The evidence that graphic warning labels (GWLs) on tobacco products can and do inform smokers about the risks of smoking, encourage smokers to quit and prevent nonsmokers from starting to smoke is extensive. The International Tobacco Control Policy Evaluation Project (ITC) is an international cohort study that consists of surveys of adult smokers in nineteen countries and focuses on tobacco control policy evaluation. According to ITC research on tobacco warning labels, adult and youth smokers report that large, comprehensive warning labels reduce smoking consumption, increase motivation to quit and increase the likelihood that they will remain abstinent following a quit attempt.¹

As of August 2012, 56 countries in the Americas, Eastern Mediterranean, Europe, South-East Asia and Western Pacific regions require pictures or images on cigarette packs (some of these are still being implemented).² A European Union directive gives its 27 member countries the option of adding pictures to warnings as a way to educate smokers about the risks of continuing to smoke.³ GWLs on tobacco packaging in countries like Canada, Australia and New Zealand include concrete information on ways to quit such as quitline numbers and website addresses and their experiences to-date indicate that including cessation resources on the label are an effective way to encourage tobacco users to quit. In fact, approximately 20 nations currently require a quitline number on their tobacco package labeling, including Finland, the Netherlands, Denmark, Iceland, Malta, the U.K., France, Sweden, Hungary, Poland, Germany, Belgium, South Africa, Brazil, Singapore, Australia, Switzerland, New Zealand and Norway.⁴

To access resources to support adoption and implementation of GWLs on tobacco packaging, including the importance of including a quitline number as part of the warning label, visit the Global Quitline Network here:
http://globalquitnetwork.wordpress.com/tools-and-resources-for-quitlines/strengthening-policy/tobacco-package-health-warnings/

To learn more about GWLs by country visit: http://www.tobaccolabels.ca/

While the evidence on the impact of GWLs is clear and the evidence for the effectiveness of the inclusion of a quitline number on warning labels growing, less is known about the impact of GWLs on quitline operations when labels first begin to include a quitline number. What is the immediate impact on call volume when these labels are first announced and how are spikes in volume best addressed operationally? Does volume become increasingly steady over time? Do the types of callers to the quitline change as a result and hence, counseling protocols? In an attempt to answer these and other questions related to implementation and impact of GWLs that include a quitline number, this case study focuses on one country and their experiences in four areas:

- Preparing for implementation
- Promoting the new warning labels
- Impact on quitline service delivery and utilization
- Evaluation of outcomes

The purpose of this case study is to describe implementation of warning labels that include a quitline number within a real-world quitline setting, noting the programmatic and operational issues that emerged and how they were addressed. Our aim is to provide quitline service providers and quitline funders with valuable information to support successful preparation and implementation. Let’s begin with important background on tobacco control efforts in New Zealand...
A number of fundamental tobacco control policy changes have been made and strengthened by the New Zealand government over the past three decades. These include:

- restricting tobacco use and supply;
- increasing the price of tobacco products;
- establishing smoke-free environments;
- providing information for consumers related to the dangers of tobacco use;
- providing funding for a national quitline (Quitline New Zealand) and other cessation support in face-to-face environments; and
- fully subsidizing nicotine replacement therapy (NRT) (Habitrol patches, gum and lozenges) and increasing the numbers of outlets than can provide subsidized NRT.

As a result of these evidence-based measures, tobacco use has been steadily declining in New Zealand and utilization of Quitline New Zealand increasing. In 2011, the New Zealand government adopted the goal of a smoke-free New Zealand by 2025. The impact of policy, regulation and cessation support measures have clearly reduced smoking rates (see Figure 1), however further gains are needed to achieve the smoke-free 2025 goal.

**History of Tobacco Warning Labels in New Zealand**

Graphic health warning requirements on tobacco packaging have been advanced as an important element of New Zealand’s overall tobacco control measures. The 1990 Smoke-free Environments Act and its 1999 and 2007 Regulation established warning label requirements in New Zealand law. The New Zealand Ministry of Health website contains further information of the country’s robust tobacco control policies (http://www.health.govt.nz/yourhealth-topics/addictions/smoking).

