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Adapting the Bridges Stroke Self-Management Programme for use in Australia

#### Abstract

**Purpose:** This study explored the applicability of the UK Bridges stroke self-management programme (SSMP) for use in an Australian healthcare context, and specifically, the need for any modification to the workbook tool.

**Method:** Data were collected via survey from Australian stroke professionals who had attended a two day Bridges training workshop and from focus groups with community based stroke survivors across three different States.

**Results:** Eighteen of 30 workshop attendees (60%) completed the electronic survey. Most (94%) agreed that the training had advanced their practice with a stronger focus on self management principles and that they would recommend the training to colleagues. The majority (71%) had incorporated some Bridges SSMP principles or strategies into their practice; although 81% reported a range of barriers to doing so. Twenty six stroke survivors attended focus groups. The workbook was considered to be a useful tool to support self-management. Suggestions for change included the addition of some culturally contextualized patient stories and locally relevant stroke support resources.

**Conclusions:** Stroke survivors and health professionals recognised the need for structured training, such as the Bridges SSMP, to develop self-management skills and knowledge post stroke. The Bridges SSMP workbook would be able to be used in Australia with minor modification.

#### Background

Stroke is the third most frequent cause of death and the leading cause of acquired adult disability in developed countries (Brewer et al, 2013). Stroke is increasingly recognized as a long term condition, with a lifelong impact on survivors, but there are many gaps in the provision of services and support especially in areas such as mobility, emotional well-being, falls, incontinence, and fatigue (McKevitt et al, 2011). Self-management is often aligned with the skills, confidence and actions which individuals have, or take, to manage living with a long term condition, including both the medical and emotional aspects, in order to maintain or create valued life roles (Parke et al, 2015). Interest in self-management interventions for stroke survivors is growing as indicated by a recent Cochrane review (Fryer et al, 2016).

Some authors have emphasized the need to tailor self-management programmes to the individual's needs (Kennedy et al, 2007), as well as taking into account the individual's state of readiness to self-manage (Peoples et al 2011). Stroke survivors have been shown to derive greater benefit from undertaking self-management training that is condition specific, to accommodate stroke related impairments, versus engaging in generic training (Cadilhac et al, 2011). Consideration also needs to be given to culturally sensitive aspects of health beliefs and the impact of ethnicity on the experience and perceptions of different self-management programmes (Norris et al, 2014).

The Bridges stroke self-management programme (SSMP) was developed in the United Kingdom (UK) and uses an individualised approach, based on self-efficacy principles, which aims to change the nature of therapeutic interactions during stroke rehabilitation (Jones et al, 2009). Self-efficacy relates to an individual's belief in their own capability to succeed and has been found to be positively associated with an improvement in mobility, activities of daily living, quality of life, and negatively associated with depression post stroke (Korpershoek et al, 2011). The Bridges SSMP is a complex intervention focused on supporting clients with chronic health conditions, including stroke, to self-manage their health condition and their lives more effectively. It relies on building a partnership between health professionals, stroke survivors and their families/carers. Key components of the Bridges SSMP training are illustrated in Figure 1. Previous studies have demonstrated preliminary proof of concept and feasibility of this programme for people living in the community post stroke (Jones et al, 2009; Jones et al, 2012; Jones et al, 2013; Jones et al, 2016; McKenna et al, 2015a) and in acute stroke care settings (Makela et al, 2014).

#### Insert Figure 1 about here

Health professionals using the Bridges SSMP are trained to recognise the patient's existing expertise and to develop plans and solutions collaboratively. Using self-efficacy principles, professionals focus on providing opportunities for patients to have mastery experiences,

and to feel in control of their achievement of tasks which are important to them. Mastery is known to be one of the strongest sources of self-efficacy but requires patients to attribute successes to their own capability, not to the skills of professionals (Bandura, 1997). The Bridges SSM approach is supported by providing a patient held workbook, in which a variety of stroke survivors describe themselves and their self-management solutions, hence providing the reader with vicarious experience of success (Bandura, 1997). The workbook provides space for users to record and plan their goals and to reflect on their individual progress and on issues impacting on their recovery.

