Media use trends and implications for potential reach of public education and motivation campaigns: application to tobacco control

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Acknowledgements


Suggested citation:

Executive Summary

- In 2018, television is still by far the most efficient channel for reaching large proportions of the population with video-based messages. While there is a growing proportion of people who do not watch commercial television on an average weekday, commercial television is still able to reach at least 19.64 million Australians each week.
- Commercial television provides differentially more effective reach to older and more disadvantaged Australians, including smokers.
- Given declines in the reach and frequency of television viewing, achieving broad population exposure to video messages now requires both greater television advertising weight than was previously required as well as some presence on digital video.
- Traditional supportive channels (radio, outdoor) continue to provide a reliable boost to reach and contribute to the ‘all around’ presence of a campaign.
- The potential reach of newer digital supportive channels depends on whether they cater for broader or specific target groups.
- The actual reach achievable with digital and social media video advertising in practical terms depends crucially on whether the exposure is incidental or opt-in, with advertising that requires someone to opt-in to view it achieving far lower and less broad reach. In these media, content that engages early and is clearly personally relevant is required to prompt people to opt-in to view the entire video advertisement.
- Multi-screening is now very common, especially among younger audiences, with much of the time spent in front of the television on other devices. Multi-screening offers opportunities for linking messages across platforms, but risks less attention being paid to advertising messages. This has implications for creating content that cuts through advertising clutter to attract attention and prompt engagement and necessitates a greater frequency of exposure than has been previously required.
- Content for the supportive secondary digital media that is designed to translate interest into action (e.g. visiting Quit website) is also required.
- Being ready to quit and being at risk of relapse are affected by a range of personal, interpersonal, situational and community factors that fluctuate across a year, and so regular bursts of campaign activity are required.
- Overall the changing media landscape has made it more expensive to broadcast public education campaigns with sufficient reach to change population health behaviour. Agencies with a public education mandate need to develop more new and engaging content and spend more across a broader range of media channels in addition to television, to maintain reach, recall and impact close to the levels that were previously achieved from a more television-centric media buy.

Recommendations for public education campaigns for 2019 and beyond

1. Media mix
   - Whereas ten years ago when up to 80% was ideal, in the contemporary media market around 60% of the media buying budget for each campaign needs to go towards television.
   - To reach those who no longer watch television, about 15% should be devoted to buying Digital video (including Catch-up television, Programmatic video, YouTube and Social media video).
• To reinforce and remind people of the main messages contained in the video material and to contribute to the “all around” presence of the campaign, the remaining 25% of the media buy budget needs to go towards supportive media, including radio, out-of-home, digital display, and social media display.

2. Required reach and frequency of advertising
• To achieve detectable population-level change, the vast majority of the target audience needs to be exposed to video-based campaign messages at least once (75-85% with 1+ reach) and 50-60% at least three times (3+ reach). To achieve this, the latest research and Quit Victoria’s media buyers’ post-campaign analyses from 2018 campaigns suggests we require campaigns that include at least 1000 to 1,200 television TARPs for the next several years, plus a digital video buy.
• Campaigns need to be on air for at least part of every quarter of the year to motivate and support those who are currently open to quitting, and bolster recent quitters’ resolve to stay quit.

3. Campaign development, support and evaluation
• A mix of familiar and new campaign messages is required to maintain year-long population engagement. Two familiar and two new campaigns should be run each year. New campaigns will require exploratory and concept pre-testing.
• Choice of supportive media for the main campaign video message needs to be driven by the features of the message. If there are distinctive visuals in the video message, out-of-home and digital display advertising can effectively remind and reinforce the message. If there are distinctive audio or narrative elements in the video message, radio and cut-down 6-second digital videos may be preferable.
• Content for “always on” digital content advertising and search engine marketing is now also needed to ensure Quit cessation services (e.g., such as the Quitline and ‘help to quit’ websites and apps) are easily accessible.
• Best practice setup and measurement of website and digital campaign activity is possible at low cost with Google Data Studio, which is the Analytics platform which allows for investigation of ‘mini conversions’ from paid media across a website (e.g. length of sessions and number of re-visits per person from those who were directed to a website after clicking on paid advertising). This data can provide insights into the quality of sessions generated by paid media/campaigns.
• To identify any issues with the message concepts or media buying strategy and to provide feedback to campaign managers and funders, campaigns also need to be rigorously evaluated among the target populations.

