

Programs to Promote Independence At Home: How Effective Are They?

Dr Gill Lewin, Research Manager, Silver Chain; Adjunct Associate Professor, Centre for Research on Ageing, Curtin University of Technology; Adjunct Senior Lecturer, School of Nursing and Public Health, Edith Cowan University
glewin@silverchain.org.au

Ms Suzanne Vandermeulen, Research Officer, Silver Chain
svandermeulen@silverchain.org.au

Ms Chris Coster, Manager Independence Programs, Silver Chain
ccoster@silverchain.org.au

Introduction

During the last six years Silver Chain, Western Australia's largest home care provider, has developed and implemented two home care programs focused on promoting people's independence.

The first of these, the Home Independence Program (HIP), is an early intervention program directed at optimising functioning, preventing or delaying further functional decline, promoting healthy ageing and encouraging the self-management of chronic diseases. It is designed to target older individuals (over 65 years of age) when they are first referred for home care services or at a point when their needs have increased and additional services are being requested. Beginning as a pilot program tested with 42 waitlisted clients, HIP has, over the last five years, grown to be a metropolitan-wide service that received 624 referrals in the last financial year.

The second program, the Personal Enablement Program (PEP), was developed in 2002 to provide a rapid response to meet the needs of home care eligible clients who were exiting an acute episode of care in metropolitan hospitals. Based on HIP, PEP is also designed to remove or minimise an individual's need for ongoing home support services by maximising their functional independence. Commencing as a metropolitan-wide service in March 2003, this program received 343 referrals in its

first six months of operation. In the last financial year 1196 referrals were received and 989 completed the program in the same period.

The effectiveness of HIP has been examined in a pilot study, a two-year operational trial and a controlled trial. A randomised-controlled trial is also currently in progress. PEP's effectiveness was formally evaluated during its first year of operation and client outcomes and satisfaction are monitored for both programs on an ongoing basis. This paper provides an overview of the program components of the independence service model, describes the methods and outcome measures used to assess the model's effectiveness and presents the findings to date.

The Independence Service Model

The model on which the independence programs are based is that of a best practice service which re-enables individuals requiring assistance with activities of daily living to complete these activities independently or to minimise the amount of assistance they require. The idea is not that the independence programs replace home care services that are directed at "support and maintenance" but by preceding them reduce the need for them. The model was developed to target older people (65 years and over) who are eligible for standard government funded home and community care services.

The service model consists of a number of key components which are considered essential for it to achieve its objectives cost effectively. These include:

- an inter-disciplinary team consisting of multi-disciplinary staff
- comprehensive multi-dimensional assessment
- goal oriented care planning in partnership with the client
- targeted evidence-based interventions to optimise functioning in daily living activities
- minimised face to face contact including telephone support and follow up
- education about principles of self-management, healthy ageing, use of medications and illness/accident prevention strategies
- gaining of family support for the promotion of independence

- use of language and patterns of communication that encourage the client and their families to participate in all care decisions and which promote their sense of autonomy rather than exerting power or control over the client
- recognition of the importance of the social support aspect of home care services for older people and the need to assist the client to develop other avenues for gaining this support
- use of local resources – facilitated by a resource file

Program Evaluation

The independence programs are continuously evaluated to determine whether they are working as efficiently and effectively as possible. The data used to make this determination is routinely collected service data which is used both by the research team and by the program manager to monitor how the program is performing, and in the case of the manager, as the basis for continuous quality improvement.

Since the program has been operating there have been 2,269 referrals to HIP and 3,615 to PEP. The individuals referred to HIP are on average slightly older than to PEP, 78 years compared to 75 years, and there are more males referred to PEP than there are to HIP.

For both HIP and PEP just over 70% of individuals referred actually go on and complete the program. Fewer than 10% are found on assessment to be inappropriate for the program, and approximately equal numbers have their care cancelled or withdraw because of changed circumstances. A few more men than women, and slightly more individuals living with others who have a carer, rather than those living alone, do not complete the program. The characteristics of individuals referred and those completing are not sufficiently different to be able to predict who will complete and who will not.

The average length of stay on the two programs (53 days for HIP and 49 days for PEP) is very similar despite the programs being originally designed with different time limits (HIP 12 weeks and PEP 8 weeks). However for both programs the intention is that an individual is discharged as soon as they have achieved their goals and are assessed as being able to maintain their improved functioning.