Text-only warning labels have been in place in New Zealand since 1987, with legislation and regulations strengthening requirements over time. The toll-free number for Quitline New Zealand (established in 1999) without the quitline logo was included on text-only warning labels from the beginning however the number was not explicitly described as a cessation resource. The 2007 Smoke-free Environments Regulations required the placement of the toll-free telephone number and quitline logo as part of the warning material on tobacco packaging. Implementation of the enhanced warning labels began in mid-2008. GWLs are required to cover 30% of the front and 90% of the back of the package in both English and Maori. Overall, 60% of the package space is appropriated to health warnings. Currently, two sets of seven warnings are rotated every 12 months.
**Quitline New Zealand**

Quitline New Zealand is a charitable trust that is charged with providing smoking cessation services by the Ministry of Health. It is wholly funded by government for the provision of these services. Quitline New Zealand operates a telephone service, online service and offers Short Messaging Service (SMS)/text support. The standard Quitline service is a three-month relationship with minimum for follow-up contact, plus quit status assessment at four weeks and three months. In practice, online and text service users receive additional support. The online service includes a quit blog, personalized client quit statistics, an interactive ‘quit coach’ application and follow-up emails. Subsidized nicotine replacement therapy (NRT) can be accessed via both telephone and online services. Each year, Quitline New Zealand supports approximately 8% of the estimated 650,000 New Zealanders who smoke.

**PREPARING FOR IMPLEMENTATION**

With adequate funding to support preparations for implementation and any resulting increases in volume promised by the Ministry of Health, Quitline New Zealand used the time between the announcement of the new regulation and when the enhanced packaging would appear in stores (nearly one year) to prepare their systems and staff. This time, while valuable, was generally perceived as being longer than needed when compared to the gains of getting more people quitting sooner.

The general approach to planning for any increased demand for Quitline New Zealand’s services is to keep the contact center service working as hard as it can while also encouraging clients to use the online capacity. Reference to the website is included in the first call answer (www.quit.org.nz). Currently, half of Quitline New Zealand’s clients are online and half use the telephone service. Furthermore, Quitline New Zealand is increasingly developing the concept of providing a ‘layered’ service where all clients can mix and match the services (telephone, SMS/text messaging and online) they want to use to support their quitting activity. Evaluation of the quit rates by service used is strongly indicating that the more variety of services used by clients, the better the quit rates of those clients.

**Key Message from Quitline New Zealand**

“The most important aspect of planning for enhanced warning labels is to ensure that your staff is well-trained and that you offer a robust, fully-operational web service so that if there are volume increases callers can be directed to the web. Online services mean a quality service can be maintained even as more fixed-capacity services such as the phone are stretched by demand spikes. In addition, develop a shortened registration service that the call center staff can put in place when phone demand increases beyond personnel capacity to handle.” - Bruce Bassett, Manager, Market Research and Communications, The Quit Group

**PROMOTING THE NEW WARNING LABEL**

Quitline New Zealand promotes its services through continuous television advertising. At the time of the 2008 changes to the warnings that included the quitline number and logo, a new advertising campaign was launched to support the positioning of quitline. Media was handled by the Ministry of Health as the government agency responsible for the graphic warning policies. Quitline New Zealand, along with other organizations involved in the tobacco control sector, undertook their own media activity to complement the Ministry of Health’s lead role.

In the 12 months leading up to implementation, Quitline New Zealand developed its own media plan to generate media coverage. Such coverage is generally associated with increased quitline service demand so every effort was made to contribute to the media coverage generated by the policy. The principles of social marketing were applied so that if the warning label triggered the “see a problem then think to do something about it,” then the act option – placing a call to the quitline – was clear and transparent. The objective was to create as much general awareness of the graphic warning policies, and of Quitline New Zealand as a trusted cessation service provider. The target for the promotion was all smokers with a focus on indigenous New Zealanders, Maori, among whom prevalence is highest.

