



get healthy[®]
Information & Coaching Service

**The story of the
NSW Get Healthy
Information and
Coaching Service[®]:
An effective service
with population health
impact and reach**

ACKNOWLEDGEMENTS

The authors would like to acknowledge the Ministry of Health (the service and evaluation funders); Medibank Health Solutions (the service providers); and the GHS evaluation co-investigators for their significant contribution to the evaluation of the GHS to date.



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Suggested citation: B J O'Hara, P Phongsavan, D Banovic, & A E Bauman (2012) **The story of the NSW Get Healthy Information and Coaching Service®: An effective population health service with public health impact and reach.** Ministry of Health & Prevention Research Collaboration: University of Sydney.

SHPN (CPH) 120402
ISBN 978 1 74187 823 3

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November 2012

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1. Background

In February 2009, the Ministry of Health launched the NSW Get Healthy Information and Coaching Service® (GHS; www.gethealthynsw.com.au), as part of New South Wales' response to the Australian Better Health Initiative [1]. The GHS is a telephone-based service supporting NSW adults make sustained improvements in healthy eating, physical activity and achieving or maintaining a healthy weight.

1.1 GHS levels of service

The GHS includes two levels of service[2]:

1. Information-only: Provides an evidence-based printed information package on healthy eating, physical activity, and achieving or maintaining a healthy weight, consistent with the Australian Guide to Healthy Eating [3] and National Physical Activity Guidelines [4]. In addition to the package, a one-off information and advice session on these topics is available to callers at the time of the call.
2. Six-month coaching program: Includes 10 individually-tailored calls provided by University qualified health coaches and are based on behaviour change/self-regulation principles designed to assist with goal setting, maintaining motivation, overcoming barriers and making sustainable lifestyle changes [5]. Coaching calls are provided on a tapered schedule, with a higher intensity of calls occurring in the first twelve weeks of the program to promote initiation of behaviour change, and less frequent calls during the latter fourteen weeks to promote maintenance and prevent relapse [6]. Participants are able to cease coaching at any time during the six-month program and are also able to re-enrol in the program after completing the six months.

Callers enrolling in the coaching program undergo medical screening via a telephone survey, and callers with any issue of potential concern are referred to their general practitioner to obtain medical clearance before coaching can commence.

Daniel Mitchell's Get Healthy Journey

With a 7-month-old baby on board, health and fitness was no longer at the top of the priority list for new 32 year old dad, Daniel. The activities he used to manage quite easily had suddenly become a challenge.

Daniel says, "the weight just slowly crept on over the years" and from the moment he signed up, Daniel was provided with information and advice. "I pull out the information manuals quite often to get tips and ideas," Daniel said.

With help from his coach, Daniel spent time working on his goals before he started to implement changes.

My coach helped me work out exactly how I was going to get healthier - that's why it has been such a success for me.

Through the Get Healthy Service, Daniel has lost 6kg and has decreased his BMI from 28 to an improved 26, and is continuing to lose weight.

Daniel now goes swimming twice a week, brisk walking 3 times a week and to the gym. "My 7 month old daughter loves being outside, so even when exercising I am not missing out on quality time with her."

