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## The NSW SAFTE Care Program - evaluation of a pilot program to prevent unnecessary hospital attendances by older people

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# Table of Contents

<b>EXECUTIVE SUMMARY.....</b>	<b>1</b>
<b>1 STATUS OF THIS REPORT .....</b>	<b>1</b>
<b>2 THE SAFTE PROGRAM AND ITS GOALS .....</b>	<b>2</b>
2.1 Background.....	2
2.2 The SAFTE Program.....	2
<b>3 METHODS.....</b>	<b>4</b>
3.1 Evaluation framework .....	4
3.2 Evaluation methods .....	8
3.2.1 Data sources .....	8
3.2.2 Quantitative data sources and limitations.....	9
3.3 Other methodological issues .....	10
3.3.1 The SAFTE target group.....	10
3.3.2 The definition of a 'good' client outcome .....	11
3.3.3 Client consent.....	11
<b>4 RESULTS.....</b>	<b>12</b>
4.1 The implementation of the SAFTE model .....	12
4.1.1 Core elements of the SAFTE model.....	13
4.2 Promotion of the SAFTE Care model .....	17
4.3 Impact and outcomes for SAFTE clients.....	18
4.3.1 Referrals to the SAFTE Program.....	18
4.3.2 Profile of clients referred to SAFTE .....	21
4.3.3 Services utilised by SAFTE clients .....	29
4.3.4 Client outcomes .....	29
4.3.5 Client and Carer perceptions .....	30
4.4 Impact and outcomes of SAFTE on providers and the broader system.....	34
4.4.1 Sustainability, generalisability and capacity building.....	34
4.4.2 Stakeholders' perceptions – referrers and local service networks.....	38
4.4.3 Patients in the SAFTE target group presenting to ED in the same period .....	40
4.4.4 Other system level impacts.....	43
4.5 Return on investment .....	45
<b>5 DISCUSSION.....</b>	<b>47</b>
5.1 Referrals to SAFTE.....	48
5.2 The complex needs of clients .....	49
5.3 Staff perceptions about program management and marketing.....	50
5.4 Call Centre - Triage, Intake and Referral System .....	51

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5.5	Partnerships with health and community care-----	51
5.6	Ongoing quality improvement to better target SAFTE -----	52
5.7	Building rapid response capacity-----	54
<b>6</b>	<b>NEXT STEPS - BUILDING RAPID RESPONSE AGED CARE SERVICES.....</b>	<b>55</b>
	<b>ATTACHMENT 1 .....</b>	<b>57</b>
	Terms of Reference and membership of the NSW SAFTE Program Steering Committee -----	57
	<b>ATTACHMENT 2 .....</b>	<b>58</b>
	Return of investment analysis -----	58
	<b>ATTACHMENT 3 .....</b>	<b>68</b>
	NSW Health response to Interim Report-----	68
	<b>ATTACHMENT 4 .....</b>	<b>71</b>
	SAFTE Evaluation Literature Review -----	71
	Bibliography .....	88

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## List of Tables

Table 1	Return on investment by client .....	iv
Table 2	Referrals to SAFTE 1 March 2006 to 27 January 2007 .....	18
Table 3	Inquiries that did not result in a referral, by reason and referrer .....	21
Table 4	Summary profile of SAFTE clients.....	21
Table 5	Item level functional profile of SAFTE clients and comparison with Home Care referrals .....	24
Table 6	Health status .....	25
Table 7	Vision and hearing.....	26
Table 8	Health problems.....	26
Table 9	Incontinence.....	27
Table 10	Medications .....	27
Table 11	Need for a carer .....	28
Table 12	Carer availability .....	28
Table 13	Current threats to carer arrangements.....	28
Table 14	Sustainability of carer arrangements.....	28
Table 15	Services utilised by SAFTE clients as part of their SAFTE care plan.....	29
Table 16	Client outcomes .....	29
Table 17	Type of unplanned interventions.....	30
Table 18	Client and staff rated surveys – impact during last 6-8 weeks.....	30
Table 19	Client and staff rated surveys – health and well-being.....	31
Table 20	Client and staff rated surveys – mental health.....	32
Table 21	Client and staff rated surveys – service issues .....	32
Table 22	Carer experiences with SAFTE over the last 6-8 weeks.....	33
Table 23	Help, information and training provided to carer during the SAFTE program.....	34
Table 24	SAFTE staff perceptions about the program and its sustainability.....	35
Table 25	SAFTE staff perceptions about partnerships .....	36
Table 26	SAFTE staff perceptions about capacity building .....	37
Table 27	SAFTE staff perceptions about the generalisability of the SAFTE model .....	37
Table 28	SAFTE staff perceptions about the nature of the change and about change management.....	38
Table 29	Impact on ED attendances March–December 2006 .....	40
Table 30	Return on investment by client .....	46
Table 31	SAFTE costs and cost per patient March 2006 to January 2007 .....	58
Table 32	Model 1 - estimated savings in first eleven months .....	62
Table 33	Model 2 - estimated savings in first eleven months .....	62
Table 34	Model 3 - estimated savings in first eleven months .....	62
Table 35	Model 1 - return on investment after eleven months.....	63
Table 36	Model 2 - return on investment after eleven months.....	63
Table 37	Model 3 - return on investment after eleven months.....	63
Table 38	Return on investment by client .....	63

Table 39	Cost per client by quarter .....	64
Table 40	Model 1 - return on investment by site.....	64
Table 41	Model 2 - return on investment by site.....	64
Table 42	Model 3 - return on investment by site.....	65
Table 43	Key differences between the assumptions in the SAFTE Business Case and actual results.....	65
Table 44	ED activity indicators.....	67
Table 45	Cost weights and costs for non-elective admissions aged 75 years and older by hospital .....	67
Table 46	Cost weights and costs for emergency department attendances aged 75 years and older by hospital .....	67
Table 47	Weighing the evidence – relevance and quality ratings.....	72

## List of Figures

Figure 1	Summary of outcomes for clients.....	ii
Figure 2	Summary of the SAFTE model of care .....	3
Figure 3	Summary of scope of the evaluation .....	4
Figure 4	Results Based Accountability Framework (Friedman) and mapping to CHSD evaluation framework proposed for the SAFTE Care evaluation. ....	5
Figure 5	SAFTE Care Program – Overall Evaluation Framework.....	5
Figure 6	SAFTE Care Program Evaluation Framework - Level 1: Impact on and outcomes for patients/clients .....	6
Figure 7	SAFTE Care Program Evaluation Framework – Level 2: Impact on, and outcomes for, providers 7	
Figure 8	SAFTE Care Program Evaluation Framework - Level 3: Impact on, and outcomes for, the system .....	8
Figure 9	SAFTE costs and potential savings .....	9
Figure 10	SAFTE evaluation cohorts.....	11
Figure 11	Possible client journeys after discharge from SAFTE .....	11
Figure 12	Levels of client consent in the SAFTE program.....	12
Figure 13	Cumulative rate of referrals .....	19
Figure 14	Referrals by site by week .....	20
Figure 15	Referrals by referral source by week.....	20
Figure 16	Presenting problems by site.....	23
Figure 17	Comparison of SAFTE client functional profiles with Home Care referrals.....	23
Figure 18	Comparison of SAFTE client functional profiles of those with and without memory problems and Home Care referrals .....	24
Figure 19	ED attendances aged 75 years and over.....	41
Figure 20	Changes in ED attendances, March-June 2005 to March-June 2006.....	42
Figure 21	Changes in ED attendances since the interim report .....	42
Figure 22	SAFTE costs and potential savings .....	58
Figure 23	Model 1 - method for the calculation of savings.....	60
Figure 24	Model 2 - method for the calculation of savings.....	61
Figure 25	Model 3 - method for the calculation of savings.....	62
Figure 26	An analysis of barriers to meeting needs in primary care .....	87

## Common abbreviations used in this report

ACAT	Aged Care Assessment Team
ASET	Aged Care Services Emergency Team
BDSP	Better Service Delivery Program
CACP	Community Aged Care Packages
CAPAC	Community Acute/Post Acute Care
CHIME	Community Health Information Management Enterprise
CHSD	Centre for Health Service Development
ComPacks	Community Options post acute packages
COPs	Community Options Program (case management teams)
DADHC	Department of Ageing, Disability and Home Care
DRG	Diagnosis Related Group
ED/s	Emergency Department/s
GP	General Practitioner
HACC	Home and Community Care
HCS	Home Care Service
HIE	Health Information Exchange
ISC	Inpatient Statistics Collection
MRN	Medical Record Number
ONI	Ongoing Needs Identification assessment tool
QRP	Quick Response Program
RIC	Referral Information Centre
ROI	Return on Investment
SAFTE	Sub Acute Fast Track Elderly (Care Program)

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## Executive Summary

The NSW SAFTE Care Program is a pilot program, which targets older people living in the community who are at risk of presenting to an Emergency Department. It is based on the premise that by providing rapid response multi-disciplinary assessment and diagnostic services, together with coordinated care services, that ED attendance and/or hospital admission can be prevented and/or delayed or shortened. A secondary premise is that the cost of the provision of these services is equal to, or less than, the cost of the avoided ED and inpatient services.

This is the Final Report of the Independent Evaluation of the NSW Sub Acute Fast Track Elderly (SAFTE) Care Program. The Interim Report of the Evaluation<sup>1</sup> presented the results of the evaluation of the Program from its commencement in March 2006 to August 2006 and concluded that while many elements of the model are working well, the overall model needs refinement if the program's goals are to be met. This Final Report has repeated the type of analysis included in the Interim Report for the period up until the end of January 2007, and includes additional information based on client and stakeholder feedback and a comprehensive literature review.

This evaluation has considered the program's impact on three levels - consumers (patients, carers), providers (health and community care) and the system (structures and processes, networks, relationships).

### Consumer impacts and outcomes

Referrals to SAFTE stabilised to around 25 per week in July 2006 and there was no significant change in the number of referrals since then. After the initial establishment period, total referrals represented 60% of the target number and about 6% of ED attendances by patients in the SAFTE target group. The eligibility criteria were broadened in September 2007 following the Interim Evaluation report, with minimal impact on referral numbers.

In total, 1159 clients were referred to SAFTE between the Program commencing in March 2006 and the end of January 2007. As expected, most SAFTE clients were quite unwell and many had complex health and care needs. Their level of function was lower than comparable community care clients, and this was reflected in their reasons for referral, with half being referred due to mobility issues and falls, and a further one in eight with general deterioration. Three quarters of clients were assessed as needing a carer, however only 66% had one and, in almost a third of cases, carer arrangements were under threat. Almost 18% of clients had been in hospital within the 7 days prior to their referral to SAFTE, and the teams estimated that nearly four fifths of their clients (79%) would have been likely to end up in hospital if SAFTE had not been available.

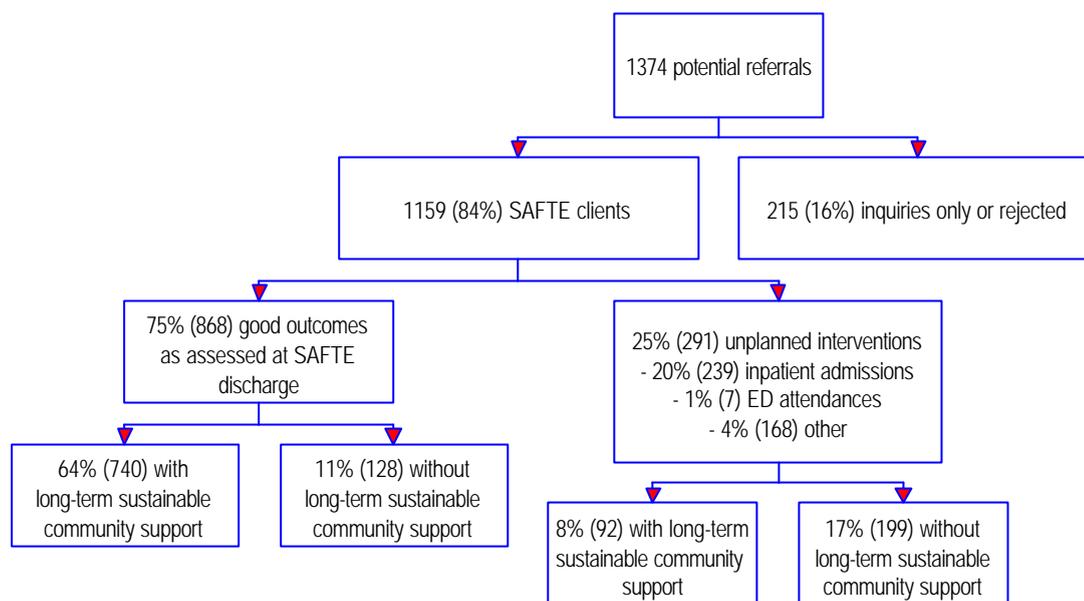
SAFTE teams were able to respond to the health and care needs of clients through the provision of ComPacks (63% of clients received a package of services), nursing care (73%), physiotherapy (59%), occupational therapy (51%), equipment (50%), medication reviews (50%), referrals to a specialist (45%) and pathology services (28%).

Outcomes for clients are summarised in Figure 1. According to SAFTE staff, the vast majority (91%) of clients had their short-term needs met by SAFTE and three quarters had long-term sustainable community support in place at discharge. In total, 25% of clients had unplanned interventions, the majority (82%) of which led to a hospital admission. Of this group, only 32% had long-term sustainable community support in place at discharge from SAFTE. Of the group without any unplanned interventions, 85% had long-term sustainable community support in place at the point of discharge. In total, 72% were assessed as having long-term sustainable community support in place at the point of discharge while 28% did not.

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<sup>1</sup> Westera A., et al (2006) *Interim evaluation of the NSW SAFTE Care Program*. Centre for Health Service Development, University of Wollongong.

**Figure 1 Summary of outcomes for clients**



These outcomes were reflected in the experiences of clients themselves, with two thirds indicating that SAFTE had addressed practical matters resulting from their condition, and just over half felt their health and well-being to be much more under their control as a result of SAFTE. One client commented that SAFTE ‘*provided me with the confidence ... to lead as normal a life as is possible ... a big confidence boost*’.

Carers were also positive about the impact of SAFTE, with three quarters reporting that support and assistance for the person for whom they care was excellent, and 96% also reporting they felt adequate attention was paid to their needs as a carer. Three out of four carers received all the help and information that they needed. One carer wrote that ‘*before SAFTE ... I hadn’t realised there was so much help available. I have been looking after my mother for five years without any help*’. However, just over half of those who required practical training in lifting, managing medicine or other tasks associated with their caring role did not receive any.

**Provider perspectives**

The impact of SAFTE on the health and Community Options Program (COPS) staff involved in the pilot has generally been very positive. The partnership principle behind SAFTE, which resources and formalises joint health and COPS assessments, care planning and management, was consolidated during the period of the evaluation, and was overwhelmingly supported (95%) by the teams; up from 87% in August 2006. The teams expressed frustration with the failure of a number of key elements to be finalised prior to the commencement of the Program, however the majority of these were resolved by the end of the evaluation period. However, difficulties associated with the electronic referral and sharing of information through CHIME, and its slow and cumbersome processes remain unresolved and continue to impact on the morale and efficiency of the SAFTE staff.

The impact of SAFTE on potential referrer groups has been less consistent. While the majority of SAFTE referrals were from GPs (41%), their level of recall of the program and its impact on clients was surprisingly low, despite a significant emphasis on promotional activities targeting them and the active engagement of all four Divisions of General Practice at the local level.

Referrals from community care providers continue to be lower than expected (8%), and this has remained constant throughout the evaluation period. This remains a concern, given the potential

capacity of these services to identify clients in the community who are deteriorating and could benefit from a SAFTE-like intervention.

A consistent theme amongst stakeholders has been the importance of the SAFTE team being located within existing aged care networks, where health teams have expertise in working with older clients in the community, and the commensurate understanding of and positive working relationship with community care services and culture of partnership approach with community care providers. This was identified as a distinguishing feature of the teams who had better referral rates initially, and while referral rates for all teams have become fairly similar, the anecdotal evidence suggests this will be important for the longer-term sustainability of the SAFTE concept.

SAFTE has provided NSW Ambulance Service with an opportunity to reframe its approach to providing care in the community, including the introduction of Protocol 73 to enable officers to refer clients to SAFTE as an alternative to transporting them to an Emergency Department (ED). This is regarded as a major cultural shift for the Service, and has opened the potential for further community-based care roles for officers. Despite this, ambulance referrals slightly decreased over the evaluation period from 15% to 12%.

## System impacts

A key finding is that, excluding the initial establishment period, the number of referrals were only 60% of that anticipated. Several possible reasons for this are discussed in Section 5.1 (page 48). With lower than anticipated referrals, SAFTE has been able to make only minimal impact on ED presentations. A further effect is that the results in relation to return on investment are disappointing (see Attachment 2).

There were initially differences in referral patterns between the sites. These appeared to indicate that those sites that had a rapid response capacity added to an existing aged and community health service (Hornsby and Queanbeyan) had greater success in attracting referrals than sites where there was an existing rapid-response service or where they were not well linked in with the community aged care network. The experience of the SAFTE Care Program suggests that an enhancement to existing local referral pathways (such as ACATs or community health services) may be more successful in attracting referrals than establishing a separate Area-wide or regional intake service.

Similarly, the concept of a central referral and intake system is generally agreed as positive, albeit on a local rather than Statewide level. However, there is no evidence to suggest that all clients can be channelled through a single intake point. There needs to be flexibility in terms of enabling clients to access services wherever they present within the health system.

Anecdotal evidence from the teams suggest that a significant proportion of SAFTE clients had minimal or no prior contact with the formal service system, and many lived alone, and therefore they have a greater need for formal services.

## Return on investment

Three models were developed to estimate the return on investment, based on different assumptions about the number of SAFTE clients who would have presented to an ED if SAFTE had not been available.

With the exception of Model 1 (which assumes that every SAFTE client would have attended hospital), the estimated savings from SAFTE are less than the direct program costs. These results are summarised per client in Table 1. The cost per client does not differ, as this is calculated based on the actual program cost. The estimated cost of routine care (if SAFTE was not available) varies from \$2,686 to \$1,639 depending on the model. The model based on an assessment by SAFTE staff of whether or not each client would otherwise have required a hospital attendance (Model 3) results in an additional cost of \$485 per SAFTE client over the estimated cost of routine care.

**Table 1 Return on investment by client**

	Actual cost	Estimated cost of routine care	Difference	Percentage difference
Model 1 – 100% ED attendances avoided	\$2,618	\$2,686	\$68	2.6%
Model 2 – 61% ED attendances avoided	\$2,618	\$1,639	-\$980	-37.4%
Model 3 – 79% ED attendances avoided	\$2,618	\$2,133	-\$485	-18.5%

The ROI is disappointing, particularly as the costs of other services (eg, ACAT assessments and geriatrician consultations) provided by Area Health Services are not cross-charged to the SAFTE program. Our data (see Section 4.3.3) suggest that SAFTE clients are receiving many of these services. Once these are included, the ROI to NSW Health is estimated to be negative in all models.

A more precise costing was not possible in the evaluation period due to the inability to link hospital and community health data and to cost the other services that SAFTE clients received. It is therefore not possible to be certain about which of the models summarised above is the most accurate, although our overall assessment is that Model 3 is the most realistic. It is recommended that, if the SAFTE model continues, a costing study be undertaken once there is capacity to link hospital and community health data and to cost the other services that SAFTE clients receive.

## Overall findings

In relation to the SAFTE hypotheses, the evaluation has found that:

- 79% of the SAFTE client group avoided the need to attend hospital due to the implementation and coordination of a range of community services.
- Because of the small numbers of referrals and the higher than expected costs of effectively meeting the needs of those who were referred, the cost of the program is estimated to be more than the cost of the avoided ED and inpatient services.

## The findings in perspective

The findings from the evaluation are consistent with the research / evidence gaps in the community care literature and suggest that “proving” the effectiveness of the SAFTE program requires quite sophisticated systems for detecting, assessing, and monitoring the functional status and outcomes for the clients in community settings. These points are covered in the literature review in Attachment 4.

While SAFTE is not breaking new ground in attempting to bring about integrated community care for the elderly, the current evidence base suggests that, bringing potentially effective elements together into a coherent program, with a focus on avoidable admissions, and doing that from a community care rather than hospital and health system perspective, is a goal that is yet to be achieved elsewhere.

The complexity of the issues around integration with community care, merging health and social care, and the related information technology questions that remain open to further work, are all well understood problems in the literature and suggest the initial business case arguments were ambitious but sound.

The organisational and policy issues for integrating health and social/community care (as well as the demands on information management systems) are the main barriers to implementation and these are outside the span of control of any one program. In this context, the best that could be expected of the SAFTE Program is that it trial the elements of a better system and highlight not only where these barriers still exist, but suggest ways they can be overcome. These include making the measurable marginal gains that have been demonstrated to date, and establishing the practical preconditions for Areas to build a more systematic approach to be used at its next stage.

## The way forward for rapid response aged care services

The NSW Health Department has advised that the SAFTE model of care will be incorporated within the Clinical Services Redesign Program projects that are focusing on access of older people and people with chronic illnesses.

The experience of the SAFTE Care Program and the international literature suggest that the following key attributes should guide the establishment of future service models designed to prevent unnecessary presentations by older people to EDs.

### 1) Early detection and rapid response capacity

The nature of the client group requires a capacity to detect problems earlier and rapidly respond to referrals and emerging needs of clients. This is best organised locally. SAFTE clients in the evaluation period were typically frail, incapacitated by illness and with limited supports. They required more interventions than others in this age group and more interventions than had been estimated in the original SAFTE Business Case.

Future models should be aimed at a broader target group and should not solely target those who are at immediate risk of hospitalisation. The international evidence (see Attachment 4) suggests that the best results are achieved by models that include a strong focus on early intervention.

*“An alternative is to replace targeting - the idea that a client is in or out, eligible or not, with titrated care: generous in its eligibility, but carefully calibrated in the amount of resources actually allocated to a client. High-risk clients would get more care than current practice, to permit more aggressive treatment of their high risks and to take advantage of their high potential to benefit. Low-risk clients would get less care, enough to meet their satisfaction and to monitor their changing conditions, but not so much care that they have little potential to show marginal benefits equal to their marginal care consumption.” (Weissert et al. 2003 page 121)*

### 2) Resources – diagnostic, clinical and community care packages

Additional resources are required to provide a comprehensive package care and support services eg, ComPacks, and diagnostic and clinical care in a timely manner. The SAFTE program as a whole cost more per client than a comparable ED presentation, due to the lower numbers of clients and the higher costs of meeting their needs. The evidence suggests that this level of resources is needed for clients with complex of health and care needs.

### 3) Central intake

The experience of the SAFTE program suggests a local intake system can work well when there is good local knowledge, understanding of service networks, and trust between services and clinicians. However, there is no evidence to suggest that all clients can be channelled through a single intake point. There needs to be flexibility in terms of enabling clients to access services wherever they present within the health system.

### 4) Builds on existing services

The service should add capacity to existing service which has expertise in community aged care, rather than be a separate service, to build on existing strengths and avoid duplication. The features of a service should include following elements:

- multidisciplinary team
- expertise in geriatrics/aged care
- experience in, and culture of, working in partnership with the community care sector
- preventative health and/or rehabilitative focus

- established links with potential referrers (ie, be part of an existing referral pathway).

## 5) Partnership with community care

The complexity of the clinical, functional and social needs of this client group requires a coordinated approach to assessment and care planning. The SAFTE program demonstrated that the partnership arrangement enabled client needs to be met in a comprehensive and coordinated manner and assisted in decision-making for longer-term care needs. Working in partnership had benefits for those health and community care staff directly involved, as well as their teams more broadly.

## 6) Standardised assessment processes

The complexity of the clinical, functional and social needs of this client group, and the inter-relatedness of these needs, requires a coordinated approach to assessment and care planning. The SAFTE program has proved the value of using a standardised assessment tool such as the ONI, which addresses both health and community care needs. The benefits of a tool such as the ONI include staff having a more holistic approach to identifying and meeting the needs of client. It also reduces the burden on clients who are not required to 'repeat their story' to the numerous service providers who may be involved in providing them care. A standardised assessment tool also assists in ensuring the consistency of approach to demand management between sites, and allows for comparability of data for the purposes of quality improvement in the targeting and delivery of the services.

## 7) IT infrastructure

The service needs to be underpinned with sound records and information management systems. The complexity of these clients' needs means that a range of service personnel may be involved in their care, including clinicians, diagnosticians and community care providers, and those coordinating care need to be able to readily make referrals, share information, monitor progress and plan for longer term care needs. This would also save clients from having to 'repeat their story' to the variety of people involved in providing their care, and facilitate feedback to referrers on the outcomes of their referrals.

## 8) Ongoing monitoring and quality improvement systems

The SAFTE program was a ground-breaking initiative that sought to identify and address the health and community care needs of those who were at risk of presentation to ED. The SAFTE evaluation has been able to analyse data to better understand the characteristics of this client group, their short-term service and clinical requirements and outcomes. However, the evaluation was unable to identify outcomes for clients in the longer-term, including service utilisation, morbidity and mortality rates. It will be important for NSW Health to establish an ongoing monitoring and quality improvement framework that will help find those who can benefit most from the program and that will help in evaluating their outcomes.

+++++

*"The problem of frailty is a central threat to our health-care system, and it will not be fixed by doing more of the same (and certainly not by doing less of the same). We need to implement... comprehensive models of care for people with complex medical and social problems."<sup>12</sup>*

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<sup>2</sup> Rockwood, K., 2002. *Future of health care for frail older adults*, *Geriatrics Today*, 5(56): 5-6, page 6

## 1 Status of this report

This is the final evaluation report on the NSW Sub Acute and Fast Track Elderly (SAFTE) Care Program. It builds on the interim evaluation report that was presented to NSW Health and the SAFTE Steering Committee in September 2006.

Our evaluation of the SAFTE Care Program has two components:

- **Formative evaluation** whereby the results of the evaluation inform the ongoing development and improvement of the Program. We call this evaluation for learning ('how can we learn and get better as we go?').
- **Summative evaluation** that seeks to ascertain whether, and to what extent, the Program was implemented as intended and the desired/anticipated results achieved. The purpose is to ensure accountability and value for money with the results of the evaluation informing any future planning decisions, policy and resource allocation. We call this evaluation for judgement ('how did we do?').

The focus of the Interim Report was primarily formative, and aimed to inform the ongoing development of the program. This Final Report is both summative and formative, in that it seeks to inform the future development of programs that may follow the SAFTE pilot. Both components of the evaluation seek to achieve the same goal – to help providers, managers and policy makers make better informed decisions about how to improve the delivery of services.

## 2 The SAFTE program and its goals

### 2.1 Background

The SAFTE Care Program has been developed to respond to the expected impact of an ageing population on the acute care system. The Business Case for the Program argues that there are increasing numbers of older people presenting to Emergency Departments (EDs), and older people are more likely to require admission and have longer lengths of stays than younger people<sup>3</sup>. While service developments such as Aged Care Services Emergency Teams (ASETS) have had some success in responding to this trend, they have not been able to prevent ED presentations through earlier interventions prior to the need for an ED presentation. The SAFTE Care Program has been developed based on '(e)vidence (that) demonstrates that the presentation of a large proportion of older people to emergency departments can be averted through more effective case management in the community'<sup>4</sup>.

### 2.2 The SAFTE Program

The SAFTE Care Program focuses on people aged 65 (initially 75) years and older who are identified by their GP or another service provider as requiring rapid assessment and support. Clients are on SAFTE for a period of up to six weeks, with the aim being to have longer term sustainable community care in place by the end of this period, where needed.

The SAFTE Care Program is expected to:

- Identify people 'at risk' of presentation to emergency departments (EDs).
- Reduce the rate of presentations to EDs against the trend.
- Effectively manage short-term needs, plan long-term care in terms of patient preferences, and establish appropriate long-term sustainable community support.

The Program aims to improve integration and communication of service providers via:

1. A single entry point for referrers via a referral, intake and triage contact centre to expedite a rapid response to patients in the community – the Referral Information Centre (RIC) based in the Hunter region.
2. Implementation and use of IT Systems including CHIME and HSNet, a web based tool, to facilitate communication and interagency information sharing.

It also aims to support patients in the community with an interagency approach, at the first sign of deterioration through:

3. Access to a health based rapid response team, seven days per week, who can work with GP's to assist with fast track diagnosis and diagnostics and clinical management of patients.
4. Access to ComPacks Services provided by Community Options (without requiring a hospital admission to be eligible) to improve access to long-term sustainable community care support.

Figure 2 summarises the SAFTE model of care. The SAFTE target group is people who meet the following criteria:

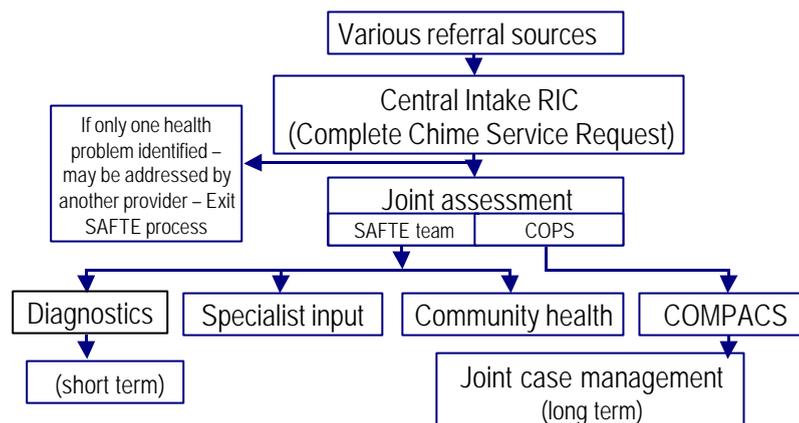
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<sup>3</sup> SAFTE CARE Program Business Case, Health Services Improvement Branch, NSW Health 2005 version ii

<sup>4</sup> Ibid, p2

- Over 65<sup>5</sup> years of age (45 years for Aboriginal and/or Torres Strait Islander clients)
- Living in designated Local Government Areas
- At risk of acute crisis
- Plus may include ANY or ALL of the following:
  - Recent decline in mobility, function, cognition
  - Requiring diagnostic and case management &/or specialist assessment
  - Requiring two or more community services

**Figure 2 Summary of the SAFTE model of care**



Four pilot sites are trialing implementation of the SAFTE Care Model for a 15-month period (initially 12) from 1 March 2006 to end June 2007 in the Hunter, St George, Hornsby and Queanbeyan areas. The evaluation includes the four pilot sites as well as the common intake and referral centre (Referral Information Centre – RIC) based in Newcastle, up to the end of January 2007.

The SAFTE Program was developed using research undertaken at the Prince of Wales Hospital, which involved a retrospective study and analysis of 100 patients over 75 years of age who were admitted through the Emergency Department over a one-year period. The study suggested that, in 61 cases, admission could have been avoided if alternative and/or timely interventions took place, with a further 18 cases avoiding an acute admission through a timely, planned or elective admission. 21 cases were classified as an unavoidable admission<sup>6</sup>.

In March 2006 NSW Health appointed the Centre for Health Service Development to undertake an independent evaluation of the SAFTE Care Program. The purpose of the evaluation reflects the aims and expected benefits of the Program (above), and its aims are to:

- Inform decision-making at State level regarding effective health service design for older people.
- Describe how SAFTE works and what the impact (results) are, and what outcomes can be achieved.
- Assist to clarify future options for health service design and resource allocation for services for older people.
- Test the value to service providers of common assessment and priority rating tools.

<sup>5</sup> The original SAFTE target group criteria specified 75 years but this was reduced to 65 years after the interim evaluation findings were received.

<sup>6</sup> Rosenfeld T et al, *General Practice Evaluation Project Report 801: Survey of Pre-Acute Care of Older People* Department of Health and Ageing 2003, p47

### 3 Methods

As shown in Figure 3, the evaluation was undertaken in seven stages. The scope of the evaluation was modest, with a total of 136 days over the life of the evaluation.

**Figure 3 Summary of scope of the evaluation**

Activity	Task
1	Activate project, including ethical approval
2	Design phase
3	Develop communication plan
4	Implementation of communication plan
5	Data collation and analysis
6	Produce interim report (this report)
7	Produce final report

#### 3.1 Evaluation framework

The Evaluation Framework<sup>7</sup> being used for the SAFTE evaluation was developed on the basis of the NSW Health brief for the evaluation, discussions with NSW Health and the SAFTE Steering Committee. The framework for the evaluation addressed 3 levels:

- Level 1 Impact on, and outcomes for, consumers (patients, families, carers, friends, communities)
- Level 2 Impact on, and outcomes for, providers (professionals, volunteers, organisations)
- Level 3 Impact on, and outcomes for, the system (structures and processes, networks, relationships)

There were six key evaluation questions:

Evaluation question	Evaluation issues
What did you do?	DELIVERY
How did it go?	IMPACT
Can you keep going?	SUSTAINABILITY
What has been learnt?	CAPACITY BUILDING
Are your lessons useful for someone else?	GENERALISABILITY
Who did you tell?	DISSEMINATION

The Framework incorporates the key elements of Friedman's Results Based Accountability Framework, as articulated in the program documentation ie, Process – how much did we do? Impact – how well did we do it? and Outcome – is anyone better off?. Figure 4 below maps the two frameworks (CHSD Evaluation Framework questions in bold).

<sup>7</sup> Eagar K et al (July 2006) *Sub Acute and Fast Track Elderly (SAFTE) Care Program Evaluation Framework and Plan*. Centre for Health Service Development, University of Wollongong

**Figure 4 Results Based Accountability Framework (Friedman) and mapping to CHSD evaluation framework proposed for the SAFTE Care evaluation.**

	Quantity	Quality
<b>Input effort</b>	How much service did we deliver? <b>What did you do?</b>	How well did we deliver it? <b>Impact on, and outcomes for, patients/clients and staff</b>
<b>Output effort</b>	How much change / effect did we produce? <b>How did it go?</b>	What quality of change / effect did we produce? <b>System level impacts, including cost effectiveness</b> <b>Can you keep going?</b> <b>What has been learnt?</b> <b>Are your lessons useful for someone else?</b> <b>Who did you tell?</b>

The overarching SAFTE Evaluation Framework is described in Figure 5, with Figure 6, Figure 7 and Figure 8 providing details of the particular issues being investigated and the data sources across the three levels.

