



Development and field testing of a standardised goal setting package for person-centred discharge care planning in stroke



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ABSTRACT

Objective: Develop and test a person-centred goal-setting package for discharge care planning in acute and rehabilitation stroke units.

Methods: A multidisciplinary, expert working group ($n = 15$), and consumer group ($n = 4$) was convened. A multistage iterative approach was used to develop and test the package. Stages included: (i) contextual understanding, (ii) package development, and (iii) clinician training and field-testing in acute and rehabilitation settings. Observational field notes were taken and clinicians' perspectives captured using semi-structured focus groups post-testing.

Results: The final package included a 34-item menu aligned with a manual containing: guideline summaries; common goals; goal metrics based on the SMART Goal Evaluation Method (SMART-GEM); evidence-based strategies; and worked examples. Twenty-three clinicians attended training. Clinician observations ($n = 5$) indicated that: the package could be incorporated into practice; a range of person-centred goals were set; and opportunities provided to raise additional issues. Clinician feedback ($n = 8$) suggested the package was useful and facilitated person-centred goal-setting. Enablers included potential for incorporation into existing processes and beliefs that it promoted person-centred care. Barriers included additional time.

Conclusion: The package demonstrated potential to facilitate comprehensive person-centred goal-setting for patients with stroke.

Innovation: We developed an innovative approach to support structured person-centred goal setting in clinical and research settings.

1. Introduction

Stroke is a leading cause of disability in Australia [1]. Transition from hospital to home is a challenging time for people living with stroke [2,3].

Structured support tailored to the needs of the individual during this transition may improve outcomes and reduce hospital readmissions [4,5]. Approximately 50% of patients with stroke in Australia are discharged directly home from acute care [6], and only 69% are provided with a

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comprehensive discharge plan to support secondary prevention of stroke and long-term recovery [7]. Even when it is provided, the quality of discharge planning is often suboptimal [8]. The process rarely involves a collaborative, person-centred approach to goal-setting for life back in the community, one in which the patient's broad-range of individual needs and goals are discussed [9]. Follow-up post hospital is variable depending on the health service providing stroke care and rarely includes assessment of recovery goals. Currently, usual care practice in Australia does not appear to meet the recommendations of the 2017 Australian Clinical Guidelines for Stroke Management that recommends comprehensive discharge care planning and collaborative person-centred goal-setting [10].

Person centred care is a multidimensional concept that lacks a universal definition [11-13]. Common across most frameworks and conceptual definitions of person-centred care is the underlying purpose of considering the meaningful life of the whole person, and engaging patients and their support people as partners in the healthcare journey [11-14]. The Australian Commission for Quality and Safety in Health Care defines person-centred care as “health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers” [15].

Goal-setting is recognized as one method of actively involving patients in clinical decision-making processes [16]. There is evidence to suggest that early, active involvement of patients with stroke and their support people in goal-setting may motivate behaviour change, improve functional outcomes, promote engagement in meaningful activities and promote self-management [17-19]. Incorporating collaborative person-centred goal-setting into standard discharge care planning may help patients engage with secondary prevention goals and promote a smoother transition home [20]. Despite the potential benefits, person-centred goal-setting is acknowledged to be difficult to achieve, time consuming, and goals often lack specificity and ignore broader needs and preferences beyond the hospital environment [21]. Where goal-setting does occur it is largely therapist led and focused on impairments such as mobility and activities of daily living [22]. There is limited guidance on *how to* perform standardised goal-setting with patients after stroke [23,24]. Consequently, clinicians and researchers [25] suggest that additional resources would provide valuable support to facilitate standardized approaches to person-centred goal-setting, as well as more reliable measurement of goal attainment.

To ensure appropriately defined goals that are meaningful and measurable, it is recommended in the Australian Stroke Clinical guidelines that goals be formulated according to the SMART principles [10] i.e. Specific, Measurable, Attainable/Achievable, Relevant and Timely. Having a well-defined goal underpinned by such criteria is essential for collaboratively set and clinically useful goals [26-28]. Well-defined goals are also essential for assessing goal achievement. Goal Attainment Scaling (GAS) is one method of reliably assessing goal achievement which has support in the research literature [29]. Although the process of setting SMART goals and applying GAS scoring is well described in the literature [27,30], there are few fully manualised approaches available for guiding person-centred goal-setting.

