Continuing Education Improves HIV Screening and Use of PrEP in High-Risk Patients
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#1320

1 Need for PrEP Education

At the time of the needs assessment (Nov ’15)

- Primary care clinicians do not follow CDC guidelines for HIV screening 1,2
  - 75% are not following screening guidelines1
  - 65% of patients in a high-risk US cohort had not been screened for HIV2

- Despite approval in 2012, the uptake of PrEP in high-risk patients remains low1,2
  - 20% of PCPs lack knowledge and confidence using PrEP1
  - Only 17% of PCPs and 66% of HIV specialists had prescribed PrEP1

Continuing education (CE) can address knowledge and competence gaps, but little is known about the impact of CE on direct patient care and healthcare costs1

Program Goals

- Estimate patient and direct cost of care impact due to practice changes implemented because of the CE via:
  - Increased HIV testing
  - Increased use of PrEP guidelines

2 Educational Overview & Model Creation

Parameters Used in Model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE participant parameters</td>
<td># who prescribed (MD/DO, NP, PA)</td>
<td>4,550</td>
</tr>
<tr>
<td>% who have seen high-risk patients since the CE</td>
<td>38%</td>
<td>Participant follow-up survey</td>
</tr>
<tr>
<td>% who now implement PrEP guidelines</td>
<td>55%</td>
<td>Participant self-report</td>
</tr>
</tbody>
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High-risk patient parameters

- % who are HIV+ | 58.7% | Smith CH, et al. MJA, Nov 27, 2013. |
- % who accept PrEP Rx | 40% | CDC, HIV Among Gay and Bisexual Men. Updated Feb, 2018. |

Cost of Care Parameters

- Cost of HIV Rx, including office visits and testing for 1 year | $29,948 | CDC, HIV Cost-effectiveness. Mar, 2011. ($29,000 in 2010 converted to 2017 USD) |

3 Impact of Education on Knowledge

- Overall Knowledge Gains
  - Patient Impact After 1 Year
  - 72% relative increase in knowledge across all pre-post questions

- Identification of Patients for PrEP
  - 46% Pre Actvity (n=3,395) |
  - 79% Post Actvity (n=1,578) |

4 Impact of Education on Practice

- How often do you offer or recommend HIV testing to high-risk patients?
  - There was a 144% relative increase in HIV testing 2 months post-learning

- How often do you implement PrEP guidelines for high-risk patients?
  - There was over a 400% relative increase in providers using PrEP guidelines 2 months post-learning

5 Estimated Patient Impact & Cost of Care Due to the CE

- Patient Impact After 1 Year
  - Direct Costs of Care at 1 Year
    - Cost associated with treating 49 newly identified patients for HIV
      - $1.2 million
    - Cost associated with PreP use in nearly 4K newly identified HIV-high-risk patients
      - $92 million

6 CONCLUSIONS & OPPORTUNITIES

- CE Targeted to PCPs
  - Increased knowledge and competence regarding HIV screening and prevention
  - Caused practice changes among providers that increase screening rates and appropriate linkage to care
  - Can be used to estimate the impact of CE on
    - Patient care
    - Costs of care

References