Despite the wide spread use of self-management support in rehabilitation, there is still minimal understanding of the cultural sensitivity of programmes such as the Bridges SSMP. In addition there may be contextual issues associated with the application of such programmes in different settings which could be critical for gaining interest and enthusiasm for this approach. A study carried out in in New Zealand (NZ), explored the relevance and content of the Bridges SSMP with stroke survivors. After stakeholder consultation with several groups of stroke survivors, the Bridges SSMP workbook was revised and the modified programme successfully trialed (Hale et al, 2014). The revised workbook incorporated patient stories that were felt to be more representative of the multicultural society in NZ, using appropriate language and making reference to specific life roles and experiences that were contextually appropriate (Hale et al, 2014). Although Australia could be expected to share many of the same contextual health issues as the UK and NZ, there may be distinct cultural differences which could impact on the relevance of the Bridges SSMP and interest in this approach in Australia.

#### Methods

The study was conducted in two parts. A questionnaire was completed by Australian stroke professionals who had attended a two day Bridges training workshop. Subsequently, focus group discussions were conducted with community based stroke survivors in three Australian States.

The aims of this study were to:

- Obtain feedback from health professionals who had participated in Bridges SSM training on their experience and the applicability of the programme to their workplace;
- Explore the perceptions of community dwelling stroke survivors on the suitability of the Bridges SSMP, and specifically the patient workbook, for an Australian context.

## Health Professional Surveys

Two Bridges SSMP training workshops (each of two days duration) were held in Perth, Western Australia (WA) and Adelaide, South Australia (SA). An overview of the Bridges SSMP training principles and examples of expected behaviours of clinicians to support selfmanagement following the workshop are provided in Table 1.

Self-directed problem solvingWhat: Not providing solutions but encouraging the person to c up with ideas and strategies.How: The person is asked to think about how they have found around a problem or challenge previously e.g. "I remember wh you had to work really hard to do 'x' – how did you manage that Can you use the same skills now to deal with this problem?"ReflectionWhat: Encouraging the person to attribute changes and progree their personal effort/not only the skills of therapist/staff.How: Regular reflection using the workbook to capture change how progress is being made is encouraged. The value of reflect	ways en it?
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on and recording progress is highlighted "It will help to have a	
reminder about all the things you have managed to do, however small the changes are".	?f
Goal settingWhat: Avoiding therapy-led goals, encouraging the person to	
identify small steps to allow 'mastery experiences' and to gradu	بالدر
work towards longer term goals.	lany
work towards longer term godis.	
How: The person is encouraged to think of small things they co	uld
do towards achieving their goal. Rather than discourage them f	rom
aiming for an 'unrealistic goal' the clinician may help them to b	reak
it down into smaller steps for instance by asking: "What is a sm	all
thing that you could do this week that might help you progress	
towards that goal?"	
Accessing resources What: Encouraging the person to use all the resources available	e to
them to support achievement of personal goals	
How: Open style coaching questions are used to help the perso	n to
identify and access all available supports e.g. "What support co	
you use to help you get to that goal?"	

Table 1. Key Principles of the Bridges SSMP training and clinician behaviours (adapted
from Jones et al, 2016)

Self-discovery	What: Encouraging the person to explore new ways of doing things and to try out different activities.		
	How: The person is encouraged to think of how they have managed to do challenging things before their stroke and what strategies have worked for them previously. The clinician talks about the need to be prepared to take some risks, and to try things out and the benefit of learning about what is possible, including through peer support.		
Activity	What: Encouraging the person to participate in any activity that they enjoy, however small.		
	How: The person is encouraged to think about what they managed to do in the last week, what they are most pleased with in terms of their activity, and to reflect on things that they enjoy doing such as hobbies and leisure pursuits.		
Knowledge	What: Encouraging the person to increase their knowledge about stroke, but also about themselves.		
	How: The person's knowledge about their stroke is explored, including what they would like to know and any concerns that they feel might be hampering their progress or engagement in rehabilitation e.g. "Are there any things that you are worried might be affecting your progress? Is there one small thing we can work towards that might help you to be more confident working towards your goals?"		

