VicHealth Centre for
TOBACCO CONTROL

Tobacco Control:

A Blue Chip Investment in Public Health

The economic case and a detailed proposal for greater investment in tobacco control in Australia

SECTION 7

Attachment 3

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Attachment 3: Detailed proposal for improving access to and effectiveness of tobacco dependence treatment in Australia

A3.1 Background/need

An individual's chances of success in quitting smoking can be roughly doubled by the use of known tobacco dependence treatments such as face-to-face or intense telephone counselling or use of pharmacotherapies [2,3]. The effects of pharmacological and non-pharmacological treatments are, roughly speaking, equal, independent and additive. Some people succeed using only pharmacological approaches; some people succeed without pharmaco-therapy. However, success rates are maximised where treatment is comprehensive. Motivated patients undertaking comprehensive treatment including both behavioural and pharmacological approaches have more than a one in three chance of succeeding [4]. Even people that fail learn a great deal about triggers for relapse and are more likely to succeed in subsequent attempts [5].

Three are two major pharmacotherapies that are currently both practical and effective in treating tobacco dependence.

Nicotine replacement therapy (NRT) products are currently marketed in Australia by Pharmacia Upjohn and GlaxoSmithKline Australia (refer Register of Therapeutic Goods). They are available from pharmacies without government subsidies, in the form of gum and transdermal patches. Inhalers are also sold in pharmacies, but scheduled to require pharmacists to advise customers about use [6].

Bupropion hydrochloride is marketed in Australia by GlaxoSmithKline under the trademark *Zyban*, in the form of 150 mg film-coated sustained release tablets. It is available only on prescription, and since 1st February 2001 it has been included on the Pharmaceutical Benefits Schedule [7].

NRT and bupropion appear to be of roughly equal efficacy [2,4,8], with some indications that bupropion hydrochloride might be more efficacious [9]. Clinical guidelines in Britain [4] and in the US [2] indicate that there are no clear criteria for preferring one treatment over the other.[8] However use of bupropion hydrochloride is associated with a higher risk of severe side effects, and is definitely unsuitable for people taking MAOIs, people with eating disorders, and for people who have a history of seizures. It should also be used only with extreme caution in those who are at risk of seizures due to diabetes, alcohol abuse or particular medications, who have renal or hepatic impairment, who are pregnant or who have psychiatric illnesses [10].

The PBS Schedule indicates that doctors prescribing Zyban must obtain Health Insurance Commission approval, and that this is provided "for use within a comprehensive treatment program" (PBS Schedule, February 2001). Glaxo SmithKline have established a Zyban Action Plan which is available to users of the product and, as part of that strategy, GSK have contracted the Victorian Smoking and Health Program to provide telephone counselling to those who wish to register. Currently there does not appear to be a requirement for either doctors or pharmacists to verify that patients undertake or complete a "comprehensive treatment program".[9] The chances of any one quit attempt being successful are greatly reduced where additional counselling does not occur.

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8. In the UK, the National Institute of Clinical Excellence is currently developing guidelines for prescribing of the two agents.
9. With respect to the service provided by the VSHP, discussions are planned between GSK and the VSHP to look at extensions to the current service, including a telephone call-back service, proactive referral and provision of feedback to GPs [11].

Prescribing of Zyban to date has been much higher than expected, with authority given for more than 300,000 prescriptions in the first fifteen weeks after listing [12]. There have been some delays in filling stock re-orders and quite a lot of negative publicity about deaths of people while taking Zyban in Australia, the UK and Canada. So far only about 55% of patients prescribed Zyban appear to have filled their prescriptions [7].