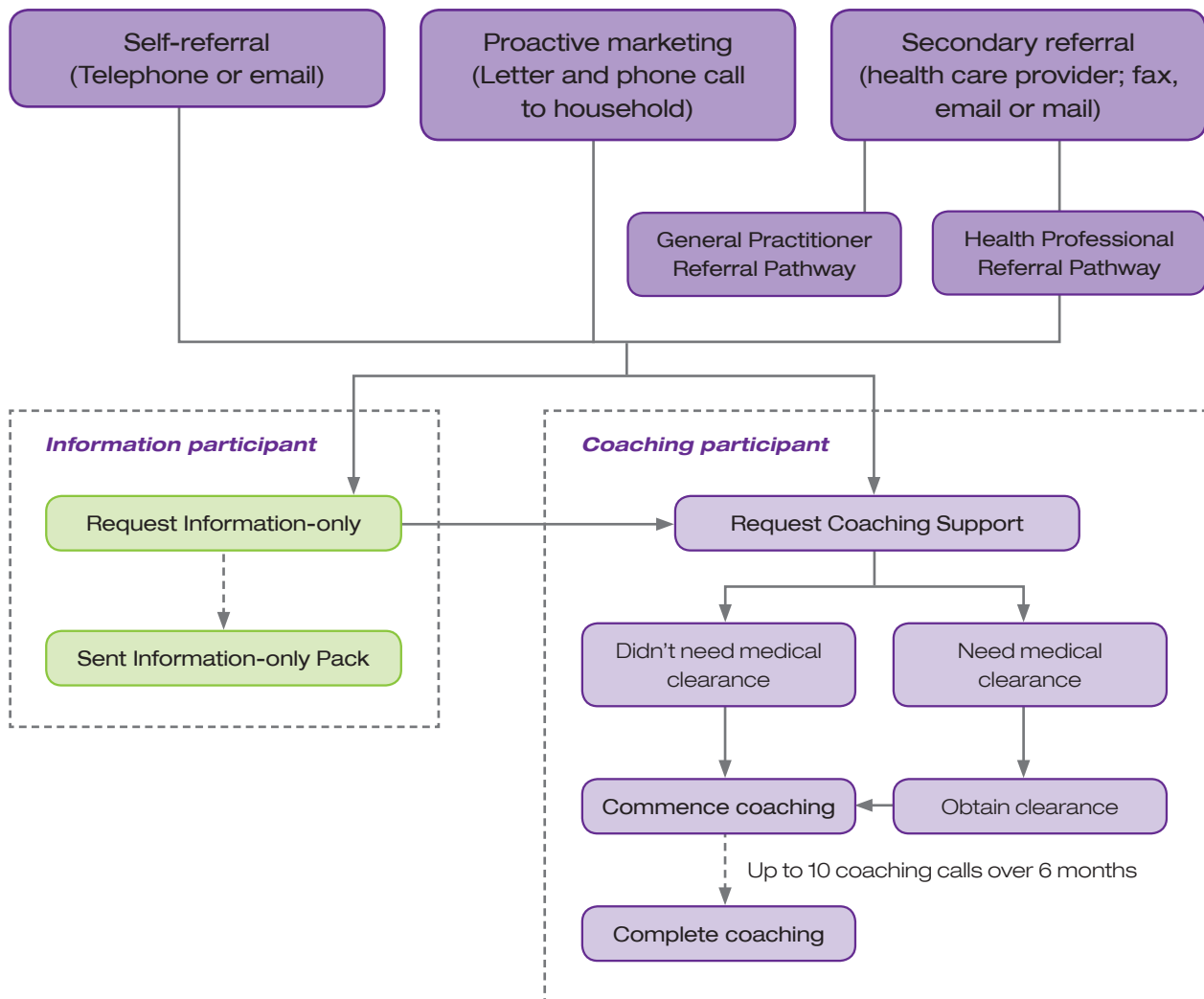


1.2 GHS enrolment

Adults aged 18 years and older can contact the GHS through a free call phone number or via the website. Potential participants are recruited to the Service via three primary methods (Figure 1):

- 1. Self-referral:** mass media and local promotions
- 2. Secondary referral:** General practitioner and other health care providers recommendation and referral
- 3. Proactive referral:** active recruitment of individuals by telephone and letter to households (introduced in August 2011)

Figure 1: GHS overview and enrolment pathways.



1.3 GHS evaluation framework

The evidence base from systematic reviews has confirmed that telephone-based interventions are effective in increasing physical activity, improving nutrition and reducing weight in the short to medium term (three – six months) across different populations, in a range of settings, and using different intervention modalities [6, 7]. Published reports demonstrating the translation of this research into population wide programs is limited and therefore GHS provides a rare example of dissemination [7, 8].

Accordingly, the primary goals of the GHS evaluation framework are to assess the process of implementation, the reach and the impact of GHS [9]. This involves collecting information pertaining to GHS promotional activities, its delivery and reach (process evaluation), and participant outcomes (impact evaluation) using a pre-test and post-test design to assess change in outcomes [2].



2. Effectiveness of GHS

2.1 General GHS usage

Since its introduction on 23 February 2009 until 30 June 2012, the GHS has received in excess of 30,000 incoming calls; many of these (30.5%) were from existing participants. Of the “new” calls to the GHS, 40.6% enrolled in the coaching program and 9.4% registered as information participants, and a further 21.9% made a general enquiry or received a one off coaching call.

2.2 Marketing and promotion of GHS

A number of marketing and promotional strategies have been used to encourage service participation, these have included:

1. **Mass media campaigns** – television (both GHS specific and GHS branding at the conclusion of the national campaigns), press, online and radio advertising and information distributed in letterboxes and subscription magazines
2. **Health professional partnerships** – direct referral and promotions through General Practice, other health professionals and Aboriginal Controlled Health Services
3. **Proactive marketing** – direct marketing to targeted households that include a letter of introduction followed by a phone call from GHS staff

Mass media campaigns provide universal reach and “branding” awareness to support GHS utilisation.