**Figure 5 SAFTE Care Program – Overall Evaluation Framework**

EVALUATION HIERARCHY	PROJECT DELIVERY What did we do?	PROJECT IMPACT How did it go?	PROJECT SUSTAINABILITY Can you keep going?	PROJECT CAPACITY BUILDING What has been learnt?	PROJECT GENERALISABILITY Are your lessons useful for someone else?	DISSEMINATION Who did you tell?
<b>Level 1 Impact on, and outcomes for, patients/clients</b>						
	<ul style="list-style-type: none"> <li>Describe SAFTE Care Program and how it was implemented</li> </ul>	<ul style="list-style-type: none"> <li>Patient uptake</li> <li>Patient experiences</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability assessment</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building assessment</li> </ul>	<ul style="list-style-type: none"> <li>Generalisability assessment</li> </ul>	<ul style="list-style-type: none"> <li>Dissemination assessment</li> </ul>
<b>Level 2 Impact on, and outcomes for, providers (general practitioners, allied health and community care providers)</b>						
	<ul style="list-style-type: none"> <li>Describe SAFTE Care Program and how it was implemented</li> </ul>	<ul style="list-style-type: none"> <li>Inter-agency communication and culture</li> <li>GP/provider experience</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability assessment</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building assessment</li> </ul>	<ul style="list-style-type: none"> <li>Generalisability assessment</li> </ul>	<ul style="list-style-type: none"> <li>Dissemination assessment</li> </ul>
<b>Level 3 Impact on, and outcomes for, the system (structures and processes, efficiency, effectiveness)</b>						
	<ul style="list-style-type: none"> <li>Describe SAFTE Care Program and how it was implemented</li> </ul>	<ul style="list-style-type: none"> <li>Program performance against key access and efficiency objectives and targets</li> </ul>	<ul style="list-style-type: none"> <li>Time series analysis (qualitative and quantitative data) over 10 months</li> <li>Sustainability assessment</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building assessment</li> </ul>	<ul style="list-style-type: none"> <li>Generalisability assessment</li> </ul>	<ul style="list-style-type: none"> <li>Dissemination assessment</li> </ul>

**Figure 6 SAFTE Care Program Evaluation Framework - Level 1: Impact on and outcomes for patients/clients**

PROJECT DELIVERY What did we do?	PROJECT IMPACT How did it go?	PROJECT SUSTAINABILITY Can you keep going?	PROJECT CAPACITY BUILDING What has been learnt?	PROJECT GENERALISABILITY Are your lessons useful for someone else?	DISSEMINATION Who did you tell?
<b>Level 1 Impact on, and outcomes for, patients/clients</b>					
<ul style="list-style-type: none"> <li>• Number of clients</li> <li>• Reason for referral</li> <li>• Demographics</li> <li>• Assessment info</li> <li>• Source of referral</li> <li>• Appropriateness of referral</li> <li>• SAFTE/ ComPacks details (costs)</li> </ul> <p><b>Data sources:</b> <i>CHIME, COPS Care Manager, RIC</i></p>	<ul style="list-style-type: none"> <li>▪ Patient uptake <i>GP survey, RIC/CHIME</i></li> <li>▪ Patient (and carer) experiences <i>survey</i></li> <li>▪ ED presentations 12/12 ago compared to SAFTE <i>EDIS/HIE, ACT Health data</i></li> <li>▪ Hospital admissions for this age group, LOS, DRG <i>HIE</i></li> <li>▪ ComPacks – number, services, specific &amp; average cost <i>Comm. Health – CHIME</i></li> <li>▪ Follow-up SAFTE clients requiring hospitalisation and LOS <i>HIE</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Long term care plan developed</li> <li>▪ Referrals made for ongoing service provision</li> <li>▪ Ongoing service provision in place (if needed)</li> </ul> <p><i>COPS Care Manager</i></p>	N/A	N/A	N/A

**Figure 7 SAFTE Care Program Evaluation Framework – Level 2: Impact on, and outcomes for, providers**

PROJECT DELIVERY What did we do?	PROJECT IMPACT How did it go?	PROJECT SUSTAINABILITY Can you keep going?	PROJECT CAPACITY BUILDING What has been learnt?	PROJECT GENERALISABILITY Are your lessons useful for someone else?	DISSEMINATION Who did you tell?
<b>Level 2 Impact on, and outcomes for, providers (general practitioners, allied health and community care providers)</b>					
<ul style="list-style-type: none"> <li>▪ Governance and management</li> <li>▪ Collaboration with NGOs, GPs, other health-related agencies <i>GP/Service provider surveys</i></li> <li>▪ Provision of services pharmacy, Geriatric/AC AT assessment, imaging etc <i>CHIME, Surveys, ComPacks outcome report</i></li> <li>▪ Referral to ASETs from in scope group – prior, during, after figures <i>ASET data, CHIME</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Inter-agency communication and culture <i>service provider survey</i></li> <li>▪ GP/provider experience <i>service provider &amp; GP survey</i></li> </ul>	<i>Sustainability assessment</i>	<i>Capacity building assessment</i>	<i>Generalisability assessment</i>	<i>Dissemination assessment</i>

**Figure 8 SAFTE Care Program Evaluation Framework - Level 3: Impact on, and outcomes for, the system**

PROJECT DELIVERY What did we do?	PROJECT IMPACT How did it go?	PROJECT SUSTAINABILITY Can you keep going?	PROJECT CAPACITY BUILDING What has been learnt?	PROJECT GENERALISABILITY Are your lessons useful for someone else?	DISSEMINATION Who did you tell?
<b>Level 3 Impact on, and outcomes for, the system (structures and processes, efficiency, effectiveness)</b>					
<ul style="list-style-type: none"> <li>▪ Governance and management</li> <li>▪ Overall project costs</li> <li>▪ Cost of SAFTE &amp; ComPacks</li> <li>▪ Stakeholder participation</li> </ul>	<ul style="list-style-type: none"> <li>▪ How many people were kept out of ED? <i>HIE, EDIS, CHIME</i></li> <li>▪ Patient days and inpatient services saved <i>HIE, EDIS, CHIME</i></li> <li>▪ Efficiencies achieved <i>client, GP &amp; service provider surveys, costs saved which could be redistributed – bed days, episode costs</i></li> <li>▪ Staff satisfaction with SAFTE survey</li> <li>▪ Referral Centre success <i>RIC, surveys</i></li> <li>▪ Has the momentum been maintained? <i>HIE, EDIS, CHIME, surveys, referral patterns – RIC</i></li> </ul>	<i>Sustainability assessment</i>	<i>Capacity building assessment</i>	<i>Generalisability assessment</i>	<i>Dissemination assessment</i>

### 3.2 Evaluation methods

As summarised in the above evaluation framework, the evaluation involves a mix of qualitative and quantitative methods, each of which is discussed briefly below. Prior to collecting data, ethical approval was received from both the University of Wollongong Human Research Ethics Committee (September 2006) and the NSW Health Ethics Committee (August 2006).

#### 3.2.1 Data sources

Several types of data were employed in the evaluation:

- Data collected by SAFTE on all clients (see next section)
- Data held in existing information systems, particularly the data sets held in the Health Information Exchange (HIE) (see Section 3.2.2 below)

- Data being collected for a snapshot period only (eg, Patient and Carer experiences – see section 4)
- Documentation generated by the SAFTE Care Program, in particular the SAFTE Care Business Case.
- Periodic surveys of key stakeholders.
- Phone interviews with key stakeholders.
- Direct observation.
- (De-identified) case reviews conducted in conjunction with individual SAFTE teams.

In addition, a review of the Australian and international literature was also undertaken. This review is summarised in Attachment 4.

### 3.2.2 Quantitative data sources and limitations

Given the context in which SAFTE was developed i.e., the projected increase in the number of people presenting to ED, the key assumptions behind the program are:

- that a range of community services can be put into place that will avoid the need for a client to require an ED attendance and/or hospital admission and
- that the cost of these is equal to, or less than, the cost of the avoided ED and inpatient services. As shown in Figure 9, this is defined for evaluation purposes as the cost during the period as a SAFTE client and in the following three months<sup>8</sup>.

**Figure 9 SAFTE costs and potential savings**



A comprehensive evaluation to test this model requires the ability to access and link multiple data sets:

- SAFTE data, including ONI data (captured in CHIME and Care Manager)
- Medicare Australia data on medical and pharmaceutical services
- NSW Health data on ED attendances (EDIS)
- NSW Health data on hospital admissions (ISC)
- ACT Health data on ED and hospital admissions by patients from the Queanbeyan catchment area
- Area Health Service expenditure data on SAFTE costs up until the end of July 2006.

The key limitation of the evaluation has been the lack of much of this linked data. This is for several reasons:

- The core client assessment – the Ongoing Needs Identification (ONI) system – was not built into CHIME as anticipated. It was initially expected to be in place in the first quarter of 2006, however was still not operational at the time of reporting. This matter is discussed under Section 4.1.1 of this report.

<sup>8</sup> The period of three months was determined at a SAFTE evaluation workshop in March 2006.

- Only clients who have given their consent can be included in the evaluation and there were delays finalising the consent form. The difficulties associated with obtaining client consent are discussed under Section 3.3.3 of this report.
- Only clients discharged from SAFTE before the end of October 2006 have been in the program long enough for the three months after discharge to be captured. Hospitals have up to two months after discharge to code a patient record and assign a Diagnosis Related Group (DRG).
- Data linkage requires access to data items such as medical record numbers (MRN) that are regarded by NSW Health as identifiable data. As such, neither NSW Health nor the CHSD could link the data sets together without formal approval of the data custodian of each data collection and the NSW Health Ethics Committee (NSWHEC). Approval was received from the NSWHEC in mid August 2006.
- NSW Health has had difficulties negotiating access to ACT data for use in the evaluation.
- Data required for linkage was either not available or not available in time for analysis. For example, there was no MRN provided in the ComPacks data for linkage. Also, the EDIS and PAS data provided was limited to attendances at only four hospitals and did not include attendances at other hospitals that the patient had attended, as requested.

Unfortunately, without this linked data, it has not been possible to map and cost the journey of each client and, using that information, to identify the costs and savings at the individual client level.

In the absence of a linked data set, the data used in this report comes from several sources:

- De-identified, aggregate data on referrals from the SAFTE RIC.
- De-identified client data collection developed by the CHSD evaluation team, and sourced by SAFTE team staff from their paper records. We gratefully acknowledge their assistance in allowing the CHSD to develop a de-identified patient data set for this report.
- NSW Health compiled a cut down version of the ONI data set by manually entering data recorded on paper ONI forms and provided this data set to the CHSD and we gratefully acknowledge the additional work required to provide data for this report.
- De-identified ComPacks data.
- Aggregated ED data.

These data have been sufficient to profile SAFTE referrals and their outcomes at the de-identified aggregate level and to allow the evaluation to undertake a Return on Investment (ROI) analysis at the program level. The results of these analyses are reported in Section 4.

### **3.3 Other methodological issues**

There are a number of important issues that were taken into account during the course of the evaluation.

#### **3.3.1 The SAFTE target group**

The SAFTE target group was described in Section 2. A key aspect of the evaluation is to assess whether there are particular types of patients who benefit more than others and whether the right groups of patients were referred.

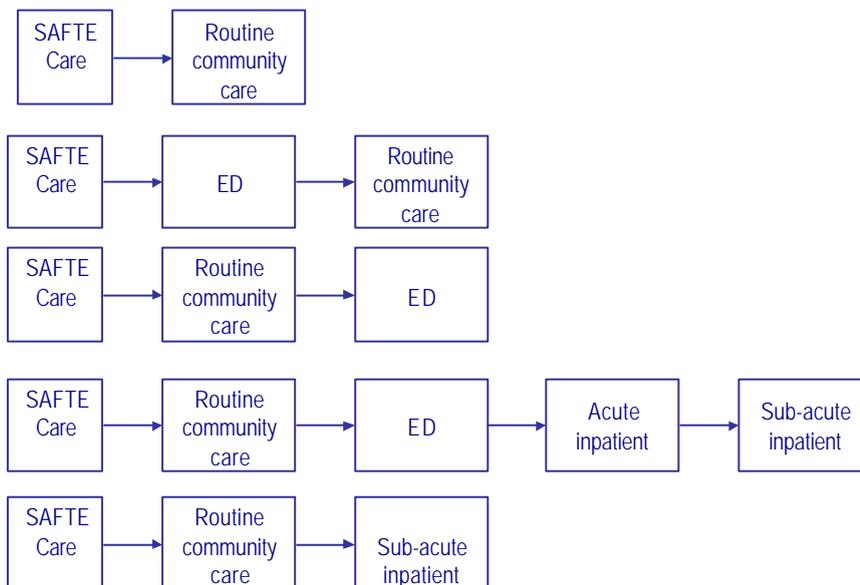
Figure 10 identifies 6 cohorts of patients considered in the evaluation. The data collected during the evaluation were designed to provide the information required to assign SAFTE clients to cohorts 1-3. Analysis of routine administrative data sets and qualitative interviews proved not to be possible and it was thus not possible to identify cohorts 4-6.

**Figure 10 SAFTE evaluation cohorts**

		Referred to SAFTE?	
		Yes	No
Needed SAFTE?	Yes	Cohort 1	Cohort 4
	No – too sick	Cohort 2	Cohort 5
	No – too well	Cohort 3	Cohort 6

### 3.3.2 The definition of a ‘good’ client outcome

Figure 11 illustrates some possible outcomes after discharge from SAFTE. These journeys were the subject of consultations at the SAFTE evaluation workshop in March 2006 as a method to define a good client outcome.

**Figure 11 Possible client journeys after discharge from SAFTE**

It was agreed at the evaluation workshop that, for the purposes of the evaluation, a ‘good’ outcome is any pathway that is planned. For example, a patient admission for a planned same day procedure is a good outcome for the client while an unplanned ED attendance leading to an admission is not. However, a NSW health internal review identified that, in practice, interpretation of this definition differed between the sites, with the specific characteristics and organisation of the team and the relationships with aged care services, their nature, organisation and admission criteria were key determining issues influencing how teams recorded ‘unplanned’ outcomes.

Section 4.3.4 (page 29) presents the results in relation to planned and unplanned outcomes for SAFTE clients.

### 3.3.3 Client consent

As a pilot project that was the subject of an evaluation, each client (or their carer) was required to give their consent for their data to be included in the evaluation. The type of data available for the evaluation was therefore determined, at least in part, by whether the client gave the required consent.

Unfortunately, there was no standard consent form in place in the first months of the program. Instead, each service used their existing consent process and forms, none of which included consent for client’s information to be included in the evaluation. A standard consent form was agreed on for use by all sites in late May 2006 providing SAFTE clients with the option of giving consent at one of four levels, as shown in Figure 12.

The full consent form was quite lengthy, given the initial need to incorporate Medicare Australia’s consent requirement to obtain data regarding individuals’ health service utilisation. This caused considerable concern for SAFTE teams, who were conscious that clients were already under significant stress at the point of the SAFTE intervention and believed the formal consent process could add to that stress. It was agreed that obtaining signed consent was not a prerequisite to the receipt of services (and conversely, refusal or failure to sign did not preclude services), and could be sought any time during the six week period of the SAFTE intervention, when the client’s health and circumstances were more likely to be stabilised.

Following the introduction of a standard consent form, SAFTE teams attempted to seek retrospective consent from those who entered the program in the early months. However, this was not possible in all cases, limiting the number of clients who have completed their time on SAFTE and who have given the relevant level of consent. The number of clients who have given each level of consent is reported in Section 4.3.2.

**Figure 12 Levels of client consent in the SAFTE program**

Consent levels	
<b>Level 1</b>	Patients giving Level 1 consent are giving agreement to participate in the project and to have their information shared between the service providers involved in their care, but not to take part in the evaluation. This is current practice for SAFTE teams, given the need for health and community care teams to share information to ensure a coordinated approach to care. This means that the evaluation team cannot be given any information about them. The evaluation team will ask each project at the end of the project only for the number of patients who consented at this level as this is an evaluation finding in its own right
<b>Level 2</b>	Patients giving Level 2 consent are agreeing to take part in the evaluation, and are allowing (de-identified) project information about them to be provided to the evaluation team.
<b>Level 3</b>	In addition to taking part in the evaluation and allowing (de-identified) project information about them to be included, patients giving Level 2 consent are also agreeing to allow the Centre for Health Service Development (CHSD) at the University of Wollongong to access information from local hospitals about the services that the patient has received from the hospital. This may include inpatient, emergency and outpatient services.
<b>Level 4</b>	In addition to consenting for the CHSD to collect the information specified in Levels 1 and 2, patients giving Level 4 consent are giving further agree to allow the CHSD to access information from Medicare Australia (formerly the Health Insurance Commission) about the medications and medical services they have used

In August 2006 NSW Health Ethics Committee advised that consent was *not* needed for de-identified data to be released for the purposes of evaluation (Level 2 above). Also, around this time it also became apparent that the very low rate of SAFTE clients who had agreed to the release of Medicare data did not justify the effort and expense associated with pursuing such data. NSW Health agreed that Medicare data (Level 4) would no longer be included in the evaluation, and a revised two-level consent form was developed: (1) to receive a SAFTE service and (2) to participate in evaluation and allow CHSD access to their health data, such as the reasons for hospital admission and treatment received (September 2006).

## 4 Results

### 4.1 The implementation of the SAFTE model

This section describes the core elements of the SAFTE model and how they have been implemented. With one exception, all elements of the SAFTE Care model as articulated in the

SAFTE Business Case and program documentation were implemented early in the life of the program. That one exception is the sharing of electronic information, an issue that is discussed below.

#### **4.1.1 Core elements of the SAFTE model**

##### ***Project Governance***

The SAFTE Care Program is oversighted by a Steering Committee which predominantly comprises executive members and senior staff from within NSW Health and Area Health Services, NSW Treasury and Department of Ageing, Disability and Home Care (DADHC) officials, as well as a non-government community service provider, General Practitioner and consumer representative. The Terms of Reference and Membership of the Steering Committee is included as Attachment 1. The Committee met regularly in the lead-up to the commencement of SAFTE, and bimonthly once the Program became established.

SAFTE is part of the Clinical Services Redesign Program, which is oversighted by a broader Steering Committee. It is not clear the extent to which this represents a direct line of accountability or reporting.

Each of the four pilot sites has an overseeing committee or management group, comprising representatives of the Area Health Service, relevant stakeholders such as related aged and community health and care services. Queanbeyan and Hunter also included representatives of the relevant IT departments within the Area Health Services, who provided advice and support regarding the implementation of CHIME. The Referral Information Centre does not have an overseeing committee, being an extension of the recently established telephone referral and intake centre for the Hunter region.

##### ***Staffing***

##### **Program Management team**

The SAFTE team within NSW Health comprises a dedicated Senior Project Officer (1 FTE) and consultant Geriatrician (0.4), supported by management within the Health Services Performance Improvement Branch.

The Program Team has had a very 'hands on' approach to the overall management of the SAFTE pilots, including an active role in promotional activities for the SAFTE Care Program, particularly during its first 6 months of operation. This includes the development and distribution of literature, establishing a website, and facilitating the distribution of common templates and processes. In addition, there has been much activity promoting SAFTE directly to key stakeholders and their respective representative groups, including General Practitioners, NSW Ambulance, Community Care providers and, more recently, carer groups.

The Program Team has aimed to work closely with the SAFTE teams to bring coherence and consistency to the Program. It has taken a collaborative approach to finalising the SAFTE Program Guidelines, assessment and reporting processes, and has actively participated in training in the use of the Ongoing Needs Identification assessment tool (ONI) and CHIME. It convenes weekly teleconferences with the SAFTE teams to discuss operational issues and bi-monthly project meetings for the teams to meet together.

##### ***Pilot sites and RIC***

The Business Case for SAFTE notes the *'importance of building on and coordinating with existing and proposed sustainable access projects and community care services... and .... build on the opportunity of new referral and treatment linkages with some of the key initiatives in ED and*

*hospital services developed to assist older frail patients*<sup>9</sup>. As a result, the SAFTE teams have different staffing profiles that reflect the different contexts in which they are located:

### *Hornsby*

The SAFTE team has been funded as an enhancement to the Rehabilitation and Discharge Team at Hornsby Hospital. The SAFTE core staffing profile comprises:

- Clinical Manager RDT NUM (1 FTE)
- SAFTE Project Manager (0.5 FTE)
- Staff Specialist (0.22 FTE)
- Medical Officer (0.5 FTE)
- Registered Nurse – Liaison with ACAT (0.75 FTE)
- Physiotherapist (0.5 FTE)
- Occupational Therapist (0.05 FTE)

The team works in partnership with Mercy Community Care (Community Options).

### *Hunter*

The SAFTE team has been funded as an enhancement to the Community Acute/Post Acute Care (CAPAC) Team at Newcastle Community Health Centre. The SAFTE staffing profile comprises:

- Project Manager (1 FTE)
- Staff specialist 0.5 FTE
- Registered Nurse (0.5 FTE)
- Occupational Therapist (0.5 FTE – 3 months)
- Physiotherapist (0.5 FTE)
- Administration support (0.5 FTE)

The team works in partnership with Newcastle/Lake Macquarie Community Options.

### *St George*

The SAFTE team has been funded as an enhancement to the Quick Response Program (QRP), an admission prevention program, based in the ED targeting people over 65 years or age. The SAFTE team is working from a demountable and QRP from ED as there is no room in the ED for the SAFTE team. SAFTE staffing profile comprises:

- SAFTE Project Manager (1 FTE). This position also carried a nursing load from 1/3/06 until the nursing position was filled.
- Physiotherapist (1 FTE )
- Occupational Therapist (1 FTE)
- Aged Care Registrar (0.5 FTE). This is a joint position with the Rapid Assessment Unit
- Nursing (1 FTE). This position has just been filled, prior to this, the position was filled by either a casual EN or RN (from the QRP), or a casual physiotherapist.

The team works in partnership with Care Connect in the first instance and the Benevolent Society's St George Live At Home Service when additional services are required.

### *Queanbeyan*

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<sup>9</sup> SAFTE CARE Program Business Case, Health Services Improvement Branch, NSW Health 2005 version ii, p9

The SAFTE team has been funded as an enhancement to the Community Health Service that includes a range of allied health and rehabilitation services for older people. The staffing profile comprises:

- Registered Nurse (1 FTE)
- Physiotherapist (0.5 FTE)
- Occupational Therapist (0.5 FTE)
- Geriatrician (4 hours per week)
- Funding was also provided for a social worker (0.4 FTE), but recruitment campaigns were unsuccessful, with the team using the generalist social worker from within the broader Community Health Service as required.

The team works in partnership with Baptist Community Services (Community Options).

#### *Referral Information Centre (RIC)*

The SAFTE RIC is an extension of the Referral Information Centre for the Hunter region. The staffing profile comprises:

- RIC Manager – Nurse Unit Manager 1 (funded for 0.2 FTE, however in practice 0.5 FTE)
- Enrolled Nurses (3.8 FTE) – one dedicated SAFTE clinician and 3 who share both SAFTE and general RIC responsibilities.

#### ***Central Triage, Intake and Referral System***

The SAFTE model incorporates the ‘establishment of the SAFTE Care Call Centre service (to) ... provide service providers with a single integrated intake, triage and referral point for aged care patients aged 75 years and older’<sup>10</sup>. The Referral Information Centre (RIC), the relatively recently established referral and information centre for all the community health and aged care services in the Greater Newcastle region, was chosen to undertake this function for all four pilot sites.

The RIC screens the calls to ascertain whether referrals fit within the SAFTE guidelines, ie, whether the client is aged 75 years and older or 55 years for ATSI clients (lowered to 65 and 45 years respectively from September 2006), lives in the designated Local Government Areas, and is at risk of hospital admission or an acute deterioration of health status has taken place (such as reduced functioning, mobility or cognition; falls; recent loss of carer or spouse). Referrals are excluded if they do not meet these criteria, if they have an acute urgent illness requiring hospitalisation or if they are made by clients and/or carers (carer referrals were accepted to the St George SAFTE team from September 2006). In cases where the referral is not appropriate, RIC staff work with the caller/referrer to determine the most appropriate course of action for the older person and, where possible, directly transfer the call to a more appropriate service type.

Once a referral has been deemed eligible, a series of questions is asked aimed at developing a profile of the client, including health, social, care service status. The referral is transferred electronically through CHIME or via fax to health teams, and by fax to COPs teams.

SAFTE referrals can be made at any time, with the RIC taking all calls up to 8pm in the evening and on weekends, and calls after that time are diverted to the Health Access Coordination Centre (HACC) run by the NSW Ambulance Service. The HACC forwards relevant referrals to the RIC for action the following day.

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<sup>10</sup> Ibid, p11

### **Rapid Response - building on existing aged care models**

The guiding principle of the SAFTE Care Program is to build on the capacity of existing service models<sup>11</sup>. This is particularly important given the well-documented fragmentation of aged and community care services.

As noted above, St George SAFTE builds on capacity of the Quick Response Team; Hornsby on the Rehabilitation and Discharge team; Queanbeyan on the Community Health Service; and, Hunter on the recently established Community Acute/Post Acute Care (CAPAC) team.

The health teams are multidisciplinary, including a mix of nursing, Occupational Therapy, Physiotherapy and medical staff, dependent on the local context and budget. The teams will provide direct nursing care (eg, wound management) and access to a range of health, diagnostic or pharmaceutical reviews and treatments, including comprehensive aged care assessments, as required by the needs of the clients. All teams acknowledge the importance of the General Practitioner as the primary health care provider for the SAFTE clients, and have developed local strategies and processes to ensure that GPs are kept informed of their patients who are SAFTE clients, from the point of referral, during the six-week period of SAFTE intervention and upon discharge.

### **Partnership with community care sector**

As noted above, each Health team works in partnership with a local Community Options (COPs) provider and this is expected to continue throughout the six-week period of the SAFTE intervention. Referrals are allocated by the RIC simultaneously to both health and COPs teams, and a joint assessment of the client is undertaken in their home within 24-48 hours using the Ongoing Needs Identification (ONI) (see Section 4.4.4 for more details on the ONI). A joint care plan is developed, followed by ongoing case conferencing and monitoring until discharge. Typically, the health team member will be predominantly responsible for clinical care, while the Community Options team will focus on the community care services required, and coordinate the multidisciplinary community care package (ComPacks).

This 'gold standard' of joint assessment and care planning is practiced by some SAFTE teams routinely, however others have developed protocols regarding the most appropriate SAFTE member to lead the assessment and care planning, depending on the nature of the presenting problem. For example, if a client is referred who has a worsening health condition, the SAFTE nurse may initially visit with a medical officer. Similarly, if the client is at imminent risk of carer breakdown, the COPs case manager may make the first visit and organise support services in the first instance.

Feedback is routinely provided to the partner agency in a timely manner, and the outstanding components of the ONI assessment is undertaken and complementary care plan developed. Clients are typically monitored by regular case conferencing between the partners.

### **Integrating health and community care**

The guiding principle of the SAFTE Care Program is to build on the capacity of existing service models, and improve communication and information management to better integrate primary and community health care. A key tool/mechanism for improving integration is the utilisation of information technology systems.

The SAFTE Care Program Business Case noted that<sup>12</sup>:

*“The Community Health Information Management Enterprise (CHIME) will be rolled out to improve technology support for community services at pilot sites. CHIME supports community*

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<sup>11</sup> Ibid, p12

<sup>12</sup> Ibid p 13

health clinicians to make informed clinical decisions at the point-of-care. This could be at a community health centre or in the client's home.

*The Better Service Delivery Program (BSDP) is a program, which will link human services through a web-based network, a comprehensive service directory, and an online referral tool. These online applications will allow human service agencies to offer the best possible service to their clients by making it easier to find information about services locally and across NSW, and refer them quickly and accurately”.*

It was expected that “(t)here will be a greatly reduced duplication of effort with access to a central intake system (CHIME) and shared information exchange through the Better Service Delivery Program (BSDP)<sup>13</sup>. A key to this was the inclusion of the ONI assessment tool within CHIME and ONI information being shared electronically (via BSDP) between health and ComPacks.

In reality, these planned enhancements were not available to the SAFTE teams during the period of the evaluation. This had significant implications for:

- the referral process – for the first few months referrals were manually faxed to the teams, and later electronically through CHIME to the health teams only; COPS teams still receive information by fax;
- communication within SAFTE teams, with the health and COPS partners unable to electronically communicate or share information; and
- communication between SAFTE and related agencies eg, referrals for diagnostic and care services needed to be done manually; EDs initially had no way to identify whether a patient presenting may be under the care of the SAFTE team.

Further, the ONI (the comprehensive assessment tool for clients) had not been built into CHIME, resulting in health staff having to transcribe their paper ONI forms into CHIME; and ONI information not able to be shared electronically between the health and COPS teams.

A further implication is that such electronic information was not readily available for the purposes of the evaluation (see Section 3.2.2).

## 4.2 Promotion of the SAFTE Care model

Significant investment of time and effort has been applied to promoting the SAFTE initiative to key stakeholders, in particular potential referrers, both at the central level and locally. This has been considered critical to raise the awareness of the new initiative and encourage referrals, as well as facilitating a culture shift amongst referrers away from automatic referral/transfer of patients to Emergency Departments.

The focus for the Program team in NSW Health was initially at the broader level, liaising with key stakeholders such as NSW Ambulance, Divisions of General Practice, and Community Care service providers such as Home Care. The Program team also developed a number of promotional resources such as the SAFTE website, SAFTE newsletter and information packs for ambulance staff.

SAFTE teams also undertook a significant amount of work raising the profile of SAFTE amongst local stakeholders such as General Practitioners, General Practice nurses, community care providers, ACATs, residential aged care facilities, local councils, regional offices of government departments such as the departments of Ageing, Disability and Home Care and Housing, and relevant hospital teams. Promotional activity included a mix of face to face visits, education sessions and distribution of SAFTE resources.

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<sup>13</sup> Ibid p 25

The SAFTE Program team sought to enhance the efforts of the local teams through their attendance at meetings with local stakeholders such as Home and Community Care (HACC) Forums, NSW Ambulance Service stations, carer groups as well as providing in-service opportunities for GPs regarding health issues affecting older people and presenting at a number of state-wide and national conferences.

### 4.3 Impact and outcomes for SAFTE clients

This section of the interim report summarises the impact and outcomes at level 1 of the program evaluation framework.

#### 4.3.1 Referrals to the SAFTE Program

As shown in Table 2, a total of 1,159 referrals were received during the first eleven months of the SAFTE Program. GPs were the largest referral source and accounted for 41% of referrals. The next largest source was health service providers who referred 35% of cases. The NSW Ambulance Service represented 12% of referrals, while community care made 8% of total referrals.

The number of referrals to all sites is well below target with total referrals until the end of January 2007 representing only half (53.7%) of what had been expected. This ranged from 48.5% at St George to 58.1% at Hornsby/Ku-Ring-Gai. These percentages increase if the initial establishment period is excluded, ranging from 55.6% at St George to 64.6% at Hornsby/Ku-Ring-Gai.

**Table 2 Referrals to SAFTE 1 March 2006 to 27 January 2007**

	St George	Hornsby	Newcastle	Queanbeyan	Total
<b>Number of Referrals Received</b>	<b>349</b>	<b>279</b>	<b>400</b>	<b>131</b>	<b>1,159</b>
Number of Enquiries	56	35	89	35	215
<b>Referral Source:</b>					
GP	112	78	234	53	477
Health Service Provider	153	128	73	54	408
Ambulance (NSW Ambulance)	36	39	63	6	144
Non Health Service Provider (eg Homecare)	25	28	25	11	89
Carer	21	0	0	0	21
Residential Care facility	0	2	3	7	12
Ambulance HAC Service	2	4	2	0	8
<b>Target referrals per week</b>					
	<b>15</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>45</b>
<b>Average referral per week</b>					
	<b>7.3</b>	<b>5.8</b>	<b>8.3</b>	<b>2.7</b>	<b>24.1</b>
<b>Expected number of referrals</b>					
	<b>720</b>	<b>480</b>	<b>720</b>	<b>240</b>	<b>2,160</b>
Variance	-371	-201	-320	-109	-1,001
<b>% Achieved of expected referrals</b>	<b>48.5%</b>	<b>58.1%</b>	<b>55.6%</b>	<b>54.6%</b>	<b>53.7%</b>
<b>% Achieved of expected referrals excluding initial establishment phase</b>	<b>55.6%</b>	<b>64.6%</b>	<b>63.1%</b>	<b>58.5%</b>	<b>60.4%</b>

Figure 13 shows the cumulative target and the cumulative number of referrals actually made by week. It will be seen that the two came closest together in the week ending 27 May, suggesting that the number of referrals peaked around that time.

This is confirmed by Figure 14. Referrals to date peaked in May 2006, with referrals stabilising in July to about 25 a week. This is about half of the expected target per week. This figure also shows that there have been erratic variations by week, making it hard to predict requirements and manage workloads.

Figure 15 shows the source of referrals and how these fluctuate and change over time. The two largest sources of referrals – GPs and health services – are each fluctuating between 6 and 16 a week. The ambulance service began referring to SAFTE in the week starting 15 April, while carers started referring in November. Referrals from the ambulance service peaked in June with 9 referrals in one week. Since then, ambulance referrals have fluctuated between 1 and 5 a week. Referrals from carers fluctuated between 1 and 4 a week until mid December, since which time there have been none.