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\(^a\) e.g., posts and articles with ‘click bait’ headings tempting people to click, such as, “Think smoking relieves stress? Think again” which offer prompts, tips and links for help.

\(^b\) i.e., paying to ensure the Quit website appears first or second in the results list when someone searches online for ‘quit advice’ or ‘quitting help’.
Changing media use patterns

Media channels can be broadly broken down into video-based and static. In the first section of this report the focus will be on video-based message platforms (television and Online/Social digital video). Motivational behaviour change messages work best in the rich medium of video, which can present emotional stories of the real experiences of smoking-related harms and disease – the types of messages that most promote quitting among smokers3, 5, 6. Online or social digital video can similarly be used to communicate motivational health messages, but these vary in terms of typical length (30 sec – catch-up television and some YouTube; 6 & 15 sec – Social, Pre-rolls and YouTube) and whether people need opt-in to be exposed (via Skippable YouTube and Pre-rolls, all Social) or whether message exposure is forced or incidental (via Catch-up television, Non-skippable YouTube and Pre-rolls).

The increasing uptake of catch-up television, streaming platforms such as Netflix and Stan, Smart TVs and faster network speeds enabling video viewing on Smart phones provide new and more diverse viewing opportunities for on-demand and downloaded video content. These changes are all contributing to the shift in the ways that people watch video content. Figure 1.1 shows the increasing time spent on catch up and Video On Demand (VOD) and the decreasing time watching broadcast television from 2014 to 2017.

![Australian TV Consumption](image)

**Figure 1.1. Customedia: How long Australians spend on each type of television in 2014 vs 2017.**

SVOD – subscription video on demand (Netflix, Stan, Foxtel); TVOD – transactional video on demand (i.e buying an iTunes movie); AVOD refers to advertising or advertising-based video on demand, and is free to consumers (e.g., YouTube).


Given the declines in television viewing and this dispersion of video content, achieving broad population exposure via television now requires more advertising presence to build required reach. Figure 1.2 shows the estimated number of Target Audience Ratings Points (TARPs) required to achieve 70% reach was 120 TARPs greater in 2017 than 2016.
As a result, +1 reach is harder to build and requires more TARPs

Figure 1.2. The increase in TARPs on television required to reach 70% of Australian adults.


Broadcast television still provides greatest potential reach of all media channels

While the use of streaming video platforms has increased, commercial television continues to be a critically important way to reach the population. This can be understood by looking at the proportion of the population that can be reached each week via broadcast television.

Figure 2.1 shows that in-home television is still able to reach 19.64 million in a week (left hand side table, top of column 3), including 18.56 million Australians during peak viewing periods (right hand side table, top extreme right-hand side column) when the broadest cross-section of people are viewing.

In-home television can still reach most of each age group, including over 63% of 18-24-year-olds (column 2, row 4), over 76% of 25-39-year-olds (column 2, row 5), and around 90% of the older age groups (column 2, rows 6-8) on in-home television sets each week. The proportion exposed to commercial television increases to 70% among 18-24-year-olds when viewing television content outside of in-home television sets is also included (e.g., viewing Catch-up television on smartphones, tablets, laptops – see Figure 3.2 below).
Figure 2.1. Reach - OzTAM & Nielsen’s (the ratings people) Australian Video Viewing Report, final quarter of 2017.

Greatest amount of time spent on broadcast television

Reach data only considers whether someone can be reached at least once per week. Another important consideration is how many opportunities there are to expose those people over time—that is, the frequency of potential exposure. This information comes from the overall amount of time people view broadcast television in the home.

Figure 2.2 shows that in Australia across all ages, people watch an average of over 75 hours of broadcast television per month at home. This compares to about 21 hours of watching video online via computers, smartphones or tablets per month: that is over 50 hours extra for television on average per month.

