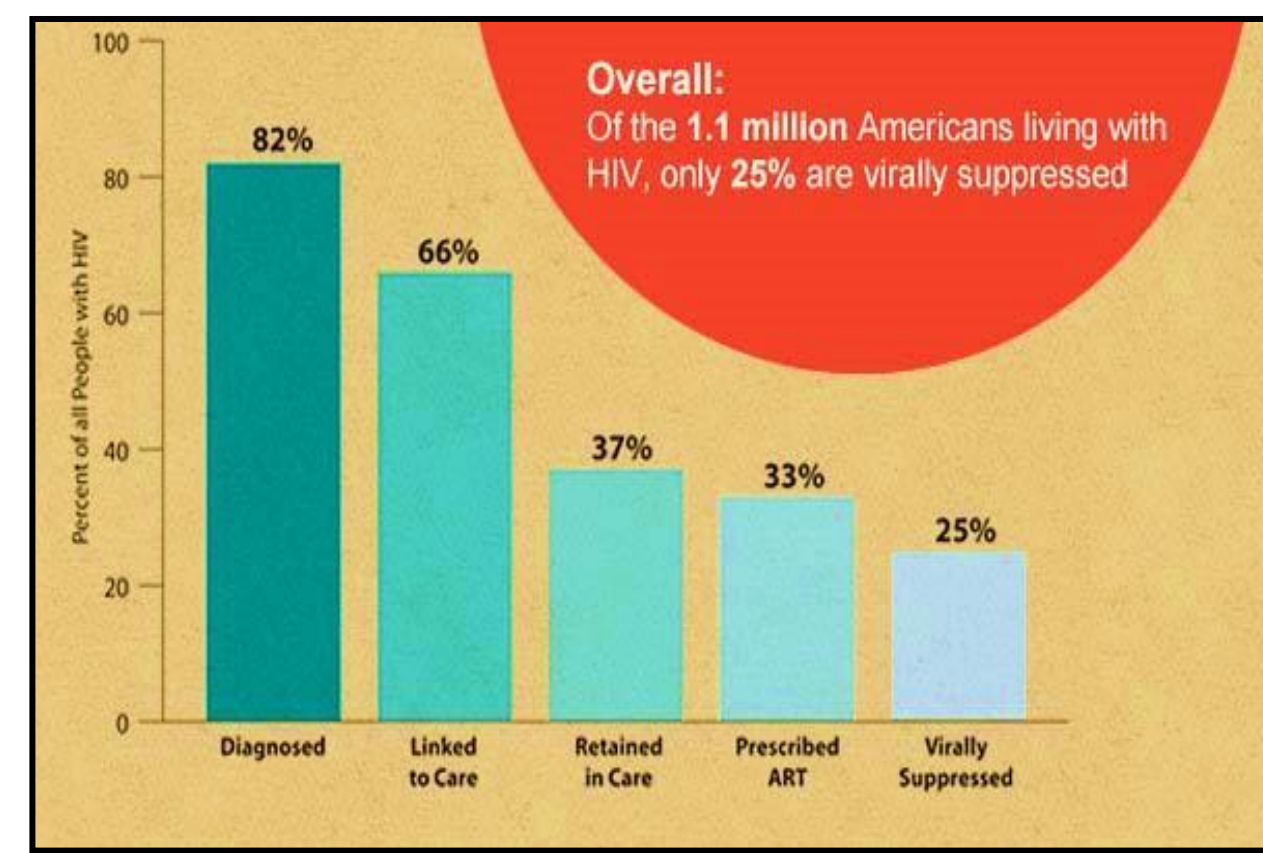# Improving Clinical Outcomes, Engagement, and Quality Measures for HIV+ Clients Through an Anticipatory Care-Planning Database

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Introduction

- Engaging HIV+ patients in ongoing care requires addressing multiple needs on varying schedules. These often include social barriers (employment, housing, transportation, scheduling), as well as cyclical and often non-overlapping medical, clinical, and insurance or other support needs requiring frequent visits.

