Personalizing Tobacco Cessation: Utilizing Care Coordination to Augment Provider-based Screening & Counseling

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Background

Adults with HIV (PWHA) are 2-3 times more likely to smoke cigarettes than the general U.S. adult population (42.4% vs 15.1%, respectively). Data suggests various factors contribute to higher smoking prevalence among PWHA, including lower socioeconomic status, previous or concurrent drug and alcohol use, age, education level, and co-existing depressive symptoms. For PWHA, smoking is associated with a decreased response to ARVs and serious health effects, including higher risks for cancer, COPD; heart disease; stroke; and other HIV-related infections. Research suggests that social support and a multidisciplinary approach to cessation may improve cessation outcomes. During medical visits, primary care providers (PCPs) have a unique opportunity to prescribe and promote brief, yet effective, smoking cessation interventions, including Nicotine Replacement Therapy, and Ryan White Care Coordination (RWCC) staff – trained in Health Education, Harm Reduction, and Motivational Interviewing – are equipped to augment providers’ tobacco-use screening/counseling.

Method & Goals

IAM’s RWCC Tobacco Cessation QI Project was implemented over two PDSA cycles and included a three-pronged approach:

1) Targeted screening of clients’ tobacco use
2) Personalized health education
3) Multidisciplinary tobacco-use counseling

PDSA Cycle 1 (June 2016-February 2017)

- Formation of QI Committee-unifying staff across three IAM RWCC programs
- Creation of a new Tobacco Cessation Health Promotion module
- Development of a Tobacco Cessation Questionnaire assessing history of smoking/cessation behavior and readiness to quit/reduce tobacco use
- Conduct case conferences with PCPs to share information gathered during counseling sessions

PDSA Cycle 2 (March 2017-August 2017)

- Simplified Tobacco Cessation Questionnaire, including improved Visual Analog Scale measuring readiness to quit/reduce tobacco use
- Goals
  1) ≥30% of smokers will complete 1 Questionnaire (8/1/16-8/31/17)
  2) ≥50% of smokers will receive 1 Tobacco HP (3/1/17-8/31/17)
  3) RWCC staff will conduct a Case Conference with PCP for ≥75% of clients who receive HP or complete Questionnaire (3/1/17-8/31/17)

HP delivery and Questionnaire completion were tracked in eSHARE. Case Conferences with PCPs were documented in the hospital EMR. Monthly reports were pulled from both systems and sent to RWCC staff to direct progress toward project goals.

Results

At the end of PDSA Cycle 2:

- 39% of eligible RWCC clients completed a Questionnaire, meeting and exceeding our goal of 30%.
- 50% received a Tobacco HP, meeting our goal of ≥50%.
- 24% received a Tobacco Case Conference, falling significantly short of the initial goal of ≥75%.

Conclusions & Next Steps

Possible Reasons for Under-Performance

- The percent completion rates of all three project indicators were inversely proportional to staff turnover, suggesting that QI efforts are most successful when programs have stable staffing and sufficient supervisory time to review progress. The MSBI and MSSLW programs experienced turnover in the PN and CC roles, leading to under-performance in all three project goals. Comparatively, the MSH program was more consistently staffed, leading to surpassed HP and Questionnaire goals, but failing short of the case conference goal.
- 69% of RWCC tobacco-using clients have a history of substance use; many reported using tobacco as a harm reduction technique, and as such, were unwilling to discuss their tobacco use further. Some clients noted that they did not complete a Case Conference when a client reported being unready to quit or reduce tobacco use.

Other Lessons Learned

- Among those clients who were motivated to quit/reduce tobacco, RWCC staff often covered the tobacco HP multiple times. This suggests that this HP topic can be valuable throughout the often arduous cessation process.
- Preliminary Questionnaire data suggests that RWCC clients are likely to be in Pre-contemplation or Contemplation when considering quitting tobacco while being in Preparation/Action for tobacco reduction.
- Given the high frequency of client encounters in RWCC, staff often reported having more accurate information about clients’ smoking habits than what was known to their PCP or captured in the EMR.

Next Steps

- The RWCC QI Committee will devise a strategy that ensures RWCC clients who smoke receive targeted tobacco counseling as a standard of care. Significant psychosocial and medical data are available to RWCC programs via eSHARE and the EMR. Future QI projects should explore how to ensure that HP sessions align better with clients’ needs and behaviors.
- RWCC programs will further examine Smoking Status and VL Suppression.

Acknowledgments

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References

1) Centers for Disease Control and Prevention. Burden of Tobacco Use in the U.S. Available at https://www.cdc.gov/tobacco/data_statistics/fact_sheets/About/tobacco_use/index.htm [last updated 2017 Apr 18]. 2) Centers for Disease Control and Prevention. Smoking Status and Viral Load Suppression for RWCC-enrolled IAM clients. As of 3/1/17, 44% of active RWCC clients (279/639) were ‘current smokers,’ ranging from 41%-48% by IAM clinic. This prevalence is much higher compared to all HIV+ clients at the IAM (33%; [26%-41%]).

Figure 1: Smoking rates across populations.

Figure 2: RWCC Viral Load Suppression Rates among smokers and non-smokers.

Figure 3: Percent of RWCC clients receiving goal measures in PDSA Cycle 2.

Figure 4: Percent of RWCC clients receiving Tobacco HP, before and after QI project.