Rationale/Objectives

- Reviews of existing smartphone cessation apps indicate that their content is not evidence-based and, therefore, less likely to be effective (Abrons, 2011).
- 24.4% of Canadian smokers are young adults (19-29 yrs of age) (CCHS, 2010).
- Young adults (25-34 yrs of age) are greatest users of social media and smartphone technology - 62% of young adult cell phone users own smartphones; 93% are more likely to use smartphone related apps compared to older adults (Neilson, 2011).
- Project targeted a hard-to-reach population of 19 to 29 year olds to help close the gap between current smartphone apps and existing evidence on what works in getting young smokers to quit.
- Objectives: To develop; test the usability, design and functionality; and promote an evidence-based quit smoking smartphone application

Methods

- 3 methods used for development and testing of the smartphone app:
  1) Comparative analysis of existing smoking cessation apps:
     - search of all quit smoking apps available on Google Play and Apple App Store
     - subset of 5 selected for further review (i.e. high downloads & credibility)
     - Clinical Practice Guidelines used to assess comprehensiveness of apps on 23 criteria (e.g. social support, link to quitline, NRT, etc.)
  2) Focus groups with young adult smokers:
     - Round 1: Jan 2012 to review app content; 4 focus groups stratified by age (19-24/25-29) and gender (M/F).
     - Round 2: Mar 2012 to test app design & functionality; 8 focus groups stratified by language (F/E), age (19-24/25-29), gender (M/F).
  3) Expert Panel with key experts in smoking cessation & social media

Successes

- User community was engaged and assisted in design and promotion
- Enhanced understanding of the possibilities of smartphones/social media in modifying behaviour.
- Leave the Pack Behind allowed us to adapt content for the app from their self-help smoking cessation program Smoke/Quit
- Strengthened existing partnerships and developed new partnerships in area of young adult cessation which will contribute to opportunities for future research
- Speed and efficiency of promotion team

Facebook (April 1/12 – June 28/12)

- Over 16,000 likes on Facebook & over 800 Twitter followers.
- Highest spike in downloads during initial launch in April 2012 & during an official press release in late April/early May 2012.
- Biggest reach obtained with posts that use motivation and humour.

Next Steps

- Plans underway to secure funds to examine the impact of the smartphone app on the quitting process. Both partners and Expert Panel members expressed interest in being involved.
- Very positive interest / feedback from colleagues in population health field.
- Presentations with key stakeholders at the Program Training and Consultation Centre and the Young Adult Leadership Team/Youth Action Committee at Health Canada.
- Promotion team has been able to connect with the target audience and generate incredible interest to date.
- Version 2.0 of Crush the Crave available for iPhone and iPad in English and French - September 2012.

Team of population health researchers and computer programmers developed CrushTheCrave in English and French over three months (Jan - Mar ’12) for the Android platform.

Results

- 5 most credible and popular apps scored low on 23 Evidence-based Cessation Assessment Criteria - CrushTheCrave achieved 20 out of 23.
- Focus Groups:
  - Not familiar with cessation apps
  - App functionality viewed favourably (e.g. calculators, navigation, tracking smoking and cravings, awards, quit help, social networking)
  - Not motivated to call the quitline
  - Concerns: Push notification needed, personal information, additional customization
  - Expert opinion: Very comprehensive, worthwhile, simple is best, and link to community trying to quit

Smartphone Features & Findings (April 1/12 – June 28/12)

- Currently 324 unique users who have clicked on 7931 app pages.
- Most popular pages visited: AWARDS, QUIT HELP, MY PROGRESS.
- Least popular pages visited: Call Quitline, My Quit Plan

BARRIERS/CHALLENGES

- Two main challenges during the course of the project:
  1) Reduced timeline
  2) Limited resource capacity
- Additional planned features (i.e. ‘push’ functionality, widget, etc.) were not incorporated into the final version of the app.