In response to the need for more comprehensive, person-centered and standardized approaches to goal-setting in stroke, the aim of our project was to develop a goal-setting discharge package with patients with stroke and their support people, together with experts and clinicians, and to field test this package with clinicians working in acute and rehabilitation stroke care.

2. Methods

This was a mixed methods study. Our standardized goal-setting package for person-centred discharge care planning was developed by a collaboration of leading academics and clinicians working in stroke and a consumer group consisting of people living with stroke and/or their support people. We used a multistage, participatory approach to the development whereby iterative feedback was obtained and used to inform subsequent stages of development of the package [31,32]. The stages were (i) contextual understanding, (ii) package development and refinement, and (iii) field testing

of the package with clinicians. Research methods included: literature and guideline review; secondary analysis of existing data; experts' knowledge; and inputs from potential users [33]. The formative evaluation process and application of research methods are depicted in Fig. 1. The goal-setting package was to comprise a goal-setting menu (originally developed to support a new intervention designed to assist goal oriented self-management after stroke) [34] and a clinician procedure manual and training program to promote standardization for clinical care and outcomes research.

This project was reviewed and approved by the Peninsula Health Human Research Ethics Committee (HREC) (LRR/17/PH/8) and Monash University HREC (2017-10,500-12,684). Participants provided informed, written consent.

2.1. Stage 1 – contextual understanding

The initial prototype for the goal-setting menu was designed for an earlier multicomponent electronic discharge support intervention, [34] and included a review of the literature on challenges and approaches to standardising goal-setting and consideration of the 2010 Australian Clinical Guidelines for Stroke Management (most recent at that time) [35]. The initial menu included items and domains contained in the Australian Stroke Survivor and Carers Needs Survey [36], mapped to the four components of the International Classification of Function (ICF) categories: [1] Body functions and structure; [2] Activities; [3] Participation; and [4] Contextual factors (for the purposes of this project, labelled “Environment”) [37]. Following review of the Clinical Guidelines for Stroke Management [35], an additional category of ‘Secondary Prevention’ was added to address this important aspect of stroke care. This initial goal-setting menu (Supplementary fig. 1a) containing 32 items under 4 broad categories (secondary prevention, body functions, activities and participation, and environment) [34] formed the basis for further development in this project.

Patient goals from prior internal audits (RB unpublished work) and investigator projects [34,38-40] were reviewed and mapped to the ICF. This enabled identification of categories, items and goal types commonly set in clinical practice and highlighted areas for improvement in current practices. Patients with stroke and their support people feedback from a prior project performed by RB were also reviewed. From this foundational work we recognized the need for goals to be more comprehensive to allow patients' broad needs to be identified, rather than just impairment and therapy-based goals.

2.2. Stage 2 – package development and refinement

An initial draft of the goal-setting package was developed by the research team with feedback provided at various stages by the multidisciplinary expert working group and the consumer group. The research team had clinical backgrounds in allied health, nursing, and psychology with expertise in goal-setting, process evaluation, health services research and implementation science.

The initial components of a goal manual were designed to align with each item of the proposed goal-setting menu and contained the following components:

- (1) A summary of the updated 2017 Australian Clinical Guidelines for Stroke Management [10], with reference to each of the menu items.
- (2) Examples of common goals for each menu item, extracted from the reviews performed in Stage 1.
- (3) Examples showing conversion of these patient stated goals into SMART goals using the SMART Goal Evaluation Method (SMART-GEM) quality scoring system [28]. These metrics included: behavior (e.g. tasks or activities); conditions (e.g. aids or assistance); context (e.g. where it will take place); measurement (e.g. time, distance, quality); performance standard (e.g. consistency); evidence-based strategies to achieve goal attainment; a review plan; and a timeframe for each goal menu item [28]. Examples of GAS scoring for converted goals was provided.