Workshop participants gave consent for their contact details to be provided to the UK Bridges team for the purpose of sending a follow up survey. The participant's consent was assumed from their completion of the electronic survey which was distributed one month post training. Ethics approval was not required, as anonymous data were obtained from this routine post training evaluation of the applicability of the Bridges programme to the participants' workplace. Participants received one prompt to complete the survey after the link was distributed. The survey was based on previous research to explore attitudes, beliefs and knowledge about stroke self-management (Jones and Bailey 2012). Fixed choice and open ended questions were used to collect data on the participants' attitudes to, and understanding of, self-management; perceived barriers to supporting self-management post stroke; satisfaction with the training; change in their practice following the workshop; and ways in which the programme could be adapted for use in Australia.

#### Focus groups with stroke survivors

Stroke survivors living in the community were invited via health professionals working within stroke services to express interest in participating in focus group discussions held in three Australian capital cities (Perth, Adelaide, and Sydney). Focus group invitees had no prior knowledge of the Bridges SSMP. Potential participants were provided with information about the research and invited to participate by a member of the research team. Interested parties were screened by phone or in person and were excluded if they: scored 8 or more on the six item cognitive impairment test (6 CIT: Brooke and Bullock, 1999), had comorbidities affecting their rehabilitation, or had hearing, visual, or speech impairments affecting their ability to evaluate the workbook and participate in a subsequent group discussion. Those with mild to moderate language impairment were not excluded and all information provided was designed to increase access to participants with aphasia. All participants provided written consent prior to focus group participation. Ethical approval was obtained from relevant ethics committees in Western Australia, South Australia and New South Wales (SMHS HREC no: 15/19; SACHREC no: 225.14; NSLHD no: 16SSA05).

Participants were provided with a copy of the workbook two weeks ahead of the focus group to allow time to familiarize themselves with it. Focus groups were held at a variety of accessible venues close to participants' homes and were facilitated by physiotherapists with experience in qualitative research and/or by physiotherapy students with an experienced physiotherapist in attendance. No more than six participants attended each group and a minimum of two health professionals attended to ensure participant safety.

Each focus group lasted for up to two hours using a standard script based on previous research to explore participants' knowledge and understanding of self-management and to solicit specific comments about ways in which the Bridges SSMP workbook might be adapted for Australian use, which is the focus of this report. The workbook comprises seven sections on: reflection, living with stroke, managing my stroke, keeping active, planning for my future, taking control and a 'useful contacts' section.

Participants were taken through a guided discussion of the sections of the workbook, and were asked to respond to the following questions in relation to each workbook section:

- Is this section helpful to you? If yes, how? If no, why not?
- Are there any changes you would like to see made?
- How could this section could be altered to make it more useful to you?

In addition participants were specifically asked to identify any changes that they thought

would be needed if the workbook were to be used in Australia.

Audio recordings were made of the discussions and were transcribed verbatim by a research assistant who was not involved in the study.

#### Data analysis

#### Health professional surveys

Mean percentages and frequencies were collated for fixed option questions in the electronic one month post training survey by a member of the Bridges training team who had not been involved in the workshop delivery. Responses to open ended questions related to barriers participants had encountered to implementing SSMP strategies and suggestions for adaptation of the Bridges workbook were summarised.

#### **Focus groups**

Participants were allocated a number to maintain confidentiality. Transcripts were carefully reviewed by one researcher (BS) and systematically organized to allow content analysis (Tong et al, 2007). Coded data were grouped using a deductive approach based on the guiding questions (workbook sections). Thematic categories arising from the data were then identified. A second researcher confirmed the summary comments and verified the level of consensus across the participants (SL).

#### Results

#### The health professional surveys

A total of 30 stroke professionals attended a Bridges SSMP training workshop in Adelaide (n=15) or Perth (n=15). Eighteen participants completed the anonymous electronic survey which was circulated one month post training (response rate = 60%). The majority of respondents (66%) were physiotherapists, however one doctor, three nurses and two Occupational Therapists also attended. The majority of respondents (72%) had worked in stroke services for more than five years. The types of service offered across the stroke journey were well represented (acute stroke unit to community based care for chronic stroke survivors); however over half (56%) of respondents worked with people who were less than one month post stroke. Following the training most respondents (71%) reported having incorporated some Bridges SSMP principles or strategies into their practice; although 81% reported a range of barriers to doing so. These barriers included: reduced staffing levels, providing training across the whole stroke pathway within clinical networks and clinical sites, and getting all professions, senior clinicians and managers on board with self-management. In addition, respondents were asked to rate their agreement to a

number of statements. These data are tabulated in Tables 2 & 3.