**Figure 13 Cumulative rate of referrals**

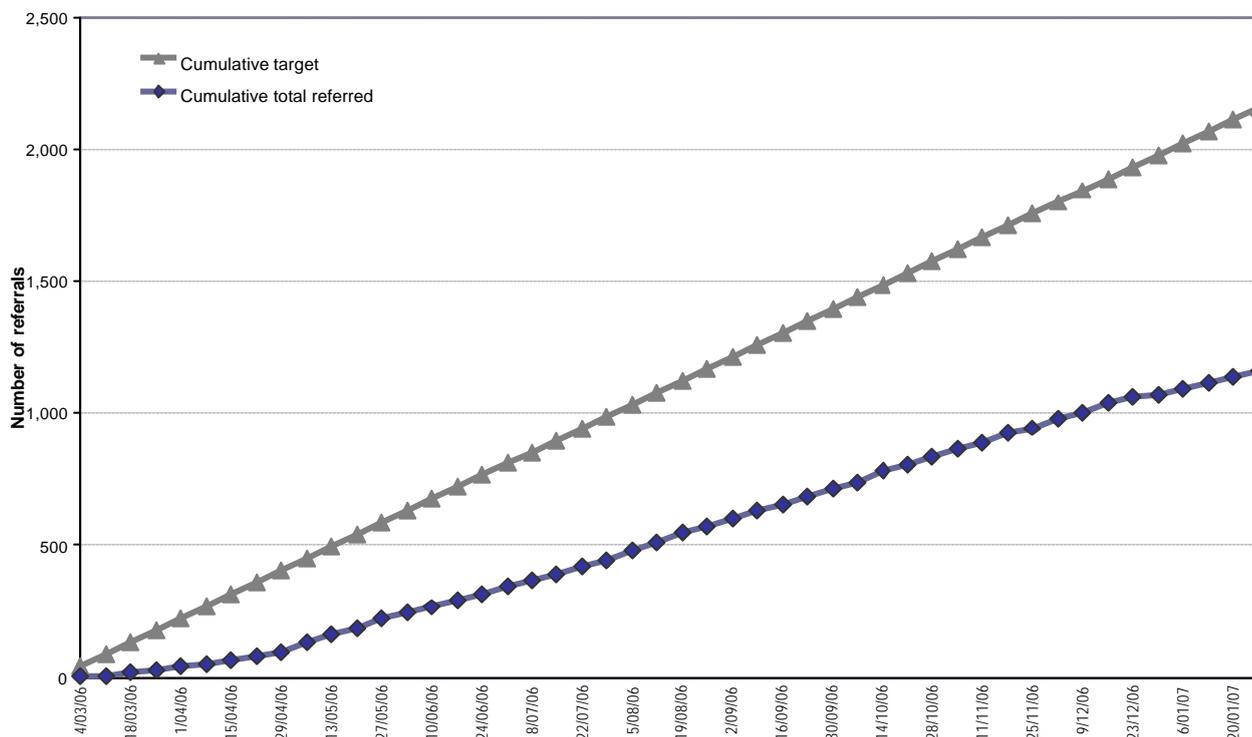


Figure 14 Referrals by site by week

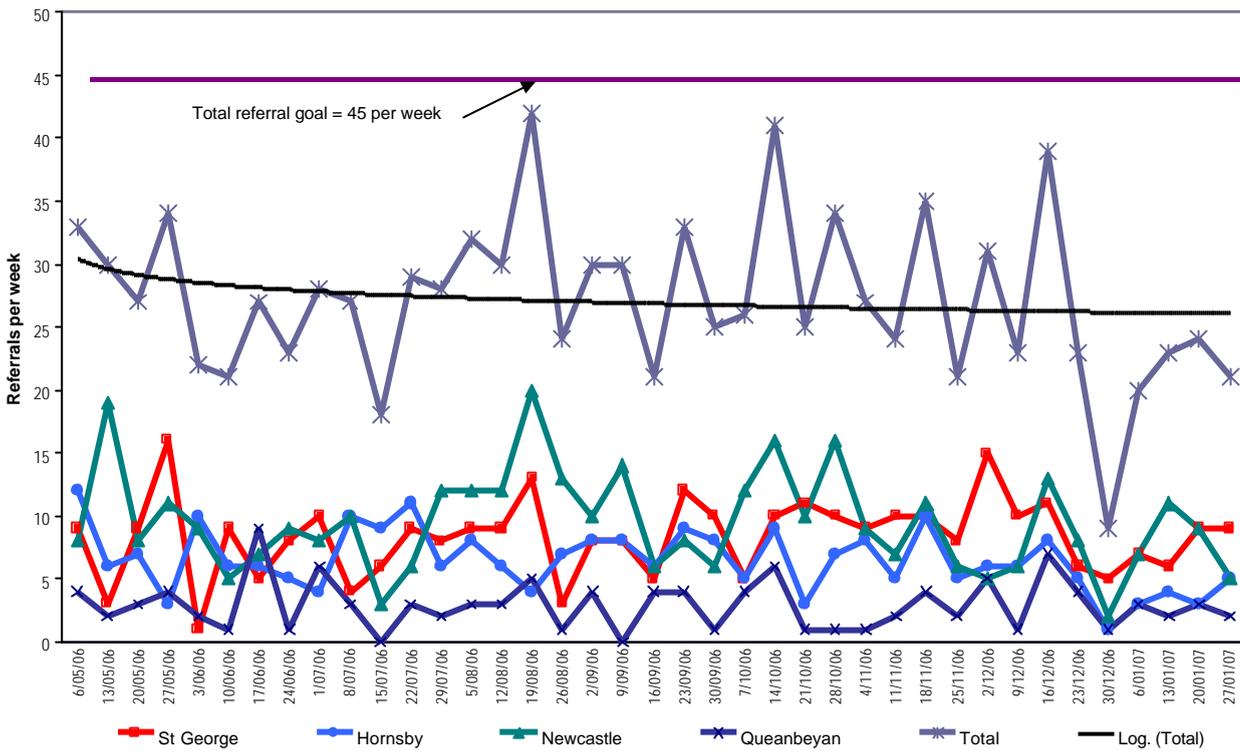


Figure 15 Referrals by referral source by week

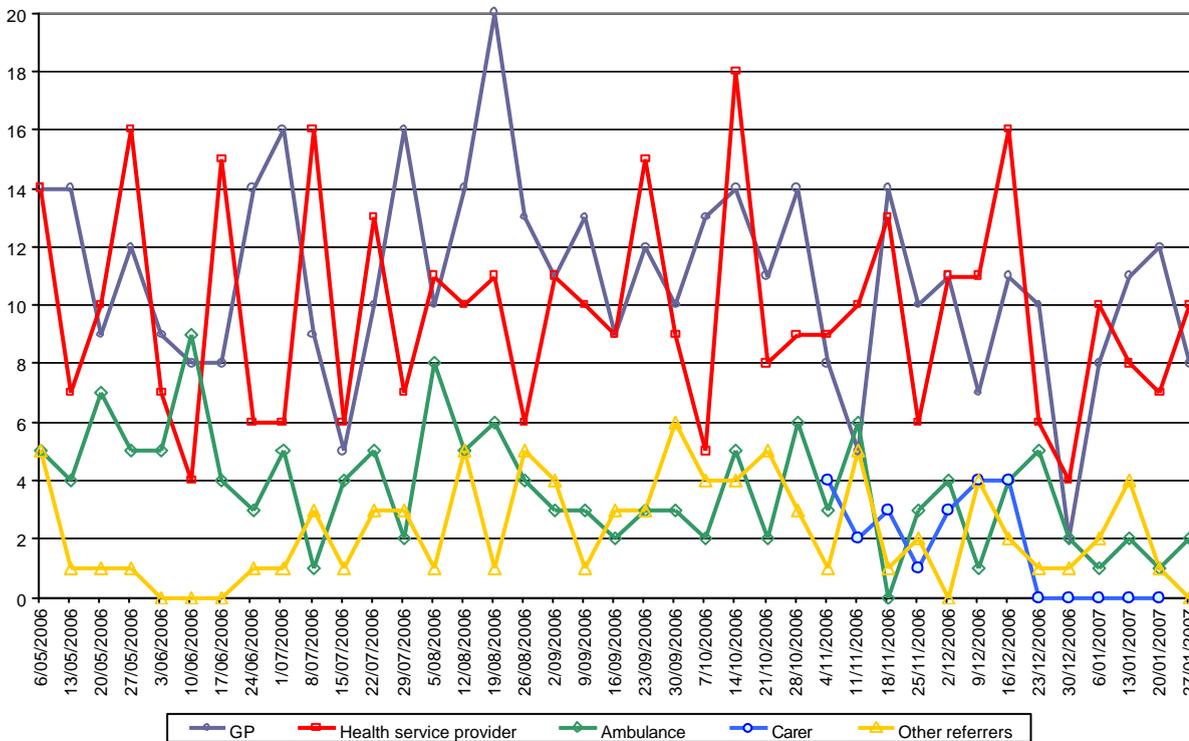


Table 3 shows information about inquiries received by the RIC that did not result in a referral. Of those not accepted onto the program, the most common reason was that their care needs were too low (26%). A further 20% were not accepted because they were too young and a further 17% because they were too sick. Most inquiries were received from health service providers or GPs (61%).

**Table 3** *Inquiries that did not result in a referral, by reason and referrer*

<b>Inquiries that did not result in a referral</b>		
Total number of inquiries		215
Number with reason/referrer		133
<b>Reason for ineligibility</b>		
Care needs too low		25.6%
Less than 75		19.5%
— Less than 65		6.0%
Needs hospital		17.3%
Not living in LGA		8.3%
Already on service		8.3%
Inappropriate referee		6.0%
Other reason		15.0%
<b>Referrer</b>		
Health Service Provider		39.1%
GP		21.8%
Non Health Service Provider		16.5%
Ambulance (NSW Ambulance)		3.8%
Carer/Family		2.3%
Not identified		16.5%

#### 4.3.2 Profile of clients referred to SAFTE

This section presents a profile of SAFTE clients. The information in this section is based on the case reviews undertaken the four SAFTE pilots on clients who had been discharged from the program by the end of December 2006. Of approximately 925 clients who had discharged from SAFTE by that time, reviews of 753 clients were conducted. However, not all items of information were available for all clients.

As shown in Table 4, 17.5% of clients had been to hospital in the previous 7 days, either as an inpatient or for an ED attendance. SAFTE staff made a judgement that 79.4% of clients would have gone to hospital in the foreseeable future if not referred to SAFTE. If not for SAFTE, 92% of those who had been to hospital in the last 7 days were expected to go again compared to 75.5% of those who had not recently been to hospital.

**Table 4** *Summary profile of SAFTE clients*

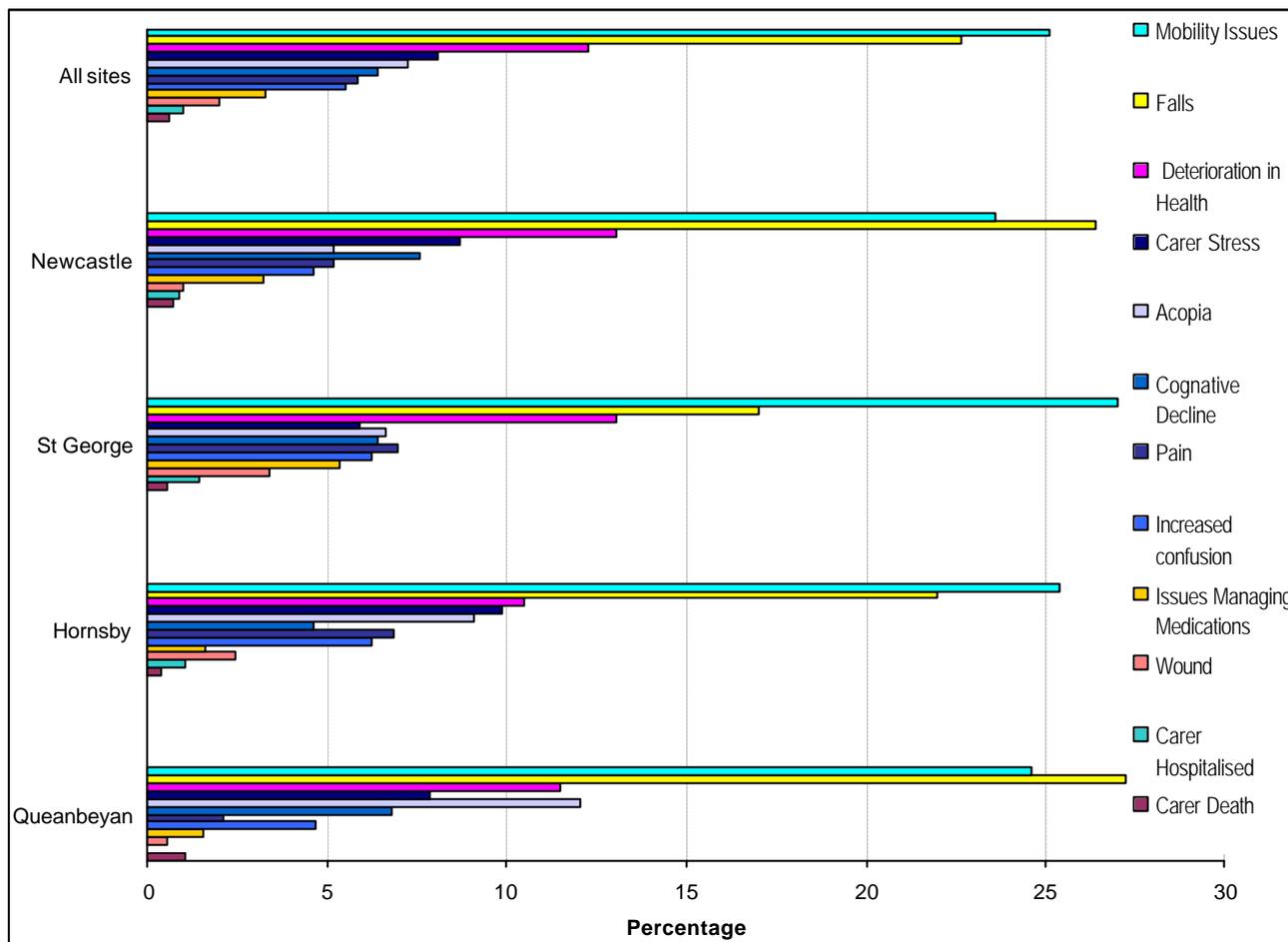
<b>ED Presentation or hospital inpatient in previous 7 days</b>		<b>N</b>	<b>%</b>
	ED presentation	41	6.2%
	Hospital inpatient	75	11.3%
	None	547	82.5%
	Total	663	100.0%
<b>SAFTE staffs' judgement – without SAFTE this client would have gone to the ED</b>		<b>N</b>	<b>%</b>
	Yes	541	79.4%
	No	140	20.6%
	Total	681	100.0%

<b>Reasons for not going to ED:</b>		<b>N</b>	<b>%</b>
	Independent or has family support	44	34.4%
	In residential care or on another care program	29	22.7%
	Client refused	17	13.3%
	Other	38	29.7%
	<b>Total</b>	<b>128</b>	<b>100.0%</b>
<b>SAFTE staffs' judgement – Appropriateness of referral to SAFTE</b>		<b>N</b>	<b>%</b>
	Too sick	70	10.0%
	Appropriate	596	84.8%
	Too well	37	5.3%
	<b>Total</b>	<b>703</b>	<b>100.0%</b>
<b>Days on SAFTE (Appropriate referrals only)</b>		<b>Average</b>	<b>Range</b>
<i>All clients with dates recorded</i>		35.7	0–320
<b>Level of consent</b>		<b>N</b>	<b>%</b>
	1 Service	128	21.0%
	2 Deidentified	95	15.6%
	3 Identified	119	19.5%
	4 Medicare	155	25.4%
	Consent level not specified	113	18.5%
	<b>Total</b>	<b>610</b>	<b>100.0%</b>

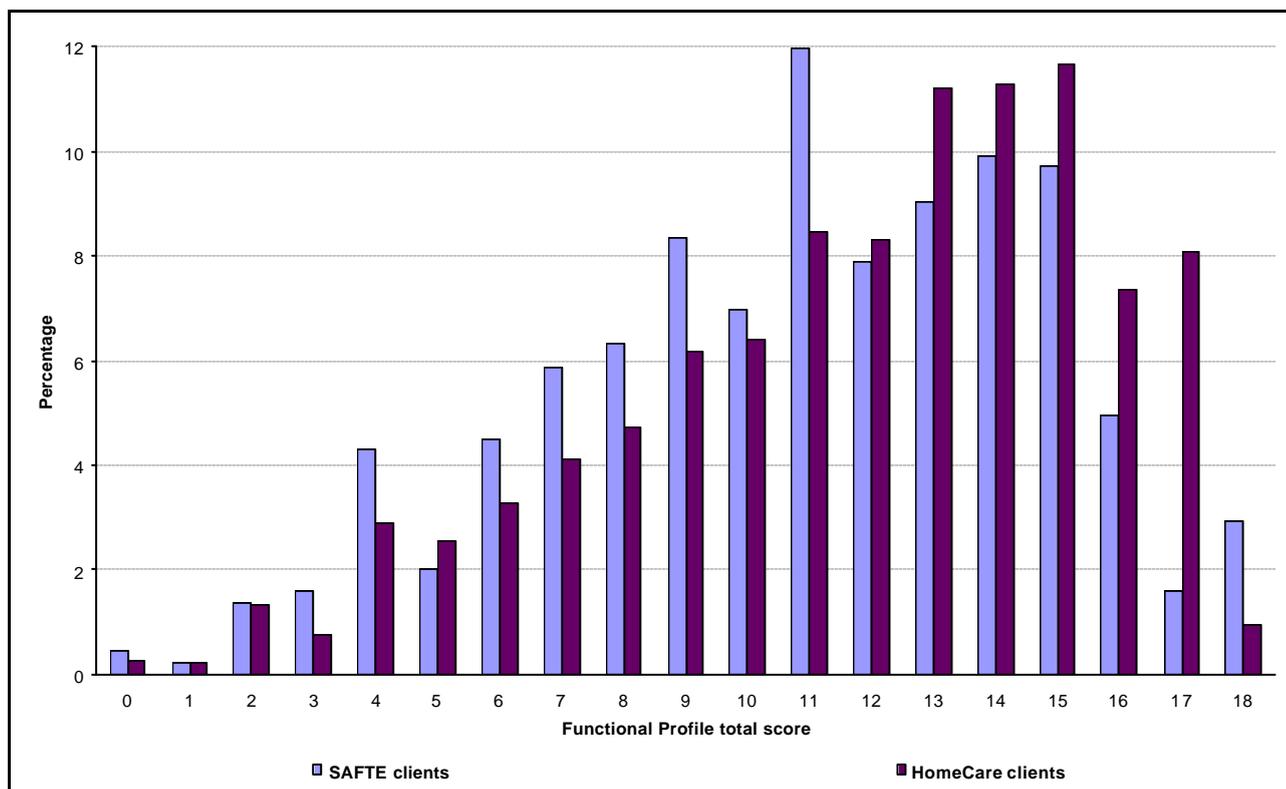
SAFTE staff were also asked to make a judgement about the appropriateness of each referral. It will be seen that about 85% were judged to be appropriate, with about 15% judged to be either too sick or too well to benefit.

A profile of presenting problems is shown in Figure 16. In total, mobility issues and falls accounted for nearly half of all referrals with deterioration in health accounting for a further one in eight referrals. Carer issues account for 10% of referrals. There are significant differences between the sites. Given that there are standard referral criteria, the reasons for these differences are not known. However, they may reflect the availability of other community health and care services in each area.

**Figure 16 Presenting problems by site**



**Figure 17 Comparison of SAFTE client functional profiles with Home Care referrals**



**Figure 18 Comparison of SAFTE client functional profiles of those with and without memory problems and Home Care referrals**

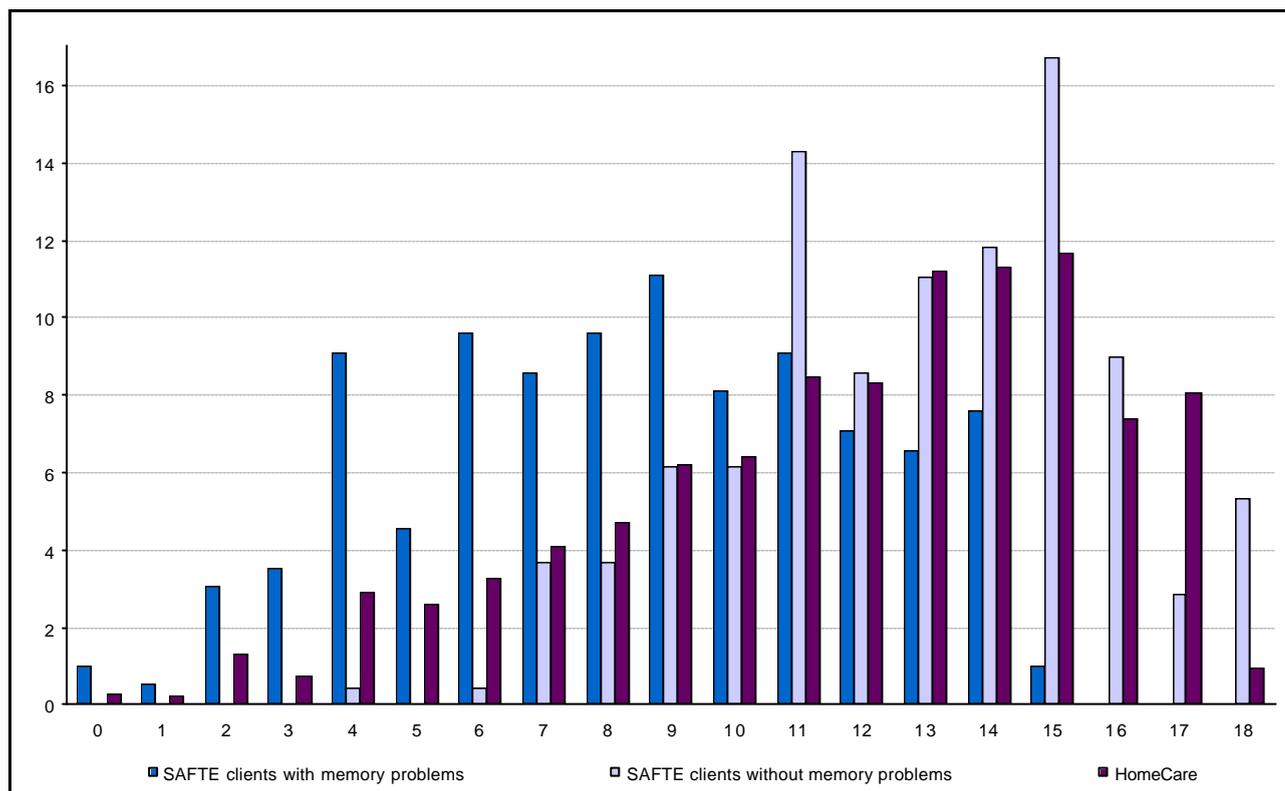


Figure 17 and Figure 18 summarise the functional profile of SAFTE clients and compares this with the functional profile of clients referred to the NSW Home Care Service (HCS). This is a 9-item profile of a person’s ability to manage activities of daily living. The lower the score, the poorer the person’s functional ability.

Overall, SAFTE clients have a lower level of function than those clients referred to the HCS, suggesting that they have a greater need for personal care. This is particularly so for SAFTE clients with memory problems. A total score of 6 or less is classified as very low function in the ONI tool. Among all the SAFTE clients 14.4% fall into this category, among those SAFTE clients with memory problems 31.3% fall into this category, compared to 11.3% of Home Care referrals.

Table 5 further illustrates this. It shows the percentage of responses on each of the 9 items in the functional profile. For example, 51% of SAFTE clients can manage their own medicines compared to 59% for Home Care referrals. Likewise, 45% of SAFTE clients have cognitive problems while 18% exhibit challenging behaviour. The equivalent figures for Home Care referrals are 26% and 13% respectively. While most SAFTE clients were able to travel with help (70%), they were twice as likely to not be able to travel at all compared to HCS clients (14% and 6%, respectively). While most SAFTE clients were able to bath with or without help, over twice as many clients, proportionately, were completely unable to bathe themselves compared with HCS clients.

**Table 5 Item level functional profile of SAFTE clients and comparison with Home Care referrals**

	SAFTE	Home Care
<b>Can you do housework</b>		
Without help	7.7%	1.4%
With help	46.7%	62.8%
Cannot do	45.6%	35.9%
<b>Can you get to places out of walking distance</b>		

	SAFTE	Home Care
Without help	16.3%	28.2%
With help	70.2%	65.8%
Cannot do	13.5%	6.0%
<b>Can you go out shopping</b>		
Without help	10.6%	15.3%
With help	51.2%	51.6%
Cannot do	38.1%	33.1%
<b>Can you take your own medicine</b>		
Without help	51.2%	59.0%
With help	37.9%	30.9%
Cannot do	10.8%	10.1%
<b>Can you handle your own money</b>		
Without help	44.0%	51.2%
With help	37.9%	31.9%
Cannot do	18.1%	16.9%
<b>Can you walk (indoor mobility)</b>		
Without help	76.5%	46.6%
With help	20.1%	46.6%
Cannot do	3.4%	6.8%
<b>Can you take a bath or shower</b>		
Without help	47.6%	53.6%
With help	39.5%	41.2%
Cannot do	12.9%	5.1%
<b>Memory problems / confusion</b>		
No	55.3%	73.9%
Yes	44.7%	26.1%
<b>Behavioural problems</b>		
No	82.2%	87.5%
Yes	17.8%	12.5%

### Health profile

The ONI tool includes a health profile of each client. This section summarises some key indicators of the health of the SAFTE client group from the ONI data.

**Table 6 Health status**

<b>Self reported health status</b>	
Excellent	1.3%
Very good	7.2%
Good	30.5%
Fair	42.9%
Poor	18.2%

<b>Bodily pain in past 4 weeks</b>	
None	20.2%
Very mild	25.3%
Moderate	32.7%
Severe	17.0%
Very severe	4.8%
<b>Health interfere with normal activities</b>	
Not at all	10.4%
Slightly	17.2%
Moderately	27.4%
Quite a bit	45.0%
<b>Fallen in the past 6 months</b>	
Yes	65.7%
No	32.3%
N/A	2.1%

The self-reported health of SAFTE clients is typically fair, with 61% rating their health as fair or poor (Table 6). This compares to 35% of people over 75 years who reported fair or poor health in the last National Health Survey<sup>14</sup>.

Most had moderate to mild bodily pain in the past four weeks, with nearly half reporting their health interfered quite a bit with normal activities. Two out of three clients (65.7%) reported having fallen at least once in the past 6 months. This is consistent with the main reasons for presentation.

**Table 7 Vision and hearing**

Status of:	Excellent	Good	Fair	Poor	N/A
Eyesight for reading	7.0%	47.9%	28.9%	15.7%	0.5%
Long distance eyesight	6.4%	48.1%	29.7%	14.8%	1.0%
Hearing	7.2%	47.9%	29.6%	14.3%	1.0%

Eyesight (near and distant) and hearing was good to fair for most SAFTE clients (Table 7). Nearly one in five clients reported problems with their oral health, speech and/or swallowing, with one in three reporting problems with either or both feet (Table 8).

**Table 8 Health problems**

Problems with:	Yes	No	N/A
Oral health	17.4%	74.5%	8.1%
Speech and/or swallowing	18.0%	75.2%	6.7%
One or both feet	33.7%	59.7%	6.6%

One in five clients experience faecal incontinence, while half have urinary incontinence (Table 9).

<sup>14</sup> ABS National Health Survey: Summary of Results, Australia 2004-5 (cat. no. 4364.0).

**Table 9 Incontinence**

<b>Frequency of urinary incontinence</b>	
Never	52.0%
Rarely	5.1%
Sometimes	14.5%
Often	14.9%
Always	13.5%
<b>Amount of leakage</b>	
Few drops	35.0%
A little	39.9%
More	25.1%
<b>Frequency of faecal incontinence</b>	
Never	81.3%
Rarely	3.6%
Sometimes	9.9%
Often	4.2%
Always	1.0%

Just over half of all SAFTE clients (57.6%) were able to reliably take their medications, with most always willing to take their prescribed medications (77.5%) and cooperate with health services (75.9%) (Table 10). One in three clients use Webster packs, or similar, for the medications with most (65.9%) not requiring a medication review.

**Table 10 Medications**

<b>Reliability with medication</b>	
Reliable with medication	57.6%
Slightly unreliable	16.2%
Moderately unreliable	11.9%
Extremely unreliable	14.3%
<b>Willing to take prescribed medication</b>	
Always	77.5%
Usually	18.3%
Rarely	2.8%
Never	1.4%
<b>Cooperate with health services</b>	
Always	75.9%
Usually	19.6%
Rarely	3.4%
Never	1.1%
<b>Webster pack (or similar) used for medicines</b>	
Yes	33.3%
No	66.7%

Review of medications recommended	
Yes	34.1%
No	65.9%

### Carer profile

Carer profiles have been completed for 478 SAFTE clients, but not all items have been completed for all clients. Table 11, Table 12, Table 13 and Table 14 summarise this carer profile. Over three quarters of SAFTE clients needed a carer, although only 66% had one. Current carer arrangements are under threat in about one third of cases because of a variety of factors, but the two most common are carer stress and the client's increasing needs. Only 23% of carer arrangements were considered by SAFTE staff as being sustainable without additional support.

**Table 11 Need for a carer**

Does the person need a carer?	Number	%
Yes, the consumer cannot be left on their own at any time (whether by day or night)	69	19.5%
Yes, the consumer can only be left on their own for some, but not all, of the time (whether by day or night)	201	56.9%
No. Carer required	83	23.5%
<b>Total</b>	<b>353</b>	<b>100.0%</b>

**Table 12 Carer availability**

Does the person need a carer?	Number	%
Has a Carer	314	65.7%
Has no Carer	146	30.5%
No carer required	16	3.3%
Paid carer	2	0.4%
<b>Total</b>	<b>478</b>	<b>100.0%</b>

**Table 13 Current threats to carer arrangements**

Reason	Percentage
Carer – emotional stress & strain	28.0%
Carer – acute physical exhaustion/illness	11.9%
Carer – slow physical health deterioration	15.9%
Carer – factors unrelated to care situation	6.1%
Consumer – increasing needs	34.3%
Consumer – other factors	7.1%

**Table 14 Sustainability of carer arrangements**

SAFTE staff assessment	Number	%
Arrangements have already broken down	13	5.5%
Carer arrangements likely to break down within weeks	51	21.7%
Carer arrangements likely to break down within months	94	40.0%
Carer arrangements are sustainable without additional support	55	23.4%
Don't know	22	9.4%
<b>Total</b>	<b>235</b>	<b>100.0%</b>

### 4.3.3 Services utilised by SAFTE clients

A snapshot of services used by SAFTE clients as part of their care plan is shown in Table 15. These services are in addition to any other services that may have already been in place prior to starting on the SAFTE program.

In total, 62.7% of clients have been referred for a ComPacks Package compared to the 37.8% that was implicitly built into the SAFTE Care Business Case. These Packages are being purchased from within the SAFTE budget. The other services in this table are funded from a variety of different sources, including SAFTE, existing community health and hospital services and Medicare Australia. A wide range of services is grouped together as 'other'. This includes ACAT assessments, aged care reviews, memory and falls clinics and home care. Six were referred to Department of Veterans Affairs (DVA) funded services as they were DVA Gold Card holders.

**Table 15 Services utilised by SAFTE clients as part of their SAFTE care plan**

Services utilised	Number of clients	% of clients
ComPacks	439	62.7%
OT	360	51.2%
PT	410	58.6%
Nursing	511	73.0%
Prescription review	347	49.9%
Equipment provision	335	49.7%
Pathology	155	27.5%
Specialist referral	338	44.9%
Other	147	19.5%

### 4.3.4 Client outcomes

Table 16 summarises the outcomes for clients who had completed their time on SAFTE. These outcomes are based on the case reviews undertaken by CHSD evaluators and the SAFTE teams.

It will be seen that the client's short-term needs were managed in 91% of cases while plans for the person's long-term care needs were in place for 82% of clients. This links to the availability of sustainable community care (72%) and whether or not the goals specified in the initial care plan had been met (72%). The achievement of the goals of the care plan is also related to the number of clients who had unplanned interventions. Of those whose care plan was not complete, three in four had had an unplanned intervention.

**Table 16 Client outcomes**

Outcomes	Number of clients	% of clients
Manage short term needs	627	91.4%
Plan long term care	549	81.6%
Long term sustainable community support	473	72.4%
Unplanned interventions	165	25.1%
SAFTE Care Plan Goals met	482	71.6%

As discussed in Section 3.3.2, a 'good' outcome for a SAFTE client is any care pathway that is planned. For example, a patient admission for a planned same day procedure is a good outcome for the patient while an unplanned ED attendance leading to an admission is not. Of the SAFTE clients reviewed for this analysis, 25% had unplanned interventions. The nature of these is summarised in Table 17 below. Significantly, the majority (82%) of unplanned interventions were

inpatient admissions, up from 71% at the time of the interim evaluation. However, there was some inconsistency in how 'unplanned interventions' were defined.

**Table 17 Type of unplanned interventions**

Intervention	Number	Percentage
Inpatient admission	136	82.4%
ED attendances not leading to admission	5	3.0%
Other (eg, emergency respite, additional diagnostic tests)	24	14.5%
Percentage of clients with unplanned interventions	165	100.0%
Percentage of all clients		25.1%

The evaluation team recommended that the Department establish a system of case reviews of clients who had unplanned outcomes, to ascertain what lessons can be learned and refine the referral criteria to ensure better targeting of clients who can benefit from SAFTE. The Department found that it was not possible to draw clear lessons from these episodes, as each site used a different definition of what constituted an 'unplanned outcome'. It concluded that '*...the specific characteristics and organisation of the team and the relationships with the geriatrics services, their nature, organisation and admission criteria were key determining issues*' in determining the definition of 'unplanned outcome'. It also advised that each SAFTE team had its own case review process, which included analysis of clients with 'unplanned outcomes' (see Attachment 3).

#### 4.3.5 Client and Carer perceptions

##### *Care recipient surveys*

Surveys were sent to all clients discharged from the SAFTE program between 1 October and 31 December 2006. Completed surveys were received from 95 clients (86 client rated and 9 rated by staff). Half the client rated surveys were completed by the client on their own (47.6%), with a further third completed with help from a friend or relative (32.1%). Staff rated surveys were mostly completed due to the client's language, literacy or physical problems (80.0%), and were typically completed after discussion with the patient (62.5%).

Most clients were female, with one in five clients being male. The average age was 83 years, the youngest client was 71 and the oldest was 93. Most clients did not associate with a particular ethnic origin or cultural background (84.1%).

Table 18 shows most clients felt that full information was made available to them, however a third of staff rated surveys indicated the information was hard to understand. Two-thirds of clients felt that practical matters resulting from their condition had been addressed, with most being involved in these decisions as much as they wanted.

