Risk Veterans

- Veterans diagnosed with HIV who have not:
  - Refilled their ART medications within 2 weeks after their due date
  - Completed a viral load lab within the past 7 months

In addition to the HIV Screening Report, a National Scorecard was created to encourage utilization and comparison amongst different regions

Figure 1: Example of Report Output

## Results

- Beta-testing for dashboard closed on 2/28/2019, and preliminary data was collected from 2/28/2019 – 4/03/2019
- Results are representative of one medical center over five weeks of implementation:

- 40 unique Veterans identified on dashboard requiring review
- 24 Veterans required further action or investigation via phone call or chart review
- 40 unique interventions identified as a result of investigation:

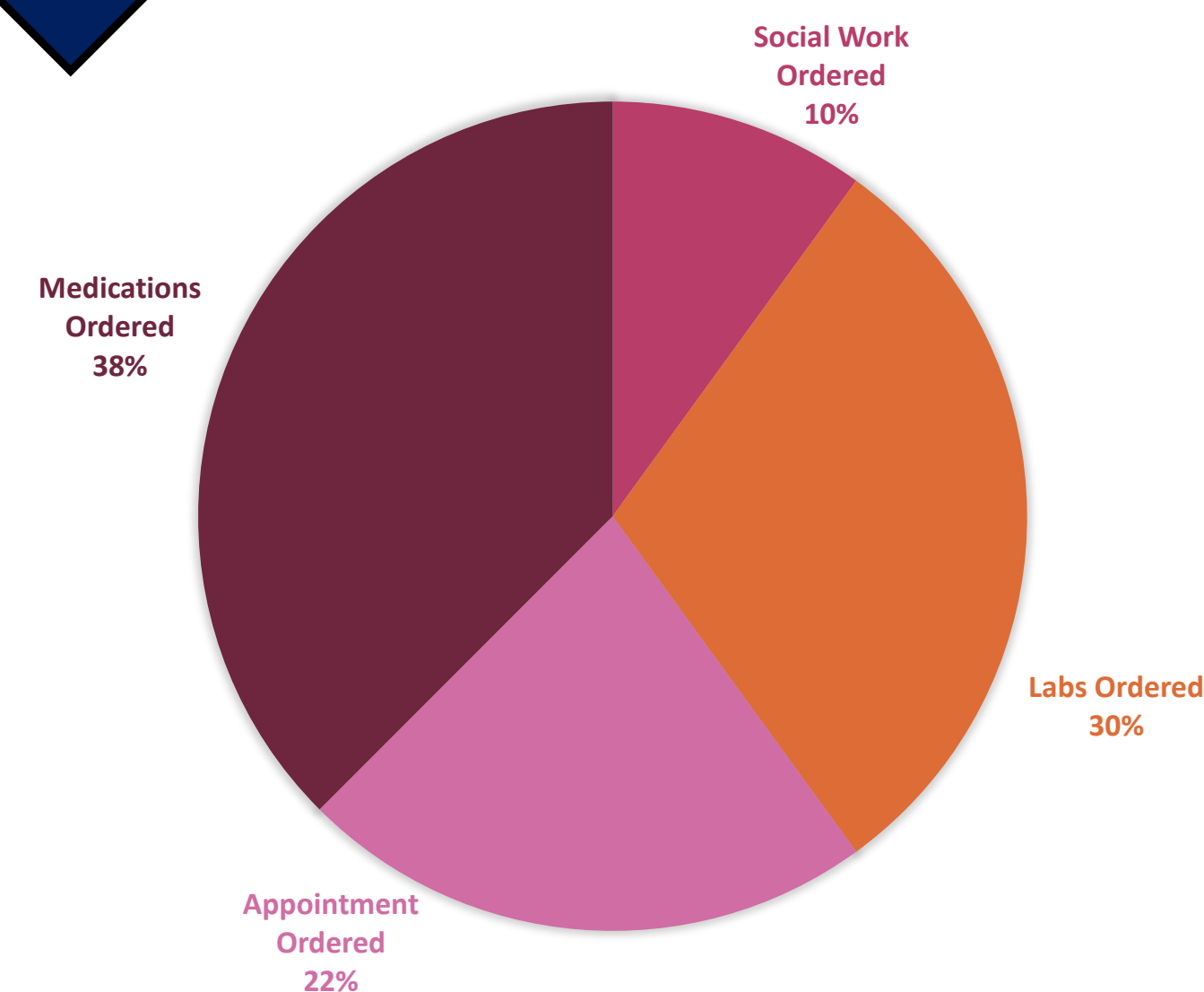


Figure 2: Summary of Interventions

## Discussion

- Feedback has been overwhelmingly positive from both patients' and providers' perspective
- Majority of non-interventions were due to early/extra refills that were unaccounted for in dashboard calculations. Adjustments to calculation will likely be necessary
- Tentative estimate of ~200 – 300 Veterans identified on dashboard nationwide per week, but experience is limited to one VA medical center
- Time commitment appears reasonable and requires approximately 2 hours for review bimonthly per initial assessment

## References

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