All participants agreed that promoting self-management was a priority in the delivery of stroke care (Table 2). Opinion was divided about the ability for people with cognitive issues to benefit from the SSMP; however participants agreed that self-management could be supported in acute stroke care, and that additional time was not required to support self-management. Involving patients in goal setting remained an issue for almost a third of survey respondents. The majority (94%) agreed that they used different ways to promote self-management following the Bridges training (Table 3). Eighty eight percent of workshop participants had used some Bridges SSMP strategies with their patients.

#### Table 2.

#### Post Bridges SSMP training - Perceptions about use of self-management in practice

	Strongly agree	Agree	Disagree
Promoting self-management is a priority	88%	12%	0%
in my current role			
Promoting self-management helps	71%	24%	0%
patients comply with treatment regimes			
Patients with cognitive dysfunction are	6%	47%	47%
unable to self-manage			
Promoting self-management takes more	0%	24%	76%
time than usual care			
My team includes the patient in goal	5%	41%	29%
setting and treatment planning			
Promoting self-management is difficult	0%	24%	76%
to achieve in acute stroke care			
I always use communication strategies	29%	65%	6%
to promote self-management			

# Table 3.Self-report of changes to practice since attending the Bridges SSMP workshop.

	Strongly agree	Agree	Disagree
I use different methods to promote self-	59%	35%	6%
management			
I am confident to encourage self-	59%	29%	12%
managed problem solving			
I support patients to set their own goals	59%	35%	12%
(even unrealistic ones)			
I am confident to support colleagues to	18%	71%	12%
promote self-management			
I use different ways to engage family	24%	59%	16%
and friends to support self-management			
I have used self-management with most	29%	59%	12%
of my patients including those with			
cognitive impairment			

In response to an open ended question, seven health professionals suggested that some 'Australian voices and stories' were needed in the Bridges SSMP workbook but otherwise considered that this tool would be applicable in Australia. One participant recommended including a patient story involving issues for rural stroke survivors, while another highlighted the need to consider cultural aspects of self management for indigenous clients.

## Focus groups

A total of 26 participants (22 males) attended six focus groups. The median age of participants was 61 years (range 20-93), and the median time since stroke was 12 months (range 1.5 to 120 months). The majority (18/26) had had ischaemic strokes affecting their left side (15/26). Most were reasonably well recovered and were able to ambulate outdoors with or without a walking aid or orthotic device (20/26). Focus group facilitators did not have any clinical relationship with participants.

Focus group demographics are presented in Table 4.

## Table 4: Focus Groups - demographic characteristics

Participant	Age/Gender	Time since stroke (months)	Location/Type of stroke	Mobility status
1	51/male	9	Right / haemorrhage	Independent. Walks with a stick.
2	72/male	30	Left / ischemic	Assistance required. Wheelchair dependent.
3	78/male	37	Left/ ischemic	Assistance required. Wheelchair dependent.
4	61/male	29	Left / haemorrhage	Independent. Walks with a stick.
5	82/male	5	Left / post endarderectomy	Independent Walks with a stick.
6	59/male	5	Left /post atrial fibrillation	Independent. Walks with a stick.
7	71/male	7	Left / ischemic	Assistance required. Walks with a stick.
8	64/female	4	Bilateral/Intra cerebral haemorrhage	Independent. Walks with a rollator frame.
9	65/male	4	Left /post surgery	Independent. Walks with a stick.
10	59/male	2	Right / ischemic	Independent. Walks unaided
11	56/male	6 weeks	Left / ischemic	Independent. Walks unaided
12	60/male	8	Left /cause unknown	Independent. Walks unaided
13	93/male	3	Right / embolus	Independent. No gait aid. Drives himself.