Targeted promotional activities ensure that GHS continues to be used most by those from vulnerable communities.

These efforts have resulted in GHS participant numbers that have increased over time (Table 1).

Table 1: Number of GHS participants by promotional strategy (February 2009 – August 2012)

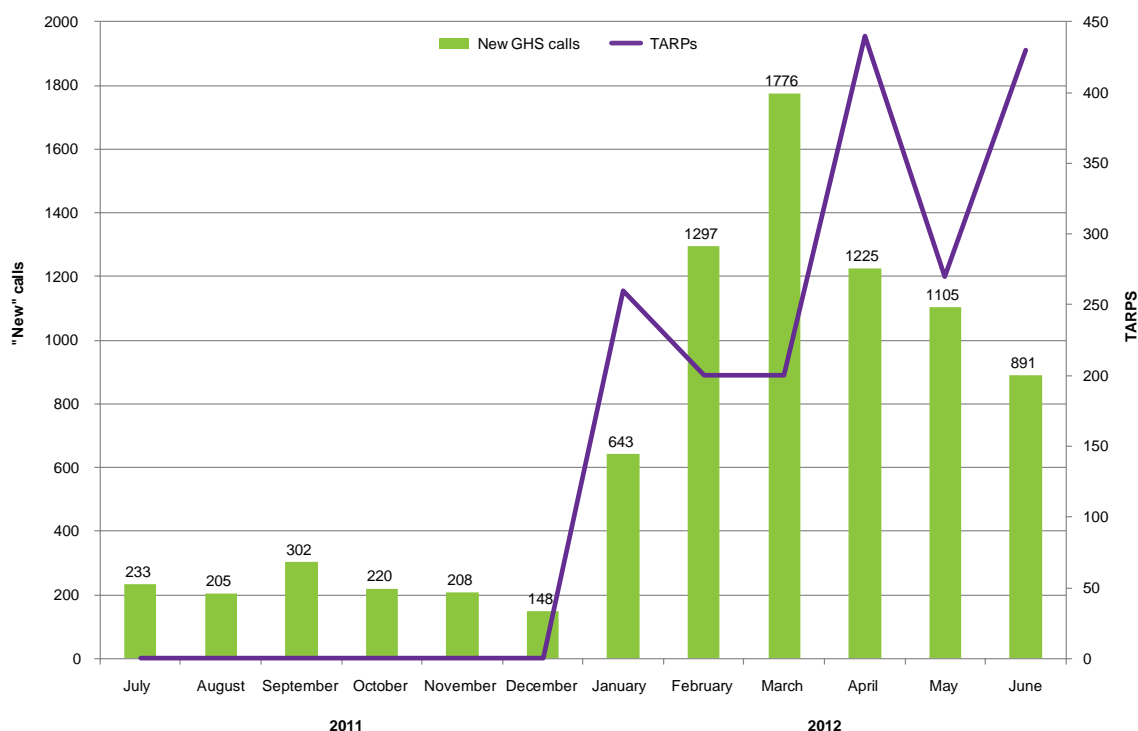
	Feb 09 – Jun 10		Jul 10 – Jun 11		Jul 11 – Aug 12		ALL	
	n	%	n	%	n	%	n	%
Mass media	2369	54.0	4932	79.2	4102	57.1	11403	64.1
Health Professionals*	595	13.6	407	6.5	753	10.5	1755	9.9
Proactive marketing					1469	20.4	1469	8.3
Other	1422	32.4	885	14.2	865	12.0	3172	17.8
TOTAL	4386		6224		7189			

*Health professionals include General Practice, Aboriginal Controlled Health Services, other allied health professionals

Evaluations of the GHS marketing and promotional efforts have shown the following:

- > There was a dose response relationship between mass media advertising and number of contacts to the GHS (and corresponding GHS participants)[10](Figure 2)
- > Television, print and mailed out information was more often cited as the source of referral by males, those aged 18 – 49 years, employed and those from the lowest socio-economic groups [11]
- > During the weeks when mass-media advertising was present, 4 and 2.5 times more information and coaching participants, respectively, registered than when there was no advertising present [11]
- > Participants recruited via proactive marketing were significantly more likely to be males, aged 50 years+, have a high school education and become information participants when compared to other referral source participants [12]

Figure 2: “New” GHS calls and television advertising as measured by Target Audience Rating Points (TARPs) per month for July 2011 - June 2012



2.3 Socio-demographic profile of GHS

From February 2009 – August 2012, approximately 20,000 (n=19,559) participants have registered their interest in the GHS service, 92% (n=18,002) consented for their information to be included for the purposes of evaluation (Figure 3). The socio-demographic profile of these GHS participants is presented in Table 2.