<div style="text-align: center;"> Process Development  </div>	Stage 1:	Stage 2:			Stage 3:
	Contextual Understanding	Package Development			Field testing of the package
Research Methods		Menu	Manual	GAS	
Literature and Guideline Review	Criteria Identified: <ul style="list-style-type: none"> - Practice gaps - Research gaps - Relevant tools e.g. menu & manual 		<ul style="list-style-type: none"> - Evidenced based strategies - Summary of guidelines relevant to each menu item 	<ul style="list-style-type: none"> - Theoretical Frameworks for GAS decision trees 	
Secondary Analysis of Existing Data	Identification of common goal types* <ul style="list-style-type: none"> - Practice gaps identified** - Confirmation of ICF to underpin package 	<ul style="list-style-type: none"> - Review of preliminary menu from prior project 	<ul style="list-style-type: none"> - Common goals extracted as examples* 		
Experts Knowledge	<ul style="list-style-type: none"> - Limitation/gaps in GAS as research tool 	<ul style="list-style-type: none"> - Included items - Structure and language 	<ul style="list-style-type: none"> - SMART-Gem identified for guiding development of SMART goals - Structure and layout of manual sections - Discipline specific feedback 	<ul style="list-style-type: none"> - Refinement of GAS scoring trees - Review of GAS scales used in examples 	<ul style="list-style-type: none"> - Refinement of training module - Finalisation of goal setting package
Clinician Input			<ul style="list-style-type: none"> - Suggested language and structure for recording templates and patient summary sheet 		<ul style="list-style-type: none"> - Language and structural changes to manual - Enhancements to training module
Patient and Carer Input	<ul style="list-style-type: none"> - Identified need for goals to be more person-centred 	<ul style="list-style-type: none"> - Language and structure changes to the menu 	<ul style="list-style-type: none"> - Suggested language and structure for patient summary sheet 		

Fig. 1. Formative evaluation development process and research methods. *Goal audit from previous goal-setting project (RB) unpublished, other investigator projects (NL) and iVERVE [34]. ** Practice gaps identified from audits of goal quality and patient and clinician survey and focus group results from previous goal setting project (RB) unpublished. GAS: Goal attainment scale, ICF: International Classification of Functioning, Disability and Health, SMART: Commonly used acronym with variations in the literature such as Specific, Measurable, Action based, Realistic and Time specific or Specified, Motivating, Attainable, Rational and Timed, SMART-Gem: SMART Goal evaluation method.

- (4) Evidence-based strategies for each item, based on recommendations in the Australian Stroke Clinical Guidelines [10].
- (5) GAS scoring decision trees, based on theoretical frameworks such as behaviour change and skill acquisition theories [41], to assist with standardization of GAS scoring. This approach was developed to address issues related to reliability of GAS scoring such as achieving consistency between raters and equidistance between GAS levels [42]. To improve standardization we identified five common goal types from our bank of prior goals for which different scoring structures could be applied: quantitative; qualitative; secondary prevention; process; and maintenance goals. (Fig. 2).
- (6) A single generic GAS recording template derived from the multiple menu specific templates developed during our prior work [34]. This was shaded to allow clinicians to use either GAS or GAS-light scoring. The shaded areas indicated the minimum amount of information required for GAS-light scoring. When using full GAS scale all levels on the GAS scale need to be predefined prior to assessment of goal attainment. In GAS-light only the current function and a well-defined SMART goal needs to be recorded as grading is applied at the time of outcome assessment. Although full GAS is recommended for use in research, the GAS-light provides an option that may be more appropriate for clinical use [30].

- (7) A patient summary sheet for the patient to take home was also developed to record the patient stated goal, SMART goal, strategies and review plan.

In addition to the manual, a training module covering: the background, practices, and evidence for goal-setting in stroke; SMART goal-setting methodology, including the metrics that should be included in a SMART goal; goal attainment scaling; and an introduction to the goal-setting package components was developed. In response to the recommendations in the literature that practice improved the quality of goal-setting [43] the training session included a video example of the package being used with a patient, and peer practice with role playing and facilitator feedback using the package.