Expenditure on pharmaceutical benefits is uncapped in Australia, so the unexpected level of demand for Zyban will result in much higher than expected levels of expenditure for both the Pharmaceutical Benefits Scheme, and Medicare, which covers the cost of the patients consultation with their doctor. If the number of prescriptions falls off over time in a similar pattern to that observed recently in New Zealand with its NRT Voucher Scheme, then combined Medicare/PBS expenditure for Zyban prescriptions could be as high as $90 m in the 2001–02 financial year. Quitting smoking reduces mortality and treatment costs for dozens of diseases, so the investment in Zyban compares favourably with investment in many other pharmaceutical treatments. However, tobacco dependence treatment is much less cost-effective than many other tobacco control strategies with higher population reach, most notably mass-media campaigns. Reid estimated, for instance, that NRT cost between $36 and $300 US per year of life saved compared to mass-media campaigns costing between $10 to $20 US per year of life saved [13].) If this estimate of PBS and Medicare expenditure on Zyban proves to be correct, then expenditure on subsidies will be almost ten times higher than the expenditure by state and federal governments (combined) on anti-smoking media and other population-wide anti-smoking education [14].

Apart from the disproportionate investment of government funds in Zyban, a further problem with the current financing arrangements is the inconsistency in the arrangements for Zyban compared with NRT. NRT products are, at worst, probably only slightly less efficacious than bupropion.[10]

There are many people, including many profoundly disadvantaged people, for whom bupropion is contra-indicated who currently find it difficult to purchase NRT. It is difficult to see why these people should not have access to NRT at a price comparable to Zyban, and under comparable conditions – that is, where they are also undertaking supportive behavioural counselling.

It has often been argued that NRT is little more expensive than a packet of cigarettes, and that the savings made by stopping smoking should enable purchase of NRT. It is true, for instance, that a three-day pack of nicotine gum, costs only a little more than the current recommended retail price of the leading brands of cigarettes – see Table 1 below.

It should be noted, however, that few low-income people purchase cigarettes at recommended retail prices. Most purchase from discount outlets [15] that sell cigarettes at prices considerably below the RRP [16], and many use tinned or pouch tobacco that is considerably cheaper “per smoke”.

10. All trials of bupropion have so far been conducted among patients receiving intensive counselling. In real-world situations where counselling is more sporadic, it is possible that the effect size will be slightly lower.

Table A3.1. Relative up-front purchase prices of NRT, Zyban and cigarettes in Australia, April 2001

Product	Recommended retail price, @ April 2001	Estimated cost per day to an average user, AUD
Nicorette 2mg 30	$12.11	$3.62
Nicorette 2mg 105	$36.32	$3.46
Nicorette 4mg 30	$14.42	$4.80
Nicorette 4mg 105	$46.98	$4.47
Nicorette 5mg Patch 7	$25.05	$3.57
Nicorette 10mg Patch 7	$27.54	$3.93
Nicorette 15mg Patch 7	$30.57	$4.37
Nicorette Inhaler 6	$7.67	$11.50 based on 9 per day
Nicorette Inhaler 42	$44.10	$9.45
Zyban, 60 tablets	$21.90 PBS ($138.57 pre-PBS)	35 cents (down from $4.60)
Peter Jackson Pack 30s	$9.95 RRT including GST	$6.63
Peter Jackson Carton 210 (actual average price)	$56.75	$5.40
Longbeach Pack 40s	$12.75	$6.38
Longbeach carton 200 (actual average price)	$54.00	$5.40

Sources: Pharmacia & Upjohn RRP lists, Australian Retail Tobacconist. Centre for Behavioural Research in Cancer, unpublished data from price monitoring study.

Based on recommended usage of NRT and an average 20 per day smokers.

Smokers know that they have a very high chance of going back to smoking within a couple of days of quitting. Those on extremely low incomes face the prospect of making a $47 outlay on NRT[11] and then, in all likelihood, relapsing to smoking, and having to spend another $54 on cigarettes over the following ten days. Many will compute the risk of failing – going back to smoking and being $20 to $40 over their budget for the week – as being too high.

The whole point of medical insurance is to share these sorts of risks among the whole community, rather than allowing the most disadvantaged groups to curtail their use of life-saving treatments.

The argument “if they can afford to smoke, they can afford treatment” would be completely unacceptable in the treatment of alcohol or illicit drug dependence. It represents an unprecedented and anomalous form of “means testing” for offering medical or pharmaceutical treatment and is discriminatory towards some of the poorest smokers in the community, many of whom are in the most urgent need of treatment for tobacco dependence.