This is true among almost all adult age groups – especially for those above 35 years of age who are more likely to be smokers than the younger age groups. The only exception is the highest users of digital devices, the 18-24-year-olds. Although they watched slightly more video online (31 hours per person), even this group watched over 26 hours per person of broadcast television in the home in an average month.
Older and lower SES more likely to watch more television

The other important thing to note about television is that older people and people of lower SES tend to watch more commercial television and are easier to reach via television. Both these groups are overrepresented in in the total population of smokers. Figure 3.1 shows that there is a growing proportion of the smoking population aged 40+ years in Australia in 2016 compared to 2001.

![Figure 3.1 Age distribution of daily smokers and the Australian population, people aged 14 or older, 2001 and 2016.](source)

Figure 3.2 shows older Australians were more likely to watch commercial television on an average weekday in 2017, while 70% of 18-24 years were still watching commercial television in 2017.

**Figure 3.2. Proportion of adults who watch commercial television on an average weekday by age group, 2001-2017.**


Figure 3.3 displays commercial television watching by SES, showing a greater proportion of those of lower SES (in red) watch commercial television on an average weekday than those of higher SES (in blue).

**Figure 3.3. Proportion of adults who watch commercial television on weekdays by SES*, 2001-2017 with lower SES in red (quintiles E–G) vs higher SES in blue (Quintiles A-D).**


*SES quintiles based on education, income and occupation scores.
Given higher prevalence of smoking and other risky behaviours, people of lower socioeconomic status (SES) are often the main target of public education prevention messages. Figure 3.4 shows the media use patterns among one of Quit Victoria’s primary target groups - lower SES Victorian smokers aged 18-49 years - from Roy Morgan Single Source data from mid-2010 to mid-2018.

Mirroring broader Australian adult viewing patterns, there have been year-on-year declines in free-to-air television (FTV) viewing, although 83% of lower SES Victorian 18-49-year-old smokers are still watching television on an average weekday in mid-2018, including 73% of 18-24-year-old low SES Victorian smokers. Also mirroring broader trends, there has been a recent increase in weekly exposure to Subscription Video On Demand (SVOD), such as Netflix, Stan, Foxtel, in the past two years. There have also been steady increases in weekly exposure to online video (e.g., pre-rolls before online new videos and YouTube videos). Figure 3.4 shows that another potentially powerful channel for motivational messages is radio, which continues to have strong population reach among 18-49-year-old lower SES Victorian smokers (85% in 2018).

In contrast to messages that can tell a story or build over time (television, radio and digital video), static channels (static or carousel digital messaging, digital content advertising, outdoor, press and magazines) are not usually primarily designed to drive motivation to change population health behaviours. Rather, they are usually designed to contribute to an ‘all around’ campaign presence and reinforce/remind people of the main video-based message. Static digital channels can also enable translation of existing campaign motivation into web-based action through click throughs and can be enhanced by re-marketing (i.e., re-serving new messages to those who have previously clicked on a relevant message).

Among 18-49-year-old lower SES Victorian smokers, Figure 3.4 shows there have been steady increases in weekly exposure to search/display online platforms (up to 89% in 2018), bringing it slightly higher than outdoor (74% in 2018) which has remained relatively
stable over the past eight years, while there have been steady declines in press and magazines.

Social media includes both static and video messaging as well as the ability to react, comment and tag others to view posts and videos. This makes the examination of potential reach to video-based and static / carousel messages more complex. There have been steady increases in weekly exposure to social media among lower SES Victorian smokers 18-49 years over the past eight years (up to 88% in 2018) but these patterns are somewhat different to the trends seen in the broader Australian population in daily use (see next section).

**Most disadvantaged Victorian smokers**

Data from the 2017 Victorian Smoking and Health Survey also suggests that television is still the most efficient way to broadcast motivational and supportive video-based quit smoking messages so that the vast proportion of highly disadvantaged Victorians who smoke are exposed (i.e., those residing in the most disadvantaged postal areas and who are also Health Care Card holders, ~17% of Victorian smokers). The majority (83%) of highly disadvantaged smokers (Figure 3.5) still watch commercial television on an average weekday. In contrast, half or more of these smokers do not use digital video platforms at all, with 56% not using streaming services, 64% not using YouTube, 66% not using Pay television and 81% not using Catch-Up television.

This data suggests that digital video should not replace free-to-air television at this time given playing digital video requires expensive data plans and access to fast broadband internet, which may limit the highly disadvantaged and regional smokers’ exposure to these important motivational and supportive quit smoking messages.