**Table 18 Client and staff rated surveys – impact during last 6-8 weeks**

During the last 6-8 weeks...	Staff rated	Client rated	Total
<b>...how much information were you and your family or friends given?</b>			
Full information – always felt free to ask what I want	66.7%	82.9%	81.3%
Information given but hard to understand	33.3%	6.1%	8.8%
Information given on request but would have liked more	0.0%	7.3%	6.6%
Very little given and some questions were avoided	0.0%	1.2%	1.1%
None at all	0.0%	2.4%	2.2%
Total	100.0%	100.0%	100.0%
<b>...how much time do you feel was wasted on appointments relating to your health care?</b>			

During the last 6-8 weeks...	Staff rated	Client rated	Total
None at all	100.0%	88.1%	89.1%
Up to half a day wasted	0.0%	9.5%	8.7%
More than half a day wasted	0.0%	2.4%	2.2%
Total	100.0%	100.0%	100.0%
<b>...have any practical matters resulting from your condition been addressed?</b>			
Problems have been addressed	50.0%	66.3%	64.8%
Practical problems are in the process of being addressed	37.5%	15.7%	17.6%
Practical problems exist which were not addressed	12.5%	1.2%	2.2%
I have had no practical problems	0.0%	16.9%	15.4%
Total	100.0%	100.0%	100.0%
<b>...have you been involved in decisions about your support needs, care and treatment, or practical matters as much as you would like?</b>			
Yes, all of the time	55.6%	63.4%	62.6%
Most of the time	22.2%	23.2%	23.1%
Sometimes	11.1%	1.2%	2.2%
Occasionally	0.0%	4.9%	4.4%
No, not at all	0.0%	6.1%	5.5%
Total	88.9%	98.8%	97.8%

While most clients felt their health and well-being to be much more under their control (59.5%), Table 19 shows that staff-rated clients were more likely to be about the same (50.0%). One client wrote that SAFTE *'made my quality of life better'* and another commented that SAFTE *"provided me with the confidence ... to lead as normal a life as is possible ... a big confidence boost"*. One in two clients felt their health and well-being was much improved (45.7%), with one in four indicating a slight improvement or about the same (25.0% and 23.9%, respectively).

**Table 19 Client and staff rated surveys – health and well-being**

As a result of the health and community care services you have received in the last 6-8 weeks...	Staff rated	Client rated	Total
<b>...do you feel your health and well-being are under your control?</b>			
Yes, much more under control	12.5%	59.5%	55.4%
Yes, slightly more under control	25.0%	25.0%	25.0%
About the same	50.0%	14.3%	17.4%
No, feeling less in control	0.0%	1.2%	1.1%
Not at all - much worse	12.5%	0.0%	1.1%
Total	100.0%	100.0%	100.0%
<b>... do you feel your health and well-being are improved?</b>			
Yes, much improved	37.5%	46.4%	45.7%
Yes, slightly improved	37.5%	23.8%	25.0%
About the same	12.5%	25.0%	23.9%
No, feeling less well	12.5%	3.6%	4.3%
Not at all - much worse	0.0%	1.2%	1.1%
Total	100.0%	100.0%	100.0%

Nearly half of all clients reported occasionally being anxious about their health (Table 20). Two of five clients reported not feeling depressed at all with one in three occasionally feeling depressed.

Significantly, one in six clients (15.6%) reported feeling depressed most or all of the time. This was reflected in comments such as ‘Having someone to talk to has really helped’, ‘each worker has been emotionally supportive’, and ‘I felt security (sic) and feeling someone cared’.

**Table 20 Client and staff rated surveys – mental health**

During the last 6-8 weeks...	Staff rated	Client rated	Total
<b>...were you feeling anxious or worried about your health and well-being?</b>			
Not at all	28.6%	20.7%	21.3%
Occasionally	28.6%	47.6%	46.1%
Sometimes – affects my concentration now and then	28.6%	18.3%	19.1%
Most of the time – often affects my concentration	0.0%	11.0%	10.1%
Can't think of anything else - completely pre-occupied	14.3%	2.4%	3.4%
Total	100.0%	100.0%	100.0%
<b>...were you feeling depressed?</b>			
No, not at all	50.0%	36.6%	37.8%
Occasionally	12.5%	36.6%	34.4%
Sometimes	12.5%	12.2%	12.2%
Most of the time	25.0%	8.5%	10.0%
Yes, definitely	0.0%	6.1%	5.6%
Total	100.0%	100.0%	100.0%

Just over half of all clients rated the quality of the SAFTE service as excellent and were very satisfied with the services they received, with most clients (75.0%) believing all their needs were met by these services (Table 21). Almost all clients would use SAFTE again if needed and would recommend the service to a friend in need of similar help (97.8% and 98.9%, respectively).

**Table 21 Client and staff rated surveys – service issues**

	Staff rated	Client rated	Total
<b>How would you rate the overall quality of services you received in the last 6-8 weeks?</b>			
Fair	0.0%	6.0%	5.5%
Good	42.9%	39.3%	39.6%
Excellent	57.1%	54.8%	54.9%
Total	100.0%	100.0%	100.0%
<b>Are there support services you feel you need and have not got in the last 6-8 weeks?</b>			
Not at all, all needs met	50.0%	77.4%	75.0%
Some needs, but better than before	37.5%	9.5%	12.0%
About the same	12.5%	6.0%	6.5%
Yes, need some more	0.0%	7.1%	6.5%
Total	100.0%	100.0%	100.0%
<b>In an overall sense, how satisfied are you with the services you have received in the last 6-8 weeks?</b>			
Indifferent or mildly satisfied	12.5%	2.4%	3.3%
Mostly satisfied	37.5%	20.2%	21.7%
Quite satisfied	0.0%	23.8%	21.7%
Very satisfied	50.0%	53.6%	53.3%
Total	100.0%	100.0%	100.0%

	Staff rated	Client rated	Total
<b>If you were to seek help again, would you come back to the SAFTE program?</b>			
No, I don't think so	12.5%	1.2%	2.2%
Yes, I think so	50.0%	30.1%	31.9%
Yes, definitely	37.5%	68.7%	65.9%
Total	100.0%	100.0%	100.0%
<b>If a friend were in need of similar help, would you recommend the SAFTE program to him or her?</b>			
No, I don't think so	12.5%	0.0%	1.1%
Yes, I think so	37.5%	21.7%	23.1%
Yes, definitely	50.0%	78.3%	75.8%
Total	100.0%	100.0%	100.0%

### Carer experiences

Completed surveys were received from 48 carers. Two thirds of all carers were females. The average age of all carers was 67 years, however female carers were significantly younger than male carers (62 years and 75 years, respectively). Most carers did not associate with a particular ethnic origin or cultural background (93.8%).

Overall, the support and assistance received from the SAFTE care program were reported to be excellent by most carers (76.6%), with 14.9% reporting it to be good and 8.5% finding it satisfactory. Male carers were more likely to report the support and assistance received as satisfactory, 17%, compared to 3% among female carers, and less likely to report it as excellent (67% and 83%, respectively).

Table 22 shows the carer experiences with SAFTE over the last 6-8 weeks to generally be very positive. Comments received by carers include, *"before SAFTE ... I hadn't realised there was so much help available. I have been looking after my mother for five years without any help"*, while another wrote, *"sincerest gratitude for making my life and my mum's so much better"*. One in five carers (22%) were not supplied with clear instructions about what to do in an emergency, while one carer in a dozen (8.4%) did not have, or were not sure they had, people to contact for support after the person they were caring for finished on the SAFTE care program. Comments were also received about the limitations of the 6-week SAFTE intervention, with one carer noting, *"... the help was great ... however, now there is a time gap before permanent help is obtained"*, while another commented that *"transferring to other people (at the end of 6 weeks) has not been easy"*.

**Table 22 Carer experiences with SAFTE over the last 6-8 weeks**

	N	Agree	Disagree	Don't know
I feel that adequate attention was paid by the service to my needs as a carer	47	95.7%	2.1%	2.1%
I feel confident every effort was made to improve the health and well-being of the person I am looking after	47	93.6%	4.3%	2.1%
I was provided with all the equipment I need to help me in my caring role	47	93.6%	4.3%	2.1%
I feel confident about using the equipment that has been supplied	34	91.2%	5.9%	2.9%
I was supplied with clear instructions about what to do in an emergency	41	78.0%	12.2%	9.8%
I knew who to contact for help if I needed it	46	100.0%	0.0%	0.0%
I felt secure that help and advice is available for me	46	95.7%	4.3%	0.0%
The SAFTE care staff were helpful and friendly	48	100.0%	0.0%	0.0%
I felt comfortable with the SAFTE care staff visiting the home of the person I care for	48	100.0%	0.0%	0.0%
Respite was available so that I could have a break if I needed it	32	90.6%	6.3%	3.1%

	N	Agree	Disagree	Don't know
I know there are people I can contact for support after the person I am caring for has finished on the SAFTE care program	48	91.7%	2.1%	6.3%

Three out of four carers received all the help and information that they needed (Table 23). The exception was practical training in lifting, managing medicine or other tasks, where among those carers that needed this help, over half (58%) reported they did not receive such training. One carer commented *"I was not provided with any equipment to assist me in my role as a carer"*.

**Table 23 Help, information and training provided to carer during the SAFTE program**

	N	Yes - all	Yes - not enough	No
Have you had someone to help you with practical tasks?	32	75.0%	15.6%	9.4%
Did anyone give you information on whether you would qualify for a Carer Payment or Allowance?	35	74.3%	8.6%	17.1%
Did someone give you information about available support services?	45	80.0%	13.3%	6.7%
Did someone give you practical training in lifting, managing medicine or other tasks?	26	38.5%	3.8%	57.7%

However, not all carers were positive about their experience with SAFTE, with one carer sending a copy of a letter of complaint to the evaluation team in December 2006. Of particular concern was the lack of understanding by the SAFTE staff of how to provide personal care for a person with dementia. Staff did not have success in showering the client, informing the carer that *'you can't make him (SAFTE client) to what he does not want to do'*. However, the carer noted that *'no strategies were suggested'* and consequently, *'my father still has not had a proper shower in 4 weeks'*. It appears that only after this period of time was the client referred to a dementia-specific service. The letter also noted that communication between the SAFTE team and the carer was poor, *'(t)o date no member of the Safte (sic) Care Team has contacted me in regards to any further care, review or follow-up on any part of the last 6 or so weeks'*, and *'I do feel left out of the services that you have provided as the red book (client record) that was left with my parents has not been filled out by any members of your team'*.

#### 4.4 Impact and outcomes of SAFTE on providers and the broader system

This section of the interim report summarises the impact and outcomes at levels 2 and 3 of the program evaluation framework.

##### 4.4.1 Sustainability, generalisability and capacity building

The views of SAFTE team members regarding the SAFTE program have been obtained through a series of structured interviews, discussions at SAFTE Project meetings, and general feedback during the regular telephone contacts made. Their views on issues relating to the sustainability of the SAFTE model, its generalisability to other settings and the degree to which the program has built capacity have been captured using a 45 item tool as part of the evaluation. This has involved surveying key stakeholders using a tool developed by the evaluation team that is based on factors identified in the literature as being important.

The tool has 45 items and was designed so that it could be completed either by:

- A member of the evaluation team in discussion with a SAFTE stakeholder group
- Through a team meeting (eg, a SAFTE or Community Options team)
- By an individual expressing their own views, and not necessarily those of the team in which they work.

The tool was first completed in August 2006 and repeated in January 2007. The results presented below represent the views of SAFTE health teams, Community Options, RIC staff and the NSW Health Program Management team in January 2007. The results include responses completed through team meetings and by individuals. Nineteen surveys were received, including ten from stakeholders working in SAFTE teams and five from staff working in Community Options:

1. Nine teams, either on their own or with the survey instrument completed at a team meeting by a CHSD evaluator
2. Nine staff expressing individual views.

For ease of presentation, the survey results are presented in a number of sections. Table 24 presents stakeholder perceptions about the program and its sustainability. There is agreement amongst respondents that there is a good level of awareness of, and engagement with, key stakeholders about SAFTE. In particular the perception that people with a stake in the program had been able to contribute to its development (Q2) increased from just over half of those surveyed in the interim report to 89% in the final report. With regard to the program having already shown itself to be effective (Q3) there is a stronger agreement now than in the interim report. While the Area/hospital's contribution to SAFTE is typically unknown (Q4), there is an unwavering alignment of views regarding the positive organisational context in which teams are located. Generally those factors within the organisational setting which are known to relate to the survival of a project and those factors in the broader community environment which affect how long projects last were viewed as positively, if not more positively, now in comparison to the interim report.

**Table 24 SAFTE staff perceptions about the program and its sustainability**

No	Statement	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
<b>Project design and implementation factors</b>						
1	People with a stake in the SAFTE program - funders, administrators, consumers/ beneficiaries, other agencies – are aware of the pilot	31.6%	68.4%	0.0%	0.0%	0.0%
2	People with a stake in the SAFTE program – consumers/ beneficiaries, other agencies, health care providers – have been able to contribute to its development	26.3%	63.2%	5.3%	0.0%	5.3%
3	SAFTE has already shown itself to be effective. Effects are visible and acknowledged	57.9%	31.6%	10.5%	0.0%	0.0%
4	The Area Health Service/hospital has been making some real or in kind financial support to SAFTE	0.0%	31.6%	63.2%	5.3%	0.0%
5	People involved with SAFTE have been able to establish links with other organisations and providers of care services for people in the target group	61.1%	38.9%	0.0%	0.0%	0.0%
6	People involved with SAFTE have taken a leadership role in the local community with regard to care services for people in the target group	15.8%	57.9%	15.8%	10.5%	0.0%
7	People involved with SAFTE have been able to resolve conflicting interests in the area of care services for people in the target group	10.5%	73.7%	5.3%	10.5%	0.0%
<b>Factors within the organisational setting which are known to relate to the survival of a project</b>						
8	The services (eg, ACAT, Community Health) within which SAFTE is located are mature (developed, stable, resourceful) and provide SAFTE with a strong organisational base	36.8%	52.6%	5.3%	5.3%	0.0%
9	The mission of SAFTE is compatible with the mission and activities of the service within which it is located	72.2%	27.8%	0.0%	0.0%	0.0%
10	Part of SAFTE's essential 'business' is integrated into other aspects of the host service (eg, in policies, practices, responsibilities etc). That is, SAFTE does not simply exist as an entirely separate entity	52.6%	36.8%	0.0%	10.5%	0.0%
11	SAFTE is already well supported in the broader service/AHS and has people 'championing' it	5.3%	78.9%	10.5%	0.0%	5.3%
12	There is someone in authority or seniority, other than the SAFTE manager, who is an advocate for SAFTE at high levels in the organisation	31.6%	63.2%	5.3%	0.0%	0.0%

No	Statement	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
13	SAFTE is not under threat and there are few rivals in the broader service/hospital/AHS who could benefit from its closure	10.5%	47.4%	26.3%	15.8%	0.0%
14	The host organisation has a history of innovation or developing new responses to situations in its environment	57.9%	36.8%	5.3%	0.0%	0.0%
<b>Factors in the broader community environment which affect how long projects last</b>						
15	There is a favourable external environment for SAFTE. That is, the values and mission fit well with community opinion and the policy environment	31.6%	68.4%	0.0%	0.0%	0.0%
16	People in the community, or other agencies and organisations, will advocate for and maintain a demand for the existence of SAFTE should it be threatened	10.5%	57.9%	26.3%	5.3%	0.0%

Perceptions about relationships with partner agencies are presented in Table 25. There is a clear majority view about the positive impacts on partnership, stronger now than at the interim report. Despite the continued lack of the planned IT, most respondents now agreed with the proposition that the burden on clients had been reduced through the sharing of information (Q20). There was less consensus regarding the benefits of using a common assessment tool (Q21), with a third believing that the costs outweigh the benefits, a third believing that the benefits outweigh the costs while the remaining third did not know. While one in five still believe the SAFTE assessment and referral tools will not be adopted for routine use after the pilot is over (Q22), less are certain the tools will be used.

**Table 25 SAFTE staff perceptions about partnerships**

No	Statement	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
<b>Relationships with partner agencies</b>						
17	The SAFTE pilot has already improved communication between participating agencies	47.4%	47.4%	0.0%	5.3%	0.0%
18	The SAFTE pilot has positively changed relationships between participating agencies	36.8%	57.9%	0.0%	5.3%	0.0%
19	The SAFTE pilot has already resulted in a more streamlined and efficient service for SAFTE clients	31.6%	63.2%	0.0%	5.3%	0.0%
20	Having access to other agencies' referral and assessment information has reduced our clients' burden of providing information	10.5%	68.4%	5.3%	15.8%	0.0%
21	The cost of using the SAFTE assessment and referral tools is greater than the benefits	10.5%	26.3%	31.6%	31.6%	0.0%
22	The SAFTE assessment and referral tools will be adopted for routine use after the pilot is over	10.5%	47.4%	21.1%	15.8%	5.3%
23	Our pilot has demonstrated that relationships between agencies at the local level can be changed by the use of formal policies and protocols	11.1%	77.8%	0.0%	11.1%	0.0%
24	Participating in pilots such as this one is a good way to strengthen relationships between agencies	50.0%	50.0%	0.0%	0.0%	0.0%
25	Pilots such as ours provide important local lessons in how to do things better	31.6%	63.2%	0.0%	0.0%	5.3%

Table 26 profiles stakeholder views about the role of the program in building capacity. There is general agreement that the SAFTE program has strengthened the capacity of the organisation to better meet the needs of people in the target group. There is now more agreement than in the interim report that SAFTE has been able to establish agreed policies or procedures with other organisations regarding the provision of care services (Q26) and enabled people not directly involved to develop improved capacity to provide care (Q32). There is, however, more uncertainty around organisational resources being directed to services for people in the SAFTE target group (Q28).

**Table 26 SAFTE staff perceptions about capacity building**

No	Statement	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
<b>Factors within the organisation's setting that relate to capacity building</b>						
26	SAFTE has been able to establish agreed policies or procedures with other organisations regarding the provision of care services for people in the SAFTE target group	26.3%	68.4%	0.0%	5.3%	0.0%
27	SAFTE has generated and supported local skills to direct, provide, lead or otherwise contribute to the provision of care services for people in the SAFTE target group	26.3%	52.6%	15.8%	5.3%	0.0%
28	More organisational resources have been directed to services for people in the SAFTE target group	15.8%	26.3%	52.6%	5.3%	0.0%
29	The training was sufficient to allow participating staff to understand and use the SAFTE assessment and referral tools	5.3%	63.2%	5.3%	26.3%	0.0%
30	SAFTE has involved formal and/or informal training of people whose skills and interests will be retained in the project or its immediate environment	26.3%	63.2%	5.3%	5.3%	0.0%
31	Our SAFTE pilot has developed the capacity (skills and/or knowledge) of service providers directly involved with our SAFTE clients	10.5%	63.2%	15.8%	10.5%	0.0%
32	Our SAFTE pilot has enabled people not directly involved to develop improved capacity (skills and/or knowledge) to provide care for people in the SAFTE target group	5.3%	47.4%	42.1%	5.3%	0.0%

SAFTE is a pilot program and so the ability to generalise its results to other settings is important. Table 27 presents the views of stakeholders about the generalisability of the SAFTE model. In general, there is agreement about the potential for the model to be replicated elsewhere, depending on the flexibility permissible to adapt to local circumstances. Compared to the interim report, more respondents already have a strategy in place to share their findings and experiences with others (Q37) and believe pilots such as theirs provide important lessons for other regions (Q39). By the time the pilot period ends more respondents felt they would have a strategy in place to ensure that their experiences and findings are shared with other people (Q38), however, this varied greatly by site.

**Table 27 SAFTE staff perceptions about the generalisability of the SAFTE model**

No	Statement	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
<b>The generalisability of the program</b>						
33	The way that we have implemented SAFTE has been designed specifically to meet our own local needs	31.6%	52.6%	0.0%	10.5%	5.3%
34	Other regions/services/organisations will learn useful lessons/information from our pilot	15.8%	84.2%	0.0%	0.0%	0.0%
35	It is reasonable to expect that our outcomes could be replicated elsewhere	10.5%	84.2%	5.3%	0.0%	0.0%
36	The success of SAFTE depends on how flexibly it can be implemented according to local circumstances	55.6%	44.4%	0.0%	0.0%	0.0%
37	We already have a strategy in place to ensure that our experience and findings are shared with other people who want to develop and improve care for people in the SAFTE target group	21.1%	42.1%	26.3%	10.5%	0.0%
38	By the time the pilot period ends, we will have a strategy in place to ensure that our experience and findings are shared with other people who want to develop and improve care for people in the SAFTE target group	15.8%	36.8%	31.6%	15.8%	0.0%
39	Pilots such as ours provide important lessons for other regions in how to do things better	26.3%	68.4%	0.0%	0.0%	5.3%

The final set of items, presented in Table 28, is about the nature of the change and about change management. Most respondents felt SAFTE is a radical new model (Q40), unlike those surveyed in the interim report. Half the respondents believed that the model had not been well designed and

implemented (Q43) and, while only half believed that there had been sufficient leadership at the State (Q44) level, nearly all felt there had been sufficient leadership at the local level (Q45).

**Table 28 SAFTE staff perceptions about the nature of the change and about change management**

No	Statement	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
<b>Change management</b>						
40	The SAFTE program represents a radical change in the way that services are provided to people in the SAFTE target group	10.5%	63.2%	15.8%	10.5%	0.0%
41	SAFTE is best described as a small and incremental change in the way that people in the SAFTE target group receive services	10.5%	42.1%	5.3%	36.8%	5.3%
42	Change management has been an important feature of implementing the SAFTE program	26.3%	47.4%	15.8%	10.5%	0.0%
43	The change that SAFTE represents has been well designed and implemented	0.0%	42.1%	10.5%	47.4%	0.0%
44	There is sufficient State leadership to effectively implement reforms such as SAFTE	5.3%	47.4%	47.4%	0.0%	0.0%
45	There is sufficient local leadership to effectively implement reforms such as SAFTE	31.6%	52.6%	15.8%	0.0%	0.0%

#### 4.4.2 Stakeholders' perceptions – referrers and local service networks

The SAFTE teams each sit within their own local health and community service context and in order to understand how SAFTE related to these contexts, the evaluation sought the views of a number of stakeholder groups, including referrers (GPs, community care providers, allied health providers and ambulance officers), and managers of local services which relate to the SAFTE teams (eg, Community Health Services, ACATs, Rehabilitation Services).

##### Referrers

The focus of enquiry for referrers was to seek their perceptions of SAFTE outcomes for the people they had referred, and their general feedback on the program. A randomised sample was developed using referral data obtained from the RIC, with the aim to interviewing a mix of people from each referral type (ie, GP, community care, allied health and ambulance).

Given the large number of clients that many of these referrers deal with each day, it was decided to advise them that the evaluation was underway prior to making telephone contact, including details of the client they had referred to SAFTE. Due to privacy considerations, the evaluation team did not have access to client names, and therefore the RIC finalised and distributed the letters to referrers on behalf of the evaluation team. Letters were distributed in early November 2006, and the evaluation team commenced follow-up phone calls several weeks later.

The evaluation team experienced significant difficulties accessing GP referrers, despite the approach outlined above. The Program management team within NSW Health had experienced some success in its attempt to follow-up with GPs. Rather than duplicate effort, it was agreed that the Program management team would continue to seek GP feedback, and provide a summary of findings to the evaluation team, and the evaluation team would instead focus their efforts on other stakeholders.

A total of 52 referrers were contacted by the evaluation team (community care and allied health between mid November - early December 2006; ambulance during February 2007), with a total of 25 responses, 10 of whom were also interviewed in their capacity of manager of related allied health and community services (see discussion below).

Despite the advance notice of the evaluation team's contact, the majority of referrers had difficulty recalling the specific details of the services provided by SAFTE for their client/patient either

because they could not recall the individual client, or they were not provided with feedback from the SAFTE team. However, their overwhelming perception about SAFTE was very positive, in particular, the rapid response and access to comprehensive assessment and services, and all said they would recommend SAFTE to others.

When asked what would have happened to their client if SAFTE had not been available, respondents noted their clients would have been *'put on an extensive waiting list, and some would have ended up being admitted to hospital'*, and *'they probably would have to be brought in (to hospital) for assessment, but better assessment is possible in the home environment'*.

All respondents believed that SAFTE had prevented their client presenting to ED, and half also believed SAFTE prevented admission to residential care. This was consistent with the views expressed by a number of SAFTE staff to the evaluation team over the course of the evaluation period: *'there are quite a few of our SAFTE patients that we have been able to maintain for an extra 3-6 months in the community, when hostel or Nursing Home accommodation was the (preferred option) of family, GPs or hospital'*.

The positive response noted above was echoed in the responses to a question about what improvements could be made to the Program, with comments such as *'I can't think of any ways to improve it, just make sure it keeps going'*. One health stakeholder noted, *'the stronger relationship with GPs is something we could learn from and do better'*. Receiving systematic feedback on clients was cited as the main area for improvement.

Ambulance Officers were also very supportive of SAFTE services. It provided them with an option for patients where they perceived that the patient or client did not need admission to an Emergency Department, but who still needed supports to be put into place quickly. With SAFTE, they could be confident that someone would follow up within 48 hours, although one officer noted *'it would be good to have 24/7 contact with the assessment organiser so that they could confirm the timetable of their assessment visit'*.

Ambulance Officers also noted the need for improved feedback about what happened to the patients or clients they had referred. Officers felt that if they received feedback on their referrals in a systematic way, it would improve their referral practices as well as being educational.

### **Managers of related allied health and community care services**

The focus of enquiry for managers of related allied health and community services was to ascertain how SAFTE related to and with the local service context for frail older people, and identify possible reasons for the lower than expected referral rates.

A mix of community care and allied health managers from all sites were contacted, with 10 respondents providing a fairly even spread across service types and SAFTE sites. A structured telephone interview was undertaken which considered issues such as awareness of SAFTE, referral processes, skills and expertise, and opportunities for improvement.

All of those contacted were aware of SAFTE and had personally referred clients to SAFTE, or a member of their staff had. Most found the referral process quite smooth, but a number used a two-step process of referral – ie, first contacting the SAFTE officer, with whom they had an established working relationship prior to SAFTE to discuss the client, then contacting the RIC. This echoes comments of other stakeholders received informally, especially in the Hornsby and Queanbeyan areas where the SAFTE team was closely located to or incorporated within the local existing aged care 'intake' point (ie, the ACAT and community health team respectively). Two managers appeared to be unclear about their capacity to refer to SAFTE directly, with one indicating a local policy which required GPs to be informed prior to referring a client to SAFTE, and another indicating that a recent change had been initiated that allowed only GPs to refer.

The benefits of SAFTE as perceived by this group echoed those of other referrers, primarily being the rapid response and access to comprehensive assessment and services, in particular

ComPacks (especially for Queanbeyan, which did not have ComPacks prior to SAFTE), the partnership between health and COPS which addresses both ‘*social and health needs*’ of the client. One manager noted that the ‘*main benefit of SAFTE is that they see clients in the community who need an urgent ACAT assessment*’, a view echoed by several others, including one manager who noted there was a 16-week wait-list for ACAT in her area.

All respondents commented on the expertise of the SAFTE teams, the staff of which are ‘*highly experienced*’, and able to undertake ‘*thorough investigations and assessments... (compared to)... 15 minutes with a GP*’. One manager cited the SAFTE staff’s ‘*incredible skills ... their greatest is communication and ease of manner*’, which was considered important not only for the services to which the team referred and related, but also particularly for the clients. Another noted that SAFTE was ‘*more than just rehabilitation and discharge, the carer and coping issues*’ added to the complexity of the role.

While the majority of respondents were enthusiastic about the SAFTE program, ‘*it’s been a terrific addition to an existing service*’, there were some concerns expressed. One manager commented on the ‘*acute-care focus*’ of the local SAFTE team, and their need for additional ‘*rehabilitation experience*’, and another noted that the ‘*SAFTE team doesn’t have any more or less (skills and expertise) than anyone else in community health*’. A number raised the duplication of phone numbers and referral processes, with one manager suggesting that SAFTE ‘*should be an extension of the ACAT rather than set up as a separate team*’. The relationship between ACATs and SAFTE was raised by a number of managers, with one noting that the ‘*main issue is overlap between SAFTE and ACAT- there is duplication of effort and resources ... especially when ACAT goes out and finds SAFTE already has been*’.

Of the six managers who were in their role at the time of SAFTE’s commencement, only two had been consulted or involved in its development at the local level. At the time the evaluation team spoke with these managers there was only 3 months funding left remaining for the SAFTE pilots, and only one had been involved in any discussions regarding its future, or the impact for the service network beyond that time. There is a clear need for improved engagement of and communication with the service context in which SAFTE is located.

#### 4.4.3 Patients in the SAFTE target group presenting to ED in the same period

Table 29 shows ED activity at the relevant hospitals during the period March to December 2006. In total, 18,728 patients aged 75 years or older presented to the four EDs over the nine month SAFTE study period. During this time, SAFTE received a total of 1,071 referrals, equivalent to around 6% of ED attendances over the period. The rate varied from 14.6% at Queanbeyan to 4.1% at St George.

**Table 29 Impact on ED attendances March–December 2006**

	John Hunter	St George	Hornsby	Queanbeyan*	All other hospitals
Total ED attendances	47,523	43,243	21,430	12,512	1,362,477
Total ED attendances aged 75+ years	5,927	7,839	4,134	828	162,420
Total ED attendances aged 75+ years with Mode of Arrival of 1 (arrived by ambulance)	4,291	5,278	2,700	316	100,913
Total ED attendances aged 75+ years with Mode of Separation of 1 (admitted to ward)	3,088	4,878	2,360	155	75,814
Total ED attendances aged 75+ years in Triage categories 1-3	2,893	4,741	1,542	189	85,794
Total ED attendances aged 75+ years in Triage categories 4-5	2,945	2,963	2,434	636	71,823
SAFTE referrals during same period	368	318	264	121	n.a.
<b>SAFTE referrals as % of ED attendances</b>	<b>6.2%</b>	<b>4.1%</b>	<b>6.4%</b>	<b>14.6%</b>	n.a.

	John Hunter	St George	Hornsby	Queanbeyan*	All other hospitals
<b>aged 75+</b>					
<b>ED profile</b>					
Attendances aged 75+ years as % of total	12.5%	18.1%	19.3%	6.6%	11.9%
Total ED attendances aged 75+ years with Mode of Arrival of 1 (arrived by ambulance) as % of total ED attendances 75+ years	72.4%	67.3%	65.3%	38.2%	62.1%
Total ED attendances aged 75+ years with Mode of Separation of 1 (admitted to ward) as % of total ED attendances 75+ years	52.1%	62.2%	57.1%	18.7%	46.7%
Total ED attendances aged 75+ years in Triage categories 1-3 as % of total ED attendances 75+ years	48.8%	60.5%	37.3%	22.8%	52.8%
Total ED attendances aged 75+ years in Triage categories 4-5 as % of total ED attendances 75+ years	49.7%	37.8%	58.9%	76.8%	44.2%

\* Queanbeyan data are for March–November 2006 only

Figure 19 shows ED attendances for patients aged 75 years and over at each of the relevant hospitals during the period March 2005 to December 2006. At each site there was an increase in presentations to the ED coinciding with the lead in to winter (March–August 2006), ranging from 18% at Hornsby to 26% at St George.