There are several options for making NRT more affordable to low-income Australians. One option would be to place NRT on the Pharmaceutical Benefits Schedule, bringing Australia into line with the UK where the government has recently placed all NRT products on the National Health Service.[12,13] Another option would be to introduce a separate scheme subsidising NRT.

11. To buy gum in packs of 30 would cost $33 more over the course of eight weeks, compared with buying it in packs of 105.
12. On the 13 March 2001, the UK government announced that all older style NRT products previously on the NHS blacklist would be available on the NHS along with product items already included.
13. The province of Quebec is also subsidising NRT in Canada.

NRT could be placed on the PBS without changing the current scheduling, thus allowing doctors to write scripts for the product to be sold at normal PBS prices. As with Paracetamol, available both over-the-counter or with a doctor's prescription which makes it cheaper for those on pensions and benefits, customers would still be able to buy NRT OTC. However, all those wanting the product at a subsidised price would have to make a Medicare-funded trip to their doctor. Under these circumstances, few doctors would be expected to provide behavioural counselling, but where they did, the cost to Medicare would be at least $41.44 per session, based on the current scheduled Medicare fee of $48.75 for a 20 to 40 minute consultation (Category AI, Item 36). Counselling by pharmacists is also likely to be limited now that most NRT products are scheduled S2.

An alternative would be to introduce a system similar to the one recently established in New Zealand, providing an Exchange Card so that people undertaking combined pharmacological treatment and counselling could receive NRT at low cost. This idea would seem attractive at face value:

1. "NRT plus counselling" treatment is more efficacious than bupropion hydrochloride alone. Contact with a counsellor around and following the quit date greatly increases success rates. Where people do relapse, contact from a counsellor often prompts a further quit attempt [17].
2. NRT has a much lower risk profile.
3. Quit counsellors and other smoking cessation specialists are considerably more experienced than doctors in providing Quit counselling.
4. Telephone counselling is invariably quicker than face-to-face counselling. And Quit counsellors are paid considerably less than GPs.[14]

14. Including on costs, it would cost the taxpayer around $8.50 to pay a quit counsellor for the 15 minutes it takes to make one counselling phone call, compared with $41.44 for a half-hour consultation with a GP.

Table A3.2. Extra effects of smoking cessation interventions on abstinence for 6 months or longer, among patients receiving levels of support as indicated

Intervention	Target population	Effect size	95% CI
Brief opportunistic advice	Patients who smoke	2%	1% to 3%
Face to face intensive behavioural support from a specialist*	– General – pregnant smokers – smokers admitted to hospital	7% 7% 4%	3% to 10% 5% to 9% 0% to 8%
Proactive telephone counselling*	Smokers wanting help to quit	2%	1% to 4%
Californian/Victorian Tailored proactive counselling, with calls timed to coincide with quit attempts+	*Smokers wanting help to quit and receiving one reactive phone call*	5.5%	*4% to 8%*
Pharmacotherapies			
Nicotine gum	Moderate to heavy smokers receiving *limited* behavioural support	5%	4% to 6%
Nicotine gum	Moderate to heavy smokers receiving *intensive* behavioural support	8%	6% to 10%
Nicotine trans-dermal patch	Moderate to heavy smokers receiving *limited* behavioural support	5%	4% to 7%
Nicotine trans-dermal patch	Moderate to heavy smokers Receiving *intensive* behavioural support	6%	5% to 8%
Nicotine nasal spray	Moderate to heavy smokers receiving *intensive* behavioural support	12%	7% to 17%
Nicotine inhalator	Moderate to heavy smokers receiving *intensive* behavioural support	8%	4% to 12%
Nicotine sublingual tablet	Moderate to heavy smokers receiving *intensive* behavioural support	8%	1% to 14%
Bupropion	Moderate to heavy smokers receiving *intensive* support	9%	5% to14%
Over-the-counter nicotine patch (US meta-analysis, Fiore et al, 2000)	Smokers with mixed level of smoking receiving manufacturers information	5%	1% to 9%

Effect size: Difference in >6 month abstinence rate between intervention and control/placebo in the studies reported; data from Cochrane meta-analyses (Silagy et al, 2000) unless otherwise stated; Limited behavioural support: Refers to brief sessions required primarily for collecting data. Intensive behavioural support: Defined as an initial session of more than 30 minutes, or an initial session of less than 30 minutes plus more than two subsequent visits * Cochrane meta-analysis not available; Source USDHHS meta-analysis [2] + Not included in West, McNeill – Based on recent evaluation of Victorian call-back service.