**Key Message from Quitline New Zealand**

“It is wise to take advantage of unpaid media resulting from new warning labels as much as possible as the primary means to stimulate service demand. With the surge in unpaid media coverage, Quitline New Zealand reduced its paid advertising spend as a way of preventing demand levels that might not have been able to be handled adequately.” - Bruce Bassett, Manager, Market Research and Communications, The Quit Group
Since 1999, Quitline New Zealand has advertised its cessation support service on television, first promoting the toll-free number and more recently, the website. Analysis of call volumes to assess the impact of the graphic warning with Quitline’s quitline number and logo has not isolated it as having a discernable impact in an environment where other influences are in play (see Figure 2).

**Figure 2: Number of Calls and Quit Attempts across Financial Years***

<table>
<thead>
<tr>
<th></th>
<th>Calls</th>
<th>Quit Attempts**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/2002</td>
<td>146,076</td>
<td>58,383</td>
</tr>
<tr>
<td>2002/2003</td>
<td>99,969</td>
<td>42,773</td>
</tr>
<tr>
<td>2004/2005</td>
<td>82,605</td>
<td>32,207</td>
</tr>
<tr>
<td>2005/2006</td>
<td>77,340</td>
<td>31,035</td>
</tr>
<tr>
<td>2006/2007</td>
<td>77,135</td>
<td>31,559</td>
</tr>
<tr>
<td>2007/2008</td>
<td>81,804</td>
<td>46,786</td>
</tr>
<tr>
<td>2008/2009</td>
<td>77,395</td>
<td>53,167</td>
</tr>
<tr>
<td>2009/2010</td>
<td>70,586</td>
<td>53,688</td>
</tr>
<tr>
<td>2010/2011</td>
<td>72,457</td>
<td>61,326</td>
</tr>
</tbody>
</table>

* A financial year is 1 July – 30 June.

**A quit attempt is a client registration that results in caller accessing nicotine replacement and developing a quit plan that Quitline New Zealand supports.

While implementation of the enhanced GWLs with the quitline number and logo in 2008 coincided with an increase in quit attempt activity with Quitline New Zealand, there were additional factors that supported these increases (see Figure 3).

**Figure 3: Quit Attempts by Service (note Txt2Quit refers to SMS messaging)**

Data from Bruce Bassett, The Quit Group

Figure 3 highlights a marked increase in overall quit attempts between 2007 and 2010 is likely to have been caused by:

- implementation of the quitline logo as part of the graphic warnings;
- development in 2007 of the online cessation support capacity and online access to subsidized NRT that resulted in the rapid growth of online service use while use of the quitline telephone service remained stable; and
- increase in tax in 2010 that aligned the tax on loose tobacco with manufactured cigarettes and both went up 10%, with further increases in January 2011 and January 2012 of 10%. The tax increases saw a 90% increase in quit attempt volumes in the month following.5
As part of its overall approach to managing client volume, and particularly volume spikes, Quitline New Zealand has deployed such mechanism as developing a shortened registration process for phone clients and a protocol to promote the website during high-volume periods. This approach has enabled the quitline to maintain services to individual clients and to increase the overall level of support it provides.

In terms of understanding the practical value of inclusion of both the quitline number and logo on the graphic warning, Quitline New Zealand asks clients from what source they received the quitline number. Initially, “...from the cigarette packet” was the most cited source of the quitline number. Over time this response has reduced to a stable level with approximately 20% of clients in 2011 citing the cigarette packet as the source of the quitline number, second only to television advertising. An evaluation of Quitline New Zealand clients conducted in 2009 found that 43% of respondents noticed the tobacco packet warnings. Also, 76% of respondents reported that the warning labels made them think about the health risks of smoking either “a little” or “a lot”. After New Zealand implemented pictorial warning labels, more smokers recognized the national quitline number than when the quitline number was on the text-only labels (61% vs. 37%). These data reinforce the significance of including both the number and logo for stimulating quitline demand and for ensuring that support from Quitline New Zealand is always within arms-reach of the smoker.