The service outcomes for clients completing the program are determined by comparing the home support services requested at referral to the program with the service being received after the program has ended. 62% of HIP and 73% of PEP clients who have completed the program, needed no ongoing services at discharge. In addition, 19% HIP and 13% PEP needed the same services at discharge as they had been receiving at referral. These individuals had been referred because their need for services had increased. The programs were therefore successful in ensuring that their need for increased services was ameliorated. The programs were therefore effective for 81% of HIP and 86% of PEP clients.

Clients are also asked for their evaluation of the program. Random samples of each program's clients are surveyed every six months, asking for their feedback. The results show a high level of satisfaction with the programs.

Research Studies

In addition to the ongoing program evaluation, two discrete research studies have been conducted and another is in progress. These studies have included the collection of data on individual client outcomes. The outcome measures used include the Modified Barthel Activities of Daily Living (ADL) Index (Colin, Wade, Davies and Horne, 1988), the Lawton and Brody Instrumental Activities of Daily Living (IADL) Scale (Lawton and Brody, 1969), the Timed Up and Go to measure functional mobility (Podsiadlo and Richardson, 1991), the Modified Falls Efficacy Scale to measure confidence in being able to perform everyday activities without falling (Hill, Schwarz, Kalogeropoulos and Gibson, 1996) and the Philadelphia Geriatric Morale Scale (Lawton, 1975) to measure wellbeing. Clients were also asked about their equipment use and need for, and use of, other services.

HIP Pilot Project 1999

Forty two older individuals (average age 81 years) participated in a pilot study to test and refine the program processes as well as test the effectiveness of the program. The results showed 47% improved their IADL score and 76% reported less difficulty in IADLs. As a group, the clients showed a statistically significant improvement in their Timed Up and Go scores (paired $t(36)=5.3$, $p<.01$), and on the Modified Falls

Efficacy Scale (paired $t(37)=-5.5$, $p<.01$), and the Geriatric Morale Scale (paired $t(15)=-2.7$, $p<.05$). After participating in the program, 33% of the clients no longer required a home care service and 39% required a lower level of service.

HIP Controlled Trial 2002-2004

This trial compared the outcomes of 100 individuals who received HIP with those of 100 similar individuals who received standard home care services.

Study participants were interviewed in their own homes – at referral, after 3 months and at one year. The results at 3 months showed that the HIP group's functioning had improved across all modalities as compared to the control group. These differences in functioning were translated into differences in service outcomes. 66% of the HIP group either needed no services at all or a reduced level of service, whereas 67% of the control group still needed the services they had been referred for and only 20% had a reduced or no need for services.

At one year the differences in functional outcomes for the two groups were still evident across all modalities and all were statistically significant. The Modified Barthel ADL Index ($F(1,137) = 6.63$; $p = 0.011$), Lawton and Brody's IADL Scale ($F(1,137) = 12.01$; $p = 0.001$), The Modified Falls Efficacy Scale ($F(1,138) = 13.14$; $p = 0.000$), The Timed Up and Go ($F(1,113) = 24.99$; $p = 0.000$) and The Philadelphia Geriatric Morale Scale ($F(1,137) = 4.27$; $p=0.041$).

Differences in service outcomes were also still evident at one year with 57% of those who received HIP still not requiring any services from Silver Chain whereas 58% of the control group were still receiving the same services that they had been at the start of the trial.

The final measure in the controlled trial was the cost of providing services under the two different paradigms and the results showed that there was no significant difference between the direct care costs of the HIP and standard home care clients for the year of the study ($F(1,191) = 2.746$ $p = 0.099$). However, as 57% of the HIP group

were no longer needing services at one year whereas 81% of the control group were, it is reasonable to expect that the HIP group would show cost savings in the longer term.

The Randomised Controlled Trial 2005-2009

Last year, a randomised-controlled trial (RCT) funded by the Australian Health Ministers' Advisory Council (AHMAC) Priority Driven Research Program commenced. This trial will compare 500 individuals who receive HIP with 500 who receive standard home care services and will examine individual and group outcomes, including the use of other health and aged care services, over two years.

Conclusions

Independence programs (such as HIP and PEP) are successful in reducing the demand for home care services and also have better outcomes for clients. They are also as cost effective in the short term as standard home care when provided within a paradigm in which home care clients receive independence programs prior to standard home care (if they still need it), and are also very likely to result in cost savings in the longer term. This is therefore a paradigm for home care that should be considered for universal adoption.

References

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