Source: West, McNeill et al, 2000 Smoking cessation guidelines for health professionals: an Update [4].

It is estimated that the proposal described below would increase the number of additional smokers expected to successfully quit due to tobacco dependence pharmacotherapies between 2002–03 and 2004–05, by between 16,000 and 58,000 **quitters**. It is estimated that such a proposal would cost **between $65m and $97m** for a three-year period,[15] but would, in combination with other measures to reduce inappropriate prescribing) also reduce expenditure on Zyban by between **$48m and $77m**. These savings would help to justify increased investment in anti-smoking education and other high-reach strategies that could be expected to have additional impacts on smoking prevalence.

A3.2 Evidence

Table A3.2 is adapted from the most recent UK *Smoking Cessation Guidelines for Health Professionals* produced by West, Raw and McNeil and endorsed by the Royal College of Physicians, the Royal College of General Practitioners, The Royal College of Nursing and the Royal College of Midwives, The British Medical Association, the British Thoracic Society and numerous other learned colleges and health charities and health advocacy groups [4] (2000). These Guidelines are based on state-of-the-art meta-analyses produced by the International Cochrane Collaboration [18], and a study on the cost-effectiveness of smoking cessation interventions produced by the University of York [19].

Note that the effect size represents the contribution to success rates on top of the control group in each category. Many of the control groups include only people receiving intensive counselling. The effects of the counselling and pharmacotherapy are probably independent and roughly equal, so that undertaking counselling roughly doubles the patient's chance of succeeding with NRT or Zyban, and adding Zyban or NRT roughly doubles the chances of success of someone undertaking counselling.

A3.3 Program Proposal

The following proposals, in combination, aim to rationalise expenditure on tobacco dependence treatment in Australia in line with evidence about the relative effectiveness of various tobacco dependence treatments and other public health strategies.

3.3.1 As part of an overall public education strategy, promote a more realistic view of the quitting process and the helpfulness of services

1. Fund mass media education campaigns which include promotion of Quitlines, and promotional activities (e.g. generation of media articles and interviews) to encourage greater understanding of the quitting process, and a more realistic view of the limitations of treatment products and the helpfulness of treatment services.
2. Include the Quitline on cigarettes packets (rather than the number of the ghastly recorded smoker's info line).

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15. The proposal assumes that the subsidy would be equivalent to the PBS subsidy. It could be shallower, however experience in New Zealand indicated that having prices different to the standard subsidised prices imposed costs for pharmacists needing to adapt accounting and administrative systems.

3.3.2 Increase funding to State Quitlines

1. Increase funding for nationally coordinated Quitlines so that they are able to provide all Australian smokers who would like it, more extended telephone counselling, including STD-free calls for rural smokers (along the lines of the programs in Victoria and South Australia) (about $100,000 nationally, for each $1 m spent on media advertising)

3.3.3 Amend the Medicare schedule to facilitate GP identification of and advice to smokers and referral to non-pharmacological treatment services

Like the package of measures recently announced in relation to mental health, fund a package of measures, across health programs and departmental sections, to ensure that doctors know about and can as quickly and easily as possible refer people to the Quitline and other evidence-based services ... And be paid a bit to do it.