EC/male	120	Dialet / autoria	الحد والمعرف والمعرا
56/male	120		Independent.
			Walks unaided
			Drives himself.
65/male	12	Left / ischemic	Walks with
			foot drop
			splint.
			Drives adapted
			car.
80/male	108	Left / ischaemic	Independent.
			Walks with
			foot drop
			splint.
71/male	6	Right /	Independent.
		-	Walks with
			foot drop
			splint.
49/female	6	Right/post	Independent.
	-	•	Walks with
			foot drop
			splint.
47male	6	Left / dissecting	Independent.
+, maic		-	Walks unaided
61/female	36		Assistance
01/Ternale	50	-	required.
		Ischaefflic	Wheelchair
FC/mala	6	Loft /:ochoore:o	dependent
56/maie	D	Left /ischaemic	Independent.
			Walks
04/	0		unaided
81/male	8	Left /ischaemic	Supervision
			required
			Walks unaided
20/female	6	Right/embolus	Assistance
			required
			Walks short
			distances only
73/male	18	Right/	Independent
		haemorrhage	Walks unaided
54/male	19	Right/ischaemic	Independent
			Walks unaided
61/male	31	Right/ischaemic	Independent
			Walks unaided
	71/male 49/female 47male 61/female 56/male 81/male 20/female 73/male 54/male	65/male 12 80/male 108 71/male 6 49/female 6 47male 6 61/female 36 56/male 36 56/male 8 20/female 8 20/female 18	venous malformation65/male12Left / ischemic80/male108Left / ischaemic71/male6Right / haemorrhage49/female6Right / post endarderectomy47male6Left / dissecting aneurysm61/female36Right / ischaemic56/male6Left / ischaemic81/male8Left / ischaemic20/female6Right/embolus73/male18Right/ haemorrhage54/male19Right/ischaemic

The primary purpose of the focus groups was gather participants' views on the content of the Bridges SSMP patient workbook and its suitability for an Australian context.

#### Views on adapting the workbook to an Australian context.

In general, participants reported that language in the workbook, with a few exceptions, was not unlike Australian terminology. Seven participants, all from within the WA groups, pointed out that some patient stories included English or European place names and that these would need to be replaced. Several suggestions were made about adding patient stories that might give the workbook a distinctly 'Australian' character, such as representing sports that people may wish to return to post stroke, that were seen as iconically Australian, such as fishing or surfing.

These characters are all English aren't they? You'd need to replace them with Australians.... 'Good old Aussies', for us to sit up and take notice. You need to sprinkle it with a few outback people. We need 'Bazza'. Also someone sporty, e.g. Cathy Freeman (Indigenous Australian, Gold medal Olympic runner) or Rod Laver (tennis champion, who had a stroke)...(*P14*)

You need an Indigenous person... although one thing about including an Indigenous person is that if they died, you'd have to take it out (*for cultural reasons*) (*P16*)

Two participants commented on the need for the distinctly Australian sense of humour to be represented in the stories.

It doesn't mention anything about humour in here. Us Aussies can laugh at ourselves. (P19)

One of our friends who was in [hospital] at the same time as me had a big stroke. He had a peg in for feeding, lost his speech, couldn't walk, all of it. He is an inspiration now, but the sense of humour he's got is just fantastic. He is so ... funny. (*P20*)

#### Key themes from the workbook

The workbook comprises seven sections on: reflection, living with stroke, managing my stroke, keeping active, planning for my future, taking control and a 'useful contacts' section. As a group, participants provided critical feedback on each section. Trends and patterns categorized by relevant sections in the workbook were identified and are summarized below together with illustrative quotes from across the dataset for each section.

Workbook section	Purpose of each section	Themes
Reflection Living with stroke	Reflection on the person's achievements and their personal contribution to their recovery Sharing patient stories from a diverse group of stroke survivors who	<ul> <li>Increasing confidence and motivation</li> <li>Identifying improvement</li> <li>Appropriate timing of workbook</li> <li>Giving hope</li> <li>Gaining perspective</li> <li>Learning from peers</li> </ul>
	describe their goals and what they have achieved so far	<ul> <li>Facing limited recovery</li> </ul>
Managing my stroke	Providing information about common problems and coping strategies from stroke survivors	<ul><li>Learning from peers</li><li>Other educational needs</li><li>Perception of others</li></ul>
Keeping active	Providing advice about benefits of, and strategies for keeping active	<ul><li>Exercise versus activity</li><li>Developing habits</li><li>Ongoing support</li></ul>
Looking forward	Long term goals to encourage ongoing progress Hopes for the future	<ul><li>Importance of goal setting,</li><li>Setting achievable targets</li></ul>
Taking control now	Making action plans towards goals	<ul> <li>Breaking goals down into small steps</li> </ul>