**Figure 19 ED attendances aged 75 years and over**

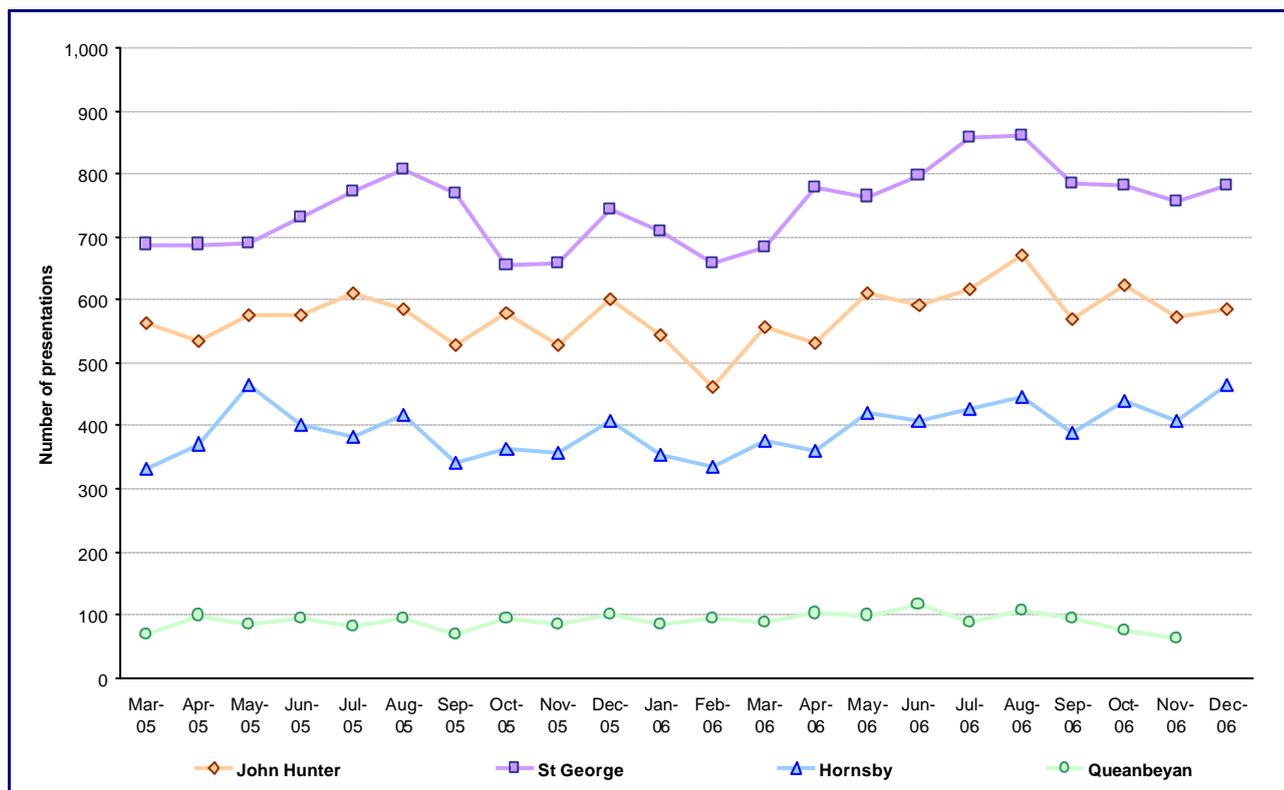
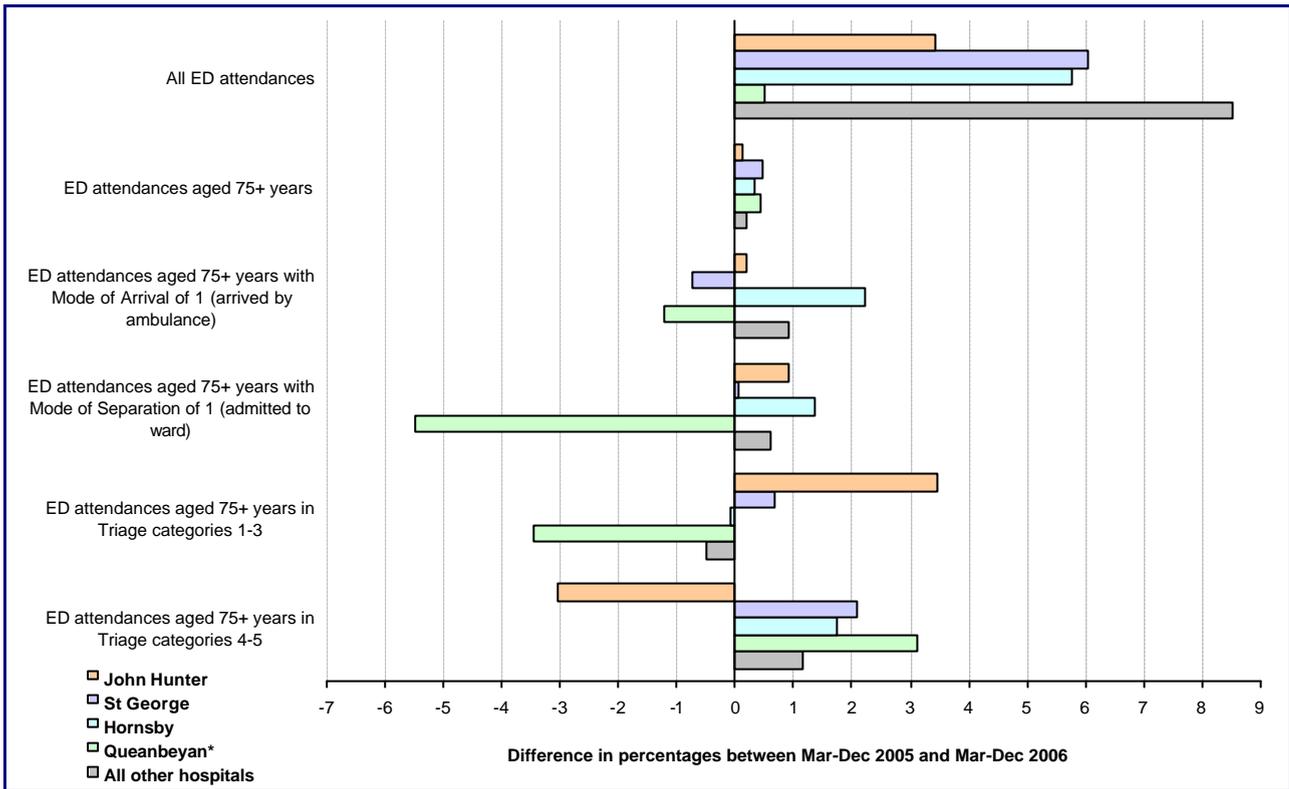
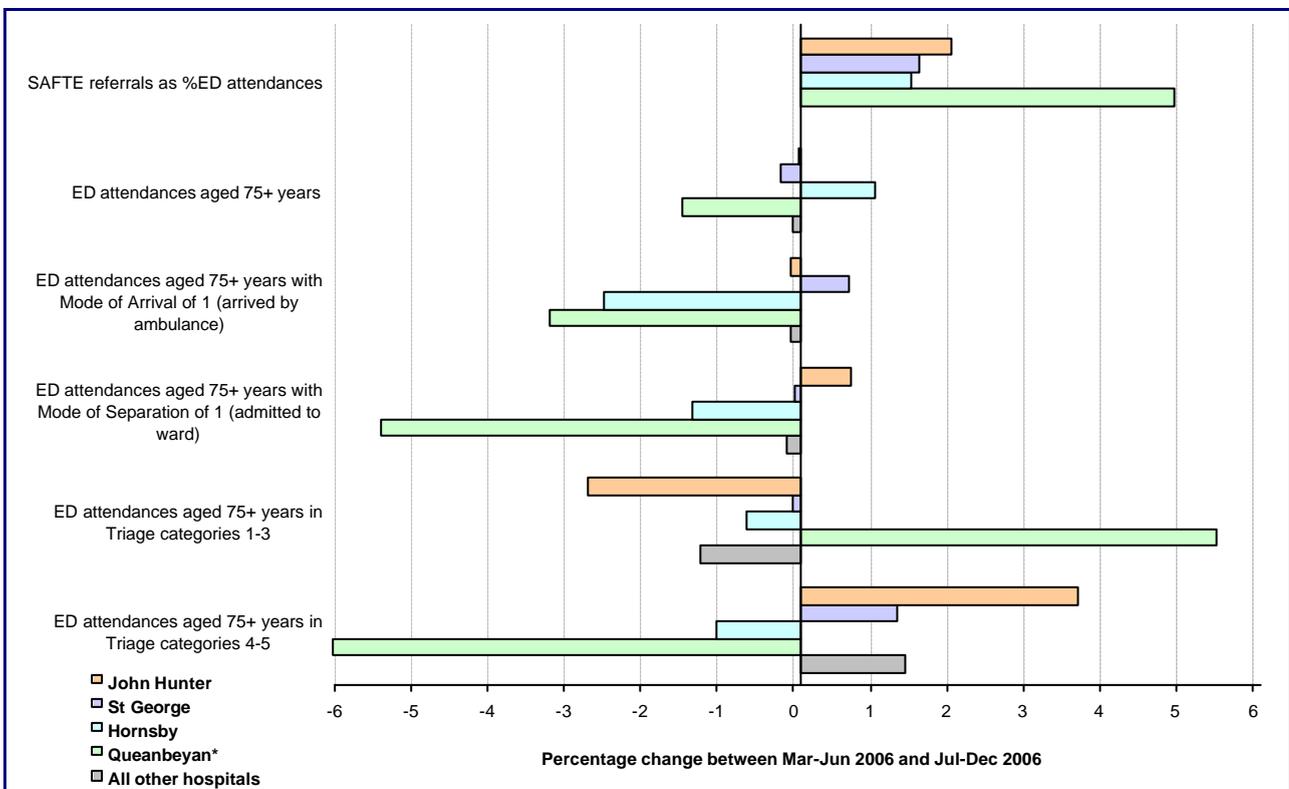


Figure 20 shows changes in ED attendances between 2005 and 2006 for each of the relevant hospitals and for all other hospitals, for the months March to December. Figure 21 shows changes in ED attendances between March–June 2006 (period of interim report) and July–December 2006 for each of the relevant hospitals and for all other hospitals.

**Figure 20 Changes in ED attendances, March-June 2005 to March-June 2006**



**Figure 21 Changes in ED attendances since the interim report**



Our conclusion is that, with the exception of Queanbeyan, SAFTE had only minimal impact on ED attendances by patients in the SAFTE target group. The potential impact on Queanbeyan during the six month period for which ED data were available was more significant, with SAFTE referrals representing 5% of ED referrals by patients 75 years and older during the same period.

#### 4.4.4 Other system level impacts

##### *Introduction of ONI*

A standard assessment tool, the Ongoing Needs Identification (ONI), was introduced for use by all SAFTE teams. This was to ensure a consistent approach to assessment, and to test the value of a common assessment tool. All sites participated in training around the use of the ONI in March 2006 that focused on how to use the tool, and additional training was offered on an individual team basis as the project progressed. However, only one team requested additional training, which is surprising given that over a quarter of SAFTE staff feel the training provided was insufficient (Table 26).

During the period of the SAFTE trial, the ONI was incorporated as an option into the Care Manager information system, which is used by Community Options. While it was anticipated that the SAFTE health teams would also have access to an electronic version of the ONI in CHIME, this had still not occurred by the end of the evaluation. For the period of the SAFTE pilot, health teams have had to maintain paper records of ONI, which were then entered into a database within NSW Health. This double-handling of information was discussed at the SAFTE Steering Committee meeting in May 2006, where it was agreed that consideration would be given to all sites having electronic 'tablets' to record ONI information on-site, once it was available to be transferred electronically into CHIME. However, no team had access to this technology at the time of writing this report.

While many SAFTE staff were concerned about the level of detail contained in the ONI, and the length of time required to undertake the assessment, these have been alleviated as the teams have become more efficient in their use of ONI and appreciated the comprehensive array of health and social issues included. Some teams also used a clinical/nursing assessment template to supplement the ONI assessment.

##### *Use of CHIME*

The mandated use of CHIME to record information on SAFTE clients has met with mixed reactions. Only one site was familiar with CHIME before the SAFTE trial commenced and there were difficulties implementing CHIME at the other sites. In 3 out of the 4 sites, the SAFTE team was initially the only part of the local health system which used CHIME, and referrals continued to be made manually, leading to comments such as '*CHIME is of no value at all as no-one else is linked in.*'

Once CHIME was introduced more widely through the health system, the lower than expected referral numbers meant that staff other than SAFTE did not become familiar with the technology, and continued to favour the manual referral process. One allied health manager (non-SAFTE) noted that the '*staff were trained in CHIME and we have five computers ... with CHIME on, but there're never used.*'

The majority of SAFTE teams acknowledged the value of an electronic client information system, however there were significant concerns about the unwieldy nature of CHIME, and the length of time it took to record information and navigate through and around client records. Three of the teams continued to record client information both in paper files as well as in CHIME. One team entered most of their assessment and case notes on a separate file, and only entered the data into CHIME sporadically due to the slowness of CHIME, '*you could walk away and get a cup of tea in the time it takes to save one page.*'

Teams commented that there were initially frequent systems failures, which added to their frustration. However this had declined in frequency by the end of the evaluation period. The most serious disruption was for a period of six weeks for the Hornsby team during late 2006. That said, most teams were quick to complement their CHIME support staff who assisted them throughout the evaluation period.

The Human Services Network (HSNet), the statewide technology infrastructure to allow secure communication between human service providers (both Government and non-Government agencies), was similarly under-utilised. HSNet includes a function called *ReferralLink* to allow secure transmission of referral information from one service to another, and theoretically, HSNET has the ability to transfer referrals from CHIME to other software systems such as Care Manager, which is used by many Community Options services. However, the ONI assessment tool had not been built into *ReferralLink* by the end of the evaluation period, and the participating COPS services did not have the ability to send and/or receive referrals automatically with their software. This means that the potential benefits of automatic exchange of data were not available to them or their service partners.

Even if these technical issues are overcome during the remainder of the trial, it is likely that further work would need to be undertaken in building the protocols and common practice regarding electronic referrals, as well as training in the use of the electronic systems and the assessment information they contain. These issues will also be important to consider for any subsequent Area-based implementation of the components of the SAFTE Program.

### **Central intake and referral system – the Referral Information Centre (RIC)**

The RIC has ensured a consistent approach to triage, intake and referral for SAFTE clients across the four pilot sites. This has proved invaluable to the evaluators, providing concise, comparable results for analysis. Up to the end of December, a total of 1,374 calls were received, with 1,159 clients being referred to the SAFTE teams. The average time to process a service request has dropped from 40.3 to 27.4 minutes, as the referral processes become bedded down, and the establishment of an electronic interface with SAFTE health teams and the reduction in referrals needing to be faxed. Referrals to COPs services are still being sent by fax.

There is general agreement about the importance of having an intake system that can triage inquiries and referrals, and the RIC staff are generally held in high regard due to their good clinical judgement and professionalism. One GP representative noted that he did not always feel confident that the RIC clinician fully appreciated the urgency of his patients' needs, however he later acknowledged that this could be because he was unfamiliar with a central intake system, and that his patients had in fact received appropriate services from SAFTE.

While the central intake system has ensured a degree of consistency and efficiency in terms of SAFTE referrals, there is less agreement about one operating state-wide. As noted above, feedback from stakeholders suggests that a local intake service incorporated into an existing referral pathway may be preferable: *'the RIC is efficient (but) we usually ring the SAFTE person who we know first, and then refer through the RIC'*. A geriatrician in one region noted that the *'biggest complaint from GPs is the single RIC; GPs still ring the ACAT, who talks to the SAFTE team, and then the SAFTE team makes the referral to RIC'*. This issue is discussed further in Section 5.4.

### **Partnerships with health and community care**

The partnership arrangement has been a significant success of the SAFTE program, with the majority of staff acknowledging the benefits it has brought, both to clients as well as themselves (see Table 25). For clients, the partnership *'gives them confidence'*, as it *'shows (they) are working as a team'*. For staff, *'the beauty of this model is that it allows for joint assessments'*, where *'two people see better than one'* and they are *'able to bounce ideas off each other'*. This is consistent with stakeholder feedback with one allied health manager commenting that *'COPS working with health has worked well – there is a close relationship'*, and a community care manager noting that *'its good that .. social and health issues are jointly considered'*.

A key mechanism to link the COPS and health teams has been the ComPacks funded under SAFTE, which are managed by COPS teams. All teams identified that this additional resource was a significant incentive to participate in the SAFTE pilots – especially Queanbeyan, which did

not have access to ComPacks for patients post-discharge. Stakeholder feedback also confirmed that additional resources of ComPacks were a significant benefit for clients. However, some noted that the 6 weeks was *'too limited'*, and were concerned about the potential gap between SAFTE finishing and longer-term care services being available. One manager argued that the availability of ComPacks should not be restricted to the SAFTE team but instead *'it may be better to have ComPacks (available) at the local level* of regional community health and ACAT teams.

A number of health managers and SAFTE staff have noted the role of ComPacks in relation to clients' utilising residential aged care services. One health manager recalled *'a patient who has been assessed as needing a Community Aged Care Package, but this can't be accessed quickly, and SAFTE fills the gap'*. A number of SAFTE team members noted that the 6 weeks that SAFTE was involved with a client often gave the clients and their carers the opportunity to come to terms with the realisation that additional long term care services were required, particularly residential care – *'feedback we have received from patients and carers is that the planned transition was made a little easier on the patients'* as it gave them *'time to adjust ... instead of being forced to confront it (during a hospital admission)'*.

### **Referral role for the NSW Ambulance Service**

A major change that has occurred as a result of SAFTE has been reforms within the NSW Ambulance Service to allow ambulance officers to refer clients to SAFTE. Ambulance officers are expected to be a major source of referral for SAFTE clients, given the large number of older people who present to EDs by ambulance. With 77% of ambulance calls resulting in a transfer (to ED), there were significant practice, as well as cultural implications to introducing the non-transfer approach of SAFTE<sup>15</sup>.

Amongst the initial concerns of ambulance officers was the potential delay of up to 48 hours before a patient would be seen by a SAFTE team member, as well as issues regarding their liability if something went wrong with the patient in the interim. Protocol 73 was introduced in April 2006 to specifically accommodate SAFTE, providing ambulance officers with the confidence to make SAFTE referrals. This represented a significant change for ambulance staff, and *'kicked off discussions within the Ambulance Service regarding their potential role in community care'*.

A strong working relationship between the NSW Ambulance Service and the Program Team has resulted in the development of a number of resources and strategies aimed at giving ambulance officers confidence in the responsiveness of the SAFTE Care Program. Anecdotal evidence suggests there is a great interest in SAFTE being a success: *"As a clinician, it's great being able to utilise a non-invasive clinical skill to achieve a positive outcome for the patients"*<sup>16</sup>.

Despite these developments, ambulance referrals have been less than anticipated. While there was an initial steady increase in referrals from commencement in mid April, it appears the referrals peaked in mid June (9 referrals), and have settled down to between 1 and 6 referrals per week (see Figure 15) since. Feedback from officers in February 2007 suggested that while they were feeling more confident about referring clients to SAFTE, this would be enhanced if they received timely and regular feedback on their clients.

## **4.5 Return on investment**

The cost-benefit analysis of the SAFTE Program is based on a return on investment (ROI) analysis. That is, return on investment is the "return" (incremental gain) from an action divided by the cost of that action:

$$\text{ROI} = \frac{\text{savings} - \text{cost}}{\text{costs}}$$

<sup>15</sup> Progress and challenges for the Ambulance Service in the SAFTE Care Project, Ambulance Service of NSW, presentation to SAFTE Steering Committee 19 May 2006

<sup>16</sup> *ibid*

The total number of referrals was 60% of that originally estimated in the SAFTE Care Program Business Case. The implication of the low number of referrals is that the cost per patient is considerably more than originally estimated. This is because the majority of SAFTE costs (ie, staff costs) are fixed and not volume-dependent. A further issue is that SAFTE clients have proved to have more complex needs than originally estimated as evidenced by the higher than expected number receiving a ComPacks package.

Three models were developed to estimate the return on investment, based on the assumptions that 100% of referrals to SAFTE were for patients who would otherwise have presented to an ED if not referred to SAFTE (Model 1), 61% ED attendances (Model 2) and 79% ED attendances (Model 3) respectively.

With the exception of Model 1, the estimated savings from SAFTE are less than the direct program costs. These results are shown per client in Table 30. The cost per client does not differ, as this is calculated based on the actual program cost. The estimated cost of routine care (if SAFTE was not available) varies from \$2,686 to \$1,639 depending on the model. The model based on staff assessment (Model 3) results in an additional cost of \$485 per SAFTE client over the estimated cost of routine care.

**Table 30 Return on investment by client**

	Actual cost	Estimated cost of routine care	Difference	Percentage difference
Model 1	\$2,618	\$2,686	\$68	2.6%
Model 2	\$2,618	\$1,639	-\$980	-37.4%
Model 3	\$2,618	\$2,133	-\$485	-18.5%

The ROI is disappointing, particularly as the costs of other services (eg, ACAT assessments and geriatrician consultations) provided by Area Health Services are not cross-charged to the SAFTE program. Our data (see Section 4.3.3) suggest that SAFTE clients are receiving many of these services. Once these are included, the ROI to NSW Health is estimated to be negative in all models.

A more precise costing was not possible in the evaluation period due to the inability to link hospital and community health data and to cost the other services that SAFTE clients received. It is therefore not possible to be certain about which of the models summarised above is the most accurate, although our overall assessment is that Model 3 is the most realistic. It is recommended that, if the SAFTE model continues, a costing study be undertaken once there is capacity to link hospital and community health data and to cost the other services that SAFTE clients receive.

A detailed discussion of the modelling and return on investment findings is included as Attachment 2.

## 5 Discussion

The SAFTE Program has now been in operation for nearly twelve months and 1,159 frail older people have been cared for by the four SAFTE teams. In case reviews of clients discharged from SAFTE during this period, staff estimated that 79% would have presented to ED if SAFTE had not been available.

SAFTE teams have a strong commitment to preventing unnecessary hospitalisation of the target group and are keen for the program to succeed. They have responded to the health and care needs of clients through the provision of ComPacks (63% of clients received a package of services), nursing care (73%), physiotherapy therapy (59%), occupational therapy (51%), equipment (50%), medication reviews (50%), referrals to a specialist (45%) and pathology services (28%).

The vast majority of clients had their short-term needs met by SAFTE (91%) and three quarters had long term sustainable community support in place at discharge. However, 25% of clients had unplanned interventions, the majority (82%) of which led to a hospital attendance.

Stakeholders also strongly supported the rapid response capacity, additional ComPacks resources, partnership between health and community care services and SAFTE's capacity to build onto existing services. The principle of streamlined referral process was also generally supported, but at the local, rather than statewide, level.

The program has ambitious goals and, based on the review of the Australian and international literature, is breaking new ground. While there have been a number of studies which looked at the concept of preventing ED presentations, very few have focussed on the SAFTE client cohort and those that did were not prospective studies. That is, the published literature (see Attachment 4) has focused on the identification of hospital patients whose attendance, in retrospect, could have been avoided. There is little in the literature to suggest how best to do this with the SAFTE target group in real time.

Furthermore, the program is relatively complex and a number of elements in the program have not been either separately tested before, nor have they been examined in combination. These include:

- Partnerships between health and community care services
- 'Rapid response' care and treatment in a community setting
- 'Front-end' ComPacks - as opposed to the usual post-discharge application
- Central intake and referral system
- Use of the Ongoing Needs Identification tool
- Use of CHIME
- Use of Better Services Delivery Project (BSDP) as an information exchange mechanism
- Development of long-term care plans for community health and care clients.

The links between interventions and outcomes can only reliably be tested by a prospective study with some randomisation of individuals with and without the interventions. Few such studies have been conducted for a combination of program elements as represented by SAFTE. Indeed, the literature highlights the caution involved with any expectation that any one component, or even the combinations of the elements of the SAFTE Care Program, can bring about the changes required to make an effective and cost-effective impact at the level of the hospital system.<sup>17</sup>

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<sup>17</sup> For example, see Wenger, N.S., et al *The quality of care provided to vulnerable community-dwelling older patients* [Annals of Internal Medicine](#) 139: 740-747

Given this context, it has not been surprising that while many elements of the model have worked well, there remain a number of areas for improvement and refinement.

## 5.1 Referrals to SAFTE

A key finding of the evaluation is the continued low rate of referrals to SAFTE – about 60% of the original estimate. This became a significant focus for the latter part of the evaluation. Four possible reasons for the lower than expected referrals were outlined in the Interim Report, not all of which were mutually exclusive. Our conclusion is that the low number of referrals is due to a combination of factors, each of which is discussed below.

1. **The SAFTE model represents a radical new model of care and, as such, will inevitably take time to become fully established.** The time required to establish this new model is dependent on the effectiveness of the change management strategies adopted by the SAFTE program.

While there is a perception that SAFTE represents a radical change, the fact that referrals peaked in mid 2006 suggests that this possible reason is not a major factor, at least in the last quarter.

2. **The need for SAFTE was significantly overstated in the business case.**

While the number of ED attendances during the period was significant, either they are largely unavoidable or few can be identified in real time. The research on which the business case is based involved a retrospective clinical review of patients who had been admitted to hospital with the reviewing clinicians subsequently having access to confirmed diagnostic test results and other clinical evidence<sup>18</sup>. While it was clearly possible in that study to identify potential candidates for SAFTE retrospectively, it is less clear whether such cases can be routinely identified in real time.

This reason is, in our view, a more important factor. The SAFTE target group is people who, in the majority of cases, have slowly deteriorating health and functional abilities and the key criterion for referral is that they are at risk of deterioration **‘and likely to be admitted to hospital within the next 2 weeks’**. While potential candidates for SAFTE can be identified retrospectively, there is little evidence in the literature or in our findings to suggest that significant numbers of such clients can be routinely identified in real time. The model may attract more referrals if the time span is extended and the focus moves to earlier intervention. Such an approach would be consistent with the international evidence (see Attachment 4) on the importance of targeting those most likely to benefit.

3. Despite significant efforts to market the program by both the Program management staff and the sites, **the low number of referrals is because promotion of SAFTE to potential referral sources has been less than optimal.** There are two possible reasons:
  - The wrong potential referral sources have been targeted to date. Specifically, significant resources have been devoted to raising GP awareness while relatively less were devoted to other potential referral sources. Other potential referral sources include community care providers (eg, Meals on Wheels, Home Care), formal carers (eg, families), informal carers (eg, neighbours) and community resources (eg, community pharmacists). It may be that GPs have a less important role in case finding than had been presumed.
  - The right potential referral sources were targeted but the promotional strategy employed has not hit the mark. One SAFTE manager felt that her staff had been *‘under pressure .. to project manage and market SAFTE’* and that this was *‘inappropriate’* given the clinical expertise and focus of the SAFTE staff.

A key finding from our interviews with referrers was that few could recall SAFTE or the person they referred. This is not surprising if referrals from an individual clinician are infrequent or one-off. Initial marketing needs to be reinforced with feedback to referrers. However, if the referral criteria are narrow (as the SAFTE criteria are) it is inevitable that each individual

<sup>18</sup> Rosenfeld T et al, *General Practice Evaluation Project Report 801: Survey of Pre-Acute Care of Older People* Department of Health and Ageing 2003

referrer will make only an occasional referral. Our conclusion is that more intensive marketing will not significantly increase the number of referrals.

4. SAFTE is not the right model of care for this target group. Specifically, SAFTE is a small service with its own separate referral pathway (separate phone number and referral process). In theory, a single entry point to SAFTE should make the referral process easier. However, at the local level, SAFTE is but one of many services targeting frail, older people. These include, but are not limited to, ACAT, Community Acute/Post Acute Care (CAPAC), Aged Care Services Emergency Teams (ASETS), Community Aged Care Packages (CACAP), Community Health and transitional care. It may be that SAFTE, as currently designed, represents one of the Leutz<sup>19</sup> laws – ‘*Your integration is my fragmentation*’.

Our conclusion, based on our stakeholder interviews and the literature, is that an enhancement to existing local referral pathways (such as ACATs or community health services) may be more successful in attracting referrals than establishing a separate Area-wide or regional intake service.

## 5.2 The complex needs of clients

The SAFTE Business Case includes a succinct description of the complexity of the needs of potential clients in its description of the target population as ‘*those who have multiple problems, complex illness, physical and functional impairments*’<sup>20</sup>. This is supported by the literature, which notes that ‘*(c)are of the elderly, and in particular the frail elderly, poses a central challenge to current health systems. Their medical needs are often complex: the frail elderly suffer from a mix of acute and chronic medical problems, and functional disabilities. Their social support networks are frequently overextended, or at risk of breaking down.*’<sup>21</sup> SAFTE clients were expected to be this, and more, given the acuity of their circumstances which means they are at risk of presentation to the ED. The SAFTE experience has unpacked this description, providing a clearer profile of the client population and the range of interventions that they need, and an understanding of the resources required to meet those needs.

As expected, SAFTE clients were typically quite unwell and had complex health and care needs. Almost one in five had been in hospital in the previous 7 days and, on the whole, clients had lower levels of function than comparable community care clients. Just over half of all referrals were due to mobility issues or falls, and a further one in eight with general deterioration. Most lived with mild to moderate bodily pain on a daily basis, and half were incontinent of urine. Three quarters of clients were assessed as needing a carer, however only 66% had one, and in almost a third of cases, carer arrangements were under threat. Given this profile, it is probably not surprising that 1 in 6 felt depressed most or all of the time.

Anecdotal evidence from the teams suggest that a significant proportion of SAFTE clients had minimal or no prior contact with the formal service system, and many lived alone, and therefore they have a greater need for formal services.

SAFTE staff judged 10% of clients to be ‘too sick’ for SAFTE (ie, they should have been referred directly to ED – Table 4). However, the percentage who had ‘unplanned outcomes’ (the majority of which were ED presentations or hospital admissions) was significantly higher at 25% (Table 16). This again reflects the complexity of the target group.

The complexity and severity of the needs of the SAFTE clients is reflected in the feedback from teams that in the weeks where they actually receive their targeted number of referrals, they are ‘frantic’. One staff member commented that ‘*the first week is quite intensive for the carers, they need lots of phone support and reassurance as they are working through major issues and*

<sup>19</sup> Leutz, W. (1999) *Five laws for integrating medical and social services: lessons from the United States and the United Kingdom* The Milbank Quarterly, 77, 77-110

<sup>20</sup> SAFTE CARE Program Business Case, Health Services Improvement Branch, NSW Health 2005 version ii, p10

<sup>21</sup> Johri M, Beland F and Bergman H (2003) *International experiments in integrated care for the elderly: A synthesis of the evidence*. International Journal of Geriatric Psychiatry, Vol 18, p223

*changes which they need to come to terms with*<sup>1</sup>. One team identified that the optimum number of clients that could be managed is approximately 80% of their target number.

The complexity of clients' needs is also reflected in the provision of ComPacks, with 62.7% of clients being referred for a ComPacks Package compared to the 37.8% that was implicitly built into the SAFTE Care Business Case. Teams acknowledge that this has only been possible because the lower than expected number of SAFTE clients has meant they do not have to ration services as tightly as they normally do for post-discharge ComPacks clients. However, all teams maintain that the level of services provided has been legitimate.

### 5.3 Staff perceptions about program management and marketing

The evaluation team have had several face to face meetings with SAFTE teams (more in the case of St George due to its proximity), attended four Program management workshops, been in regular telephone contact, and surveyed staff in an effort to fully understand the nature of the work being undertaken by the teams, their environments and concerns.

A recurring theme early on in SAFTE was the teams' frustration that the 'goal-posts keep shifting'. This primarily relates to the number of core elements that had not been finalised prior to the Program commencing (eg, the need for a common written consent, ONI not being in CHIME and changes to the intake criteria of the SAFTE Guidelines) and the absence of documentation regarding decisions taken consultatively. This is reflected in the final survey results, with only two fifths of respondents believing that the program has been well designed and implemented (Table 28).

The roles and responsibilities of the program management team and the SAFTE pilots are clearly spelt out in the SAFTE Business Case. However, in practice, the boundaries between the two have not always been clear, leaving teams with the perception that the program is too centrally driven. An example is the promotion of SAFTE to potential referrers. The Business Case clearly states that pilot site teams will be responsible for education and marketing the service to GP divisions, health and non-health services, which provide service to the older population<sup>22</sup>, and the SAFTE teams have actively undertaken this role.

With the lower than anticipated referrals from GPs, a number of remedial strategies were sought by the program management team, including re-visiting GPs and examining ED files to ascertain those GPs who could have referred clients to SAFTE. Some teams were concerned that the additional contacts and promotional activity had the potential to alienate some GPs, especially in those areas where the GP population was smaller. The perception by some teams that a significant proportion of their clients either had minimal or no prior contact with the formal service system (as discussed above), suggests the reliance on targeting existing health and care services to identify and refer clients may be misplaced.

Referral rates were constant agenda items for the weekly teleconferences, project meetings and Steering Committee meetings. This caused considerable stress for some staff, leading one health worker to comment that *'it appears to be a numbers game'* with the implicit message that they needed to *'keep the numbers up or we won't get ongoing funding'*. Another commented that she was *'counting down the days to when this project finishes ... then we can just get on with doing our job'*.

When asked to comment on the feedback from teams about the ongoing focus on referral numbers, the program management team responded that, given the pilot nature of SAFTE, this was a legitimate priority and that *'change is difficult...especially when there is a history of pilots that are not ongoing'*. Marketing of SAFTE to potential referrers continues to be a priority activity for the SAFTE sites and the program management team. However, as noted above, based on the evidence to date, our conclusion is that more intensive marketing will not significantly increase the number of referrals (see discussion in Section 5.1).

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<sup>22</sup> Ibid p17

## 5.4 Call Centre - Triage, Intake and Referral System

As noted in Section 4.4.3, there is general agreement about the importance of having an intake system that can triage inquiries and referrals, and the RIC staff are generally held in high regard because of their clinical judgement and professionalism.

The Interim Report noted that there was disagreement, however, whether this should be a State-wide (ie, as is currently the case for SAFTE), or local/regional service. While there are clear advantages to a Statewide service in terms of efficiencies and consistency, there were concerns about the ability of a Statewide service to understand the local service system environment and respond to local circumstances. Some felt it impacted on the number of referrals, particularly where there is an existing, well-known local referral pathway or service, such as in the case of the Hornsby ACAT (which worked closely alongside the SAFTE team) which receives calls from referrers wishing to make a SAFTE referral. Rather than asking the referrer to phone another number, the ACAT refers to the RIC who then registers the referral and refers it back to the Hornsby SAFTE team.

Stakeholders such as referrers and managers of allied health and community care services who were interviewed as part of the evaluation also commented on the overlap – *‘there is duplication regarding phone numbers and making referrals ... SAFTE is just one more number to remember’*.

However, there is no clear evidence from the literature that a single point of access will be successful in reaching all potential clients. The experience of the Commonwealth Carerlink Centres is useful here. The Centres were established in 2001 with the aim of streamlining carer referrals for a range of carer services. Despite a significant investment in promotional activities, however, the referrals through Carelink Centres remain very low; the majority of carers continue to access services using mainstream or established referral pathways.

It is understood that under the NSW Health Clinical Services Redesign Program, all Area Health Services will be asked to consider establishing a central intake and referral system for aged and chronic care services. The experience of the SAFTE Care Program suggests that an enhancement to existing local referral pathways (such as ACATs or community health services) may be more successful in attracting referrals than establishing a separate Area-wide or regional intake service. The experience of the Commonwealth Carelink Centres, however, should caution against the expectation that all clients can be channelled through a single intake system to access services.

In determining the shape of centralised intake and referral services, Area Health Services need to ensure that process undertaken is genuinely consultative with all key stakeholders, including those involved in delivering care services. As noted above, very few managers of allied health and community services which directly related to SAFTE were involved in its development and implementation at the local level, and even fewer were involved in discussions regarding its future (Section 4.4.2). In a review of the implementation of the Single Assessment Process (SAP) in the United Kingdom, Dickinson (2006) concluded that *“(f)ront-line practitioners (street-level bureaucrats) had a major impact on the SAP implementation, particularly through their reluctance to engage with the process, work together and share assessments. Success of the national SAP implementation will depend on the extent to which those working directly with older people can be engaged in the policy process.”*<sup>23</sup>

## 5.5 Partnerships with health and community care

A major success of the SAFTE Program has been the partnership between health and community care staff in undertaking joint assessment and care planning of SAFTE clients.

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<sup>23</sup> Dickinson A (2006) *Implementing the Single Assessment Process: Opportunities and challenges*. [Journal of Interprofessional Care](#). Vol. 20, No.4, (abstract)

The availability of ComPacks was a critical factor in cementing the partnership between health and community care teams in some sites. Many staff felt professionally enriched by the closer working relationships. *'I now go in looking at a client's home in a different way, and will often come back to (COPS partner) and say that Mrs X needs some equipment or cleaning or whatever'*, commented one health worker.

However, some health staff were concerned about the inherent inequity in the provision of ComPacks, as SAFTE clients were able to access services and supports more readily than the regular clients of the 'host' health service, who often faced long waiting periods due to limited resources.