1. Promote the Quitline to GPs and mechanisms to refer patients to it, for instance negotiate to include Quitline referral modules on each of the three most popular electronic prescribing packages
2. Introduce a Medicare Benefits Schedule Item that specifically covers assessment of the smoker's readiness to quit, advice that they should quit, and referral to the Quitline or another service, and discussion of progress at a follow up consultation. This would enable the GP to be paid slightly more for this sort of consultation, in recognition that it does take a few minutes to broach this subject, to explain the relevance to the patient's health, and to make referrals.
3. As in the recently announced Mental Health package, introduce another Medicare Benefits Schedule Item allowing GPs to provide smoking cessation counselling provided they are appropriately trained.
4. Through the Practice Incentive Payments initiative, award points for GP practices that establish good systems for routinising detection, brief advice and referral of all patients who smoke, with extra points available to practices that undertake proactive recruitment to tobacco dependence treatment services.

3.3.4 Fund a scheme that would provide vouchers (exchange cards) for purchase from pharmacies of NRT for smokers who are undertaking smoking cessation counselling.

The Health Insurance Commission could, as the Health Financing Authority did in New Zealand, call for tenders and contract with those pharmaceutical companies offering the cheapest prices for patches in various strengths, and gum in 2mg and 4mg strengths, and also for inhalers.

The Department of Health and Aged Care could, like the Ministry of Health did in New Zealand, contract Australian state Quit Campaigns[16] and other specialist smoking cessation services,[17],[18] to provide the counselling and to issue the Exchange Cards to those eligible and interested in enrolling.

Registration forms could be sent to doctors, pharmacists and the Quitlines to distribute to patients and callers.[19] People would complete the registration forms, indicating their smoking and relevant medical history and previous use of NRT. Quitline staff would then call each person and, after establishing they were still interested in participating, would issue Exchange Cards to eligible clients. People excluded from the scheme would include those who smoke fewer than 15 cigarettes a day, and those that are pregnant or suffering from heart disease, except where they have approval from their obstetrician, cardiologist or physician.

Pharmacists participating in the scheme would be contracted to accept the Exchange Card, check *Centrelink* documentation, provide instructions about use, provide the NRT at the subsidised price and claim the cost of the subsidy back from the Health Insurance Commission, together with a dispensing fee.

3.3.5 Implement measures to reduce any inappropriate prescribing of Zyban, including

1. A survey of patients prescribed Zyban to check the proportion of patients that are undertaking comprehensive treatment programs.
2. An article in the *National Prescriber* journal and GP magazines, on results of study and appropriate treatment of tobacco dependence, including prescribing of Zyban and (recommendation of) NRT
3. Clinical audits on smoking cessation to be offered for education purposes by the National Prescribers' Service, with participation providing points towards Continuing Medical Education and the government's *Practice Incentive Payments* [20].
4. Provision of feedback to prescribers about referred patients who fail to make or maintain contact with counselling services.
5. **Establishment by the Health Insurance Commission of a requirement (as a condition of providing rebates to pharmacists) that pharmacists sight evidence of participation in comprehensive treatment prior to filling the script (at the subsidised price).**

A3.4 Elements/costings

3.4.2 Medicare amendments

Doctors currently advising patients about smoking would already generally be charging for a long consultation. Providing a specific item in the Schedule would probably encourage more doctors to offer

16. Cancer-Council auspiced Quit Campaigns in Victoria, South Australia, the ACT and NT, the Quit organisation in Tasmania, and contracted drug counselling agencies in NSW, Queensland and WA.
17. Provided these services used therapies demonstrated to be effective according to criteria established in the Cochrane Review Database, Tobacco Addiction Module [18].
18. Doctors prepared to sign a contract with the Department agreeing to provide a minimum three counselling sessions would also be authorised to issue Exchange Cards. For some patients, a shared care model would be ideal, with the doctor undertaking the initial counselling, referring the person to the Quitline, receiving case-notes and reviewing the patient's progress at later consultations.
19. In the first few months of operation, when demand could be expected to be very high, a call centre would issue registration forms. Quit Call Centre and Quitline staff could indicate "there is currently an XX week waiting list" for entry into the scheme but could post-out preparatory material in the meantime.

this sort of assistance. However, longer consultations would tend to reduce the number of patients a doctor sees in a day, so the impact on Medicare would not necessarily be very large. Based on costings for diabetes, mental health and asthma initiatives, but anticipating much greater use of specialist services, and less direct counselling.

