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The impact of different types of incentives on re-enrolment into health management programs

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Arts and Humanities | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

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The Impact of Different Types of Incentives on Re-Enrolment in Health-Management Programs

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Abstract

The Australian Health Management Group (AHMG) offers disease- and risk-management programs for members, aimed at improving health status and reducing health care costs. As an incentive to re-enrol, members are posted a small gift upon receipt of their completed enrolment form. The purpose of the present study was to determine whether the provision of an incentive has a measurable effect on re-enrolment rates. Members were allocated to one of three conditions: “gift”; “competition”; or “no incentive”. We found that the provision of an incentive resulted in an increase in re-enrolment rates, with little difference between the “competition” and “gift” conditions. However, the cost per additional re-enrollee is considerable, thus a more detailed analysis of the costs and benefits of offering incentives need to be undertaken.

Keywords: incentives, re-enrolment, health-management, response rates

Introduction

This paper describes an experiment conducted to determine the impact of incentives on re-enrolment rates on insurer-provided disease and risk management programs. Maximising re-enrolment rates in these programs is important as management of a chronic condition is a life-long task, and effective management substantially reduce complications and health care costs.

Health management programs at AHMG

AHMG is a not-for-profit organisation that is wholly owned and governed by its members, and as a result, it focuses on the health and wellbeing of its members and the community at large through its provision of not just insurance - but also health management services. Today, AHMG is the eighth largest provider of health insurance in Australia, with over 115,000 members (AHMG Annual Report, 2003). CareLink, a subdivision of AHMG was established in 1999 to honour AHMG’s commitment to health and includes the provision of:

- Individual risk management and disease management programs
- Assisted discharge from hospital and hospital in home care management
- The management of people with complex medical care needs

The Enrolment Process at AHMG: Enrolment in a health program starts with a Health Risk Assessment (HRA), which is a survey administered to members asking them a series of health-related questions. Members are encouraged to complete the survey and return it the AHMG where it is then assessed. Currently, an estimated 17% of members complete and return their
HRA. Based on the member’s responses to the HRA, they are triaged into one of three groups. Those who self-identify as having a condition for which a disease-management program is provided (arthritis, asthma, cardiac, and diabetes) are offered enrolment in the relevant disease-management program. Disease management (DM) can be defined as “a system of coordinated healthcare interventions and communications for populations with conditions in which patient self-care efforts are significant” (Disease Management Association of America). Between December 2000 and March 2002, only 23% of the 7,896 invited eligible members acted on an invitation to enrol in a program.

Those who do not have one of the specified conditions but are identified via the algorithms as being at high risk of developing medical problems, due to their health status (such as blood pressure or cholesterol level) or behaviours (such as smoking or not exercising) are offered enrolment in a risk-management (RM) program. Between December 2000 and March 2002, only 18% of the 8,038 invited members accepted this invitation and joined the program. Those who do not fall into either category are classified as low risk and are offered annual HRAs to monitor their health. However, getting people to join health programs is only half the battle. The next hurdle is trying to maintain their membership. This involves understanding and addressing the barriers that impede people from changing, since “behaviour change is difficult to initiate and even more difficult to maintain” (Burke, Giangiulio, Gillam, Beilin, Houghton, Cutt, Mansour and Wilson, 2002: 580).

The use of incentives to increase response rates

Incentives are often implemented to induce the desired response or behaviour; hence “researchers and practitioners often implement some kind of reward, compensation, or token value to increase the respondent’s motivation to complete the survey” (Church, 1993:63). There are many forms of incentives, with the most common being monetary incentives or non-monetary incentives in the form of complementary gifts, competitions and lotteries. Church conducted a meta-analysis into the effectiveness of incentives and found that “incentives do indeed have positive effects on mail survey response rates” with an average effect size of 0.347 (Church, 1993:72). Monetary incentives are cash rewards or payments. Many industries have realised the effectiveness of monetary incentives as a means of eliciting the desired response, and the health industry is no different. Monetary incentives have long been used to encourage people to participate and engage in various health programs aimed at increasing their health status and quality of life, and therefore have the ability to correct people’s sub-optimal health choices (Byrne and Thompson, 2001). Monetary incentives are commonly used because of their ability to lead to more rapid recruitment of subjects. There is some suggestion that it can also increase compliance and retention among persons exposed to behavioural-focused interventions – for example, offering financial incentives greatly increased recruitment into, participation in, and retention in interventions for HIV/STD prevention (Giuffrida and Togerson, 1997, as cited in Byrne and Thompson, 2001) – although the evidence for this is quite limited.