The benefits of the partnership arrangement for clients were also evidenced in the survey results, where respondents detailed the mix of clinical and community services they received. One client wrote that they had received assistance with *'monitoring blood pressure and my health ... and advice and reassurance about alternative accommodation'*, and another commented that, *'(f)rom feeling utterly abandoned after returning from hospital, I felt I was a 'valued human being' after all..'*

Much has been written in the literature about the need for greater coordination of care for frail older people, and the importance of a range of services working in partnership for the benefit of the client (see Johri et al 2003).<sup>24</sup> In their Cochrane Review of specialist outreach clinics, Gruen et al (2003) found that *'primary care collaborations, education and other services was associated with improved health outcomes, more efficient and guideline consistent care, and less use of inpatient services.'*<sup>25</sup> There is a note of caution, however: *'Although this coordination represents an important step towards reduced fragmentation and improved use of resources, significant limitations may remain, including the cleavage between medical and social care, acute and continuing care, and community and institutional care. Each agency continues to function autonomously in its own jurisdiction with its own budget.'*<sup>26</sup>

While the feedback from teams and stakeholders suggests that the 'cleavage' has been bridged as a result of SAFTE, this was not consistent with the observations of the evaluation team. Two sites in particular did not routinely practice joint assessments or hold joint case conferences, and the partner agencies did not appear to relate closely to each other when observed by evaluation team members at the project workshops and site visits. It appeared that the interpretation of the concept of partnership was strongly influenced by the environment and culture in which the SAFTE teams were located, with those in an aged and community care context having a more overt expression of the concept of partnership.

## 5.6 Ongoing quality improvement to better target SAFTE

As Table 24 shows, the vast majority (90%) of SAFTE staff believe that the program has been effective. This view is supported by the case reviews showing that 91% of SAFTE clients had their short-term care needs met and that 72% had sustainable long term community care in place on discharge (Table 16). The extent to which SAFTE prevented people from presenting to hospital in the period immediately following SAFTE was not able to be determined due to the lower than expected number of referrals and unavailability of linked data. It is salient to note, however, that two recent studies concerned with assessment and preventive/avoidance strategies did *not* show a reduction in ED attendances and/or hospital admissions<sup>27 28</sup>.

Anecdotal evidence suggested that the broad eligibility criteria did not provide sufficient guidance as to the optimum point at which to refer a client to SAFTE. One SAFTE health staff member

<sup>24</sup> Johri et al (2003) op cit

<sup>25</sup> Gruen RL, Weeramanthri TS, Knight SE, et al (2003) *Specialist outreach clinics in primary care and rural hospital settings*. [Cochrane Database of Systematic Reviews](#). CD003798, p14

<sup>26</sup> Bergman H, Beland F, Lebel P, et al 1997. *Care for Canada's frail elderly population: fragmentation or integration?* [Canadian Medical Association Journal](#). 157 : 1116-1121 (Quoted in Johri et al 2003)

<sup>27</sup> Walker L and Jamrozik K (2005) *Effectiveness of screening for risk of medical emergencies in the elderly*. [Age and Ageing](#) Vol 34, pp238 – 242;

<sup>28</sup> Byles JE, Tavenor M, O'Connell RL et al (2004) *Randomised controlled trial of health assessment for older Australian veterans and war widows*. [Medical Journal of Australia](#) Vol 181, No.4, pp186-190

commented that *'it makes it hard for GPs to know when to refer. They worry about referring too early because they don't want to waste resources, but then it can quite quickly change and be too late (to refer to SAFTE)'*. The pilot nature of the SAFTE program, however, did not provide sufficient opportunity for the development of risk indicators that may have assisted decision-makers. The literature points to this being an important element to produce *'better outcomes because care would be directed at those for whom it would do the most good. Directing it at risks should also produce greater effectiveness. And focusing on risks should also produce better progress markers and useful standards against which to judge and reward high-quality program performance... Care decisions would be based on risks, value, and effectiveness, and as training and knowledge expands of what combinations of care work and how much additional benefit can be expected from additional units of care for a given set of client characteristics, care planning should become more standardized.'*<sup>29</sup>

The need for a more rigorous approach to understanding the variability of the client population is clear when you look at the difference between the number of clients SAFTE staff judged to be 'too sick' to benefit from SAFTE (10%) (Table 4), and the number of clients who had an unplanned intervention (one in four), the majority (85%) of which were hospital admissions or ED presentations. This suggests that the number of clients who were 'too sick' to benefit was significantly greater than initially anticipated.

The Interim report included discussion of two clients who initially appeared ideal SAFTE candidates but for whom the benefits of the SAFTE intervention were unclear. The first client had been referred to SAFTE following a fall, the cause of which was subsequently found out to be a cerebral haemorrhage (stroke). SAFTE provided this client with a range of health, allied and community services. It was noted that had this client been admitted to hospital, their rehabilitation may have been more intensive than that which could be provided in the community.

The second client was referred to SAFTE with lower back pain, mobility difficulties and general deterioration and assessed by the SAFTE team the following day where an initial diagnosis was made of a Urinary Tract Infection. The SAFTE team contacted the client's GP and arranged commencement of antibiotic cover. However, the client's condition continued to deteriorate, she was hospitalised where she was found to be in acute renal failure due to sepsis, and she died six days later.

These two cases highlight the complex decisions that SAFTE clinicians are faced with on a daily basis and that the judgements they make are not always straightforward. A classification system which better identified the risk characteristics of clients would assist in their decision-making, and facilitate clients being directed to the most appropriate care settings in a timely manner.

This is reflected in the literature. In their summary, Aminzadeh and Dalziel (2002) make the point that *"Older ED patients have distinct patterns of service use and care needs. The current disease-oriented and episodic models of emergency care do not adequately respond to the complex care needs of frail older patients. More research is needed to determine the effectiveness of screening and intervention strategies targeting at-risk older ED patients"*<sup>30</sup>

The Interim Report recommended that a formal process be established to review cases where clients had unplanned outcomes, to identify lessons to be learned and refine referral criteria to ensure that SAFTE is better targeted to those who can benefit most. The Department's response notes that case reviews are routinely undertaken by the SAFTE teams, and therefore no broader, system-wide process was necessary (see Attachment 3). The evaluation team remains of the view, however, that there would be benefit in coordinating a case review process, to facilitate the disseminations of findings, clarification of risk indicators and refinement of eligibility and referral criteria.

<sup>29</sup> Weissert W, Chernen M and Hirth R (2003) *Titration versus targeting home care services to frail elderly clients*. *Journal of Aging and Health* Vol. 15, No. 1, pp99-123

<sup>30</sup> Aminzadeh F and Dalziel WB (2002) *Older adults in the Emergency Department: A systematic review of patterns of use, adverse outcomes, and effectiveness of interventions*. *Annals of Emergency Medicine*. Vol. 39, abstract.

## 5.7 Building rapid response capacity

A key strength of the SAFTE Care Program is its ability to provide a rapid response to people with emerging care needs, a community service that has been largely under-developed to this point. This was overwhelmingly identified as one of the main benefits of the SAFTE by representatives of all stakeholder and referral groups, including GPs, community care, allied health and ambulance teams. This was also raised in the consumer feedback: *'the immediate nature of the help was great'*.

The team with the greatest success in initially attracting referrals to date was Hornsby (58% of target). The Hornsby model was built on an existing community aged care focussed service, to which a rapid response capacity was added. Feedback from stakeholders included *'the quick response is great'*; *'we see these sorts of clients every day ... it would be great to have this (rapid response and ComPacks) as an addition to our (existing) service'*; and *'it should be set up as an extension of ACAT rather than set up as a separate team'*.

This approach is supported by the Cochrane Review covering specialist outreach clinics, conducted by Gruen et al (2003), which found that integration through specialist outreach (in the SAFTE scenario this is akin to aged and community care coordination) *'can improve access, outcomes and service use, especially when delivered as part of a multifaceted intervention.'*<sup>31</sup> However, they cautioned that *"Simple models in urban non-disadvantaged settings, where outreach involves little more than a shift in the location of the consultation confer relatively little benefit, limited to measures of convenience and patient satisfaction"*.

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<sup>31</sup> Gruen et al, op cit, p14

## 6 Next steps - building rapid response aged care services

NSW Health has indicated that SAFTE teams will continue to be funded until June 30 2007, an extension of 4 months on the initial pilot timeframe. Beyond that date, the Department has indicated that the SAFTE model of care will be incorporated within the Clinical Services Redesign Program projects regarding access of older people and people with chronic illnesses, which are expected to unfold in the coming months.

The experience of the SAFTE Care Program and the international literature suggest that the following key attributes should guide the establishment of future service models designed to prevent unnecessary presentations by older people to EDs:

### 1) Early detection and rapid response capacity

The nature of the client group requires a capacity to detect problems earlier and rapidly respond to referrals and emerging needs of clients. This is best organised locally. SAFTE clients in the evaluation period were typically frail, incapacitated by illness and with limited supports. They required more interventions than others in this age group and more interventions than had been estimated in the original SAFTE Business Case.

Future models should be aimed at a broader target group and should not solely target those who are at immediate risk of hospitalisation. The international evidence (see Attachment 4) suggests that the best results are achieved by models that include a strong focus on early intervention.

*“An alternative is to replace targeting - the idea that a client is in or out, eligible or not, with titrated care: generous in its eligibility, but carefully calibrated in the amount of resources actually allocated to a client. High-risk clients would get more care than current practice, to permit more aggressive treatment of their high risks and to take advantage of their high potential to benefit. Low-risk clients would get less care, enough to meet their satisfaction and to monitor their changing conditions, but not so much care that they have little potential to show marginal benefits equal to their marginal care consumption.” (Weissert et al. 2003 page 121)*

### 2) Resources – diagnostic, clinical and community care packages

Additional resources are required to provide a comprehensive package care and support services eg, ComPacks, and diagnostic and clinical care in a timely manner. The SAFTE program as a whole cost more per client than a comparable ED presentation, due to the lower numbers of clients and the higher costs of meeting their needs. The evidence suggests that this level of resources is needed for clients with complex of health and care needs.

### 3) Central intake

The experience of the SAFTE program suggests that a local intake system can work well when there is good local knowledge, understanding of service networks, and trust between services and clinicians. However, there is no evidence to suggest that all clients can be channelled through a single intake point. There needs to be flexibility in terms of enabling clients to access services wherever they present within the health system.

### 4) Builds on existing services

The service should add capacity to an existing service which has expertise in community aged care, rather than be a separate service, to build on existing strengths and avoid duplication. The features of a service should include following elements:

- multidisciplinary team
- expertise in geriatrics/aged care

- experience in, and culture of, working in partnership with the community care sector
- preventative health and/or rehabilitative focus
- established links with potential referrers (ie, be part of an existing referral pathway).

## **5) Partnership with community care**

The SAFTE program demonstrated that the partnership arrangement enabled client needs to be assessed and met in a more comprehensive and coordinated manner, as well as assisting in decision-making for longer-term care needs. The additional resources provided for ComPacks assisted in cementing this partnership. The partnership approach had benefits for those health and community care staff directly involved, as well as their teams more broadly.

## **6) Standardised assessment processes**

The complexity of the clinical, functional and social needs of this client group, and the inter-relatedness of these needs, requires a coordinated approach to assessment and care planning. The SAFTE program has proved the value of using a standardised assessment tool such as the ONI, which addresses both health and community care needs. The benefits of a tool such as the ONI include staff having a more holistic approach to identifying and meeting the needs of client. It also reduces the burden on clients who are not required to 'repeat their story' to the numerous service providers who may be involved in providing them care. A standardised assessment tool also assists in ensuring the consistency of approach to demand management between sites, and allows for comparability of data for the purposes of quality improvement in the targeting and delivery of the services.

## **7) IT infrastructure**

The service needs to be underpinned with sound records and information management systems. The complexity of these clients means that a range of service personnel may be involved in their care, including clinicians, diagnosticians and community care providers, and those coordinating care need to be able to readily make referrals, share information, monitor progress and plan for longer term care needs. The ability to exchange information between health and community care teams is imperative if the partnership is able to function effectively, and also relate to the broader service system. A sound IT infrastructure would also save clients from having to 'repeat their story' to the variety of people involved in providing their care, and facilitate feedback to referrers on the outcomes of their referrals.

## **8) Ongoing monitoring and quality improvement systems**

The SAFTE program was a ground-breaking initiative that sought to identify and address the health and community care needs of those who were at risk of presenting to ED. The SAFTE evaluation has been able to analyse data to enable a better understanding of the characteristics of this client group, their short-term service and clinical requirements and outcomes. However, the evaluation was unable to identify outcomes for clients in the longer-term, including service utilisation, morbidity and mortality rates. It will be important for NSW Health to establish an ongoing monitoring and quality improvement framework that will help find those who can benefit most from the program and that will help in evaluating their outcomes.

## Attachment 1

### Terms of Reference and membership of the NSW SAFTE Program Steering Committee

#### Function:

The SAFTE Care Steering Committee will be the key Governance Committee for the SAFTE Care Pilot reporting through the Deputy Director-General Health System Performance. It will consider recommendations from the pilot site steering committee and review progress and outcomes of the pilot.

#### Responsibilities:

The SAFTE Care steering committee will be responsible for:

- Reviewing progress of the program, evaluation and delivery of results;
- Monitoring the operations of the program to ensure congruence by the components across the four pilot sites
- Reviewing the issues that arise as barriers to performance and identify strategies to overcome these
- Development of knowledge management framework and review of strategies for dissemination to other pilot sites.
- Identification of strategies to maximise effective demand management for older persons

#### Reporting relationships:

The SAFTE Care Steering Committee will be responsible to the Deputy Director-General, Health System Performance. Local pilot site steering committees will report to the SAFTE Care Steering Committee.

#### Initial Membership:

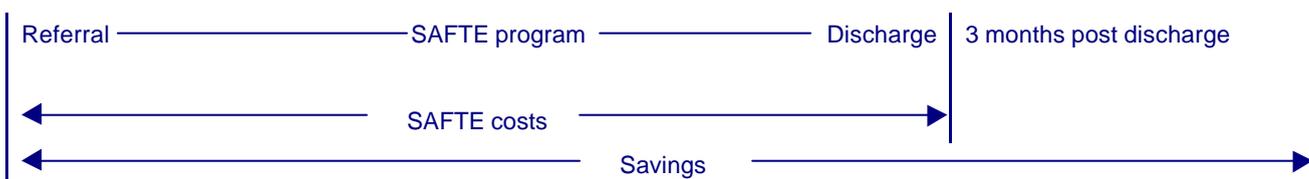
- Professor Katherine McGrath – Deputy Director General, Health System Performance
- Dr Tony O’Connell - Director, Performance Improvement Branch
- Dr Tuly Rosenfeld – Department of Health, Advisor
- Kathy Baker- Chief Nursing Officer
- Bronwyn Wilkinson – Director ComPacks
- Joanna Burdajewicz – Senior Project Officer
- Deb Oong – Strategic Information Technology
- Frank Cordingly – Director, Health Technology
- Catherine Katz – Director, Inter-government & Funding Strategies
- Hugh Ralston – Consumer representative
- Dr Chris Dedousis - St George Hospital
- Derene Anderson – Greater Newcastle
- Dr Sue Kurle – Hornsby Hospital
- Simon Milligan – Queanbeyan Hospital
- Greg Rochford – Chief Executive, NSW Ambulance
- Klaus Stelter – St George GP Division
- Carol Mills - Deputy Director- General - DADHC
- Vivian - Community Options
- Tracey Duffy - Commonwealth
- Elizabeth Koff, Director Population Health, Planning and Performance, SES & Illawarra
- Dr Nigel Lyons, Director Clinical Operations, Hunter and New England
- Dr Paul Douglas, Director Population Health, Planning and Performance, Northern Sydney/Central Coast
- Karen Edwards – Director of Clinical Operations – Primary and Community Health, Greater Southern
- Leon Reynolds – NSW Treasury

## Attachment 2

### Return of investment analysis

This section estimates the net cost of SAFTE at this interim point. It is based on costs until the end of January 2007. As described in the methods section, costs are modelled using the schema reported in Figure 9 and replicated in Figure 22.

**Figure 22 SAFTE costs and potential savings**



The Business Case outlines the benefits that are expected to arise from the SAFTE Care Program (p25):

- 1 Reduced rate of presentations to EDs
- 2 Reduced rate of admissions
- 3 Reduced inpatient days for SAFTE clients
- 4 Reduced average cost per person

The ROI analysis below considers each of these expected benefits.

### Costs

The total cost of the program for the eleven-month period March 2006 to January 2007 is shown in Table 31. This table shows program management, IT development and evaluation costs as one-off costs on the basis that, if implemented on a routine basis, these costs would not continue to be incurred. While included in the table for completeness, they are excluded from the calculation of the average cost per SAFTE referral.

**Table 31 SAFTE costs and cost per patient March 2006 to January 2007**

Site	Budget/Expenditure		Total	Cost per SAFTE referral, including share of RIC costs
	One-off	Recurrent		
Program	\$631,986	\$0	\$631,986	
RIC		\$294,764	\$294,764	
St George		\$819,255	\$819,255	\$2,602
Hunter		\$819,255	\$819,255	\$2,302
Hornsby		\$677,790	\$677,790	\$2,684
Queanbeyan		\$423,616	\$423,616	\$3,488
<b>Total</b>	<b>\$631,986</b>	<b>\$3,034,681</b>	<b>\$3,666,667</b>	<b>\$2,618</b>

Note 1: All expenditure has been pro-rated over the 12-month life of the current program. In reality, the cost of items such as mobile phones and computers would be accrued over 2 years or more. Separate expenditure data on these items were not available to allow this accrual adjustment to be made.

Note 2: Includes all SAFTE costs, including ComPacks Packages, but excludes the cost of all routine care received by SAFTE clients over the period.

It will be seen that total recurrent expenditure at the end of eleven months was \$3,034,681. During this eleven month period, SAFTE accepted 1,159 referrals, at a cost equivalent to an average of **\$2,618** per SAFTE referral. This compares with the average cost of **\$1,415** that was implicitly built into the SAFTE Business Case.

In addition to the SAFTE Care Program costs are the costs of any routine health services that SAFTE patients also utilised during their time on the program and in the three month period after discharge from SAFTE. These costs include:

- With the exception of ComPacks Packages, community health and care services that were already in place or that were instigated as part of a SAFTE care plan. As reported in Section 4.3.3, SAFTE clients have utilised a number of services as part of the SAFTE intervention. ComPacks Packages are the only services that are currently funded by the SAFTE program. No cross-charging for other services is in place and these are being provided within existing budgets by the relevant service or agency. These services include, but are not limited to, ACAT assessments, medical consultations and allied health services.
- ED attendances
- Hospitalisations
- Ambulance call outs
- Medical and pharmaceutical services funded by Medicare Australia.

The original methodology for the evaluation included the calculation of the actual cost of these services per client. This has not proved to be possible. NSW Health was unable to extract comprehensive data on ED attendances or hospitalisations and there is no existing data collection on the other community health and care services that SAFTE clients access. The costing in the next section is thus based on modelling rather than actual costs.

## Savings

This section models the potential savings that the SAFTE Care Program has delivered to this point. In considering such savings, it is important to note that these are estimates rather than definitive figures.

SAFTE is aiming to prevent the need for services such as ED and hospital admissions and the costs in this section are modelled on that basis. The assessment of whether such services were actually prevented is, by definition, a judgement that is based on a set of assumptions. This is because it is impossible to determine with certainty whether, if not referred to SAFTE, a particular patient would otherwise have presented to ED at some point and, if so, whether they would have been admitted. While clinical data on the patient can be used to indicatively group the patient to a particular DRG, it is also not possible to determine whether this would be the DRG that would have been assigned if the patient had been admitted or the actual cost of that admission.

## Assumptions

Three models have been developed to estimate savings to date:

### Model 1 100% ED attendances

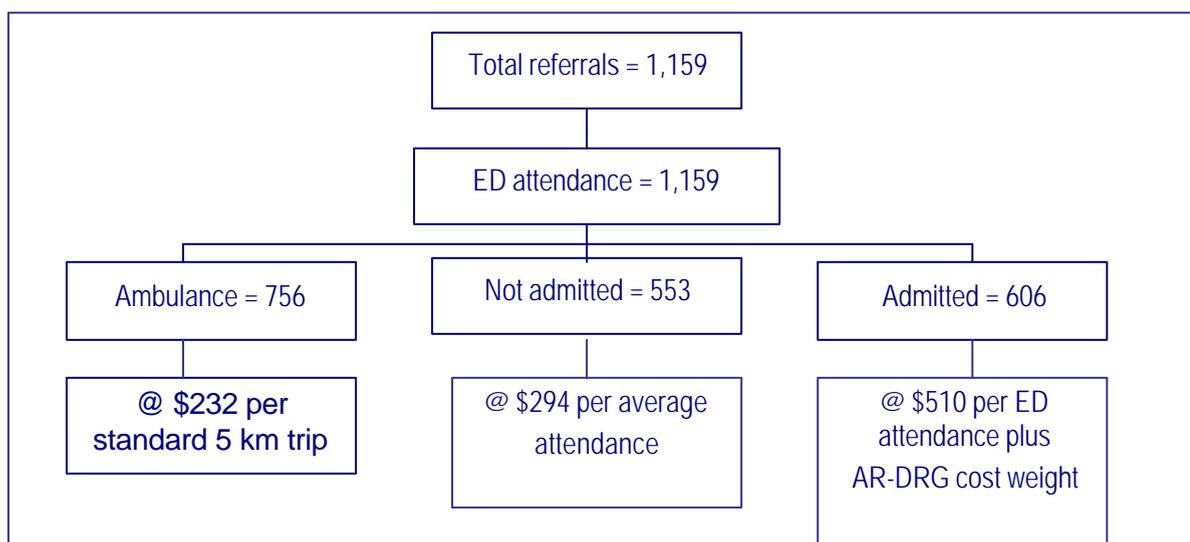
1. Consistent with the program's referral criteria, all referrals to SAFTE were for patients whose clinical condition would otherwise have progressed to the point where they would have presented to an ED at some point in the three months from the date of referral. Each SAFTE patient thus represents (at least) one saved ED attendance.
2. The proportion of SAFTE clients being transported to ED by the NSW Ambulance Service would be the same as that for patients aged 75 years or more at each specific hospital. For example, 72.4% of patients aged 75 years or more arrive at John Hunter Hospital ED by

ambulance. This model (as with those that follow) presumes that 72.4% of SAFTE clients in Greater Newcastle would have arrived at the ED by ambulance if not for the SAFTE program. In contrast, the proportion arriving by ambulance was 37.5% at Queanbeyan and this proportion is built into the model. The rates used in the model are included below.

3. Once presenting to ED, SAFTE patients would have been admitted as an overnight patient at the same rate as other patients in the 75+ age group in each specific hospital. As with (2) above, the proportion of patients who are admitted varies by hospital. This model uses the specific percentage for each hospital. These percentages are included below.
4. If admitted to hospital, the average SAFTE patient admission would cost the same as the average patient in the 75+ years age group admitted on a non-elective basis at each specific hospital based on the Peer Reference Cost for the hospital peer group. These costs and weights are included below.

This model is the best-case scenario for the calculation of savings and is summarised in Figure 23.

**Figure 23 Model 1 - method for the calculation of savings**



**Model 2 61% ED attendances**

1. Consistent with the research on which the program is based<sup>32</sup>, 61% of referrals to SAFTE were for patients who would otherwise have presented to an ED if not referred to SAFTE. 21% would have required an ED attendance that could not have been anticipated regardless of the availability of SAFTE, while a further 18% of unplanned admissions could have been avoided by a planned admission.

The other assumptions in the model are the same as Model 1, namely:

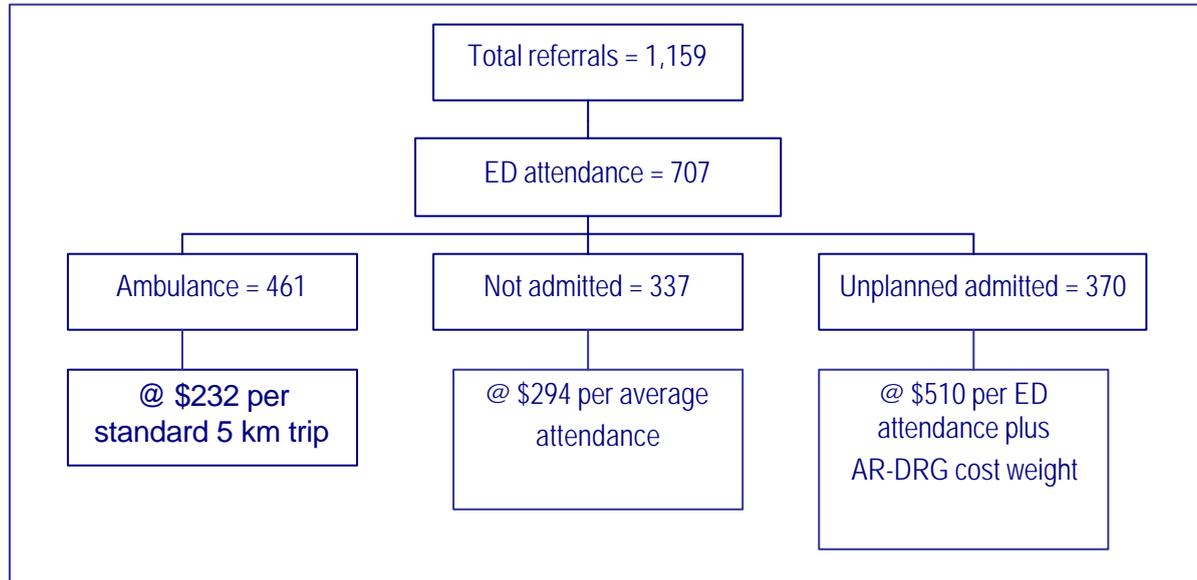
2. The proportion of SAFTE clients being transported to ED by the NSW Ambulance Service would be the same as that for patients aged 75 years or more at each specific hospital. For example, 72.4% of patients aged 75 years or more arrive at John Hunter Hospital ED by ambulance. This model (as with the others) presumes that 72.4% of SAFTE clients in Greater Newcastle would have arrived at the ED by ambulance if not for the SAFTE program. In contrast, the proportion arriving by ambulance was 65.3% at Hornsby and this proportion is built into the model.
3. Once presenting to ED, SAFTE patients would have been admitted as an overnight patient at the same rate as other patients in the 75+ age group in each specific hospital. As with (2) above, the proportion of patients who are admitted varies by hospital. This model uses the specific percentage for each hospital.

<sup>32</sup> Rosenfeld T et al, *General Practice Evaluation Project Report 801: Survey of Pre-Acute Care of Older People* Department of Health and Ageing 2003.

- If admitted to hospital, the average SAFTE patient admission would cost the same as the average patient in the 75+ age group admitted on a non-elective basis at each specific hospital based on the Peer Reference Cost for the hospital peer group.

This model for the calculation of savings is summarised in Figure 24.

**Figure 24 Model 2 - method for the calculation of savings**



### Model 3 79% ED attendances

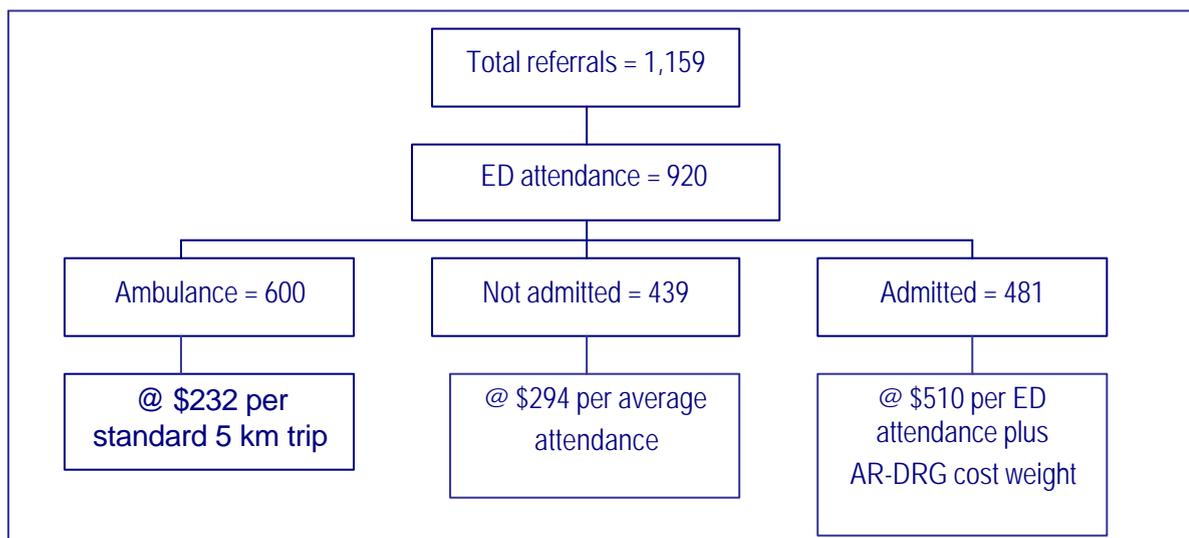
- As discussed in Section 4.3.2, SAFTE staff were asked to make a judgement as to whether, in their view, each client would have gone to the ED if SAFTE had not been available. In total, SAFTE staff assessed that 79.4% of referrals to SAFTE were for patients who would otherwise have presented to an ED. The other 20.6% would not have required an ED attendance regardless of the availability of SAFTE.

The other assumptions in the model are the same as Model 1 and Model 2, namely:

- The proportion of SAFTE clients being transported to ED by the NSW Ambulance Service would be the same as that for patients aged 75 years or more at each specific hospital. For example, 72.4% of patients aged 75 years or more arrive at John Hunter Hospital ED by ambulance. This model (as with the others) presumes that 72.4% of SAFTE clients in Greater Newcastle would have arrived at the ED by ambulance if not for the SAFTE program. In contrast, the proportion arriving by ambulance was 65.3% at Hornsby and this proportion is built into the model.
- Once presenting to ED, SAFTE patients would have been admitted as an overnight patient at the same rate as other patients in the 75+ age group in each specific hospital. As with (2) above, the proportion of patients who are admitted varies by hospital. This model uses the specific percentage for each hospital.
- If admitted to hospital, the average SAFTE patient admission would cost the same as the average patient in the 75+ age group admitted on a non-elective basis at each specific hospital based on the Peer Reference Cost for the hospital peer group.

This model for the calculation of savings is summarised in Figure 25.

**Figure 25 Model 3 - method for the calculation of savings**



On the basis of these assumptions, Table 32, Table 33 and Table 34 show the savings that SAFTE is estimated to have achieved in its first eleven months. In considering these findings, it is important to note that there may be other possible savings that cannot be calculated with any accuracy at this stage. For example, a small proportion of patients may subsequently been transferred for a rehabilitation episode. Likewise, some SAFTE patients may have otherwise had had more than one than one ED attendance and/or more than one admission. It is also important to note that, for reasons already discussed, not all routine care costs have been included at this point.

**Table 32 Model 1 - estimated savings in first eleven months**

	Unit cost	Volume	Total \$
Ambulance	\$232	756	\$175,496
ED attendances	\$397	1159	\$460,438
Admissions	\$4,088	606	\$2,477,645
<b>Total</b>			<b>\$3,113,579</b>

**Table 33 Model 2 - estimated savings in first eleven months**

	Unit cost	Volume	Total \$
Ambulance	\$232	461	\$107,053
ED attendances	\$397	707	\$280,867
Admissions	\$4,088	370	\$1,511,364
<b>Total</b>			<b>\$1,899,283</b>

**Table 34 Model 3 - estimated savings in first eleven months**

	Unit cost	Volume	Total \$
Ambulance	\$232	600	\$139,344
ED attendances	\$397	920	\$365,587
Admissions	\$4,088	481	\$1,967,250
<b>Total</b>			<b>\$2,472,182</b>

## Return on investment (ROI) results

The cost-benefit analysis of the SAFTE Care Program is based on a return on investment (ROI) analysis. That is, return on investment is the “return” (incremental gain) from an action divided by the cost of that action:

$$\text{ROI} = \frac{\text{savings} - \text{costs}}{\text{costs}}$$

Table 35, Table 36 and Table 37 show costs to date, estimated savings and the ROI at this point.

**Table 35 Model 1 - return on investment after eleven months**

	<b>Total \$</b>
SAFTE care costs to date (excluding one-off costs)	\$3,034,681
Estimated savings to date	\$3,113,579
<b>Difference</b>	<b>\$78,898</b>
<b>ROI</b>	<b>2.6%</b>

**Table 36 Model 2 - return on investment after eleven months**

	<b>Total \$</b>
SAFTE care costs to date (excluding one-off costs)	\$3,034,681
Estimated savings to date	\$1,899,283
<b>Difference</b>	<b>-\$1,135,398</b>
<b>ROI</b>	<b>-37.4%</b>

**Table 37 Model 3 - return on investment after eleven months**

	<b>Total \$</b>
SAFTE care costs to date (excluding one-off costs)	\$3,034,681
Estimated savings to date	\$2,472,182
<b>Difference</b>	<b>-\$562,499</b>
<b>ROI</b>	<b>-18.5%</b>

With the exception of Model 1, the estimated savings from SAFTE are less than the direct program costs. These results are shown per client in Table 38. The cost per client does not differ, as this is calculated based on the actual program cost. The estimated cost of routine care (if SAFTE was not available) varies from \$2,686 to \$1,639 depending on the model. The model based on staff assessment (Model 3) results in an additional cost of \$485 per SAFTE client over the estimated cost of routine care.

**Table 38 Return on investment by client**

	<b>Actual cost</b>	<b>Estimated cost of routine care</b>	<b>Difference</b>
Model 1	\$2,618	\$2,686	\$68
Model 2	\$2,618	\$1,639	-\$980
Model 3	\$2,618	\$2,133	-\$485

Table 39 shows the cost per client by quarter. The lowest cost was in the third quarter (August to September 2006). During this quarter, the cost was \$27 per client less than the estimated costs of

routine care under Model 2. But the cost increased in the last quarter during to the drop in referrals the Christmas period.

**Table 39 Cost per client by quarter**

	No of referrals	Cost per client
1st two months	99	\$5,573
2nd quarter	347	\$2,385
3rd quarter	393	\$2,106
4th quarter	320	\$2,586
<b>Total</b>	<b>1,159</b>	<b>\$2,618</b>

After absorbing the costs of the RIC on a pro-rate basis, Table 40 shows the ROI by site using the model that assumes that every SAFTE client represents one saved ED attendance. The ROI varies from 20% to -68% across the four sites. This table uses hospital cost data by hospital peer group in NSW. The average cost of both ED attendances and admissions at Queanbeyan is lower than that of the other hospitals that SAFTE clients would otherwise attend. Likewise, the admission rate for patients aged 75 or more is also lower. This works to lower the ROI at Queanbeyan. On the other hand, the average case weight for patients aged 75 years or more is higher in the major metropolitan hospitals than in the principal referral hospitals. This works to increase the ROI at Hornsby relative to the other hospitals.

