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Development and Evaluation of Silver Chain's Independence Programs (HIP and PEP)

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Independence Programs



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- **Home Independence Program (HIP)**
 - Older individuals needing homecare
 - Community based referral
- **Personal Enablement Program (PEP)**
 - Leaving hospital, potential to improve
 - Hospital referral
 - Inc. post acute nursing

Both HACC funded + based on HIP care model



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The programs that I am talking about are the Home Independence Program (HIP) and the Personal Enablement Program (PEP). Both programs are based on the HIP care model which we developed in 1999 in response to being in a situation where the demand for our home care services was exceeding the number of hours of care we had available to deliver. Rather than raise the bar for getting a service we decided to develop a model of care that would assist people to regain their independence and not require ongoing home care. Thus reducing the overall demand for home care.

HIP Care Model



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- Restorative
- Multidimensional
- Interdisciplinary
- Goal oriented
- Evidence-based
- Time limited



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Thus the HIP model we developed, which was targeted at older people when they first required home care or when they required an increase in care, particularly from needing assistance with domestic tasks to needing assistance with their personal care, was restorative. It aimed to assist people to regain or maximise their functioning across all modalities and thus remove or reduce their need for ongoing home care. The development of the model was based on research and much consultation with providers and researchers overseas as well as in Australia to ensure that it was based on the best evidence and clinical experiences available at the time.

The story so far



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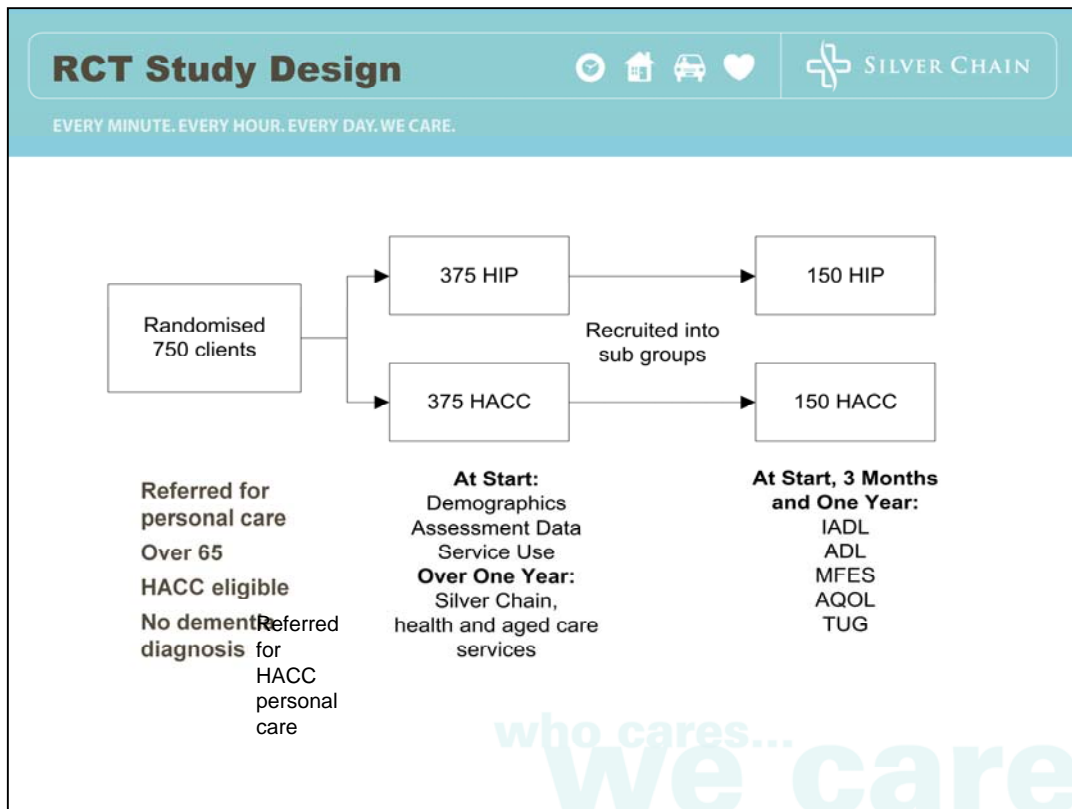
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- 1999 HIP developed
- 2000 Pilot study
- 2001 HIP Operational Trial commenced
- 2002 HIP Controlled Trial commenced
- 2003 PEP implemented across metro
- 2004 HIP implemented across metro
- 2005 HIP RCT commenced
HIP implemented in country
- 2008 HIP RCT 1 yr follow up complete
- 2009 Ongoing program analysis



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This slide shows you what we have been up to over the last ten years since we developed HIP. You can see that our testing of the model has become increasingly sophisticated over time as we have gone from a pilot test to an operational trial to a non-randomised controlled trial and most recently a randomised controlled trial and some exploratory analyses we are doing looking at long term outcomes and whether the programs could be more effectively targeted. At the same time as the evidence-base for the effectiveness of the care model has accumulated the program has expanded both geographically, so that it now is delivered in several of our rural centres as well as throughout metro, as well as in terms of its target group. Given the positive outcomes of the early evaluations of HIP we were asked to develop a version of the program targeted at older people coming out of hospital which would remove or minimise their need for ongoing home support services whilst also addressing any post acute need they might have – thus PEP has post acute nursing as part of the service whereas HIP does not.



