Approximately 40,000 individuals were diagnosed with human immunodeficiency virus (HIV) infection in the United States in 2015.

Despite its demonstrated efficacy, pre-exposure prophylaxis (PrEP) remains underutilized as an HIV prevention tool: although more than 3 million Americans are estimated to be candidates for PrEP, only 2350 people received PrEP prescriptions between January 1, 2012, and March 31, 2014, according to US pharmacy claims.

To close identified gaps in the use of PrEP, an online, CME-certified initiative was developed to address the educational needs of healthcare practitioners (HCPs) who have the opportunity to identify individuals at risk for HIV acquisition.

Reported here is the educational impact of this initiative on the ability of primary care providers (PCPs) to:

- Identify patients who may benefit from PrEP
- Perform baseline laboratory evaluation prior to PrEP initiation
- Provide ongoing management to patients receiving PrEP, including tailored care to women who conceive or give birth after initiating PrEP

Results

- Together, the initiatives comprising the online initiative have engaged more than 14,576 HCPs to:
- Identify patients who may benefit from PrEP
- Perform baseline laboratory evaluation prior to PrEP initiation
- Provide ongoing management to patients receiving PrEP, including tailored care to women who conceive or give birth after initiating PrEP.

Total relative improvements in the following areas of assessment and follow-up are depicted in Figures 3 and 4:

- Patient Education
- Coordinate Care
- Follow-up Appointment
- HIV Test
- Chlamydia Screening
- Syndemic

Baseline and follow-up improvements in appropriate orders of select PrEP-related actions are depicted in Figures 5 and 6 as a percentage for each category of user (PL=personalized learning, SF=standard offering).

Conclusions

- This CME-certified initiative utilized a 2-dimensional, self-directed, interactive learning strategy that engaged learners in identifying key knowledge gaps and to appropriately incorporate PrEP into a comprehensive HIV prevention strategy.
- Suboptimal knowledge was observed in all learning domains and categories, with the highest rates of deficits in patient education, follow-up appointment, and prescription of HIV testing.
- The results were then leveraged in the design of an online CME initiative for the delivery of personalized learning to 11,056 users and 10,876 physicians across the United States.
- As a result, physicians who participated in the patient simulations improved their ability to appropriately use PrEP (Figure 4).
- Similarly, compared with their responses to the baseline SA, there was statistically significant (P < .01) improvement in physicians who responded correctly to case-based scenarios following participation in the PL curriculum (Table 1 not shown).
- Subset analyses revealed that physicians who participated in at least one patient simulation and the PL curriculum performed better than physicians who only participated in the patient simulation (Figure 7).