![Figure 3.5. Media consumption across channels late 2017 among the most disadvantaged smokers in Victoria.](image)

Source Victorian Smoking and Health Survey, November and December 2017.
To achieve detectable population-level change, the vast majority of the target audience needs to be exposed to video-based campaign messages at least once (75-85% with 1+ reach) and 50-60% at least three times (3+ reach). To achieve this, the latest research\(^2\) and Quit Victoria’s media buyers’ post-campaign analyses from 2018 campaigns suggests we require campaigns that include at least 1000 to 1,200 television TARPs\(^c\) for the next several years plus a digital video buy to achieve 75-85% 1+ reach.

Customedia advises that the actual level of TARPs required to achieve 75-85% 1+ reach and 50-60% 3+ reach via television will vary by area, with outer suburban and regional areas likely achieving these reach levels with lower TARPs compared to metropolitan areas. This is due to higher proportions of the population in the non-metropolitan areas watching television and watching television more frequently. Regional areas are overrepresented in terms of the proportion living in areas of relative disadvantage and in terms of older-aged residents\(^7\)\(^,\)\(^8\) (Figure 3.1) reinforcing that television is a particularly efficient channel for broadcasting anti-smoking messages in regional Victoria.

**Social media trends**

Figure 4.1 shows the proportion of Australians who update or check their social media profile or social network daily. It indicates that although the proportion on social media daily has increased from 2014 (in green) to 2016 (in dark blue), since then it has declined to 2014 levels.

\[^c\] Target Audience Ratings Points (TARPs) are an advertisement exposure measure for the target population (e.g., 18-54-year-old Victorians). TARPs are the product of the percentage of target audience exposed to an advertisement (reach) and the average number of times the audience is exposed (frequency). Thus, 100 TARPs per month represents an average of 100% of the target audience within a media market reached once in that month or 50% reached twice, and 1000 GRPs represents an average of 100% of the audience being reached 10 times. TARPs provide average potential exposure: actual exposure for any given individual varies based on the frequency of actual television viewing, which television programs are watched, and attention to the advertisements within television programs.
Figure 4.2 shows that Facebook remains the most popular platform, followed by YouTube, Instagram, Snapchat and Twitter. Unfortunately, there are no reliable data on how many hours per week or month people spend watching streaming videos on various social media platforms.

![Figure 4.2. Social network platform use. Deloitte Media Consumer Report, March 2018.](image)

Figure 4.3 shows that on average 20% of digital time is spent watching streaming video, followed closely by 19% of time on social media.

![Figure 4.3. Share of time spent on various forms of digital entertainment.](image)

Multi-screening

Multi-screening is now very common, especially among younger audiences, with much of the time spent on other devices being done in front of the television. Figure 4.4 shows that while watching television, 27% are on social media and 26% browse and surf the web.

Multi-screening offers opportunities for linking messages across platforms but could also mean that less attention is paid to television messages. This makes it important to create content that attracts attention and cuts through advertising clutter and necessitates greater frequency of exposure than has been previously required.

![Figure 4.4. Social network platform use while watching television.](source: Deloitte Media Consumer Report, March 2018)

Choice of exposure

An important factor that determines actual reach of video-based messages is whether the exposure is incidental or opt-in, that is, whether the person needs to do anything to be exposed to the message.

Broadcast television & Catch-up television are incidental – in other words, exposure is not chosen, it is passive, occurring while the person is already watching a program. In contrast, Facebook and other social media is “opt-in” – that is, a person needs to choose to be exposed – to press on a play button or stop scrolling through their feed to view more than 1-2 seconds of a video. YouTube / Digital video exposure depends on whether non-skippable or skippable content is purchased. If non-skippable video advertising is purchased, it is more akin to Broadcast television / Catch-up television in that a viewer must let the full video advertisement play before they can access the video program they want to watch (and hence they are more likely to watch the advertisement). In contrast, skippable video advertising on YouTube is opt-in, and most people (82% - Deloitte, 2018) skip the video advertising if they have an option to do so. Advertising content that engages early and that is clearly personally relevant to viewers is more likely to encourage audiences to opt-in to view the entire video in this context. The advantage of non-skippable digital video advertising is that people are exposed to messages incidentally.