A multidisciplinary, national expert working group ($n = 15$) comprised of researchers and clinicians representing various clinical specialties (i.e. physiotherapy, speech pathology, occupational therapy, psychology, nursing and public health) was convened. Researchers and clinicians were pragmatically selected based on known prior experience with goal-setting in stroke or similar chronic conditions, or were considered experts in goal-setting methodology. Following completion of the first draft, and using consensus-based methods, the working group provided feedback on: broad measurement parameters; the layout and structure of the goal-

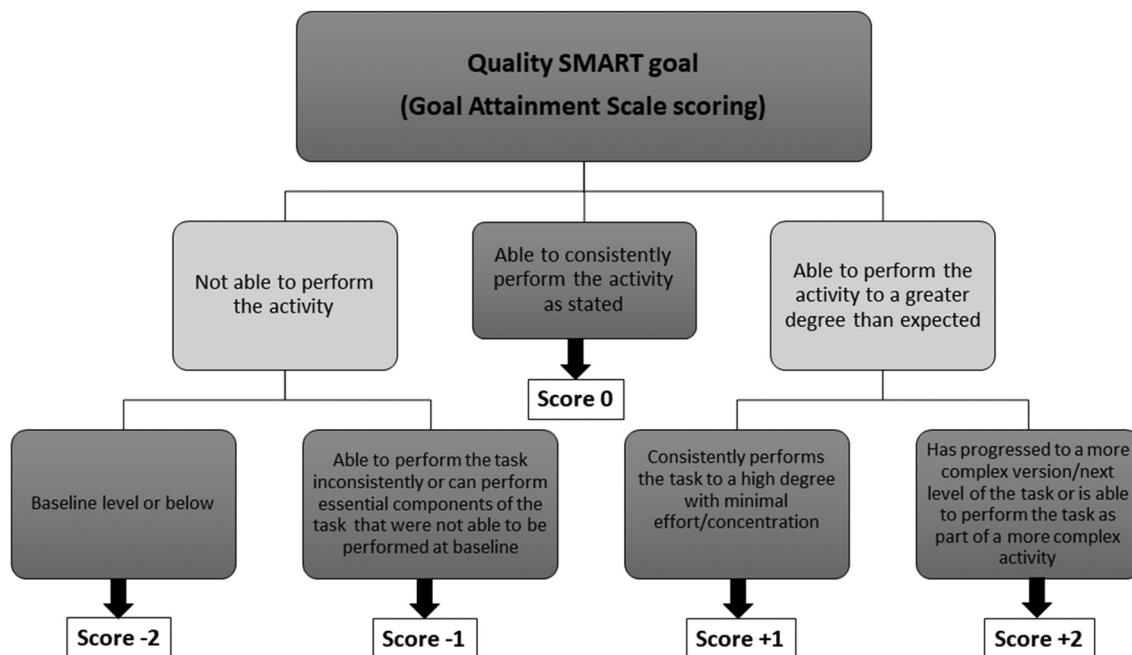


Fig. 2. Sample GAS decision scoring tree for qualitative goal. GAS: Goal attainment scale, SMART: Commonly used acronym with variations in the literature such as Specific, Measurable, Action based, Realistic and Time specific or Specified, Motivating, Attainable, Rational and Timed.

setting menu, manual and recording templates; manual sections pertaining to each of the goal-setting items relevant to their discipline and clinical area; GAS scoring decision trees and the training module. Where more detailed feedback was required, e.g. for manual components, a data collection template was circulated to working group members for completion and tasks requiring discipline specific input allocated to relevant working group members. Responses were collated and summarised during each phase of feedback prior to incorporating changes into the subsequent draft versions of the menu and manual.

A consumer group consisting of people living with stroke and/or their support people ($N = 4$) who had been involved in a previous goal-setting project performed by author RB, was convened. During this stage, the consumer group provided feedback and input on the layout and content of draft versions of the goal-setting menu, goal recording template and the patient summary sheet.

2.3. Stage 3 - field testing of the package with clinicians

Once developed, the package was field tested in one acute stroke unit and one inpatient stroke rehabilitation unit within a single Australian public health service. Testing occurred in both acute care and rehabilitation settings to account for the contextual and work flow differences between these settings. Clinicians were invited to attend a three-hour training program (as described above). Following training, clinicians were asked to use the goal-setting package as part of their routine discharge care planning. A member of the research team observed clinical sessions in person, in order to describe firsthand how clinicians were using the package. This researcher (RB) recorded detailed notes using a purposefully designed behavioural observation recording template with predefined categories. Clinician demographics including profession, duration that the clinician had worked on the unit and their previous experience with goal-setting was recorded. Patients with stroke verbally consented to the therapist being observed during the goal-setting process.