Larson and Chow (2003) tested the effectiveness of both personalised cover letters and follow-up surveys (at two and four weeks) coupled with either no incentive, a one-dollar monetary prepaid incentive or a $600 lottery, on a sample of 1800 purchasing professionals from across Canada. Hence, overall 18 different experimental conditions were tested. In total, 27.3% of subjects returned the questionnaire, and the response rates ranged from 13% for the non-inducement group
(Group A) to 40% for the personalised letter/replacement survey at 4 weeks/one dollar prepaid incentive group (Group Q) (Larson and Chow, 2002). The one-dollar prepaid monetary incentive therefore yielded a 31.8% response rate compared to 25.3% for the $600 lottery and 24.7% for non-incentive condition, and this indicates that monetary incentives are effective in increasing the response rate of mail surveys. However, due to the nature of the health industry in Australia, it has been decided that monetary incentives are neither appropriate nor viable for AHMG to implement. As a result, AHMG are interested in the use of complementary gifts and other forms of non-monetary incentives such as lotteries and prize draws to induce response to their HRA’s.

**Background to the study**

**Re-enrolment in CareLink Programs:** Member satisfaction with the CareLink programs is very high, as evidenced by the re-enrolment rates for the DM and RM programs. Maximising re-enrolment rates is important since management of a chronic condition is a life-long task. Currently, there is insufficient data to accurately determine the rate of re-enrolments. All AHMG members being offered re-enrolment into disease- and risk-management programs are currently posted a small gift upon receipt of their completed enrolment form. The gifts are generally only marginally related to the health condition and unlikely to have any impact on health outcomes (e.g., in the current instance a heat-pack or backpack for the arthritis or HealthCheck program respectively). The perceived advantages of the re-enrolment gift are: provide an incentive for the member to re-enrol; provide the member with a specific tool for use in managing their condition/health; promote positive health outcomes; and develop a relationship with the member.

The financial costs of the incentive gifts, however, are considerable ($13.50 - $19.30 per gift, depending on the program). The estimated cost of gifts in 2003 was $92,000 plus $25,000 in postage and handling costs. It is believed that the provision of these incentives is a successful tool in increasing re-enrolment rates, although this is based on anecdotal comments from members and has never been empirically tested. In essence, it is not clear whether the very high re-enrolment rates are due to a high level of satisfaction with the program or due to the provision of a gift. Given the total costs associated with provision of the gifts it is important that AHMG know whether the allocation of funds to provide re-enrolment gifts is a good business decision. Thus, the purpose of the present study was to determine whether the provision of an incentive has a measurable effect on re-enrolment rates.

**Methodology**

The study was conducted across two of the CareLink programs: “Living with Arthritis” (LWA) which provides information and support to members with arthritic conditions, and “HealthCheck” (HC) which provides information and support in relation to specific identified risk factors (such as excess weight, insufficient exercise, or smoking). Participants in the study were members who had completed 12 months membership in the relevant program, and were being offered the opportunity to re-enrol for another 12 months (members had not been provided with any indication that there would, or would not, be an incentive to re-enrol). Members were allocated to one of three re-enrolment conditions:
1. No incentive: members received the standard enrolment pack (covering letter, re-enrolment form, and reply-paid envelope)
2. Competition: members received the standard enrolment pack plus the competition offer (the chance to win a $500 voucher which could be used for the purchase of a gymnasium or leisure centre membership or the purchase of approved health or sport-related equipment such as a treadmill or exercise bike)
3. Gift: members received the standard enrolment pack and were advised that they would be posted a gift (see above) on receipt of their re-enrolment form

For logistical reasons, it was not feasible to randomly allocate members to the different conditions. Thus, the allocation strategy was based on re-enrolment dates; with the aim of making the group sizes as similar as possible, while making the task manageable for the Program Coordinators and the mailing house. All members whose re-enrolment letter was posted in May and June 2003 were allocated to the “no incentive” condition; those posted in July to the “competition” condition; and those posted in August to the “gift” condition. We are not aware of any variables that would differentially affect the type of enrollee across these three time periods. Sample sizes are shown in Table 1.