- Proactively tracking and addressing patient needs is typically costly, time-consuming, and staff intensive; and gaps in care impact funding and the capacity to provide continued services.

- Many software programs exist to help automate medical care using data from a variety of electronic medical records (EMR), but few focus specifically on HIV.

- Facing limited funding and resources, an anticipatory care-tracking Excel database was created.

Overall: Of the 1.1 million Americans living with HIV, only 25% are virally suppressed.

Diagnosed 82% · Linked to Care 66% · Retained in Care 37% · Prescribed ART 33% · Virally Suppressed 25%
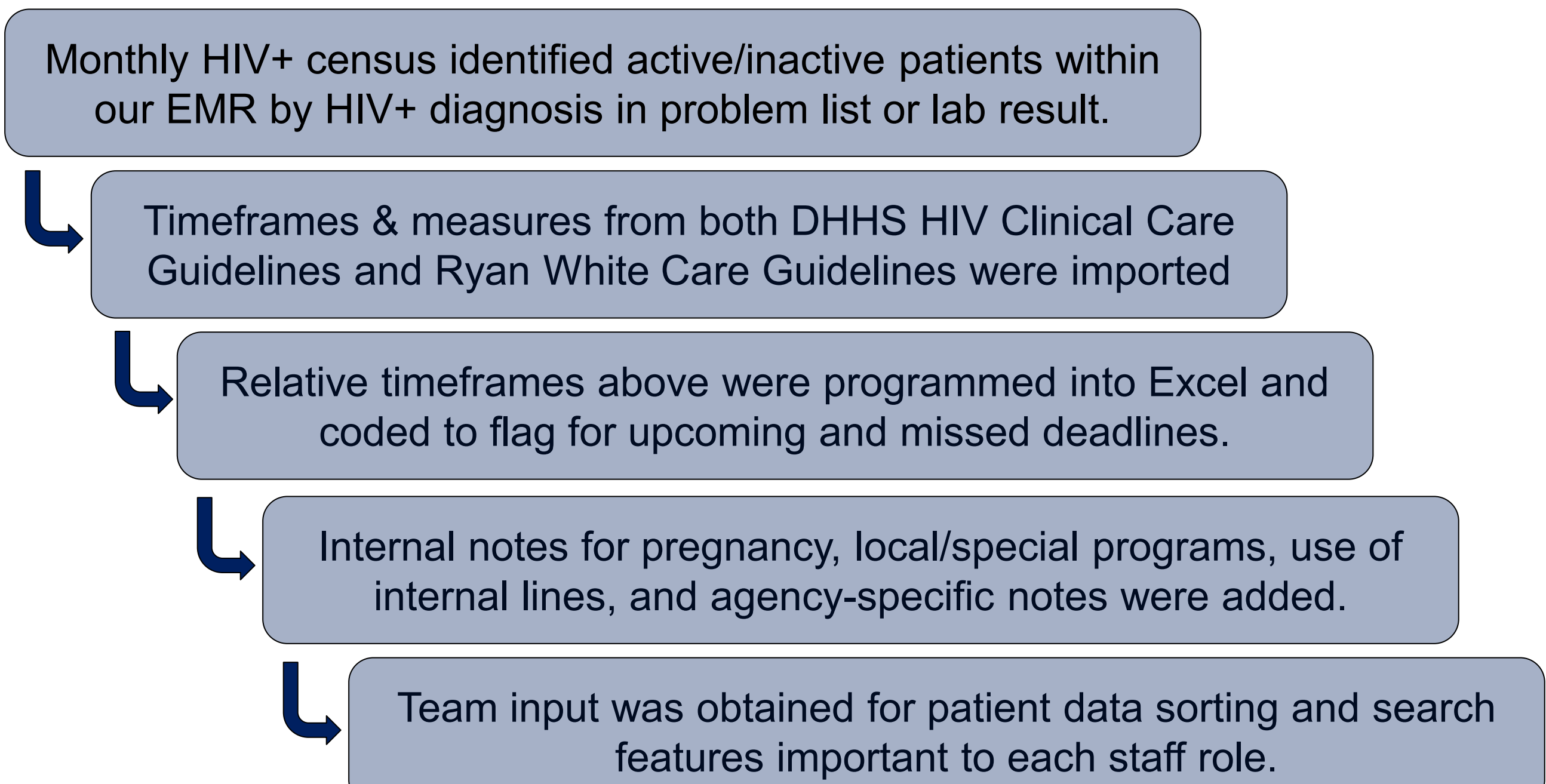
Purpose