**Table 40 Model 1 - return on investment by site**

Site	Costs	savings	patients	difference	ROI
St George	\$908,015	\$1,089,125	349	\$181,110	19.9%
Hunter	\$920,986	\$1,062,614	400	\$141,628	15.4%
Hornsby	\$748,747	\$814,745	279	\$65,998	8.8%
Queanbeyan	\$456,933	\$147,095	131	-\$309,838	-67.8%
<b>Total</b>	<b>\$3,034,681</b>	<b>\$3,113,579</b>	<b>1159</b>	<b>\$78,898</b>	<b>2.6%</b>

Table 41 shows the ROI by site using Model 2 (the model that assumes that 61% of ED attendances could have been avoided). The ROI varies from -27% to -80% across the four sites. Again, because the average cost of both ED attendances and admissions at Queanbeyan is lower than that of the other hospitals, there is a lower ROI at Queanbeyan and the high cost per admission at Hornsby works to increase its ROI relative to the other sites.

**Table 41 Model 2 - return on investment by site**

Site	Costs	savings	patients	Difference	ROI
St George	\$908,015	\$664,366	349	-\$243,649	-26.8%
Hunter	\$920,986	\$648,195	400	-\$272,791	-29.6%
Hornsby	\$748,747	\$496,994	279	-\$251,752	-33.6%
Queanbeyan	\$456,933	\$89,728	131	-\$367,205	-80.4%
<b>Total</b>	<b>\$3,034,681</b>	<b>\$1,899,283</b>	<b>1159</b>	<b>-\$1,135,398</b>	<b>-37.4%</b>

Table 42 shows the ROI by site using Model 3 (the model that assumes that 79% of ED attendances could have been avoided). The ROI varies from -5% to -74% across the four sites. Again, because the average cost of both ED attendances and admissions at Queanbeyan is lower than that of the other hospitals, there is a lower ROI at Queanbeyan.

**Table 42 Model 3 - return on investment by site**

Site	Costs	savings	patients	Difference	ROI
St George	\$908,015	\$864,765	349	-\$43,250	-4.8%
Hunter	\$920,986	\$843,716	400	-\$77,270	-8.4%
Hornsby	\$748,747	\$646,908	279	-\$101,839	-13.6%
Queanbeyan	\$456,933	\$116,793	131	-\$340,140	-74.4%
<b>Total</b>	<b>\$3,034,681</b>	<b>\$2,472,182</b>	<b>1159</b>	<b>-\$562,499</b>	<b>-18.5%</b>

### The ROI implicit in the SAFTE Business Case

The SAFTE Business Case implicitly assumed an average cost of \$1,415 per client. In practice, it was an average of \$2,618 per client or 85% more than the cost built into the Business Case. This percentage is significantly more than the difference in the number of referrals (see Table 43).

There are (at least) two reasons for the higher cost per client. One is the lower than expected number of referrals. But that explains only some of the difference.

The other equally important reason, and one that was not as apparent at the point of the interim evaluation, is the unexpected complexity of SAFTE clients (see Section 5.2). As one indicator of this, 62.7% of clients received a ComPacks Package compared to the 37.8% that was implicitly built into the SAFTE Care Business Case. Another indicator is anecdotal evidence from some team members that their SAFTE clients were significantly more complex than their post hospital discharge ComPacks clients.

**Table 43 Key differences between the assumptions in the SAFTE Business Case and actual results**

Measure	Business Case	Actual	Difference from Business Case	% difference from Business Case
No of referrals	2160	1159	-1001	-46.3%
Cost per client	\$1,415	\$2,618	\$1,203	85.0%

All teams maintain that the level of services provided has been legitimate and all agree that, had they received the anticipated number of referrals, they would not have been able to meet their needs with their current level of staffing (ie, while remaining within budget). To do so would have meant almost halving the average cost per client.

Given this, our conclusion is that the ROI cannot be improved simply by reducing the budget of the teams to fit the number of actual referrals. In consequence, we have not modelled what the ROI might have been if the number of referrals had been as anticipated and if it had been possible to reduce the cost per client to \$1,415 as this is not, in our view, a realistic scenario.

### Interpretation of ROI results

The total number of referrals is about half of that originally estimated in the SAFTE Care Program Business Case. The implication of the low number of referrals is that the cost per patient is considerably more than originally estimated. This is because the majority of SAFTE costs (i.e. staff costs) are fixed and not volume-dependent.

A further and equally important issue is that, based on their experience over the last 10 months, the SAFTE teams do not believe that they could manage a total of 45 referrals per week between them with their current staff levels. One stated reason for this is that the planned information systems for the program have failed to eventuate so far, which has added significant inefficiencies

to the system. If the program were to be implemented on a routine basis no doubt this could be resolved.

But a more important reason is the higher than expected level of client complexity and, in some cases, the significant time spent travelling for home visits. Factors such as these would continue to exist if the program was rolled out on a routine basis. The complexity of SAFTE clients is reflected in the number of client's receiving ComPacks packages. As discussed in Section 4.3.3, the proportion of clients receiving ComPacks packages is significantly higher than originally estimated (62.7% compared to an estimate of 37.8% in the original business case). This has also acted to increase the average cost per client.

A related issue is that of 'critical mass'. Each SAFTE team needs to have the capacity to deliver on the following:

- Multidisciplinary team
- Ability to access rapid diagnostic services for patients identified as at risk within 24 – 48 hours
- Provide a service in the patients home
- 7 day service
- Facilitate access to fast track diagnostic services (pathology and imaging)
- Facilitate access to specialist aged care advice
- Facilitate access to a comprehensive geriatric assessment
- Primary referrers for ComPacks
- Short term case management in conjunction with GP's and ComPacks
- Referral on to short and long-term care services.

The ROI is disappointing, particularly as the costs of other services not funded by the SAFTE Program are not included. These services include services provided by Area Health Services that are not being cross-charged to the SAFTE program including services such as ACAT assessments and geriatrician consultations. Our data (see Section 4.3.3) suggest that SAFTE clients are receiving many of these services. Once these are included, it can be anticipated that the ROI to NSW Health is negative in all models.

In addition, there are medical, diagnostic and pharmaceutical costs that are billed to Medicare Australia. In many cases there are also costs borne by the client. These can include patient co-payments for medical consultations and medicines, travel costs for appointments and other out of pocket expenses. It is not possible to estimate these with any accuracy and they are therefore out of scope in the ROI analysis.

Of the three models employed in the analysis, Model 1 is the best case scenario while Model 2 is the worse case scenario. Based on all of the available evidence, it is implausible that all clients receiving a SAFTE service would have otherwise presented to an ED. Model 3 is based on an assessment of each client by the SAFTE teams and is, in our view, the most realistic scenario.

A more precise costing was not possible in the evaluation period due to the inability to link hospital and community health data and to cost the other services that SAFTE clients received. It is therefore not possible to be certain about which of the models summarised above is the most accurate. It is recommended that, if the SAFTE model continues, a costing study be undertaken once there is capacity to link hospital and community health data and to cost the other services that SAFTE clients receive.

## Cost and activity data used in the ROI model

The following tables show the cost and activity data that were used to calculate savings in each of the ROI models. More detail on the costing method can be found in our evaluation plan (Eagar K et al (July 2006) *Sub Acute and Fast Track Elderly (SAFTE) Care Program Evaluation Framework and Plan*. Centre for Health Service Development, University of Wollongong).

**Table 44 ED activity indicators**

	John Hunter	St George	Hornsby	Queanbeyan
Total ED attendances aged 75+ years with Mode of Arrival of 1 (arrived by ambulance)	72.4%	67.3%	65.3%	37.5%
Total ED attendances aged 75+ years with Mode of Separation of 1 (admitted to ward)	52.1%	62.2%	57.1%	25.0%

**Table 45 Cost weights and costs for non-elective admissions aged 75 years and older by hospital**

Hospital	Average Cost Weight	Cost
St George	1.30	\$4,104
Hunter	1.30	\$4,104
Hornsby	1.47	\$4,184
Queanbeyan	1.19	\$3,364
All	1.34	\$4,086

**Table 46 Cost weights and costs for emergency department attendances aged 75 years and older by hospital**

Class	Description	Cost Weight	All but Queanbeyan	Queanbeyan
1	Subsequently Admitted/Priority 1	2.61	\$1,016	\$761
2	Subsequently Admitted/Priority 2	1.63	\$636	\$476
3	Subsequently Admitted/Priority 3	1.47	\$574	\$430
4	Subsequently Admitted/Priority 4	1.32	\$513	\$384
5	Subsequently Admitted/Priority 5	1.30	\$507	\$379
6	ED Only/Priority 1	1.35	\$527	\$394
7	ED Only/Priority 2	1.16	\$454	\$340
8	ED Only/Priority 3	0.99	\$385	\$288
9	ED Only/Priority 4	0.83	\$323	\$242
10	ED Only/Priority 5	0.68	\$265	\$199
11	Did not wait	0.50	\$194	\$145
<b>All</b>	<b>All</b>	<b>1.00</b>	<b>\$390</b>	<b>\$292</b>

## Attachment 3

### NSW Health response to Interim Report

The Interim Report of the SAFTE evaluation was presented to NSW Health, the SAFTE teams and the SAFTE Steering Committee in September 2006. The focus of the report was primarily formative, whereby the results of the evaluation were aimed to inform the ongoing development and improvement of the Program. The report included a series of recommendations arising from the evaluation findings to date. The evaluation team formally interviewed the NSW Health Program management team on February 14 2007, to obtain the Department's response to the recommendations in the Interim report and a summary of their responses is provided below in blue italic font.

#### 1. **The Program team establish an inclusive process to review and refine the overall SAFTE Care model, using the results of this interim evaluation as the starting point.**

While some elements of the model are working well, the overall model requires refinement. If the program is to become cost effective in the way articulated in the original business case on which it is based, it will need to demonstrate that it can reduce ED attendances and subsequent hospitalisations within a realistic period.

This process should include broad consultation with community care providers to assess the potential for additional referrals from this source. In doing so, it will be important to ensure that potential referrals meet the program's referral criteria, particularly in relation to risk of an ED attendance.

Specific issues that need to be considered in this review are:

- The establishment of a system of case reviews of all clients with unplanned outcomes (currently 25% of clients, 85% of whom ended up being admitted to hospital). The purpose of each review is to ascertain what lessons can be learned and to refine the referral criteria to ensure better targeting of clients who can benefit from SAFTE.

*A number of discussions occurred with the project teams around the definition of an "unplanned outcome". It became apparent that in the reporting of unplanned outcomes different definitions were used between the sites... The specific characteristics and organisation of the team and the relationships with the geriatrics services, their nature, organisation and admission criteria were key determining issues. Inpatient geriatrics services, their nature, ward base and admission processes did not facilitate direct admissions from home for SAFTE patients.*

*Processes for reviewing cases with unplanned outcomes were discussed with the SAFTE Care teams. One proposal was for a regular meeting between the teams at which cases would be discussed. After discussion the consensus view was that each team was responsible for the care of their patients according to established area policies and procedures. The SAFTE Care teams were part of, and answerable to their management structures and personnel. Further, each of the teams had established processes for dealing with and reviewing unplanned or adverse events either as part of their clinical conferencing or management reporting processes.*

- Whether, in addition to the RIC, there should also be a direct, local referral pathway to the local SAFTE program based on existing entry points. If so, the local entry point could run in parallel with, or feed into, the existing referral pathway via the RIC.

*There was agreement that a local access point was the preferred option for the future, as it ensured the service had knowledge of local services, was part of the local service network, and*

where there was trust between referrers and the service. 'Having a RIC in each Area Health Service (AHS) is part of the vision'. Under the Clinical Services Redesign Program all AHSs are being required to undertake projects to provide a single point of access for all aged and chronic care services. This process is due to be implemented progressively across 7 out of the 8 AHSs during mid 2007.

- Refinement of the referral criteria and opportunities to make them more flexible
- The potential to broaden the list of eligible referrers

Following the Interim Report, discussions were held with the SAFTE teams regarding broadening the SAFTE eligibility criteria and referral sources. Discussions focussed on reducing the age criteria from 75 years to 65 years, and 55 to 45 for people of Aboriginal and Torres Strait Islander descent. There was some initial reluctance to this proposal by the teams, who at the time were feeling frustrated by the numerous program changes which had occurred since the pilot commenced, but overall there was consensus about the change.

The teams also discussed expanding the list of eligible referrers to include family carers, and agreed to trial this approach in two sites, St George and Queanbeyan. Carers' inquiries to the RIC are directed to the local Carer Respite Service, which screens calls to determine the level of need, and either refers directly back to the RIC, or to more appropriate service options.

These changes were endorsed by the SAFTE Steering Committee at its September 2006 meeting.

- The best location for each SAFTE team.

The decision regarding the location of the SAFTE teams was made by each AHS, according to their needs and local circumstances. The resulting variety of locations was initially viewed positively, as it allowed comparison of the model in different contexts. The view of the NSW Health Program management team was that each team had worked extremely hard to establish itself within the local service networks, however it appeared that this was easier for two sites, ie. Queanbeyan, which was an enhancement to the existing community health team and Hornsby, with its close links with the ACAT. It also observed that teams which were familiar with aged care clients appeared more readily able to deal with the complexity of care needs and inter-relationship of carer issues. That said, however, it maintained that the location of services was best determined at the local level rather than dictated centrally.

## **2. Urgent priority should be given to putting in place the systems required for the electronic collection and sharing of client information.**

The lack of these systems to this point is a key weakness in the current model and has had negative and costly consequences both for the program and its evaluation.

The team concurred with this recommendation, and acknowledged their disappointment that the efficiencies expected of CHIME, in terms of streamlined referrals, information exchange and electronic ONI, were not able to be realised during the pilot, and that this had caused additional workload and significant frustration for the SAFTE teams.

Approximately \$1.5m had been spent on CHIME in the last year and, while this may seem 'an expensive exercise', there were 'opportunity costs' which needed to be borne in mind, for example the benefits to clients and patients of a more streamlined referral process.

The team observed that the benefits of HSNet were yet to be realised for the health system. However, they noted that GPs in one area, having been introduced to HSNet and used it during the SAFTE pilot, are now exploring ways to optimise its use amongst GPs more generally within their local area.

### **3. The Program team develop new rules of engagement with the pilot sites that allow greater local flexibility and that promote effective partnerships at all levels.**

*The team acknowledged the importance of having an effective partnership between the program and SAFTE pilot teams. There were a number of system issues that made this partnership difficult in the early stages of SAFTE, which caused some frustration for the SAFTE teams. These included the lack of an effective information sharing mechanism (i.e. the CHIME and HSN Net ONI applications) and the complexity of different systems being brought into the partnership (community care, community health Community Options teams, SAFTE teams, aged care services).*

*The Program Management team were clear on the need to ‘drive change’, however they were acutely aware of the extra burdens on teams arising from the IT systems not being bedded down, in particular the impact on effective communication within and between teams, and on data collection.*

*They were also aware that common information systems per se were not the only strategy that was needed to support SAFTE, as common information systems were not an end in themselves. The experience from ComPacks pointed to the system and cultural changes that have yet to be supported in changing interagency processes. These were the local protocols (already developed by Community Options around post acute packages), that allowed agreement to be reached on what constituted “unplanned” admissions, and the way that local case reviews could be used to select SAFTE clients.*

### **4. The Program team work with each site to agree on a workload model that can be used to inform decisions about the future of the program, including the funding required to run a sustainable service.**

*The team has had a number of discussions with the SAFTE teams regarding their capacity to manage their client load, however there was ‘no consensus yet about an appropriate workload model.’*

*The team remained of the view that the ‘numbers (of referrals) predicted are reasonable (and) to have less is luxury’. It noted that the intent of the SAFTE program was to build capacity of existing services, and the expectation that positions funded through SAFTE would be those directly related to meeting additional demand, ie, clinical staff. However, in some cases the funding was used for management and administrative positions, resulting in the clinicians being overwhelmed when referrals reached their predicted number.*

*The team noted that there was little evidence in the literature regarding workload models for community care settings.*

## Attachment 4

### SAFTE Evaluation Literature Review

#### Introduction

A literature review was conducted over the course of the SAFTE evaluation using the academic / experimental / scientific literature, which focussed on the existing systematic reviews (rather than all the primary studies) as well as reports and evaluation studies from directly relevant non-academic and practice based sources. This review covers the issues that are relevant to the program, as well as practical issues concerning the ways of taking the program going forward. Those issues and the available evidence are set out under headings that cover the business case, the evidence for the program and its components, and some lessons from related programs.

The evaluation framework pointed out that the process would be both formative, to guide the decision-making inside the program, and summative in order to help the program managers and outside decision-makers understand what to do next.

The first section looks at the evidence for the assumptions guiding the program based on the model in the business case. Subsequent sections describe the evidence about the different components of the program, including the central entry point, rapid response in aged care, case management and the tools used to coordinate the interventions, assess the clients, understand their needs and devising care plans. Integration is the key underlying concept and evidence from programs for similar target groups can be used to understand the scope of the issues being addressed by the SAFTE program. The summary (Table 47) below brings the findings from the literature review together.

The search strategy used key terms such as: the partnership between health and community care; central intake/screening functions for older people living in the community; assessment, care planning and case management for older people with complex health and care needs; best practice approaches and models of care; outcomes for clients; costs; and sustainability. This built up a useful “evidence base” for the project, from systematic reviews and meta-analyses and other important papers and reports identified by the evaluation team and people in the field.

The aim was not to provide an exhaustive review of all the issues. The aim was more modest - to provide some guidance to the program and clarify the conceptual frameworks of relevance to the SAFTE program and the evaluation questions.

#### Summary of lessons from other programs

A classification system was used to weigh the evidence for the SAFTE interventions based on work in other human service programs (Sanders and Morawska, 2006), namely:

- The intervention is based on scientifically derived principles
- Cultural appropriateness and consumer acceptability in diverse contexts have been demonstrated
- Cost-effectiveness data are available.

The requirements for the highest level of evidence were relaxed to reflect the nature of the evidence available for this project. The strict insistence on the RCT design was replaced by a broader assessment of whether the study was rigorous. It was considered most important that the intervention was evaluated against a comparison group receiving usual treatment. Independent evaluators, and publication of findings in the peer-reviewed literature were also considered markers of quality. The concept of replicating evaluation results in different settings was

separated from the concepts of study design and methods, and included in the framework as an indicator that the intervention can be generalised beyond the original community for which it was designed.

The Cochrane hierarchies of study design and levels of evidence was modified and expanded to summarise the nature of the evidence:

1. Systematic review of all relevant randomised controlled trials
2. At least one properly designed and randomised controlled trial
3. Well-designed pseudo-randomised controlled trial
4. Comparative study with concurrent controls and allocation not randomised
5. Case control studies, or interrupted time series with a control group
6. Cohort study
7. Analysis of routine data
8. Economic evaluation
9. Expert opinion
10. Systematic review - other
11. Literature review
12. Service evaluation
13. Other (e.g. data derived from qualitative interviews with patients).

This is not a strict hierarchy because it is possible for an evaluation to be, for example, a comparison group study conducted by the host organisation (i.e. not independent) and published in a peer-reviewed journal. Where this is the case, studies were assigned to the highest relevant level of evidence (in the case of this example, level 2).

In addition to the literature sourced through our search strategy, the following table covers references included in the ARCHI website for SAFTE (<http://www.archi.net.au/e-library/build/moc/safte>).

**Table 47 Weighing the evidence – relevance and quality ratings**

Paper	Support for SAFTE business case, model or elements in the model	Target Group	Evidence Rating (1 - 13)	Key elements of SAFTE model / interventions / comments
Aminzadeh F and Dalziel WB (2002) <i>Older adults in the Emergency Department: A systematic review of patterns of use, adverse outcomes, and effectiveness of interventions. Annals of Emergency Medicine</i> , Vol. 39, pp.238 - 247.	Yes, elements	65 years plus	1	Reduce emergency admissions through screening / assessment + discharge planning. Not targeted to those at risk of hospitalisation
Australian Government (2004) <i>A New Strategy for Community Care The Way Forward</i> . Department of Health and Ageing.	Yes, elements	Frail older people and people with disabilities	9	Home Visiting + Screening / Assessment. Not targeted to those at risk of hospitalisation
Bergman H, Beland F, Lebel P, et al. 1997. <i>Care for Canada's frail elderly population: fragmentation or integration? Canadian Medical Association Journal</i> 157: 1116–1121. (Quoted in Johri et al, 2003)	Yes, SAFTE goals	Frail older people	9	Commentary on the difficulties of achieving integration. Not targeted to those at risk of hospitalisation
Byles, J. E. (2000). <i>A thorough going over: Evidence for health assessment for older persons. Australian and New Zealand</i>	Yes, elements	65 years plus	11	Literature review of health assessments for older people living in the community

Paper	Support for SAFTE business case, model or elements in the model	Target Group	Evidence Rating (1 - 13)	Key elements of SAFTE model / interventions / comments
<u>Journal of Public Health</u> , 24(2), 117-123.				Not targeted to those at risk of hospitalisation
Byles JE, Tavener M, O'Connell RL, et al (2004) <i>Randomised controlled trial of health assessment for older Australian veterans and war widows</i> . <u>Medical Journal of Australia</u> . Vol. 181, No.4, pp.186 - 190.	No	70 years plus	2	Controlled study into Screening / Assessment of veterans and war widows Not targeted to those at risk of hospitalisation. No significant difference in the probability of hospital admission or death between intervention and control groups
Capewell, S., 1996. 'The continuing rise in emergency admissions', <u>British Medical Journal</u> , 312: 991-2.	Yes, business case re increasing ED presentations	People at risk of hospitalisation	9	Editorial on increasing emergency admissions in UK Not specifically targeting people 65 and over
Cordato, N, Saha, S and Price, M. (2005) <i>Geriatric interventions: the evidence base for comprehensive health care services for older people</i> . <u>Australian Health Review</u> May 2005 Vol 29, No 2 151-155.	Neutral	Older people	11	Based on a literature review for the Working Group on Care of Older People in NSW Health Care System in September 2002. Not targeting people at risk of ED presentation
Dickinson A (2006) <i>Implementing the Single Assessment Process: Opportunities and challenges</i> . <u>Journal of Interprofessional Care</u> . Vol. 20, No.4, pp.365 - 379.	Neutral	65 years plus	13	Qualitative study into introduction of single assessment process in UK Discusses implementation issues
Dudgeon, D., Knott, C., Viola, R., Van Dijk, J. P., Preston, S., Eichholtz, M., Batchelor, D., Chapman, C. and Barfay, E., 2004. <i>Managing continuity through collaborative care plans: a study of palliative care patients</i> , Canadian Health Services Research Foundation	Yes, elements	Palliative care clients at risk of hospitalisation	6	Integration project for people with palliative care, focus on case management Not specifically targeting people 65 and over
Eagar K et al (2006) <i>Sub Acute and Fast Track Elderly (SAFTE) Care Program Evaluation Framework and Plan</i> . Centre for Health Service Development, University of Wollongong.	Neutral	People aged 65 plus at risk of ED presentation	8	Report describing the evaluation framework for the SAFTE Care Program
Eagar K, Pirkis J, Owen A, Burgess P, Posner N and Perkins D (2005) <i>Lessons from the National Mental Health Integration Program</i> . <u>Australian Health Review</u> . 29(1): 189-200.	Yes, elements	Mental health clients	2	Evaluation report with integration lessons across four linked trials under National Mental Health Strategy Not targeting people at risk of ED presentation
Eagar K, Owen A, Marosszeky N and Poulos R (2006) <i>Towards a measure of function for Home and Community Care Services in Australia: Part 1 – Development of a standard national approach</i> <u>Australian Journal of Primary Health</u> . Vol.12, No.1, pp. 73-81.	Yes, elements	Frail older people and people with disabilities	9	Outline of functional screening / assessment and its use in early detection. Not targeting people at risk of ED presentation
Fatovich, D. M., Nagree, Y., and Sprivilis, P., 2005. 'Access block causes emergency department overcrowding and ambulance diversion in Perth, Western Australia', <u>Emergency Medicine Journal</u> , 22: 352- 354.	Yes, business case re increasing ED presentations	People at risk of hospitalisation	6	Retrospective analysis of ED admissions Not specifically targeting people 65 and over
Fatovich, D. M. and Hirsch R. L., 2003. 'Entry overload, emergency department overcrowding and ambulance bypass', <u>Emergency Medicine Journal</u> , 20:406-409.	Yes, business case re increasing ED presentations	People at risk of hospitalisation	6	Study into ED admissions and ambulance bypass (prospective and observational) Not specifically targeting people 65 and over
Fine, M and Thomson C (1995) <i>Factors affecting the outcome of community care service intervention: a literature review</i> . <u>Aged and Community Care Service Development and Evaluation Reports No. 20</u> . Department of Human Services and Health, Aged and Community Care	Yes, elements	Frail older people and people with disabilities	1	Historical review of case management trials in international literature Not targeting people at risk of ED presentation

Paper	Support for SAFTE business case, model or elements in the model	Target Group	Evidence Rating (1 - 13)	Key elements of SAFTE model / interventions / comments
Division. AGPS, Canberra, October 1995.				
Fletcher AE, Price GM, Ng ESW, et al (2004) <i>Population-based multidimensional assessment of older people in UK general practice: A cluster-randomised factorial trial.</i> <u>The Lancet</u> . Vol. 364, pp.1667 - 1677.	No	75 years plus	2	Cluster randomised trial comparing universal and targeted assessment procedures (with management). Groups did not differ in mortality or hospital/nursing home admissions. Not targeting people at risk of ED presentation
Florio ER, Rockwood TH, Hendryx MS, et al (1996) <i>A model gatekeeper program to find the at-risk elderly.</i> <u>Journal of Case Management</u> . Vol. 5, pp.106 - 114.	Neutral	65 years plus	4	Study describes an innovative approach to tackle social Isolation using community workers eg, bank clerks and postal workers. Not targeting people at risk of ED presentation
Godfrey, M., Townsend, J. and Denby, T. (2004). <i>Building a good life for older people in local communities: the experience of ageing in time and place</i> , The Joseph Rowntree Foundation.	Neutral	65 years plus	13	Descriptive study of older people living in the community and their quality of life  Not targeting people at risk of ED presentation
Green J, Eagar K, Owen A, Gordon R and Quinsey K (2006) <i>Towards a measure of function for Home and Community Care Services in Australia: Part 2 – Evaluation of the screening tool and assessment instruments.</i> <u>Australian Journal of Primary Health</u> . Vol.12, No.1, pp.82-88.	Yes, elements	Frail older people and people with disabilities	6	Outline of functional screening / assessment and its use in early detection, with data  Not targeting people at risk of ED presentation
Gruen RL, Weeramanthri TS, Knight SE, et al (2003) <i>Specialist outreach clinics in primary care and rural hospital settings.</i> <u>Cochrane Database of Systematic Reviews</u> . CD003798.	No, elements	All ages	1	Cochrane review into specialist outreach clinics / primary care in community. Little benefit found for urban non-disadvantaged communities.  Not targeting people at risk of ED presentation
Johri M, Beland F and Bergman H (2003) <i>International experiments in integrated care for the elderly: A synthesis of the evidence.</i> <u>International Journal of Geriatric Psychiatry</u> . Vol. 18, pp.222-235.	Yes, elements	65 years plus	1	Review of demonstration projects into integrated care. Evidence base for screening / assessment and case management  Not targeting people at risk of ED presentation
Kumar S and Grimmer-Somers K (2007) <i>A synthesis of the secondary literature on effectiveness of hospital avoidance and discharge programs.</i> <u>Australian Health Review</u> . Vol. 31, No.1, pp.34 - 49.	No	All ages	1	Review of hospital avoidance and discharge planning, with some comments on specialist outreach clinics / primary care in community.  Methodological problems with most hospital avoidance studies found.  Not specifically targeting older people.
Leutz W. (1999) <i>Five laws for integrating medical and social services: lessons from the United States and the United Kingdom.</i> <u>Milbank Quarterly</u> : 77; 77-110.	Yes, elements	NA	9	Review of lessons from trials to improve integration.  Not targeting people at risk of ED presentation
Lynn J and Adamson DM (2003) <i>Living Well at the End of Life: Adapting Health Care to Serious Chronic Illness in Old Age.</i> Rand Health, Rand Corporation, Santa Monica	Yes, elements business case	People with chronic disease	2	Rand Review of evidence on management of serious chronic illness at end of life stage. Advocates targeting of services to match severity and need.  Not targeting people at risk of ED presentation
Lowenstein S. R., Creccenzi, C. A., Kern, D. C. and Steel, K., 1986. 'Care of the elderly in the emergency department', <u>Annals of Emergency Medicine</u> , 15 (5): 528-535.	Yes, business case re increasing ED presentations	65 years plus	4	Study examining emergency admissions for older people (prospective).  Not targeting people at risk of (ie, prior to) ED presentation
McCusker J and Verdon J (2006) <i>Do geriatric interventions reduce Emergency Department visits? A systematic review.</i> <u>Journals of Gerontology</u> . Vol. 61A, Issue 1, pp.53-62.	Yes, elements	65 years plus	1	Systematic review of screening / assessment and case Management.  Reviews effects of innovative geriatric interventions on ED visits.  However, when further examined, the evidence is weak for people at risk of ED presentations.