The GHS is being used by those in the community who are most at need including those in the lowest quintiles of advantage; those in regional and remote locations and those who have a high risk of chronic disease.

Figure 3: GHS participant flow chart (February 2009 –August 2012)

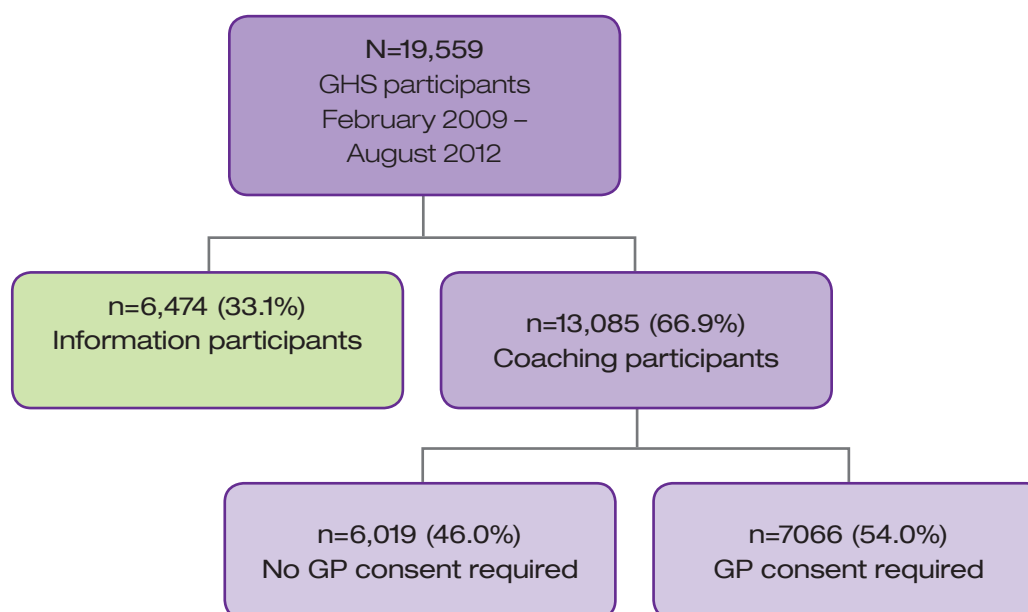


Table 2: Socio-demographic characteristics of Information and Coaching participants (February 2009 – August 2012)

		Information		Coaching		ALL		
		n	%	n	%	n	%	
Gender	Female	3678	69.2	9401	74.1	13079	72.7	**
Age	18-49 years	2689	50.6	6176	48.7	8865	49.3	*
Education	High school education	2453	47.4	5579	44.1	8032	45.1	**
Employment	Employed	2984	57.6	6836	54.0	9820	55.0	**
Aboriginal status	Aboriginal	133	2.5	453	3.6	586	3.3	**
Language	English	534	10.0	905	7.1	1439	8.0	**
SEIFA	4th & 5th quintile (most disadvantaged)	2417	45.5	5730	45.2	8147	45.3	NS
Region	Major City	3208	60.4	7554	59.5	10762	59.8	NS

**significant at p<0.001; *significant at p<0.05; NS not significant

Importantly, the GHS is attracting participants in the lowest quintiles of advantage (as measured by Socio Economic Index for Areas: SEIFA [13]) and has a higher proportion of participants from the 3rd, 4th and 5th quintiles (most disadvantaged) than would be expected from the proportion of NSW adults in those quintiles (Figure 4). Similarly, there are a greater proportion of participants from regional locations, compared to major cities (as measured by Accessibility/Remoteness Index of Australia: ARIA[14]) than would be expected from the proportion of NSW adults who reside in those locations (Figure 5).