Following the observation period, all clinicians that had participated in the training session were invited to attend a 90-min face-to-face focus group to discuss their experience with using the person-centred goal-setting package, including the training session. Focus groups were conducted by authors NA and RB, with separate focus groups for clinicians working in the

acute stroke unit and the inpatient stroke rehabilitation unit to identify barriers and enablers that were specific to the different contexts within which the package was tested. Focus group questions were developed with reference to the Theoretical Domains Framework (TDF) [44]. This framework provided a comprehensive guide to help identify design issues and perceived enablers and barriers that would assist with future implementation of the package in healthcare settings [44-46]. Clinician focus group sessions were audio recorded. The audio recording was used to transcribe the focus groups verbatim.

2.4. Data analysis

Detailed notes were recorded during each multidisciplinary expert working group meeting and circulated in meeting minute format post meetings for verification. A document review of these notes was performed by one author (RB). Data obtained from the behavioural observation component were subjected to inductive and summative content analysis [47]. Transcripts from the clinician focus groups were deductively coded to identify major themes and subthemes using the 14 items of the TDF to guide this process. All thematic coding was performed by two independent researchers (RB and NA) and summarised using NVivo software.

3. Results

3.1. Stage 1 - contextual understanding

During the Stage 1 review we identified the appropriateness of using a broad category-based goal-setting menu, based on the earlier prototype, from which all the other aspects of the package could be designed and refined. The goal mapping process ($N = 399$ goals) confirmed that goals could be mapped to the ICF, that this was an appropriate basis for the menu, and that the early prototype menu template was comprehensive.

3.2. Stage 2 - package development and refinement

Review of the initial menu by the multidisciplinary expert working group resulted in a number of changes. The original 4 broad categories were extended to 5 whereby 'Activities and Participation' were separated.

Three new items were also added. 'Managing diabetes' was added to the secondary prevention category, and 'Using technology' and 'Other activities - writing, reading a book, music and craft' were added to the Activities category. The 'Spousal relationships' and 'Friend relationships' items were merged into a single item "Getting along with others", with three sub-categories, "family, friends or partner", to cover the diverse relationship types may be important to the patient and cover a range of relationship scenarios including those related to intimacy and sexual function. Menu items were reworded to reflect what the patient was seeking to achieve e.g. 'Feeling low, depressed, anxious or angry' category was reworded to 'feeling less depressed, anxious or angry' and 'Cholesterol' was reworded to 'Managing cholesterol'. The wording of a number of items was refined for better clarity i.e. 'Eating and drinking' were clarified within the 'Swallowing' category, 'Falls' was reworded to include 'Trips, slips and falls', and examples were added to the inside and outside tasks items. The broad categories were also renamed to: Your health; Mind and body; Everyday activities, Out and about; and Healthcare and support. Following input from the consumer group wording was amended to reflect Easy English. A final menu comprising 34 menu items within 5 broad categories that patients with stroke could use to select up to 5 priority goal areas was agreed upon. (Supplementary Fig. 1b).

The multidisciplinary working group provided three rounds of feedback on the content of the clinician manual. These included: advice regarding the overall format, additional examples of evidence-based strategies for working towards goal attainment specific to individual menu items, and worked examples for each menu item showing examples of how to convert a patient stated goal into a SMART goal using the SMART-GEM metrics and how to apply GAS scoring (Supplementary Fig. 2). The GAS scoring decision trees as applied to GAS scoring were considered to be both comprehensive and useful by the working group. An additional scoring tree specific to secondary prevention was added following feedback. Although, the procedure manual underwent a number of iterations, the overall structure remained the same. By the end of the consensus process all members agreed that the manual was comprehensive, would assist clinicians with setting well defined person-centred goals and standardise GAS scoring.

Working group members felt that having two versions of the GAS recording template, with the order of the -2 to $+2$ GAS scoring scale presented in reverse order to the alternate version, would be useful to cater for different methods currently used in clinical practice.

The consumer group feedback and suggestions for the patient summary sheet, included: having all the summary information presented on a single A4 page and the SMART goal being referred to as a measurable goal, for ease of understanding. They reported that the summary sheet would be useful to take to appointments with healthcare providers. Additional input regarding the formatting was provided by the multidisciplinary working group to allow easy recording of the goals, strategies and review plans so as to meet the needs of all user groups.