Table 5 – Summary of key themes related to workbook sections

#### Section 1 - Reflection

The majority of participants (16/26) highlighted that the reflection process fostered confidence and the motivation, and enabled participants to see how much they had improved. Eight participants spoke about the timing of introduction of the workbook, recommending that it should be introduced as early as possible post stroke.

I think it's very good to write down stuff that you've achieved but then later on do it again, you know sort of do it again, and then you can see how much you've improved. I think that's - like it's reassuring of yourself, knowing that you're going down the right path. (P8)

Yeah I think that it needs to be at the hospital stage, then if you were presented with this I think that you're also challenged that you're responsible for your recovery as well, you're not just seeing that it's the nurses' job, the doctors' job or the pharmaceuticals, whatever. (*P21*)

#### Section 2 - Living with stroke

Most participants (19/26) appreciated the patient stories, indicating that it 'gave them hope' to hear the stories of others who had experienced a stroke, and that reflecting on others' stories encouraged them to put their own experiences into perspective.

The majority of participants (19/26) were generally satisfied that the most common aspects of stroke had been covered. Five participants felt that some of the stories needed to be more confronting and to represent those who had had severe strokes or who had made a limited recovery.

That's sort of what I'm saying, that someone who's had quite the same stroke and sort of they've recovered and you get the story from everyone 'oh I know someone who had a stroke and he was up walking within weeks, months, whatever' and you think 'I'm not a wuss, but I can't do it'. So it sort of puts it back into perspective I think. (*P2*)

I think it's encouraging to see that other people have suffered similar circumstances and it's encouraging to see that they've found a way to get over it and it gives you a bit of hope that you can make it too; you'll get over it as well. (*P11*)

They don't seem to say anything about people that will never work again, you know, like us. We'll never work again. (*P19*)

## Section 3 - Managing my stroke

Only seven participants raised comments about the 'managing my stroke' section. They highlighted that they appreciated the value of hearing solutions to common impairments from stroke survivors themselves, because they felt that they could relate to their experiences.

A number of suggestions were made about topics that could be added to this section including: dealing with frustration (7/26), relationship management (4/26), coping with emotional lability (8/26), dealing with depression (2/26), and the appreciating the financial consequences of stroke (2/26).

Four participants spoke about the need to address the perception of stroke in the community and the potential for people to be embarrassed about the condition.

I think so, because we can relate to so many of these people, you know, just their little things. They are very small things but you can relate to them. (*P10*)

And also the financial really needs to be stressed.... Are we considering suicide? There'd be a lot of men who would actually feel that they're no longer able to be the man they were, and I think they would be very challenging... (*P21*)

I think I don't like to stereotype a person with a stroke. I was talking to [name] the other day and she said 'don't tell anyone I've had a stroke, just tell them I've had a fall or something' because she doesn't want people to think she's had a stroke because of the connotations to that.....I probably initially had the same view, particularly when people would ring me. Because I was an independent contractor people would ring me about whether I was available to do work and I was always reluctant to say I had a stroke and I'm on the mend. It took me a number of months before I, I guess, opened up to the fact that I'd had a stroke. (*P26*)

## Section 4 - Keeping active

Fourteen participants appreciated the need for keeping active after stroke. The distinction between 'doing exercises' and just 'being active', for instance the value of incidental exercise as part of everyday life, was also seen as important for eight participants.

Ten participants thought that more emphasis should be placed on choosing an activity that was enjoyable, so that people were more likely to make it a lifelong habit.

Six participants highlighted the need for ongoing support from a health professional in order to keep active.