Table 1: Sample sizes for the three conditions

<table>
<thead>
<tr>
<th></th>
<th>No incentive</th>
<th>Competition</th>
<th>Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with Arthritis</td>
<td>101</td>
<td>132</td>
<td>75</td>
</tr>
<tr>
<td>HealthCheck</td>
<td>201</td>
<td>194</td>
<td>187</td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td>326</td>
<td>262</td>
</tr>
</tbody>
</table>

Results

Across the two programs, the overall response rates were considerably higher the incentive conditions than in the no-incentive condition.

Response to initial offer

As shown in Table 2, the “competition” and “gift” conditions resulted in similar initial response rates (marginally higher in the “gift” condition), and both were significantly higher than the “no incentive” condition for both programs. Initial response rates were higher for the LWA program than the HC program across all conditions (54% vs 44%, z = 2.84, p < .01). This result was expected due to the different nature of the programs and of the members enrolled in them (enrollees in the Living with Arthritis program have a recognised medical condition and are generally older people; enrollees in the HealthCheck program do not have a specific medical condition and are on average younger).

Table 2: Response rates to the initial offer by condition

<table>
<thead>
<tr>
<th></th>
<th>No gift</th>
<th>Competition</th>
<th>Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with Arthritis</td>
<td>47%</td>
<td>56%</td>
<td>60%</td>
</tr>
<tr>
<td>HealthCheck</td>
<td>39%</td>
<td>46%</td>
<td>49%</td>
</tr>
</tbody>
</table>
Response to the reminder letter

Response to the reminder letter was highest among those in the “competition” condition for both programs (35% of reminders returned for LWA and 28% for HC). For the LWA program, response rates in the other two conditions was similar, and considerably lower at 21% for both conditions (this is counter-intuitive as the competition date had closed by the time of the re-enrolment mailout, so these members were, in effect, in a “no incentive” condition). For the HC program, response rates were only marginally lower, at 23% for “no incentive” and 26% for the “gift” condition. Across the programs and conditions, the reminder letter resulted in an additional take-up of the offer by between 8% and 14% of the total sample.

The final overall response rates are shown in Table 3. It appears that both forms of incentives result in an increased response rate compared to a re-enrolment offer without an incentive. For LWA, response rates were lower with no incentive than with a gift ($z = 1.71, p < .05$) or a competition ($z = 2.84, p < .01$). For HC, response rates were also lower with no incentive than with a gift ($z = 1.99, p < .01$) or a competition ($z = 1.70, p < .05$). Further, there was very little difference in response rates between the “competition” and “gift” conditions for both programs.

Table 3: Final response rates by condition

<table>
<thead>
<tr>
<th></th>
<th>No incentive</th>
<th>Competition</th>
<th>Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with Arthritis</td>
<td>56%</td>
<td>70%</td>
<td>68%</td>
</tr>
<tr>
<td>HealthCheck</td>
<td>52%</td>
<td>60%</td>
<td>62%</td>
</tr>
</tbody>
</table>

Discussion

It is clear that the provision of an incentive results in an increase in re-enrolment rates. However, given that there is no significant difference between the “competition” and “gift” conditions, the decision as to the better option should be based on financial and operational considerations.

The cost of the “gift” condition was approximately $19 per member ($15 for the gift and $4 postage), although this is probably an underestimate of the actual costs. This condition resulted in an additional nine members re-enrolling in LWA and 19 in HC (above that expected based on response to the no incentive condition). This translates to a cost of $158 per additional re-enrollee in LWA and $187 per re-enrollee in HC. The estimated cost of the “competition” condition was $1,650 per program, consisting of the $500 prize, $150 for government permits, and $1,000 in design, artwork and personnel costs. This condition resulted in an additional 19 members re-enrolling in LWA and 16 in HealthCheck (above that expected based on response to the no incentive condition). This translates to a cost of $87 per additional re-enrollee in LWA and $103 per re-enrollee in HealthCheck. Program coordinators also commented that this option was quite complex and time-consuming to manage, due to the necessity of obtaining the required permits and the liaison with the winner to agree on the utilization of the $500 and the physical reimbursement of the monies. As a result the actual costs of having a ‘competition’ are probably much greater than the $1,650 estimate.
There are clearly a number of other issues to be resolved in order to determine whether to offer re-enrolment incentives, and what type of incentives to offer. As discussed in the introduction, the re-enrolment gift has a range of objectives beyond simply increasing response and re-enrolment rates. The gift is also intended to provide the member with a specific tool for use in managing their condition/health, to promote positive health outcomes, and to develop a relationship between the organization and the member. A series of further studies will be conducted to examine these issues, as well as to more fully investigate the range of potential incentive strategies for the disease- and risk-management programs.

References