It is also important to note that the quitline number and logo on the GWL has not affected the types of smokers who use the service. People reported wanting to quit for the same reasons – family and health. The citing of the source of the quitline telephone number as either cigarette packet or other advertising has had no measureable gender or ethnic differences.

Key Message from Quitline New Zealand
“Two things have generated large increases in demand for Quitline New Zealand:

- Fully subsidized and universally available NRT became available via the quitline in 2000, with access further enhanced with online access to NRT in 2007.
- Tax increases on cigarettes and loose tobacco in 2010 and 2011. During the first unexpected tax increase in April 2010, the quitline service demand increased by 90%. The services provided were scaled back to a shortened registration for two weeks after which full service was resumed. During this time we have not changed performance metrics – our grade of service handling key performance indicators have ben constant over the last five years.” - Bruce Bassett, Manager, Market Research and Communications, The Quit Group

EVALUATING LONG-TERM OUTCOMES
A recent study that investigated whether Quitline New Zealand callers’ use of packaging to source the quitline number continued beyond the initial introduction of graphic health warning labels found that during the 12-month pre-graphic warning labels period (March 2007 to February 2008), 7.5% and 34.9% of new callers (out of n=19,558 total callers) cited tobacco packaging and television advertising respectively as their source for the quitline number. However, in the first full year of the new warning labels (March 2008 to February 2009) the proportions reporting tobacco packaging as the source increased to 26.4% and television advertising declined to 27.1% (out of n=20,152 total callers). The same pattern was still evident in the subsequent 12-month period at 22.9% and 23.3% respectively (n=18,309 for the period March 2009 to February 2010). These findings support implementation of GWLs that include a clearly identified cessation resource such as a quitline as a method for increasing awareness and utilization following initial introduction to the public and in the long-term.

FINAL THOUGHTS
Real progress has been made in reducing smoking in New Zealand. There is no doubt that GWLs and the inclusion of the quitline number and logo on tobacco packaging has been a critical step in increasing awareness and access to an evidence-based cessation treatment option.

The main observations from New Zealand’s experience are:

- **Of all the policy changes that stimulate demand for quitline services, tax increases create the strongest response in calls to the quitline and quit attempts.**
- **Telephone systems can cope with spikes in demand by deploying such techniques as shorter registration steps and/or referral to an online cessation service that is more readily scalable to cope with these increases.**
- **Tobacco warnings should include web addresses as well as telephone numbers. In New Zealand, online services are increasingly important (now account for half of all quit attempts) and a recent evaluation has found that the quit rates of**
these clients are comparable to those using the telephone service. In fact, clients that use a number of services have even better quit rates.

- Graphic warning labels and the quitline number and logo as part of the graphic warning label is normalized in New Zealand. The emphasis now is on exploring next steps such as stronger and more effective positioning and messaging on the packaging.
- Graphic warnings are one of a number of tools that need to be deployed to reduce tobacco consumption. A broad suite of initiatives is needed to establish a concerted policy response to reduce tobacco use.
- Ensuring smokers are “one step from support” is of utmost importance and using the cigarette packet as a vehicle for this makes good sense.

The New Zealand experience suggests that other jurisdictions should expect to implement the inclusion of the quitline contact details into graphic warning labels without major disruption to service delivery and quality standards provided:

- **There is adequate funding to support anticipated increased demand for services and to support continued promotion of quitline services;**
- **There is careful contingency planning to address possible needed changes to intake protocols; and**
- **There is a robust online cessation resource that operates in coordination with the telephone service and can be referred to as an additional option for support – especially in times of high volume.**

The inclusion of quitline contact details on New Zealand’s graphic warning labels did not impact significantly on service demand, but instead formed a very important additional platform for both reducing the ‘normalcy’ of smoking and increasing awareness of the national quitline as a reliable, trusted resource for help with quitting.
ACKNOWLEDGEMENTS

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