CONTRIBUTION OF UNDERTREATED HIV+ MSM MTDI IN DIFFERENT HIV DISEASE AND CARE STAGES

The remodeled estimated fraction of untreated HIV+ MSM in the acute phase of the disease contributed to 20% of the transmissions observed over the past 10 years (Figure 4), with undiagnosed HIV+ MSM in the acute stage of the disease contributing to 20% of the transmissions observed over the past 10 years, with undiagnosed HIV+ MSM in the acute stage of the disease contributing to 20% of the transmissions observed over the past 10 years, with undiagnosed HIV+ MSM in the acute stage contributing to 20% of the transmissions observed over the past 10 years, with undiagnosed HIV+ MSM in the acute stage contributing to 20% of the transmissions observed over the past 10 years, with undiagnosed HIV+ MSM in the acute stage contributing to 20% of the transmissions observed over the past 10 years. The model suggests that the contribution of untreated HIV+ MSM in the different disease stages has remained constant over time (Figure 2).

We estimated that over the past 10 years:
- Untreated (diagnosed or not) contributed to 66% (79% of all HIV infections) (Table 2).
- MSM in the acute stage were the most disproportionately affected by HIV among MSM (Figure 5).
- MSM transmitting less efficiently (12 vs 19/100 infected person years over 2007-2017) despite comprising 42% (25 vs 39/100 infected person years over 2007-2017) of new HIV diagnoses in the US attributed to MSM. Among them, those adhering to ART made very little contribution to transmission (PAF = 2% (1 vs 14/100 infected person years over 2007-2017)) despite comprising 42% (25 vs 39/100 infected person years over 2007-2017) of new HIV diagnoses in the US attributed to MSM. Among them, those adhering to ART made very little contribution to transmission (PAF = 2% (1 vs 14/100 infected person years over 2007-2017)).

5. CONCLUSIONS

We estimated that undiagnosed MSM might have contributed to 40% of HIV transmissions among MSM in Baltimore over the past 10 years, with undiagnosed HIV+ MSM in the acute stage of the disease contributing to 20% of transmissions.

Increases in the relative contribution to transmission of diagnosed MSM over time reflect improvements in HIV testing, but the majority of these transmissions arise from those who remain undiagnosed, showing gaps in treatment and prevention efforts. Future interventions will need to address the remaining diagnosis and treatment gaps.