Figure 4: SEIFA Index: Comparison between GHS participants and NSW Adults

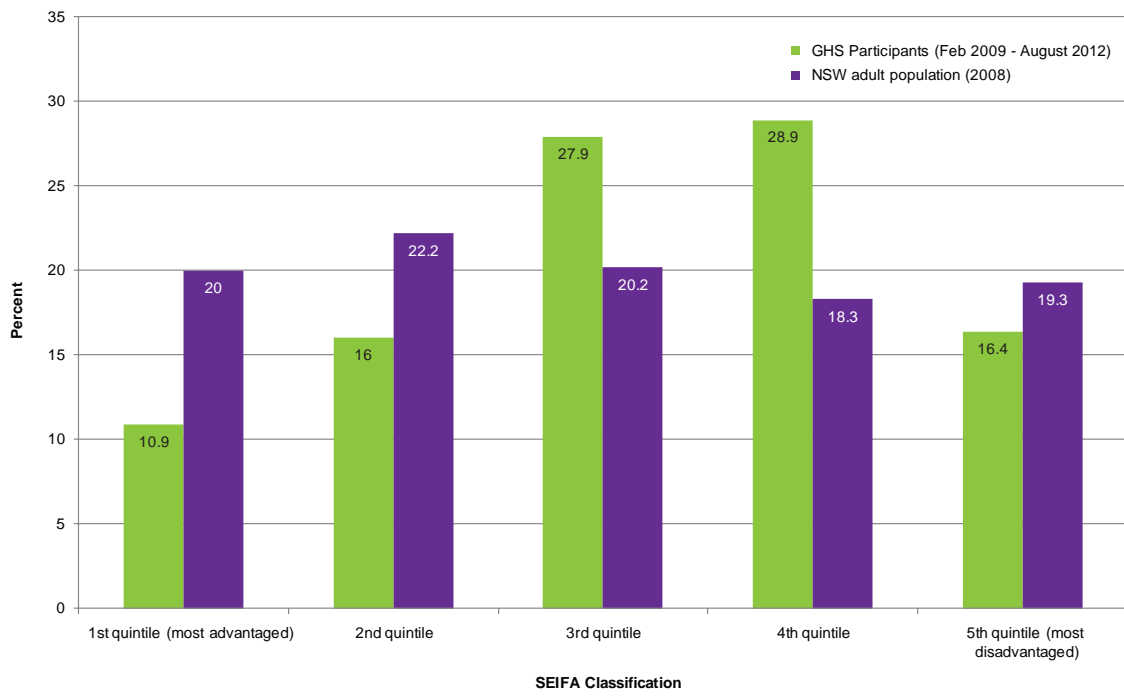
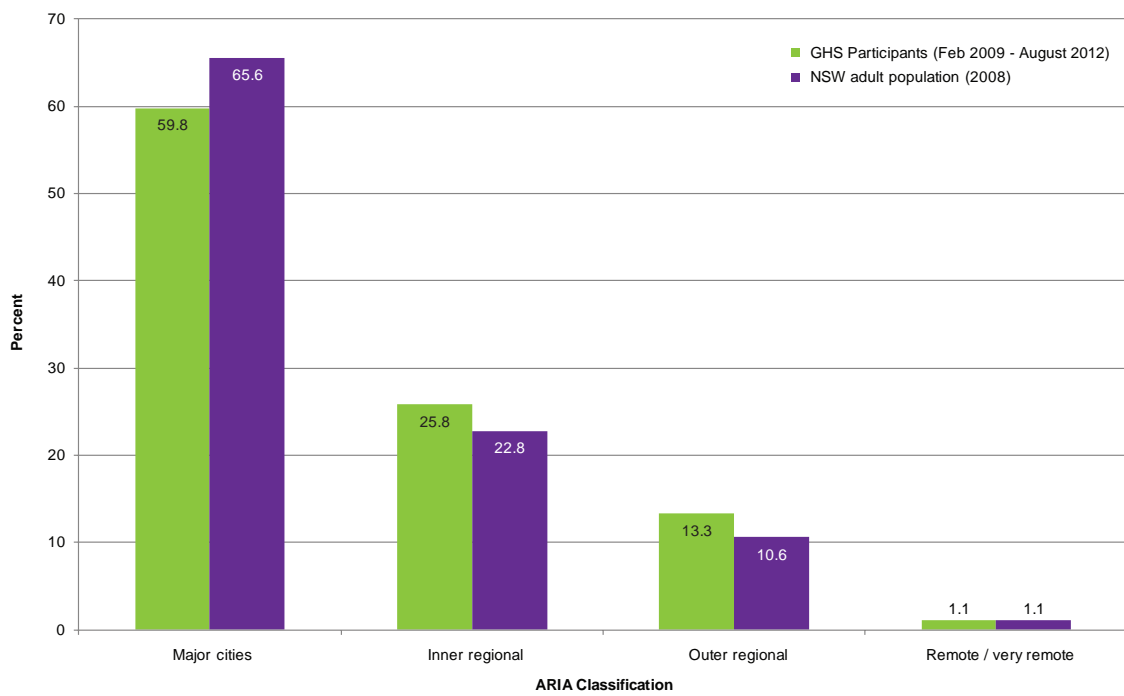


Figure 5: ARIA Classification: Comparison between GHS participants and NSW adults



The socio-demographic profile of GHS participants over the time GHS has been operating has also changed [15], with increases in the proportion of coaching participants (an increase of 23.8% from 58.8% in July 2010-June 2011 to 82.6% in July 2011-August 2012 period), males (an increase of 13.5% from 19.2% in February 2009-June 2010 to 32.7% in July 2011-August 2012), and Aboriginal participants (an increase of 1.8% from 2.4% in February 2009-June 2010 to 4.2% in July 2011-August 2012).