Quit Victoria has found over 98% of its catch-up television non-skippable video advertisements have complete views, 80% of digital non-skippable video advertisements
pre-rolls within websites are completed, and around 70% of YouTube\textsuperscript{d} pre-rolls are completed when non-skippable, compared to only 20% when the content is purchased as skippable.

However, the acceptability of being forced to view advertisements differs across content types. The Deloitte survey found that 40% would rather pay for online movies to avoid advertisements, whereas only 22% felt the same about online news content. Another issue with non-skippable video is the use of ad-blocking software, which has remained stable at 32% of use among those responding to the Deloitte survey over the 2017-2018 period.

\textbf{Social context}

Another factor that will influence the impact of campaign messages is the social context within which it is viewed. Broadcast television viewing can be solo, but it also has high potential for social effects, with the target group and family/friends/community members being routinely exposed to the messages, often in the presence of others. These social effects include discussion of messages that can extend and amplify message impact, and otherwise strengthen social norms to avoid smoking. In contrast, catch-up television and digital video viewing is served to those who closely resemble the target group and is often viewed alone via an individual’s laptop, tablet or smartphone, and so is likely to have low potential for social impact. This may change in the future if more people view catch-up / online video in communal groups via their smart television.

Checking social media is also usually a solo activity and so there is limited potential for real time social effects, although if someone finds a video that is particularly interesting or relevant they may share it, tag someone to recommend they also view it, comment on it or like it – and in this way they become message sources as well as receivers. This opens the potential for further reach and social effects. Research needs to explore the extent to which this potential extension of reach occurs and whether these forms of social media-mediated pressure or support have the same impact on behaviour as has been found for broadcast television advertising-prompted real-time discussions\textsuperscript{9-12}.

\textbf{Reach and utility of social and other supportive channels}

Video and display messages placed in social media can potentially provide broad population reach, with 55% of Australians checking in daily and over 85% of lower SES Victorian smokers using it weekly. It may be best to use social media to expose people to supportive \textit{static display} messages, as these can provide incidental reach as people scroll through their feed – which they can click on if they are interested – translating interest into action. However, any \textit{video} viewing requires a person to stop scrolling or to opt-in to click on the advertisement to view it, and so it is unlikely to be a good primary channel for broad population motivational video-based messages.

Social media has become popular with advertisers because of its ability to target people who live in particular areas, have bought particular products, or have visited particular websites etc. However, it is challenging and expensive to purchase the kind of broad population reach that can generate social support and social norm effects. For example, a Facebook campaign would need to specifically target the secondary group of smokers’ family and friends and pay for their direct campaign exposure in the same way as it would pay for the primary target-group of smokers’ exposure.

\textsuperscript{d} non-skippable video does not equate to 100% completed views due to ad-blocking software that some people have installed on their devices.
Radio and out-of-home banner advertising have relatively high population reach and people are incidentally exposed given they hear or see the message as they are driving or doing other activities, and so these message channels still provide a great way to build campaign reminders and reinforce the main video-based message. Radio is also potentially a useful way to broadcast motivational messages if visual elements are not required to explain the message.

Digital display media is akin to outdoor / transit posters: these usually feature static or carousel images related to the main video-based message and have relatively high potential reach if displayed on high traffic websites. They also expose people whether they want to be exposed or not and so are incidental, extending the reach to the primary target audience. However, unlike traditional outdoor or transit advertising, they tend to be posted on websites that the target group is likely to visit, so there is much lower potential for population reach beyond the primary target audience, with consequently low potential for social effects (changing social norms).

‘Content media’ is material placed by advertisers that appears to be the same type of content as the website that one is visiting. One form of content media is news content seeding, which usually appears at the end of online news articles under banners such as ‘recommended for you’ or ‘from around the web’. These have ‘click bait’ headings tempting people to click to view the full article on the topic, such as, “Think smoking relieves stress? Think again”. There is high potential population reach if included on widely visited websites and articles, but this potential reach is only to the headline.