Yeah, so if the activity is enjoyable you're more likely to do it and that's what I find with sports.... (*P25*)

But you don't do that as a part of your daily life? I live in a town house which has three sets of stairs so I have to go up 3 sets of stairs. I don't notice I am going up and down stairs, but if I had to do it for an hour - no chance – I would give up. (*P14*)

I was lucky I had the (home rehab service) come into the home for three months to help me with exercises and I was on another program where they had an iPad and they could call me from the iPad and go through all my exercises with me. They helped me manage it that way and you had to measure how many steps you did every day and everything like that, so I would have been lost without them...... Yeah and they had me up onto 3000 steps a day. I'm huffing and puffing after 500. I thinking 'oh God, girls, come back' and my son says 'but why did you stop it?' I think 'oh go to work' and it's - we said that earlier (*in the discussion group*) - it's easier to give in than do it, than do the exercises. (*P7*) Seventeen participants highlighted the importance of goal setting as a core activity that needed to be encouraged post stroke.

Four participants emphasized that large goals may need to be broken down into small steps so that they were expressed as achievable targets. Two participants flagged the need to be careful that goals were actually going to be achievable, as otherwise there was the potential for an individual to get discouraged or even depressed.

Yeah, I think it's very important - it's important to put goals there and then you can work towards them..... Yeah, motivating, most definitely. (*P10*)

Yeah, well, there's always a plan. If there's a plan there's hope, obviously. (P25)

You probably can set yourself up for failure too, that's the other thing about goal setting. You've got to be careful not to set yourself up for failure because I think about the things I spoke about, I want to be able to get back to my four wheel drive and go travelling, go gold fossicking and things like that, go fishing, but sometimes reality hits. (*P12*)

## Section 6 - Taking control now

Eight participants really supported the need for breaking goals down into small steps.

To make it achievable you need to break it down into small steps.... It's all - sometimes it's all well and good to set yourself a goal - but you still need to be able to take the steps to get to that goal and from what I see here you've got to identify those minor - you know, smaller steps before you reach that target so, yeah, you set a goal and then you've got to think about what are the things I need to do to get there? Like I want to get back to driving so the first thing I've got to do is get my license back. (*P12*)

## **General comments**

On the whole, participants were positive about the presentation and format of the book. Three participants questioned the amount of space given to the user's recording of different aspects such as past achievements or future goals, while others felt that there may not be enough space for recording. Four participants stated they looked forward to the time when the resource might be available electronically, so that additional resources could be added such as videos and interviews with the featured stroke survivors.

... it's easy to turn the pages. That's not a silly thing because, you know, you really struggle with a single piece of paper.... (*P4*)

I like the design, not too much information on each page. The binding allows the pages to flip over easily – even with one hand. (*P16*)

Finally, a range of services and resources for stroke survivors to access were suggested to be added to the section at the end of the workbook on 'useful contacts'. Emphasis was placed on internet based resources, including those available through the National Stroke Foundation (e.g. <u>https://enableme.org.au/</u>), the Aphasia Association (<u>https://aphasia.org.au/</u>) and on social media (e.g. <u>https://www.facebook.com/strokesurvivors</u>). There was also the need to provide information about funding for ongoing care and support following the conclusion of formal rehabilitation services, and organisations providing assistance with return to work, and to

driving, for those for whom this was an option.

#### Discussion

This study explored the relevance and appropriateness of using the UK Bridges SSMP, and particularly the workbook tool, in an Australian context. Survey data from 18 health professionals who had attended a two day Bridges SSMP workshop indicated that following the training, the majority of participants were using a range of strategies to promote self-management in their stroke clients, including those with cognitive dysfunction. In addition, they were confident to encourage client centred problem solving and goal setting and to encourage their colleagues to promote self-management.

Focus groups with 26 stroke survivors were conducted across three Australian States, with a diverse range of participants. Participants confirmed the need to support selfmanagement following stroke in alignment with other reviews by Boger et al (2015) and Pearce et al (2015). In general, the workbook associated with the Bridges SSMP was considered to be a useful tool. While the Bridges SSMP resources have been developed for use in the UK, the workbook was seen to be applicable to an Australian context with minor changes to wording and the inclusion of some patient stories with an Australian flavor. Similarly to the work undertaken by Hale et al (2014), the adapted workbook would need to be piloted and evaluated within a range of settings and stroke services in Australia, prior to widespread use.