- Between 3/2017 – 9/2018, our clinic lost roughly one-half of our HIV+ patients to follow-up; primarily due to staff turnover and inefficient patient care and engagement. Subsequently, RW funding was reduced by 75% and we were placed on corrective action in August 2018.

- This pilot sought to improve patient retention and outcomes by combining multiple guidelines applied to HIV+ patients into one "database" where we could flexibly program various requirements for staff to anticipate care of our HIV+ patients.

- However, guidelines for HIV+ patient care originate from many sources – some grant-related, many medical, some agency- or community-based. Overlapping timeframes & requirements from these sources can be cumbersome to track accurately.

- Objectives:
  1. Minimize gaps and losses in patient care and the resulting benchmarks.
  2. Improve program stability and sustainability.

Methods

- DHHS HIV Clinical Care guidelines and Ryan White Clinical guidelines were merged into an Excel database to better anticipate upcoming care needs.

- Excel was already licensed by the clinic, is easily shared and encrypted, and allows tailoring of data needs for patient populations, staffing, and service lines.

- Monthly HIV+ census identified active/inactive patients within our EMR by HIV+ diagnosis in problem list or lab result.

- Timeframes & measures from both DHHS HIV Clinical Care Guidelines and Ryan White Care Guidelines were imported.

- Relative timeframes above were programmed into Excel and coded to flag for upcoming and missed deadlines.

- Internal notes for pregnancy, local/special programs, use of internal lines, and agency-specific notes were added.

- Team input was obtained for patient data sorting and search features important to each staff role.

Results

Outcomes

- Prior to database implementation (18-months into a 3-year grant), our program had spent only 2% of the HCA budget as of Q4 2018. One year later, at the end of the HCA cycle in Q4 2019, two additional disbursements for HCA were approved and our clinic had spent 297% of initially allocated funding.

- Fewer than 25% of HIV+ clients deemed Ryan White-eligible were appropriately screened prior to Q4 2018. By the end of Q2 2019, quarterly audits revealed >90% compliance on eligibility documentation and RSR data submissions.