Table A3.3. Estimated costs of GP referring patients to Quitlines

	2002–03	2003–04	2004–05
Extra funding for Quitlines etc	4	4	4
Inclusion of Quitline referral modules in electronic prescribing packages; measures to promote Quitlines etc	1.25	1.25	1.25
Addition of specific item for schedule item for assessment and referral of smokers	1	3.5	3.5
Additional item to cover trained doctors providing counselling	.75	.75	.75
Total	$7m	$9.5m	$9.5m

3.4.2 NRT Exchange Scheme

The costs to be covered in an NRT Exchange Card scheme can be estimated taking into account recent overseas experience.

In New Zealand where an Exchange Card Scheme was introduced in November 2000, 70,000 calls were received in the first four weeks, compared to a total of 50,000 calls to the Quitline for the previous 12 months [21]. More than 25,000 Exchange Cards were issued in the first three months of the scheme, with a steady 5,000 calls a week still being received in March 2001 [22]. Staff estimate that the full $6.18m allocated for the scheme will be fully spent.

The estimates below takes into account the larger population of Australian, but the significantly lower demand that would be likely due to recent PBS listing of Zyban. Attachment 1 includes tables modelling the cost and impact of the scheme under various assumptions about uptake. The critical factors determining the cost of the scheme are the cost at which purchase of the product could be negotiated (and hence the level of subsidy) and the number of counselling calls provided, dependent on the level of demand. To be conservative, costs have been estimated on the assumption that the negotiated purchase price would be around 10% higher than in was in New Zealand. Costs have been modelled assuming per capita uptake of the NRT Voucher as high as 75% and even 90% of per capita demand in New Zealand. Many price-sensitive quitters would, by the time such a scheme was implemented, already have tried Zyban. It is more likely then, that demand would be more like 50% of the demand in New Zealand.

Unlike government expenditure on drugs that are PBS-listed, funding for a scheme such as this could be capped: a waiting list could be established to ensure that counselling and pharmaceutical subsidy costs could be contained within any nominated budget.

Demand for an Australian NRT Exchange Card scheme would almost certainly be highest in the first year, would remain steady in the second year and drop off in the third year as most of the interested smokers had been reached. However, the budget for the first year need only be slightly higher than that for the second if the scheme were to commence only part way through the financial year. If the scheme were to commence in December, post graduate psychology students during their University summer break could be casually employed to help meet the initial demand.

To ensure the smooth introduction of the scheme, the government could appoint a project manager to oversee implementation. That person could get support and advice from a working party including the Health Insurance Commission, the Pharmaceutical Pricing Body, the Pharmacy Guild, the selected pharmaceutical companies, pharmaceutical wholesalers, and Quit Campaigns/*Quitlines*.

Table A3.4. Estimated costs to run an Australian NRT Voucher Scheme

Fixed costs	**2002–03**	**2003–04**	**2004–05**
1. Distribution of 175,000 forms to 25,000 GPs and 4,925 pharmacies with order forms for more	$299,250	$15,000	$15,000
2. Inclusion of registration/ referral forms on electronic prescribing packages	$10,000	$10,000	$10,000
3. Fees to Call Centre, to issue 200,000 forms during first two high demand months, and then during Quit Week and New Years @ $1.50 per call	$300,000		
4. Rental of dedicated 1 300 number	$500	$500	$500
5. Fulltime Quitline supervisors in both Adelaide and Melbourne, with extra duties allowance for one counsellor on each night shift	$111,480	$111,480	$122,960
6. Consultant pharmacist or pharmacologist on duty or on call each shift	$120,000	$120,000	$120,000
7. National project manager, with admin support	$125,000	$125,000	$125,000
8. Evaluation	$200,000	$200,000	$200,000
Total fixed costs	$1,166,230	$581,980	$593,460