More than half of the health professionals who attended the Australian Bridges workshops worked with people who were less than six months post stroke. The Bridges SSMP has recently been adapted for use in acute stroke services in the UK, to support the early introduction of strategies to empower the stroke survivor to be as independent as possible and to encourage them to participate in decision making about their initial care (Makela et al, 2014). While most focus group participants were more than six months post stroke, the usefulness of the workbook in the early stages was also highlighted, with some participants feeling that it was 'too late' now for them to receive this information. It will be important to continue to explore the application of the Bridges SSMP across the whole of the stroke survivor's journey, including applying the principles of self management in acute stroke care in Australian settings. Stroke survivors in a study by Satink et al (2015) also agreed that self-management should start earlier, and integrate emotional management. The latter point was corroborated by focus group participants, particularly those who were under 65 years of age, who spoke of the emotional and social consequences of having had a stroke. Most focus group participants recognized the value of reflecting on their progress, setting goals for the future and breaking these down into small achievable targets, and the benefits of trying to keep as physically and mentally active as possible. These themes have also been reported in a qualitative study of UK stroke survivors who had participated in the Bridges SSMP (McKenna et al, 2015b).

There are a number of limitations on the data presented here. Completed surveys were received from only 60% of the health professionals who attended the Bridges SSMP training. The views and behaviours of those who took the time to respond may not be representative of non-responders. Health professionals who undertook the Bridges SSMP training are likely to be highly motivated to learn more about self-management and so were more likely to report using strategies to promote these behaviours in their stroke clients following the training. No baseline data were collected on workshop participants' knowledge, self-efficacy and practice in the area of self-management prior to the training; consequently the actual influence of the training on these variables was unable to be assessed. Caution is needed in interpreting the data from this small sample of workshop participants to inform the expected uptake of the Bridges SSMP more widely in Australian stroke services.

Focus group participants were identified by health professionals or were recruited from advertisements at health services or stroke support groups. This may have resulted in a biased sample, not representative of those who really need training in self-management or support in this area. The majority of participants were male and more than half were under 65 years of age, which may have resulted in a bias in the views expressed. None of the participants identified as Aboriginal or Torres Strait Islanders, and the majority were from Caucasian backgrounds. Participants in some groups recognised that they were relatively active, were already fairly self-directed and determined to make the best recovery possible by doing all that they could to help themselves, and that it might be difficult to access those who were less inclined towards self-management unless this training was a routine part of acute stroke care.

The importance of self-management support following stroke has recently been highlighted (Pearce et al, 2015; Fryer et al, 2016). Our study has provided insight into how the Bridges SSMP can be developed for use in Australia. In summary, health professionals who underwent Bridges SSMP training, and stroke survivors who undertook a review of the workbook which forms part of this programme, in general reported that there was considerable value in this type of self-management support being available to people who had had a stroke, preferably from the time of their admission to hospital, and that the workbook could be used in Australia with minor adaptation.

#### **Key Points**

- Stroke survivors and health professionals working in care stroke supported the need for structured training, such as the Bridges SSMP, to develop self-management skills and knowledge.
- The Bridges SSMP workbook could be used in Australia with minor changes.

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#### **Conflict of Interest**

The authors have no conflicts of interest to declare.

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#### Application of key self-management principles by practitioners

Problem solving Activity Knowledge Goal setting

Knowledge Accessing resources

Self-discovery

Reflection

#### Integrated

i.e. SMS is initiated by and delivered through rehabilitation, thereby making use of existing healthcare interactions

and service infrastructure



#### Contextualised

i.e. SMS is adapted to the patients needs (acute or community) and configuration of services using co-production and implementation science. Working with service users and professionals, to define and deliver SMS that is relevant to the local context e.g. Australia

#### Utilisation of a bespoke self-management tool

*i.e.* SMS is supported through the Bridges stroke workbook, containing stories and experiences of people living with long term conditions e.g. stroke to foster self-efficacy through facilitating mastery and modelling.

Figure 1 – The Bridges Programme uses a self-management support (SMS) model which includes unique tools for patients and families, customised to their specific circumstances. These tools have the dual role of creating a structure/framework for SMS delivered by health professionals, as well as providing resources for patients and families to use during their rehabilitation and beyond.