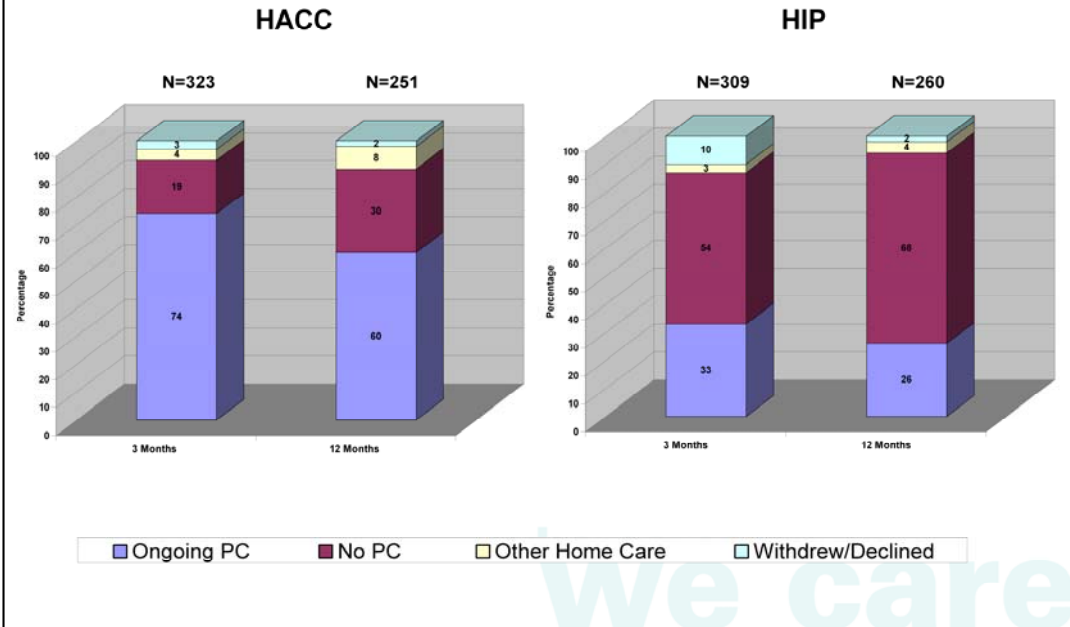
This slide shows you design of the RCT. As you can see 750 older individuals referred for personal care assistance, who met the eligibility criteria of being: non palliative, not having a diagnosis of dementia and being able to communicate in English, were randomly assigned to receive HIP (and then HACC services if they needed them) or to receive HACC services immediately. A standard set of assessment and service data that we collect on all clients was then available for this study. Additionally we recruited 300 of the study participants, 150 from each group, to the substudy in which we visited them at home 3 times (soon after service commencement, 3 months and 1 year) and collected a standard set of outcome data.

The other data that we are looking at in this study is WA and commonwealth health and aged care data so we can look at the impact on use of other services and quantify any cost savings resulting from reduced use of services.