2.4 Risk factor profile of GHS coaching participants

The following list details the risk factor profile of the coaching participants who enrolled in the coaching program between February 2009 and August 2012:

- > 32.1% were overweight and a further 53.3% were obese according to their BMI classification
- > 13.2% had an increased risk of chronic disease due to their waist circumference and a further 76.6% had a greatly increased risk of chronic disease
- > 52.9% consume less than the recommended levels of two daily serves of fruit
- > 89.0% consume less than the recommended levels of five daily serves of vegetables
- > 65.6% do not undertake the recommended levels of weekly physical activity

2.5 Effectiveness of the 6-month coaching program

GHS participants who complete the 6-month coaching program make significant improvements (Table 3) to their:

- > weight
- > waist circumference
- > Body Mass Index (BMI)
- > physical activity
- > healthy eating behaviours

Participants who complete the 6-month coaching program on average lose 3.9kg and 5cm off their waist circumference



Table 3: Anthropometric and behavioural risk factor changes from baseline to 6-months for GHS coaching participants (February 2009 – December 2011)

	N	Baseline	6-months	Change	
Weight (kg) ¥	1377	86.4	82.5	-3.9	**
BMI (kg/m ²) ¥	1377	31.4	29.9	-1.4	**
Waist circumference (cm) ¥	1057	101.5	96.5	-5.0	**
Fruit (daily serves)€	1384	1.7	2.0	+0.3	**
Vegetables (daily serves) €	1356	2.8	3.8	+1.0	**
Sweetened drinks (daily serves) €	1361	0.4	0.1	-0.3	**
Takeaway meals (weekly serves) €	1356	0.8	0.3	-0.5	**
Walking (no. 30min sessions per week) €	1392	2.6	3.6	+1.0	**
Moderate Physical activity (no. 30min sessions per week) €	1332	1.1	1.6	+0.5	**
Vigorous physical activity (no. of 20min sessions per week) €	1355	0.4	0.9	+0.5	**

** significant at $p < 0.001$; matched pair analysis; ¥ T-test undertaken for matched paired samples for significant mean difference; € Non parametric test undertaken for related samples for significant median difference

Importantly, improvements in weight, waist circumference, moderate physical activity, fruit and vegetable and take-away meal consumption remained significant after adjusting for socio-demographic characteristics.

Approximately 50% of participants who complete the 6-month coaching program lose between 2.5% – 10% of their original body weight

These results show that GHS is facilitating significant lifestyle improvements where it is needed most. GHS participants considerably improved their risk of chronic disease, with approximately half losing 2.5-10% of their baseline body weight.



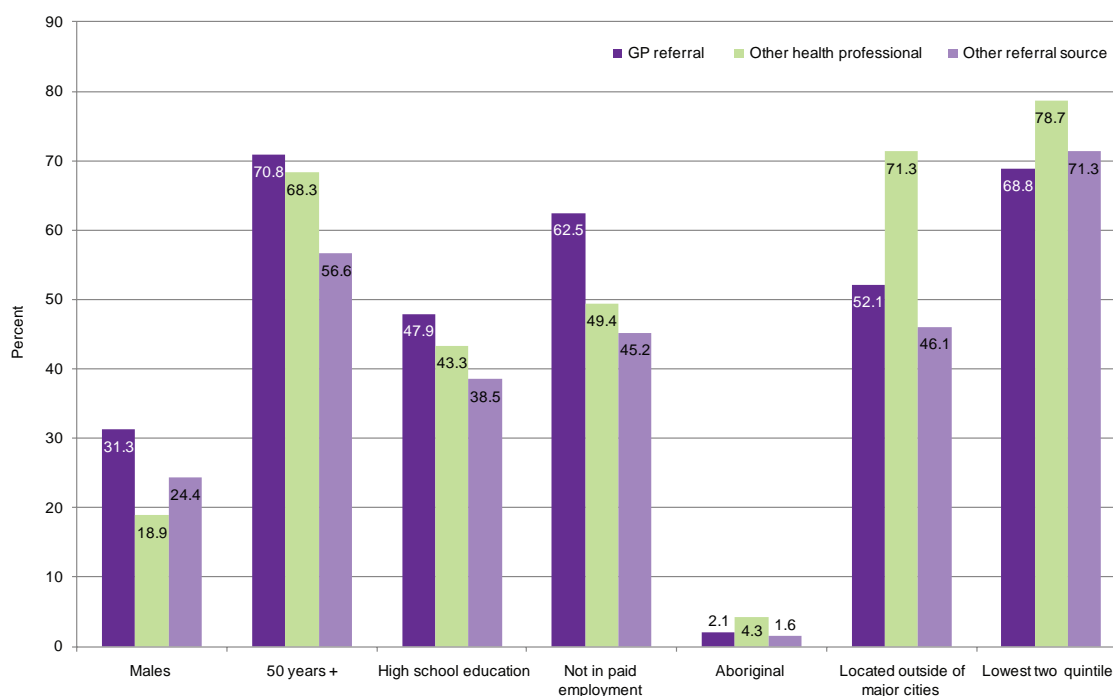
2.6 Profile of participants referred by General Practice and health practitioners