Paper	Support for SAFTE business case, model or elements in the model	Target Group	Evidence Rating (1 - 13)	Key elements of SAFTE model / interventions / comments
National Hospitals and Health Services Commission (1973) <i>A Community Health Program for Australia</i> , AGPS, Canberra, June 1973.	Yes, elements	Frail older people and people with disabilities	9	(Historical) Policy analysis for integration of health and social care Not targeting people at risk of ED presentation
National Health Strategy (1991) <i>The Australian Health Jigsaw. Integration of Health Care Delivery</i> . National Health Strategy Issues Paper No. 1, July 1991	Yes, elements	All ages	13	Issues paper demonstrating long history of national moves to improve integration issues in community care Not targeting people at risk of ED presentation
New Zealand Guidelines G (2003) <i>Best Practice Evidence-Based Guideline - Assessment processes for older people</i> . New Zealand Guidelines Group.	Yes, elements	65 years plus	1	Evidence based report into screening / assessment framework including care planning and process guidelines Not targeting people at risk of ED presentation
NHS Institute for Innovation and Improvement (2006) <i>Delivering Quality and Value Focus on: Frail Older People</i>	Yes, elements	Frail Older people	9	UK Policy Framework includes discussion of 'intermediate care' – such as rapid response, single entry point, multi-disciplinary, case management etc. Focus on one condition (UTI) as an example.
NSW Health (2002) <i>Framework for integrated support and management of older people in the NSW health care system 2004-2006</i> .	Yes, elements	65 years plus	11	Contains a set of standards and a literature review for the Working Group on Care of Older People in NSW Health Care System in September 2002. Not targeting people at risk of ED presentation
NSW Health (2006) <i>Clinical Services Redesign Program: Model of Care for ComPacks</i> . NSW Health.	Yes, elements	Frail older people and people with disabilities	9	Outlines model of care including Discharge Planning and care coordination model Not targeting people at risk of ED presentation
Owen, A, Ramsay, L., Holt, N, Eagar, K (2004) <i>Ongoing Needs Assessment in Queensland Community Care: Why Use the Tier 1 Screening and Referral Tools - Evidence and Explanations</i> . Centre for Health Service Development, University of Wollongong	Yes, elements	Frail older people and people with disabilities	9	Report on screening / assessment tools for use in referral systems with implementation in Qld. Includes literature review Not targeting people at risk of ED presentation
Perkins D, Owen A, Cromwell D, Adamson L, Eagar K, Quinsey K and Green J (2001). <i>The Illawarra Coordinated Care Trial: better outcomes with existing resources?</i> <i>Australian Health Review</i> , Vol 24, No 2, 163-173, 2001.	No	Frail older people	2	Assessment, case management and integrated community care. Not targeting people at risk of ED presentation Intervention group cost more than control group and went to residential care at a higher rate
Ramsay L et al (2007) <i>A National Approach to Assessing the Needs of Carers</i> . Centre for Health Service Development, University of Wollongong.	Yes, elements	Frail older people and people with disabilities	7	Report on screening / assessment, care planning, early detection and referral systems to meet the needs of carers Not targeting people at risk of ED presentation
Rockwood, K., 2002. 'Future of health care for frail older adults', <i>Geriatrics Today</i> , 5(56): 5-6.	Yes, elements	Frail older people	9	Editorial into impact of frailty on emergency admissions Not targeting people at risk of ED presentation
Rosenfeld, T., Thomas, M., Robertson, H., Basser, M., Abraham, K., Broe, T., Collings, A. and Singer, A., 2003. <i>Survey of Pre-Acute Care of Older People – Final Report</i> . Department of Geriatric Medicine, Community Health and Aged Care, Prince of Wales Hospital, South East Sydney Area Health Service.	Yes, business case re increasing ED presentations	75 years plus	6	Retrospective study of emergency admissions to identify potential service options to reduce unnecessary ED presentations.
Samsa P et al (2007) <i>The Australian Community Care Needs Assessment (ACCNA): towards a national standard</i> . Centre for Health Service Development, University of Wollongong.	Yes, elements	Frail older people and people with disabilities	7	Report on screening / assessment, care planning, early detection and referral systems to meet the needs of carer recipients Not targeting people at risk of ED presentation

Paper	Support for SAFTE business case, model or elements in the model	Target Group	Evidence Rating (1 - 13)	Key elements of SAFTE model / interventions / comments
Sanders MR and Morawska A (2006) <i>Towards a public health approach to parenting</i> . <u>The Psychologist</u> . Vol. 19, No. 8, pp. 476-479.	Neutral	NA	9	Commentary on evidence categorisation method
Sax, S (1984) <i>A Strife of Interests</i> . Allen and Unwin Sydney.	Yes, elements	All ages	9	Policy analysis for integration of health and social care Not targeting people at risk of ED presentation
Sheerin I, Allen G, Henare M, and Craig K, (2006) <i>Avoidable hospitalisations: potential for primary and public health initiatives in Canterbury, New Zealand</i> . <u>The New Zealand Medical Journal</u> Vol.119, No.1236/2029.	Yes, business case re increasing ED presentations	All ages	7	Retrospective case review of avoidable hospitalisations using DRGs. Focus on disease-base, rather than age-specific.
Stathers, G. M., Delpuch, V. and Raftos, J. R., 1992. 'Factors influencing the presentation and care of the elderly people in the Emergency Department', <u>Medical Journal of Australia</u> , 156: 197-200, 1992.	Yes, business case re increasing ED presentations	65 years plus	6	Reviews of emergency admissions in Sutherland area. Retrospective and prospective. Not targeting people at risk of ED presentation
Stuck AE, Egger M, Hammer A, et al (2002) <i>Home visits to prevent Nursing Home admission and functional decline in elderly people</i> . <u>JAMA</u> . Vol. 287, pp.1022 - 1028.	Yes, elements	65 years plus	1	Meta-analysis of home visiting and screening / assessment for older people. Examining functional decline and nursing home admission reduction. Not targeting people at risk of ED presentation
Temlett, J. and Thompson, P., 2006. 'Reasons for admission to hospital for Parkinson's Disease', <u>Internal Medicine Journal</u> , 36(2006): 524-526.	Yes, elements	People with Parkinson's disease	6	Review of hospital admissions of people with Parkinson's Disease. Retrospectively suggests presentations are potentially avoidable with better planning of management in the outpatient and community setting. Not targeting people at risk of ED presentation
Thomas, F., 1999. 'Ambulatory and Community-Based Services', <u>Health Care Financing Review</u> , 20(4): 1-6.	No, elements	65 years plus	9	Editorial on case management and discharge planning projects in US. Not targeting people at risk of ED presentation
Tulloch A. J., 2005. 'Effectiveness of preventive care programmes in the elderly', <u>Age and Ageing</u> , 34: 203-204.	Neutral	75 years plus	9	Editorial with useful advice re implementation of preventive programs for older people. Not targeting people at risk of ED presentation
Ustun TB (2000) <i>Unmet need for management of mental disorders in primary care</i> . In Andrews G, Henderson S (Eds) <i>Unmet need in psychiatry: Problems, resources, responses</i> . Cambridge: Cambridge University Press.	Neutral	NA	9	Useful opinion piece on the measurement of unmet needs (theoretical basis).
Walker J et al (2005) <i>The Value of Health Care Information Exchange and Interoperability</i> <u>Health Affairs</u> 19 January, 2005.	Yes, elements	NA	9	Expert opinion on possible savings due to improved interoperability.
Walker L and Jamrozik K (2005) <i>Effectiveness of screening for risk of medical emergencies in the elderly</i> . <u>Age and Ageing</u> . Vol. 34, pp.238 - 242.	No	75 years plus at risk of ED presentation	4	Study into screening / assessment and home visiting which found no impact on emergency department admissions.
Walters K, Iliffe S and Orrell M (2001) <i>An exploration of help-seeking behaviour in older people with unmet needs</i> . <u>Family Practice</u> . Vol. 18, pp.277 - 282.	Neutral	65 years plus	13	Qualitative study exploring the theme of help-seeking behaviour and impact of social isolation. Not targeting people at risk of ED presentation
Walters K, Iliffe S, Orrell M, et al (2004) <i>The CANE in primary care settings: its feasibility and utility as a research and</i>	Neutral	65 years plus	13	Comment on qualitative study exploring the theme of help-seeking behaviour and impact of

Paper	Support for SAFTE business case, model or elements in the model	Target Group	Evidence Rating (1 - 13)	Key elements of SAFTE model / interventions / comments
<i>clinical tool</i> . In Orrell M, Hancock G (Eds) <u>CANE: Camberwell assessment of need for the elderly</u> . London: Royal College of Psychiatry				social isolation. Not targeting people at risk of ED presentation
Weissert W, Chernew M and Hirth R (2003) <i>Titrating versus targeting home care services to frail elderly clients</i> . <u>Journal of Aging and Health</u> . Vol. 15, No.1, pp.99-123.	Neutral	Frail older people	9	Policy article advocating the need for better targeting of home care services Not targeting people at risk of ED presentation
Wenger, N. S., Solomon, D. H., Roth, C. P., MacLean, C. H., Saliba, D., Kamberg, C. J., Rubenstein, L. Z., Young, R. T., Sloss, E. M., Louie, R., Adams, J., Chang, J. T., Venus, P. J., Schnelle, J. F. and Shekelle, P. G., (2003). 'The quality of care provided to vulnerable community-dwelling older patients', <u>Annals of Internal Medicine</u> . 139: 740-747.	Neutral	65 years plus	6	Rand study designed to develop quality benchmarks for the care of vulnerable community dwelling older patients. Not targeting people at risk of ED presentation.
Yarmo-Roberts D and Stoelwinder J (2006) <i>Untangling the web: The need to clarify care co-ordinating models for people with chronic and complex conditions</i> . <u>Aust N Z J Public Health</u> . Vol. 30, pp.413 - 415.	Neutral	NA	9	Useful typology for case management approaches.

In summary, the evidence on programs such as SAFTE is weak because the program is relatively complex and a number of elements in the program have not been either separately tested before, nor have they been examined in combination. Further, most studies report on outcomes for frail, older people in general rather than those who are at short-term risk of hospitalisation. The links between interventions and outcomes can only reliably be tested by prospective studies with some randomisation of individuals with and without the interventions. We could find no studies on the full combination of program elements as represented by SAFTE.

The NSW service environment of health and community care is complex and not closely replicated elsewhere. Also the conditions for such a study are difficult to achieve in routine practice, where control of the relevant variables is difficult to maintain. A control group would require early screening and detection in the community rather than in hospital systems, followed by no or minimal intervention for some of those detected. This would be ethically challenging as it would require a minimal response to identified but unmet need. The other elements of a more definitive study are the means of controlling variation in the social, environmental and carer support characteristics around the clients, and the characteristics of their health and functional needs.

It is clear from the more current literature that the SAFTE implementation had very ambitious aims related to early detection, care coordination and overcoming barriers to prevention of hospital admissions. This meant essentially having the means to detect problems in a prospective and pro-active way, plus an ability to inter-operate efficiently with other systems of care.

This is where the evidence for the best ways of achieving early detection and care coordination is relatively thin and subject to the methodological constraints of community level and system change research. The evidence around what can be expected to be achievable aims for the SAFTE Program is compounded by much larger system-level concerns. The key among these is the relative absence of commonly used pro-active, preventive early detection approaches in community care. Developing and testing such systems is compounded by the pressures in community systems to deal with those most in need and already known to the system.

## The model in the business case

The SAFTE Program, with its focus on ED presentations, was based on evidence that is compiled in the reference list on the Australian Resource Centre for Healthcare Innovations (ARCHI) website<sup>33</sup> from a range of international and more local studies. Each of these references was reviewed and summarised in the table above.

The Sub-Acute Fast Track Elderly Care SAFTE CARE Program Business Case, September 2005 (Version ii) stated:

*“Evidence demonstrates that the presentation of a large proportion of older people to emergency departments can be averted through more effective case management in the community. A growing number of service imperatives, directly related to the specific needs of this ageing patient group, dictate the urgent need to redesign and reorientate models to provide the most appropriate care.”*

The case for the program as an exploration of important clinical service re-design issues is supported by quotes from two summary papers in the literature:

*“Older ED patients have distinct patterns of service use and care needs. The current disease-oriented and episodic models of emergency care do not adequately respond to the complex care needs of frail older patients. More research is needed to determine the effectiveness of screening and intervention strategies targeting at-risk older ED patients.”* (Aminzadeh & Dalziel, 2002, from Abstract)

*“Care of the elderly, and in particular the frail elderly, poses a central challenge to current health care systems. Their medical needs are often complex: the frail elderly suffer from a mix of acute and chronic medical problems, and functional disabilities. Their social support networks are frequently overextended, or at risk of breaking down. These factors commonly lead to increased - and sometimes inappropriate - use of medical and social services.”*

*“These individuals, therefore, need an elaborate and flexible combination of interventions. Internationally, many jurisdictions have attempted to facilitate this by establishing a single entry point system, with case management provided for continuing care in the community and for admissions to long-term care institutions. Although this coordination represents an important step towards reduced fragmentation and improved use of resources, significant limitations may remain, including the cleavage between medical and social care, acute and continuing care, and community and institutional care. Each agency continues to function autonomously in its own jurisdiction with its own budget (Bergman et al., 1997).”* (from Johri et al. 2003, page 223)

The aims of the SAFTE Care Program are consistent with these international efforts, and are specifically designed to:

- identify people at risk of presentation to Emergency Departments (EDs),
- reduce the rate of presentations to EDs against the trend, and
- effectively manage short-term needs, plan long-term care in terms of patient preferences, and establish long-term sustainable community support.

The model was developed using research undertaken at the Prince of Wales Hospital, which involved a retrospective study and analysis of 100 patients over 75 years of age who were admitted through the Emergency Department over a one year period. The study suggested that, in 61 cases, admission could have been avoided if alternative and/or timely interventions took place, with a further 18 cases avoiding an acute admission through a timely, planned or elective admission. 21 cases were classified as an unavoidable admission (Rosenfeld et al, 2003).

<sup>33</sup> <http://www.archi.net.au/e-library/build/moc/safte/references>

The prevention and ED focus is what makes SAFTE different from other more commonly implemented case management and coordination programs, where the aims are generally to match the needs of clients to effective long term management and intervention strategies. *“The concepts “avoidable hospitalisations” and “avoidable mortality” have been proposed as a way of identifying hospital admissions and premature mortality that could potentially be prevented by timely and effective health interventions.”* (Sheerin, I, Allen, G, Henare, M and Craig K, 2006). This quote comes from a study of avoidable admissions reported from Christchurch New Zealand where a retrospective look at hospital admissions for older people (not clinically reviewed but coded by DRGs) concluded that *“potentially “avoidable hospitalisations” to Christchurch Hospital comprised 31% of all hospital admissions.”*

The aims of the two studies were similar and the differences in the findings may be attributed to the different methods of retrospective review that were used – clinical review of individual cases by a geriatrician versus review of the data on diagnoses for one facility, coded by DRGs. The New Zealand cases were selected on the basis of *“theoretical concepts based on a list of selected diseases and causes of death that are amenable to early detection and/or preventive measures”* (Sheerin et al 2006).

The New Zealand authors described their target group in diagnostic terms. *“The majority of potentially “avoidable hospitalisations” involve conditions that could have been identified and treated earlier by either public health or primary healthcare interventions, thereby preventing deterioration that may involve a hospital admission or even death. Examples include lung disease; cervical and breast cancer; traffic accidents; infectious, cardiovascular, and vaccine preventable diseases; early detection and excision of melanoma; and effective glycaemic control in people with diabetes.”* (Sheerin et al, 2006).

The assumptions behind the conclusions in both these studies were that the conditions could have been identified in real time and that these conditions could have been treated earlier by either public health or primary healthcare interventions. Early detection is the key concept, and after early detection, timely and relevant interventions of a medical/clinical or community/social type (or a combination of both) were assumed to be available and capable of being organised in support of the prevention effort.

The biggest challenge in a study of preventing “avoidable hospitalisations” (and SAFTE is a prime example) is in integrating the information on the effectiveness of community care service interventions and client outcomes sufficiently well so to make attribution possible in a highly complex environment with clients with complex, chronic and co-morbid conditions (this issue is discussed further below).

### **Additional papers relevant to the model of care**

The international literature on hospital-based geriatric assessment was described in the work done by Cordato et al (2005) to support the Working Group on Care of Older People in NSW Health Care System and build the Framework for integrated support and management of older people in the NSW health care system 2004-2006. It provides important background lessons and useful information from the hospital viewpoint, but covers few of the research areas relevant to the community perspective required to understand the results of the evaluation and the planning the next phase of the SAFTE program.

The areas that are emphasised in the present review include the common mechanisms to promote integrated care, the existing evidence on the effectiveness of community care interventions, and the final section summarises the literature that was used for interpreting the results of the SAFTE evaluation.

Johri et al. (2003) conducted a systematic review of recent demonstration projects testing innovative models of care for the elderly in OECD countries. They note that *“To date, the only reform initiatives that have been successfully implemented on a large scale are single-entry point*

*systems with geriatric assessment and case-management, in publicly funded systems of care.”* (Page 234). The elements in the NSW Framework were used to build the SAFTE business case, and are essentially the same package as Johri et al. (2003) outlines, including a number of common mechanisms to promote integrated care for the elderly:

- Single point of entry
- Breadth of service provision
- Degree of responsibility for patient
- Case management
- Geriatric services
- Multidisciplinary team
- Financing mechanisms
- Physician integration and patient choice

McCusker and Verdon (2006) looked at the question of preventing ED admissions by geriatric interventions. It is a recent summary paper of relevance for the SAFTE business case as it looked at emergency department impacts of geriatric interventions and concluded the locus of care was important but the level of evidence was still an issue. They found *“Hospital-based interventions (mostly short-term assessment and / or liaison) had little overall effect on ED utilization, whereas many interventions in outpatient and / or primary care or home care settings (including geriatric assessment and management and case management) reduce ED utilization. Heterogeneity in study methods, measures of comorbidity, functional status and ED utilization precluded meta-analysis of the results.”* (Abstract)

Kumar and Grimmer-Somers (2007) conducted a re-examination of general hospital avoidance and discharge planning strategies and also emphasise the issue of the level of evidence in community care settings when saying *“There is only limited evidence on interventions such as GP collocations, specialist outreach clinics and provision of primary care in the community as an alternative to hospital care. This evidence is derived from methodologically poor publications and hence results of these publications should be considered with caution.”* (Page 46)

When the focus of investigation in community care settings is not directly on outcomes such as hospital admissions, the evidence on the effectiveness of different interventions is stronger. The factors affecting the outcome of community care service interventions were investigated over a decade ago in a relevant literature review by Fine and Thomson in 1995 for the (then) Commonwealth Department of Human Services and Health (Fine and Thomson, 1995). Their focus (like Johri et al. 2003) was on the large scale trials of the effectiveness of community care, especially case management, in the US, the UK and Europe.

*“One of the few consistent findings is that low levels of standardised services for people with complex or high levels of need are relatively ineffective. Case management was a favoured approach to service provision, but a number of studies indicated concern at the high costs associated with it and questioned whether it was a necessary element in the organisation of services for most recipients.”* (Fine and Thomson, 1995, p.34)

These summary papers highlight the research / evidence gaps in the community care literature and suggest that “proving” the effectiveness of the SAFTE program requires quite sophisticated systems for detecting, assessing, and monitoring the functional status and outcomes for the clients in community settings. While SAFTE is not breaking new ground in integrated community care for the elderly, the current evidence base suggests that bringing potentially effective elements together into a coherent program, with a focus on avoidable admissions, and doing that from a community care perspective, is a goal that is yet to be achieved elsewhere.

The complexity of the issues around integration with community care, merging health and social care, and the related information technology questions that remain open to further work, all are well understood in the literature and suggest the initial business case arguments were sound.

However the organisational and policy issues for integrating health and social/community care are the main barriers to implementation and these are outside the span of control of any one program. In this context the best that can be expected of the SAFTE Program is that it can highlight where these barriers still exist, make some measurable marginal gains and establish some useful pre-conditions for a more systematic approach to be used at its next stage.

### **Structural and methodological issues**

A number of individual papers reporting results relevant to the SAFTE business case further highlight the issues for program planners to consider in overcoming the structural and methodological difficulties for the program. They include two recent papers concerned with assessment and preventive / avoidance strategies that were *not* shown to reduce ED attendances/hospital admissions (Walker and Jamrozik, 2005 and Byles et al, 2004).

The 'Keep Well at Home Project' as described by Walker and Jamrozik, (2005) was a general practice based two-phase screening and intervention program aimed at persons aged 75 years or older who were 'at risk' of medical emergencies. The authors concluded it *"has failed to achieve one of its key aims: a reduction in emergency admissions to hospital among patients aged 75 years or more ... This study showed that, despite being mandated by official policy, systematic screening of community-dwelling, elderly people for disability, coupled with provision of additional health and social care services did not reduce emergency attendances at, or admission to, hospital in one London PCT (Primary Care Trust)... A randomised controlled trial in Australia recently reported a similar result in relation specifically to admissions to hospital"*.

In describing their findings of the UK study, the authors made reference to work on the impact of health assessments on veterans and war widows by Byles et al, (2004). The dependent variable in that study was admission to institutions and the analysis did not include information on the outcomes of subsequent interventions. The study used 3-year follow-up interviews for 1031 participants and found *"no significant difference in the probability of hospital admission or death between intervention and control groups over the study period. Significantly more participants in the intervention group were admitted to nursing homes compared with the control group."* (Page 186, Abstract)

It is clear that assessment per se is insufficient to achieve outcomes for clients. Work by the New Zealand Guidelines Group (2003) looked beyond health assessment towards the system changes that can make an impact on the depth of assessment. That body of work provided more detailed evidence based recommendations for assessment processes for elderly people, including chapters on the location of assessment, assessor skills and support, and working together.

Even where the study methods included more depth of investigation on the consequences of the assessment, there is still no clear evidence of differential benefits for those receiving follow-up interventions or fewer admissions. Fletcher et al. (2004) in their large, multi-centre, general practice trial in the United Kingdom found *"no benefit of an intensive in-depth assessment on mortality or admissions compared with a targeted approach, irrespective of whether the in-depth assessment was followed by clinical examination by a hospital-based geriatric team or usual primary care."* (Page 1675)

These papers and the study by Wenger et al (2003) highlight the caution involved with any expectation that any one component, or even the combinations of the elements of the SAFTE Program, can bring about the changes required to make an effective and cost-effective impact at the level of the hospital system.

Changes in community care assessment and support services outside the hospital are where the most gains can be expected to be made, but due to the complexity of these systems, these gains

cannot be easily measured or shown to be achieved in the limited amount of time and with the span of control within which SAFTE has been operating.

The focus of the SAFTE program, even if it is essentially at the interface between emergency departments and primary and community care, will not be able to detect those people who are still not known or accessible in those systems, or those people who are known, but because of a lack of communication and common assessment demand management tools, are not given priority. Finding the right clients is the pre-requisite to tailoring service interventions to address their needs.

### ***Finding the right clients***

The issues around finding and prioritising the right clients are key questions where there is some limited evidence regarding the best means of early detection and formulating interventions to achieve the optimal outcomes of programs like SAFTE. These issues are addressed by a major paper in the literature by Stuck et al. (2002). The two questions are: do you target interventions to the “old-old” or “young-old”; and given the age cohort selected, what is the target for the interventions - functional decline or mortality?

The literature / evidence base for preventive, multi-disciplinary assessment and home visitation programs suggest you need to “*target those persons at a low risk for death and those who are relatively young*” (Stuck et al., 2002 page 1027). This meta-analysis also supports the idea that the clients’ needs have to be matched by the goal of care, expressed as “*the notion that different processes of care are important in mortality and functional status outcomes.*” (Page1027).

The ability to assess people in their home environment and appraise their needs and risks and potential for improvement is recognised as the key factor in choosing the best model of care to meet the client’s needs. Some very useful work by Weissert et al. (2003) was based on a series of studies of home care clients in Michigan in the US. While the focus is on delaying nursing home entry it highlights the role of standardised and modular assessment methods, where the goal of care is related to the type of client based on their key characteristics (ideally the class type is related to the costs of the interventions). This goes beyond the common approach in community care based mainly on targeting via broad eligibility criteria.

*“An alternative is to replace targeting - the idea that a client is in or out, eligible or not, with titrated care: generous in its eligibility, but carefully calibrated in the amount of resources actually allocated to a client. High-risk clients would get more care than current practice, to permit more aggressive treatment of their high risks and to take advantage of their high potential to benefit. Low-risk clients would get less care, enough to meet their satisfaction and to monitor their changing conditions, but not so much care that they have little potential to show marginal benefits equal to their marginal care consumption.”* (Weissert et al. 2003 page 121)

These authors point out that this classification approach is required in order to achieve real gains in the longer term as part of a systematic redesign process, where the aim is not just a one-off study with overly ambitious aims, but to build a system that can be progressively improved and fine-tuned over time.

*“Such careful titration of care should produce better outcomes because care would be directed at those for whom it would do the most good. Directing it at risks should also produce greater effectiveness. And focusing on risks should also produce better progress markers and useful standards against which to judge and reward high-quality program performance... Care decisions would be based on risks, value, and effectiveness, and as training and knowledge expands of what combinations of care work and how much additional benefit can be expected from additional units of care for a given set of client characteristics, care planning should become more standardized.”*

A more rigorous approach to understanding the variability in the client population is recommended. This should be in terms of their goal of care, level of dependency and the presence or absence of

key risks such as carer status, psychosocial problems, presence or absence of wounds, and environmental factors. “*More of the variation in care should be explained by client characteristics. And home care would become part of the solution to how we provide affordable, high quality care to deserving populations of frail elderly people rather than a difficult-to-justify drain on scarce resources.*” (Weissert et al. 2003, page 121)

The lesson from this literature is that applying the SAFTE Program to the right people is extremely important, but doing so means looking to the longer term redesign of systems, rather than expecting definitive results in the relatively short term. These “targeting” issues are expressed in the evaluation framework in terms of the cohorts of patients and the issues of selecting those who will most benefit – not too sick such as they do in fact need hospitalisation, and not too well in that they have relatively low levels of need and risks.

There are indications from recent work under the Council of Australian Governments (COAG) agenda, on standardising assessment in the community care sector that suggests that the means of building a classification approach are at hand. Those who can benefit from prevention activities can be reliably detected, and assessed in a way that generates a goal of care and the start of a care plan. The main limitation is that the Australian Community Care Needs Assessment (ACCNA) (Samsa et al, 2007) is necessarily for those accessing community care or already in the community care system, so does not reach those who are socially isolated and not in touch with services. However it does provide a way of assigning a priority to those who enter the community care system.

Many standardised community care assessment tools do not go beyond measuring disability to give a basis for care planning and referral to a range of services that may prevent subsequent hospitalisations, including more in-depth assessment. That level of functionality requires a level of ‘interoperability’ of information (Walker et al, 2005) that is yet to be achieved in common practice in community care, where information systems are still mainly paper-based.

This work by Samsa et al (2007) and related work on *A National Approach to Assessing the Needs of Carers* by Ramsay et al (2007), both on a common pool of data elements and electronic information transfer is not yet published. It is based on a requirement of COAG to achieve a national version of the type of tool represented by the ONI, i.e. a broad but shallow assessment of need that can be shared across programs in an electronic format and help assign a priority for interventions. This national work is still some distance from achieving the levels of interoperability assumed to be most useful to the SAFTE Program in the business case.

The ACCNA and carers field testing showed it was possible to detect new and existing clients who were identified by the assessor as likely to benefit from rehabilitation. Just over four out of ten (42.5%) clients assessed were triggered for a rehabilitation assessment on the tool. The assessment trigger corresponded well with those considered by the assessor likely to benefit from rehabilitation (99.4% v 0.4%).

Given that over 40% of those assessed were identified as having the potential to become more independent, these results suggest that there is considerable scope to review current community care policies to give increasing attention to early intervention services for people to prevent ‘avoidable hospitalisations’ and to select those meeting the current criteria for SAFTE. As experience from both the ComPacks and SAFTE programs indicates, investment in training to support the use of reliable tools in community care assessment systems would be a pre-requisite for such an approach.

### **Components of the SAFTE approach**

The Business Case set out the four elements making up the SAFTE approach:

- Call Centre - Triage, Intake and Referral System
- Rapid Response - building on existing aged care models

- Community ComPacks
- Integrating care

In combination they are a way to respond to the issues of client selection and the model of care, choosing interventions and resource levels based on the goal of care, and organising a service response. Given the difficulties associated with controlling for the variation in community care settings and practices, the evidence of the effectiveness of these components of the program is still relatively weak.

### Call Centre - Triage, Intake and Referral System

There is strong policy support for a single entry point to community care interventions, although the level at which entry points operate (national, state, area or regional) is not specified. The NSW Department of Health (2004) in its *Framework for integrated support and management of older people in the NSW Health Care System 2004-2006* has triage in its set of Standards “1.3: AHSs implement systems which screen and identify the potential aged care client on presentation to a NSW Health entry point”.

Integrated referral systems are part of the same set of standards: “1.13: AHSs work with other agencies and service providers to provide flexible and multidisciplinary care services which are responsive to individual needs, integrated with community support services, and enable the older person to be as healthy and independent as possible; 1.14: AHSs facilitate smooth transition of aged care clients between the various levels of care as needed.”

The COAG national agenda as expressed in the Department of Health and Ageing’s community care reform strategy for the Australian Government, (2004) *A New Strategy for Community Care The Way Forward*, also includes attention to refining the tools and processes for entry point, triage and referral functions to make them less confusing for clients. Translating these policies into practice is where SAFTE is on new ground.

Dickinson (2006) provided qualitative information on the implementation of the Single Assessment Process (SAP) in the United Kingdom which outlined the major factors having an impact on implementation of this central intake / screening function. She comments “*Front-line practitioners (street-level bureaucrats) had a major impact on the SAP implementation, particularly through their reluctance to engage with the process, work together and share assessments. Success of the national SAP implementation will depend on the extent to which those working directly with older people can be engaged in the policy process.*” (Abstract)

### Rapid Response - building on existing aged care models

The evidence base for comprehensive aged care services was covered in the literature review for the Working Group on Care of Older People in NSW Health Care System and is reproduced as Appendix A in the Department of Health (2004) *Framework for integrated support and management of older people in the NSW Health Care System 2004-2006*. One goal of the framework is to reduce the fragmentation of services and effectively integrate acute and long-term care into a single, seamless system. This framework essentially replicates the approach taken in the NHS Institute for Innovation and Improvement (2006) to help local health communities and organisations improve the quality and value of care for frail older people.

The NSW Health report on ComPacks (NSW Health, 2006) described one of the means of reducing this fragmentation and provides a list of key aspects of successful services that bring health and community care together:

- Be client focussed
- Enable the client to be at home and independent
- Provide timely responsive care

- Be flexible in providing care as it is essential the care fits the client's needs
- Raise awareness and educate community about the services available
- Provide seamless transition into the community and extended support services.

### **Integrating care – the tools used to coordinate the SAFTE service response**

The business case assumed that the Ongoing Needs Assessment Instrument (ONI) tools used in SAFTE were adequate to support the tasks of care planning, and that these would be available in an electronic format. There is evidence from the use of the ONI in a context of state-wide implementation in Queensland<sup>34</sup> that included independent evaluations in the field, that the use of a standardised approach assists coordination of care for clients. The assumption in the SAFTE program was that these tools would be widely available and that efficiencies flowing from these systems could assist the program to achieve its goals.

This literature review will not cover the myriad of alternative systems for needs assessment in community care. The assumption in most of the literature is that integration will result from the common use of community care assessment tools that can identify needs and risks and help to organise a service response based on a goal of care commensurate with the nature of clients' problems. Fine and Thomson (1995) in their review of the factors affecting community care outcomes pointed to the value of periodic re-assessment of people already receiving community care services. This does not overcome the significant problem of finding those people at risk but currently not visible to the community and primary care systems.

A consistent approach to assessment and re-assessment in community care should be able to identify the circumstances in which the SAFTE program worked best. Research by Lynn and Adamson (2003) showed that particular illnesses have different trajectories for older people, and it would be useful to identify those illnesses or social circumstances that are most likely to benefit from the intervention of the SAFTE Care. Similarly, tracking referral patterns by particular GPs and response rates of individual service providers could also provide useful information about factors that hinder or enhance the efficacy of the SAFTE Care Program.

Standardised measures of function are commonly the starting point for community care assessment and are recognised as necessary but not sufficient to assess the needs and risks of older people in the community (Eagar, Owen et al, 2006, Green et al, 2006). Building out from research in developing the national HACC functional screening tool and work in home care projects in a number of jurisdictions, an assumption in the SAFTE Program is that improved efficiencies are expected as the sites become familiar with the use of the ONI.

This means tools to assess community needs and risks have to be built into broader systems to organise a service response, which are characterised as variations on the concept of care planning. Yarmo-Roberts & Stoelwinder (2006) provide a useful typology for care coordinating models (i.e. case management, disease management, demand management, self care management and population health management).

Gruen et al. (2003) in their Cochrane Review covering specialist outreach clinics supported the view that integration through specialist outreach (in the SAFTE scenario this is akin to aged and community care service coordination) *"can improve access, outcomes and service use, especially when delivered as part of a multifaceted intervention"*. Providing support to the argument in the SAFTE business case, the Cochrane Review found better outcomes and increased efficiency were associated with a broader and more integrated approach.

They found that *"primary care collaborations, education and other services was associated with improved health outcomes, more efficient and guideline-consistent care, and less use of inpatient services... Simple models in urban non-disadvantaged settings, where outreach involves little more than a shift in the location of the consultation confer relatively little benefit, limited to*

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<sup>34</sup> See <http://www.health.qld.gov.au/hacc/ONInteractive.asp>

*measures of convenience and patient satisfaction... Interaction is greatest when outreach is part of a complex multifaceted intervention which involves case-conferences, joint consultations, seminars and education sessions, other health professionals or other care enhancements. (Page 14)*

Other reviews point to the need for tools for service coordination and also warn about the dangers of cost shifting between community and health care agencies (Kumar & Grimmer-Somers, 2007). The evidence in this coordination literature suggests it is important to note that interventions targeting reductions in one area (for example, hospital or nursing home admissions) may mean more services in another area (home care). To understand this complexity, a client classification and resource allocation rather than a crude eligibility-based solution is recommended.

This classification approach, as suggested by Weissert et al. (2003) may be the best way to reliably match resources to client needs and overcome the basic problem. *“Regardless of the assumptions, the basic pattern suggesting that high-risk clients do not receive enough care and low-risk clients receive too much care persists. (p117).*

A key issue raised by the SAFTE implementation is the need for interoperability of information between the health and community care systems. A paper by Walker et al (2005) defines the various levels at which interoperability can operate. The level of interoperability depends on the amount of human involvement required, the sophistication of the IT and the level of standardisation in how agencies share information:

- Level 1 Non-electronic data - no use of IT to share information (examples: mail, telephone).
- Level 2 Machine transportable data - transmission of non-standardised information via basic IT; information within the document cannot be electronically manipulated (e.g. fax or PC-based exchange of scanned documents, pictures, or PDF files).
- Level 3 Machine-organisable data - messages contain non-standardised data; imperfect translations because of vocabularies' incompatible levels of detail e.g. e-mail of free text, or PC-based exchange of files in incompatible/ proprietary file formats, HL-7 messages.
- Level 4 Machine-interpretable data - transmission of structured messages containing standardised and coded data; all systems exchange information using the same formats and vocabularies.

The ability to achieve higher levels of interoperability was seen as one of the key means of increasing efficiency in the flow of information in and around the SAFTE Program. In a variation of the well understood integration arguments from the 1990s (Leutz, 1999), the assumption in the paper by Walker et al (2005) is that increasing the ability of agencies to share information in a standardised and machine-interpretable way will create greater efficiencies and ultimately cost savings. The ability to share ONI assessment data was seen to be a key part of this process of achieving greater efficiency.

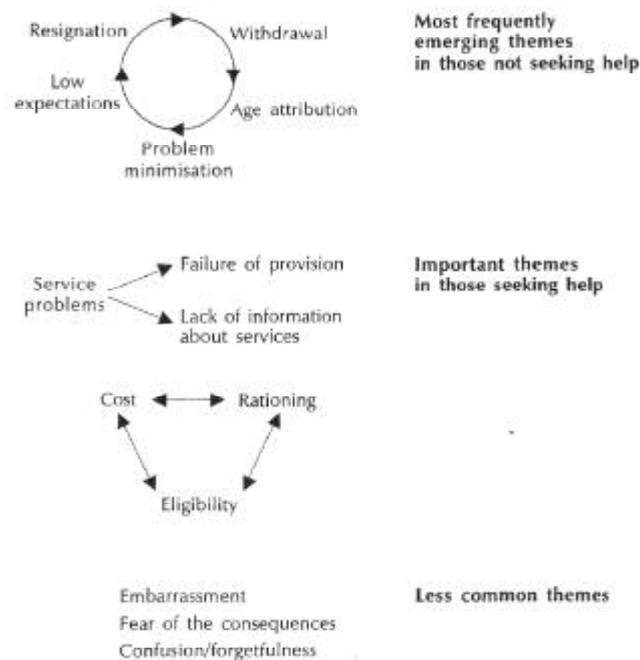
A historical perspective can help get the difficulty of overcoming these issues into perspective. Integration problems have been current for decades and were the initial focus of the Community Health Program in the 1970s (National Hospitals and Health Services Commission, 1973, Sax, 1984), taken up again by the National Health Strategy in the 1990s (National Health Strategy, 1991) and are current once again in the Council of Australian Governments initiatives in community care reform (Australian Government, 2004).

The dilemma of achieving system integration and enabling the early detection of those at risk can be described through two basic questions: what is the best way to measure unmet need, both at an individual and population level and how to break down the barriers to service provision for people who are socially isolated?

Andrews and Henderson (2000), who also quote Ustun (2000), provide some guidance on the first issue from the mental health field, and as there is little reason to believe the issues in the mental health sector will be significantly different to community care, their summary is sobering. “Treatment services in most countries reach only a minority of the people that epidemiologists identify as having a mental disorder. Few countries can provide adequate health services for all citizens who suffer from mental disorders, yet none has developed a rational system to decide who should be treated.”

Walters, Iliffe et al (2004) provide a useful diagram summarising their qualitative research concerning the barriers to meeting people’s needs in primary care (see Figure 26 below).

**Figure 26 An analysis of barriers to meeting needs in primary care**



Source: Walters K, Iliffe S, Orrell M, et al (2004)

“This illustrates how, for the majority of patients who had not sought help, the overlapping themes of resignation, social withdrawal, low expectations, age attribution and problem minimisation were dominant. For those who had actively sought help, the themes were more oriented around services with issues such as costs, rationing or eligibility for services, failure of service provision or lack of information about services.” (Walters K, Iliffe S, Orrell M, et al, 2004, page 17).

One approach by Florio et al. (1996) outlines a “gate keeping” program for generalist community workers (e.g. postal workers, bank personnel, police, utility workers) to find the at risk elderly. A more realistic approach in the Australian context is to focus on the primary care and community systems where tools for screening and assessment, if they were to be standardised and in common use, could provide such a gate keeping function.

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