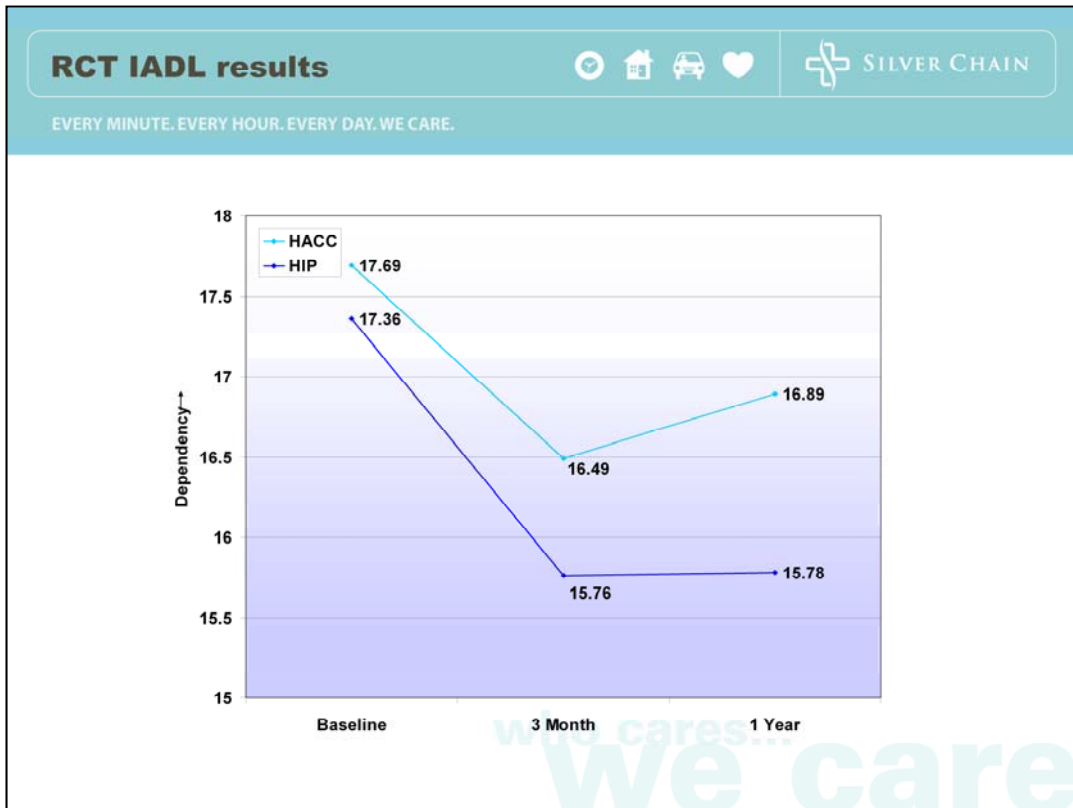
RCT Service Outcomes



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These are the outcomes in terms of use of ongoing home care at the 3 month and 1 year follow up. What can be seen clearly is that while the largest proportions of the HACC group are receiving ongoing HACC personal care at these time points, the proportions of the HIP group receiving ongoing care are much smaller and most of the HIP group are not receiving services.

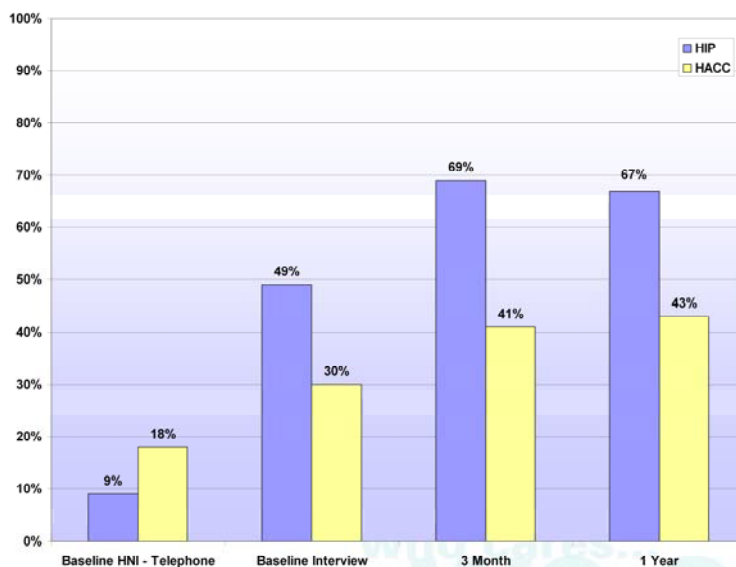


This graph shows that the difference in service outcomes are reflected in differential improvement in Instrumental activities of daily living with the HIP group whilst not showing greater improvement in the first 3 months as both groups improved, but that over the next 9 months they retained their improvement better than the HACC group. There was a significant difference at 1 yr ($p = .012$) with the HIP group being significantly more independent.

Showers Independently



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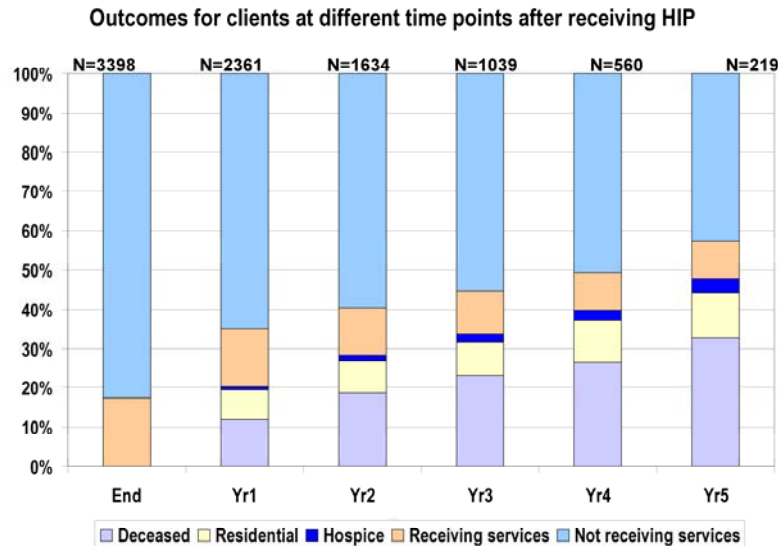