Variable costs, based on demand in Australia being 50% lower per capita than demand in NZ	**2002–03**	**2003–04**	**2004–05**
1. Required allocations to state Quitlines (and other providers) for			
• Production of registration and exchange cards sufficient to meet demand (110%), at 5c per sheet	$35,500	$31,000	$30,300
• Purchase of additional office furniture for 50 counsellors	$333,000	$20,000	$20,000
• Rental of temporary premises, Dec 2002 to Easter 2003 – Melbourne and Adelaide?	$50,000		

• Data entry clerks, 5, 4 nights per week, from Dec 2002 to Easter 2003	$34,000		
• Employment of additional staff, to enable 75 counsellors per shift from 1 December 2002 to 31 March 2003, and then around 50 counsellors per shift for balance of the year and the following two years @ $25 per hour x 12 hours per day x 360 days per year	$3,928,600	$3,021,891	$2,969,800
• Telephone costs for phoning participating smokers times @ 20c per call for 25% of calls (Melbourne and Adelaide metropolitan), and STD costs for three quarters (country Vic and SA and interstate callers)	$681,770	$568,115	$604,847
– additional mail out costs to each client – voucher, brochure, envelope and mail cost at least twice for each client	$554,900	$518,545	$509,792
2. Subsidy for smokers	**$14,967,600**	**$13,986,891**	**$13,750,791**
3. Dispensing fees for pharmacists	**$1,849,680**	**$1,728,487**	**$1,699,307**
Estimated total costs	**$23,300,000**	**$20,457,000**	**$20,178,000**

A3.5 Immediate benefits of proposals

1. Increase in total number of people using tobacco dependence treatments, demonstrated to double success rates.
2. Increased awareness that tobacco dependence treatment pharmaco-therapies are not a “magic bullet”.
3. Substantially greater awareness of the Quitline and other smoking cessation services among health professionals.
4. Increase in use of extended counselling services by NRT users, and in the total number of people using counselling services – also estimated to increase success rates between 75% to 100%.
5. Less incidents of PBS subsidy of Zyban for tokenistic, half-hearted quit attempts.
6. Lower incidence of serious adverse incidents among quitters using tobacco dependence treatments.
7. Reduced overall PBS expenditure which could be directed to anti-smoking media education and other highly cost effective tobacco control initiatives

A3.6 Estimated combined impact on Federal Budget

Introduction of the NRT Exchange Card Scheme and other educational measures listed above could be expected to significantly reduce demand for subsidised Zyban, resulting in large offsetting savings. Attachment 1 models the savings that could be achieved if demand for Zyban were to reduce by 20, 33, 50 or 70%. The following shows the costs and savings to government based on a (conservative) 33% reduction in Zyban use.

Table A3.5. Estimated impact on Federal Budget of Medicare amendments, NRT Exchange Card Scheme and prescriber education on Zyban

	2002–03	2003–04	2004–05
Medicare amendments, publicity of Quitline	+ $7m	+ 9.25m	+ 9.25m
NRT subsidy scheme	+ $23.3m	+ $21.0m	+ $21.2m
Measures 1–5 to reduce inappropriate prescribing of Zyban	$0.5m – $3.5m	$0.5m – $3.5m	$0.5m – $3.5m
Measure 6	– $7.3m	– $7.6m	– $7.6m
Further reduction in Zyban prescriptions due to improved access to NRT	– $8.3m	– $8.6m	– $8.9m
Total net impact on Federal Budget	+ $11.7m	+ $11.05m	+ $10.95m

A3.7 Predicted impact on numbers of quitters of Proposals

Assumptions

1. Demand (per capita) would be lower than in NZ due to recent placement of Zyban on the PBS.
2. Around 33% of Exchange Card recipients would have purchased NRT OTC anyway, but not received counselling
3. Around 33% of Exchange Card recipients would otherwise have used Zyban (some with counselling, most without).
4. Average incremental effect size of 6% for NRT users
5. Average incremental effect size of 9% for Zyban users
6. Additional incremental increase in quit rate of 5.5% for those receiving phone call-back counselling

Table A3.6. Effects on predicted numbers of quitters[20] resulting from introduction of eligibility checks and an NRT Voucher Scheme, compared with status quo "Zyban on PBS"