Given these messages require ‘clicking’ on them to view the full message, this type of digital media exposure is not incidental, it is opt-in, making this an unviable channel for population-level motivational messages designed to activate all smokers. This channel is best used to offer prompts, tips and help for those already interested in quitting, as well as re-marketing to those who’ve previously clicked on a relevant message. These supportive messages can drive already motivated smokers towards quitting action by providing advice and stories of successful quitters and by bringing them into the Quit website where they can access more intensive help-to-quit options. Similarly search engine marketing (i.e., paying to ensure the Quit website and apps appears when someone searches online for ‘quit advice’ or ‘quitting help’) is needed to ensure those motivated by the main campaign message who independently search for help are linked into the Quit cessation services.

**Final considerations and recommendations**

For hard-to-change behaviours such as smoking, being ready to quit and being at risk of relapse are affected by a range of personal, interpersonal, situational and community factors\(^1\) that fluctuate across a year. Therefore, regular bursts of campaign activity are required to seize on this readiness and translate it into action, as well as bolster recent quitters’ resolve to stay quit. A mix of familiar and new campaign messages is required to maintain year-long population engagement.

These new campaign messages require a greater range of supportive media content, given the expansion of radio and out-of-home media options and the multitude of new digital media platforms. Choice of the mix of supportive media for the main campaign video message needs to be driven by the features of the message. If there are distinctive visuals in the video message, outdoor and digital display advertising can effectively remind and reinforce the message. If there are distinctive audio or narrative elements in the video message, radio and cut-down 6-second digital videos may be preferable.

To ensure the effectiveness of new messages, exploratory research is required to identify potentially influential message domains that can inform concept briefs for creative agencies.
Once concept options are delivered, pre-testing is necessary to determine which message concepts are taken through to development and production. Further pre-testing of end-frame and alternate scenes may also be required.

The media buying budget should comprise 75% to 90% of the entire annual public education campaign budget depending on the size of the jurisdiction and the organising agency. (Small jurisdictions may use advertisements from other states and territories and so be able to devote a greater percentage of their budgets to screening/broadcast. Very large agencies (e.g. the Australian Government Health Department) may use the same staff to manage campaigns across multiple issues, possibly also reducing funds required for staff time).

Agencies developing new campaign materials may need to devote about 10% of the campaign budget to conduct exploratory testing, engage a creative agency and to pre-test, produce and develop new campaign messages; more than this may be required for new or untried approaches.

About 5% of the annual campaign budget should be available for the development and media placement of content for “always on” native or content advertising\(^e\) and search engine marketing\(^f\) to provide smokers with direct links into cessation services such as the Quitline and ‘help to quit’ websites and apps. In addition, at least 10% of the annual campaign budget should be devoted to evaluating the effectiveness of the campaigns in the population. Best practice setup and measurement of website and digital campaign activity is possible at low cost with Google Data Studio, which is the Analytics platform which allows for investigation of ‘mini conversions’ from paid media across a website (e.g. length of sessions and number of re-visits per person from those who were directed to website after clicking on paid advertising). This data can provide insights into the quality of sessions generated by paid media/campaigns. To identify any issues with the message concepts or media buying strategy and to provide feedback to campaign managers and funders, campaigns also need to be rigorously evaluated among the target populations.

Whereas ten years ago when 80% was ideal, in the contemporary media market around 60% of the media buying budget for each campaign needs to go towards television. To reach those who no longer watch television, about 15% should be devoted to buying Digital video (including Catch-up television, Programmatic video, YouTube and Social media video). To reinforce and remind people of the main messages contained in the video material and to contribute to the “all around” presence of the campaign, the remaining 25% of the media buy budget needs to go towards supportive media, including radio, out-of-home, digital display, and social media display.

Overall the changing media landscape has made it more expensive to broadcast public education campaigns with sufficient reach to change population health behaviour. Agencies with a public education mandate need to develop more new and engaging content and spend more across a broader range of media channels in addition to television to maintain reach, recall and impact close to the levels that were previously achieved from a more singular television-centric media buy.

\(^e\) e.g., posts and articles with ‘click bait’ headings tempting people to click, such as, “Think smoking relieves stress? Think again” which offer prompts, tips and links for help.

\(^f\) i.e., paying to ensure the Quit website appears first or second in the advertised results list when someone searches online for ‘quit advice’ or ‘quitting help’.
References