- Internal 340B pharmacy revenue stabilized parallel to overall HIV program stabilization, and internal HIV medication prescriptions were now responsible for >70% of annual pharmacy revenue.
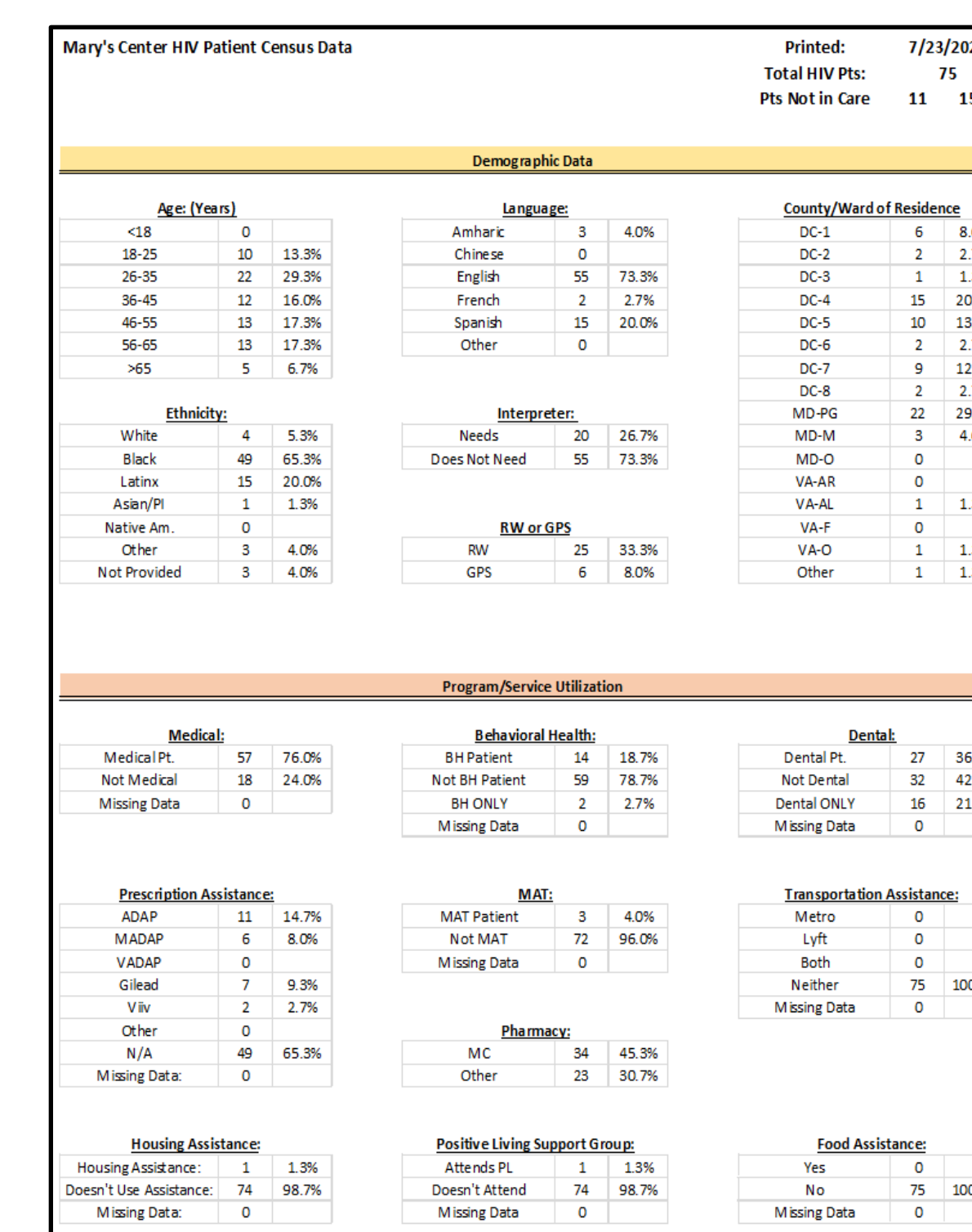
Conclusions

Lessons Learned:

1. Not everything has to be updated at the same time. Have ongoing conversations and triage your data needs with patients to update what you can, when you can. Rapport is better than completed checklists.

2. When creating any patient database, save and backup often. When possible, enlist IT staff to help structure and protect the file and content.

3. Spreadsheets have many wonderful functions and tricks. Take your time, make changes in the next file version/update. Everything doesn't have to be perfect the first time and patient care planning shouldn't have to wait.

4. Be mindful of staff limitations and consider them when populating timeframes or deadlines into such a program. If something requires follow-up weekly and current staffing cannot support that, change it and make note of why it was modified.

5. Timeframes are relative. A 6-month check-up may happen at 5 months, or 7, or 12. Ongoing contact is the most important driver to continuing care, not whether deadlines are strictly met.

- While this particular measure was time-intensive on the front-end for staff to translate EMR data into Excel, it also affords more frequent and structured follow-up with each patient.

- Spreadsheet or other large-volume data management software such as Microsoft's Excel or Access, are fairly inexpensive for site licensing, allow organizations to tailor the data they use, do not rely on externally structured and/or purchased data mining, and most are already HIPAA-compliant.

- *Automated proactive client monitoring for clinical, social, and insurance measures improves continued client engagement as well as program stability and opportunities for program growth.*

References

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Acknowledgements