	2002–03	2003–04	2004–05	Total
Best case: 75% of NZ uptake, 40% reduction in Zyban use	21,396	18,293	18,320	58,009
Most likely case: 50% of NZ per capita uptake, 40% reduction in Zyban use	12,507	10,375	10,334	33,215
Worst case: 33% of NZ uptake, 20% reduction in Zyban use	6,462	4,990	4,903	16,355

References

1. Burns DM. Smoking cessation: Recent indicators of what's working at a population level. In: Shopland D, editor. Population Based Smoking Cessation. Bethseda: US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute; 2000.
2. Fiore M, Bailey W, Cohen S, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville MD: US Department of Health and Human Services. Public Health Service.; 2000.
3. Lancaster T, Stead L, Silagy C, Sowden A. Regular review: Effectiveness of interventions to help people stop smoking: findings from the Cochrane Library. BMJ 2000;7257:355-57.
4. West R, McNeill A, Raw M. Smoking cessation guidelines for health professionals: an update. Thorax 2000;55(987-999).
5. Borland R. Submission to NHMRC for Reducing relapse and enhancing recycling in smoking cessation using callback counselling. 2000.
6. Australian Health Ministers Advisory Council. Standard for the Uniform Scheduling of Drugs and Poisons. Canberra: Commonwealth of Australia; 2000. Report No.: No. 17.
7. Health Insurance Commission. Prescription data, item 8465M. In:; 2001.
8. Hurt R, Sachs E, Glover K, al e. A comparison of sustained-release bupropion and placebo for smoking cessation. New Eng J Med 1997;337:1195.
9. Jorenby DE, Leischow SJ, Nides MA, Rennard SI, Johnston JA, Hughes AR, et al. Controlled trial of sustained-release Bupropion, a nicotine patch or both for smoking cessation. New England Journal of Medicine 1999;340(9):685-691.
10. GlaxoWellcome. Zyban (bupropion hydrochloride) sustained-release tablets [patient information leaflet]. In: Approved TGA 15 August, editor. Boronia, Victoria; 2000.
11. Victorian Smoking and Health Program. In:: Personal communication; 2001.
12. Public Affairs Branch HIC. In:; 2001.
13. Reid D. Tobacco control: overview. British Medical Bulletin. London, UK: The British Council, Association for Public Health; 1996 1996. Report No.: 52(No. 1).
14. Scollo M. Contributions to tobacco control state and federal government and non-government. In:: Unpublished data; 2001.
15. Tan N, Wakefield M, Freeman J. Changes associated with the National Tobacco Campaign: results of the second follow-up survey. In: Australia's National Tobacco Campaign. Evaluation Report Volume Two. Canberra: Commonwealth Department of Health and Aged Care; 2000. p. 21-75.

20. This does not take into account the additional quitting that would be achieved by application of the savings to tobacco media education

16. Scollo M, Owen T, Boulter J. Price discounting of cigarettes during the National Tobacco Campaign. In: Hassard K, editor. Australia's National Tobacco Campaign. Evaluation Report Volume Two. Canberra: Commonwealth Department of Health and Aged Care; 2000. p. 155-200.

17. Borland R, Segan C, Livingstone P, Owen N. The effectiveness of call back counselling for smoking cessation: a randomised trial. Addiction 2001;96(6):881-889.

18. Lancaster T, Silagy C. Tobacco Addiction Module of the Cochrane Database of Systematic Reviews. In:: The Cochrane Collaboration. Oxford; 1998.

19. Parrot S, Godfrey C, Raw M, West R, Mc Neill A. Guidance for commissioners of the cost-effectiveness of smoking cessation interventions. Thorax 1998;53(Supplement 5, Part 2).

20. Health Insurance Commission. Practice Incentive Scheme. HIC. July 2001. Access date: February 2003 URL: http://www.hic.gov.au/providers/incentives_allowances/pip.htm.

21. Allen M. MOH announces broadening of NRT Voucher Scheme. In:: Ministry of Health; 2000.

22. Price L. Estimate of current demand for Quit-line voucher scheme. In:; 2001.