A study examining the profile of GHS participants based on their “source of referral” has shown some important differences in relation to the socio-demographic and risk factor profile of coaching participants (who had completed the coaching program) based on their source of referral [16]. Such that (Figure 6):

- > Males were more likely to cite General Practice (GP) as their referral source
- > 47.9% of GP referrals had a high school education
- > 62.5% of GP referrals were not in paid employment
- > 71.3% of health professional referrals were from the locations other than major cities
- > 78.7% of health professional referrals were from the lowest two quintiles of advantage
- > A greater proportion of coaching participants referred by GP were classified as obese (76.6%) and had a greatly increased waist circumference risk (88.6%).

Participants who are referred by their GP or other health practitioner make the same improvements to their risk factor profile as those who are self-referred to the coaching program

Figure 6: Socio-demographic profile of coaching GHS participants by source of referral (GP, Health professional and other) February 2009 – June 2012



The study also focused on the differences between GP referral, other health professional referral and other sources (including mass media, family and friends and workplaces) and the improvements coaching participants made after completing the 6-month coaching program. Regardless of the referral source, the improvements experienced by coaching participants were the same as previously reported [17].

These findings emphasise the important role that GPs and other health practitioners have in referring clients to the GHS:

- > GP and other health practitioners can target those in the community who are most at need of the assistance that GHS can offer, both in terms of a client's socio-demographic profile but also their risk factor profile
- > Knowing that the results of those who are referred by health professionals are the same as those self-referred could also provide impetus for health practitioners to refer to GHS as it places less importance on self-motivation and suggests that health practitioners can ignite the motivation of clients to make significant lifestyle improvements to their chronic disease risk factors

2.7 Maintenance of behaviour change of coaching participants

A 6-month follow-up study (6-months after completing coaching and 12-months from baseline) [18] showed that the anthropometric improvements made at the completion of the coaching program were maintained for a further 6-months (12-months from baseline).

Key results relating to maintenance of behaviour change are as follows:

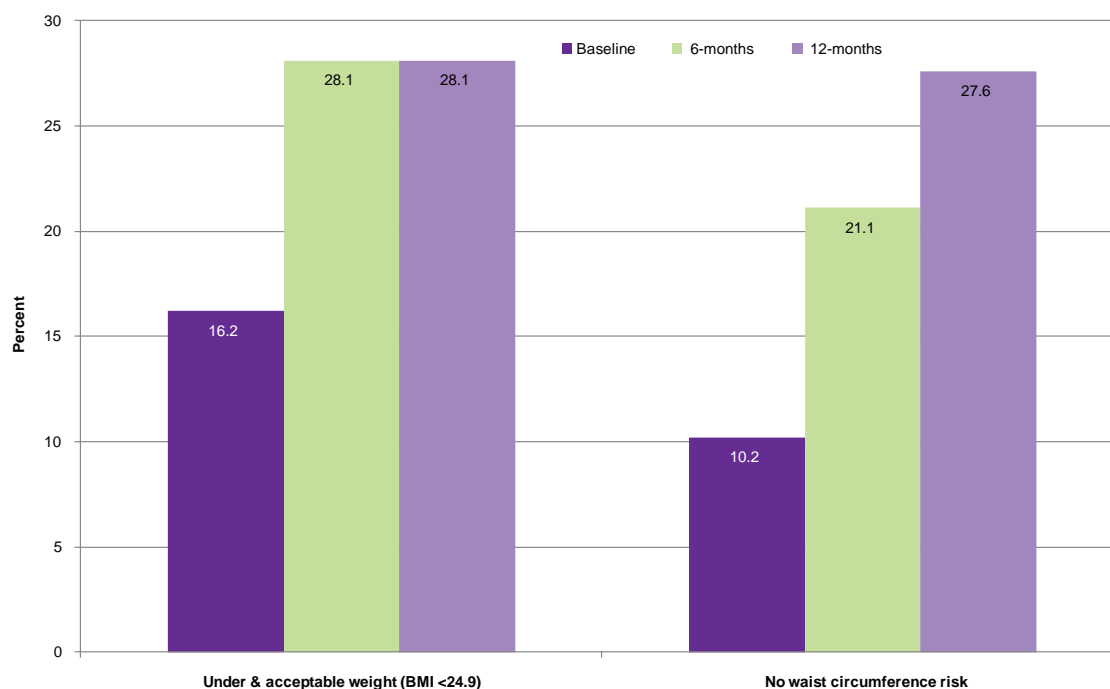
- > Significant decreases in weight from baseline to 12-months and these had been maintained from the completion of the coaching program
- > Significant improvements in waist circumference from baseline to 12-months and these were also maintained from the completion of the coaching program
- > Significant decreases in Body Mass Index between baseline to 12-months, and were also maintained from the completion of the coaching program
- > Increased fruit and vegetable consumption from baseline to 12-months; this impact was maintained for fruit consumption from the end of the coaching program but the degree of improvement obtained at the completion of the coaching program was not maintained for vegetable consumption
- > Improvements in the proportion of participants undertaking recommended levels of physical activity from baseline to 12-months (increase of 5.2%), however the improvements made at end of the coaching program were not maintained at the 6-month follow up.