This slide shows the data on being able to shower independently. The first bars being based on the telephone assessment done at referral and the second bar when our researcher went to visit, about 10 days later as clients, particularly HIP clients were reluctant to be visited before this as the HIP Care manager was visiting perhaps every other day to complete their assessment and to get the interventions starting. The effect of these visits is quite visible as 40% of the HIP group had regained their ability to shower independently within this time while a further 20% regained their independence over the next few weeks. While the HIP results match the service outcome data there is a bit of mismatch between 43% of the HACC group being independent in showering at one year and yet only 30% are not receiving ongoing HACC personal care services.

Outcomes for HIP clients (not already receiving home care)



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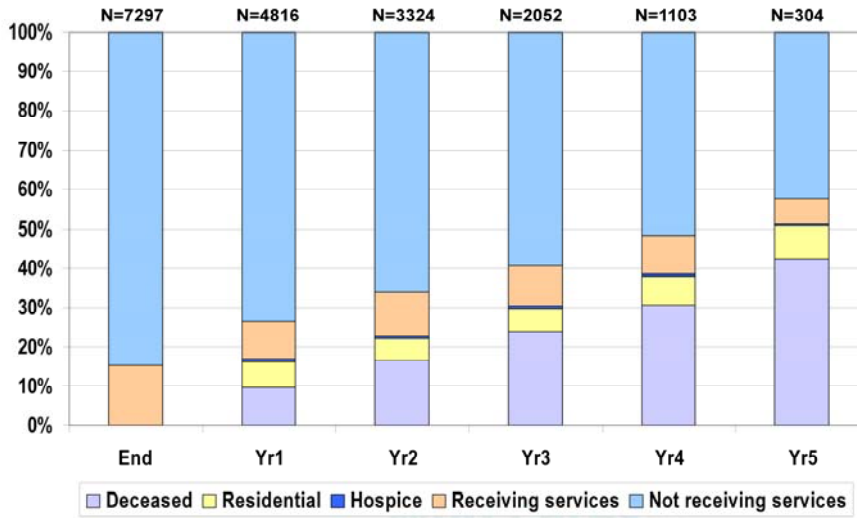
This and the next slide show you the results of the analyses we have been doing recently in terms of looking at what happens to people in the longer term and you can see that the proportion of people who have participated in the programs who require ongoing services does not increase over time. The reduction in the proportion of those not receiving care is matched by the increased proportions that have died or who are receiving care because they are palliative. Both graphs looked at people who did not have services before going on an independence program (represents about 80%).

Outcomes for PEP clients
(not already receiving home care)



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Outcomes for clients at different time points after receiving PEP



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Logistic Regression



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HIP (N=4,079)

Client Characteristic	Odds Ratio	P value	95% Conf. Interval	
Living with others	1.57	<0.00	1.29	1.91
No Carer	1.53	<0.00	1.24	1.88
Not receiving home care services	4.27	<0.00	3.44	5.30

PEP (N=8,255)

Client Characteristic	Odds Ratio	P value	95% Conf. Interval	
Living with others	1.74	<0.00	1.37	2.21
No Carer	1.47	<0.00	1.16	1.87
Not receiving home care services	5.12	<0.00	4.02	6.53

These are the results of the multivariate analysis we have just completed in which we have looked at what are the best predictors of “success” on an independence program, where we defined success in terms of not needing ongoing services. The first two variables that are associated with about a 50% increase in the odds of being successful are Living with others and not having a carer. Which might at first seem a bit inconsistent but perhaps makes sense if we think in terms of it being about living with others who encourage you to do things for yourself whereas a carer sees it as their role to care and perhaps inadvertently undermines attempts at independence. We do need to look at the interaction of these characteristics which we haven't done yet. But the most significant effect is having home care services already when the person participates in the independence program. People who don't already have services, remembering this is taking dependency, age etc into account, are 4 and 5 times more likely to succeed than those who do.

Independence Programs:

- **reduce demand for home care**
- **achieve better outcomes for clients**

Do they?

- **reduce use of other services**
- **save money**
- **increase carer burden**



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Summarising what we know at the moment ...that is that the programs are effective in reducing the demand for home care and are associated with better individual outcomes for clients. We are currently waiting for some commonwealth data to be able to find out whether HIP affects service use more broadly and hence saves the community money. We also need to look at how the program effects carers and their relationships with clients and whilst it may mean that the older person is able to keep on doing more for themselves that it increases carer strain as they keep on worrying about them or feeling that they should be doing more.

Acknowledgements



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