Participants who complete the 6-month coaching program maintain the improvements they have made 6-months after the coaching program was completed

After adjusting for baseline levels and socio-demographic variables, the coaching program had significant maintenance effects for all anthropometric measurements and for fruit consumption.

Figure 7 demonstrates the proportion of GHS coaching participants who are classified as being a healthy weight and with 'no risk' waist circumference after completing the coaching program and at 6-months post follow up (12-months from baseline).

Figure 7: Proportions in classifications of Body Mass Index (BMI) and waist circumference risk at baseline, 6-months and 12-months



2.8 Costing of GHS

The costing study undertaken of GHS [19] concluded that:

- > Once people were committed to the 6-month coaching program, key outcomes (such as 5% or more weight loss) were more frequently achieved after 26 weeks of coaching rather than 12 weeks
- > The marginal cost of keeping people in the coaching program for the full 26 weeks is smaller than the associated increase in achieving these outcomes; the 26 week program is generally also more cost effective
- > The mean coaching costs ranged from \$640 to \$1030 per person depending upon the assumptions used to develop the models (and their inclusions of fixed, variable and marketing costs)
- > Models which excluded the costs of marketing had substantially lower costs as marketing costs were estimated to be \$350 per person

3. Future Directions

The success of the Get Healthy Information and Coaching Service® in delivering significant health improvements means that further effort needs to go into increasing participation in this service. This will not only occur through general advertising, but also by working with general practitioners and health professionals to increase their referrals to the GHS. Workplaces will also likely be an important site for promoting the service. Specific target groups will also be identified, including Aboriginal people, and people at risk of diabetes.



Robyn Sheldon's Get Healthy Journey

Unable to do any strenuous exercise as a result of painful arthritis in her hips, knees and spine, Robyn has struggled to sustain the motivation to get fit and lose weight over the years. With her 60th birthday fast approaching and suffering from Type 2 Diabetes, Robyn knew she had to make a life change sooner rather than later.

After finding out about the free Get Healthy Information and Coaching Service®, Robyn knew it was exactly what she needed. "I saw the ad on TV about the Get Healthy Service and thought it would be great to have someone keeping a watch on me and my progress so to speak," said Robyn.

Aside from the fact that the Service was free, Robyn enjoyed building a relationship with her Get Healthy coach. "I felt like I could be really honest without being embarrassed, and it made trying to get fit less challenging," she said.

Implementing lifestyle changes were easy for Robyn who, following the advice of her coach, used an exercise bike in her home as part of a low impact fitness regime. She was also given food and cooking tips to get her through the winter months. "I learnt how to eat healthier hot, comfort foods during winter so I was never hungry."

Not only has Robyn lost 4kg whilst on the Get Healthy Service, she has also lost 15cm from her waist. Robyn feels she has gained motivation to continue working towards her healthy lifestyle goals.

Thanks to my weight loss, my Type 2 Diabetes is much better controlled now and I have a lot more energy.

"The Get Healthy Service is about more than just losing weight though. It has improved my outlook on life and I'm more confident in my ability to continue getting healthier and fitter. I would recommend it to everyone."

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