The final goal-setting package included: a 34-item menu aligned to a clinician procedure manual containing: guideline summaries; common goals; SMART goal metrics; evidence-based strategies and worked examples; goal-setting recording templates based on GAS methodology; a summary sheet for patients; and a comprehensive goal-setting training package.

3.3. Stage 3 field testing of the package with clinicians

Twenty-three (of the invited 38) clinicians from the two units participated in a three-hour goal-setting training session. Those who did not accept the invitation were not followed up to obtain information on their reason(s) for this. All participating clinicians agreed to use the package clinically and five underwent clinical observation on one occasion each (4 from the rehabilitation unit and 1 from the acute stroke unit) between October and December 2017. Observed clinicians were from a variety of disciplines including nursing, occupational therapy, speech pathology and dietetics (Fig. 3). During clinical observations the menu was provided to the patient with stroke on all occasions, patients led the selection of goal priority areas, and all patients were provided with a copy of the patient summary sheet,

with agreed strategies. The manual was referred to by the clinician at least once during the goal-setting process which took between 30 and 60 min. Variability was observed in the ease with which health professionals were able to translate a broad goal area into a highly specific SMART goal. Clinicians experienced with goal-setting appeared to find this process easier (Supplementary Table 1).

Post field testing, eight clinicians attended two focus group sessions (acute stroke care $n = 4$) and (inpatient stroke rehabilitation $n = 4$) with representation from physiotherapy, occupational therapy, speech pathology and dietetics (Fig. 3). Seventy-five percent of clinicians who attended the focus groups reported trialling the package as part of their clinical practice. Coding of qualitative data from the focus groups was consistent between the two reviewers. There was consensus among focus group participants that the training workshop was essential for preparing them to use this package. Clinicians in both groups felt that the goal-setting discharge package was useful "I think I would have struggled without it (manual)", that it facilitated a more person-centred approach "Patients felt that their preferences were being verified" and it was "Useful to give patient ownership" and was particularly helpful in assisting clinicians set goals that did not traditionally fall within their clinical discipline "Goals were things that I had not considered". All clinicians found the patient summary sheet useful and had received positive feedback from families.

Challenges faced by clinicians when using the package varied between units. In particular, clinicians from acute care felt that implementation of the package ongoing would be challenging given the high caseload, short length of stay of most patients, and frequent short notice to discharge. There was consensus that the goal menu and recording templates could be incorporated into existing stroke clinical pathways and integrated into existing electronic clinical documentation "If in stroke pathway clinicians would do it". Clinicians working in inpatient rehabilitation felt that timetabling goal-setting into a patient's schedule, integrating the person-centred goals with discipline specific goals into clinical team meeting discussions and attaching goals to discharge care plans would facilitate implementation. All participants reported that it was a beneficial process that facilitated a more person-centred approach and expressed it was worth exploring implementation options through existing clinical pathways (Table 1).

Final changes were made to the package following the field testing and clinician focus groups and feedback to the multidisciplinary expert working group. Changes included the clinician manual sections being referred to in the same Easy English version as used in the menu and training session incorporating goal examples from a range of clinical areas.

4. Discussion and conclusion

4.1. Discussion

We used a formative evaluation, iterative approach to develop and field test a comprehensive, standardized, person-centred goal-setting package for use with patients after stroke. Importantly, we have documented the collaborative, iterative approach used to develop the package. The resulting goal-setting package provides a much needed evidence-based resource to support person-centred goal-setting in stroke.

Person-centred care aims to engage patients and their support people as partners in the healthcare journey [15,48]. Despite being considered best practice, three systematic reviews have concluded that person-centred goal-setting is minimally adopted in stroke care [19,21,49]. Patients frequently find the task of identifying priority goal areas challenging [50]. Using the menu as a basis of the goal-setting process facilitated patient selection of goals relevant to their individual needs and preferences. This approach was viewed as being more inclusive of the patient compared to prior methods, frequently resulted in the development of goals that had not been identified in routine clinical practice and provided patients with stroke and their support people with an opportunity to raise additional questions regarding transition to home. Importantly clinicians perceived this outcome as a positive attribute of using the package.

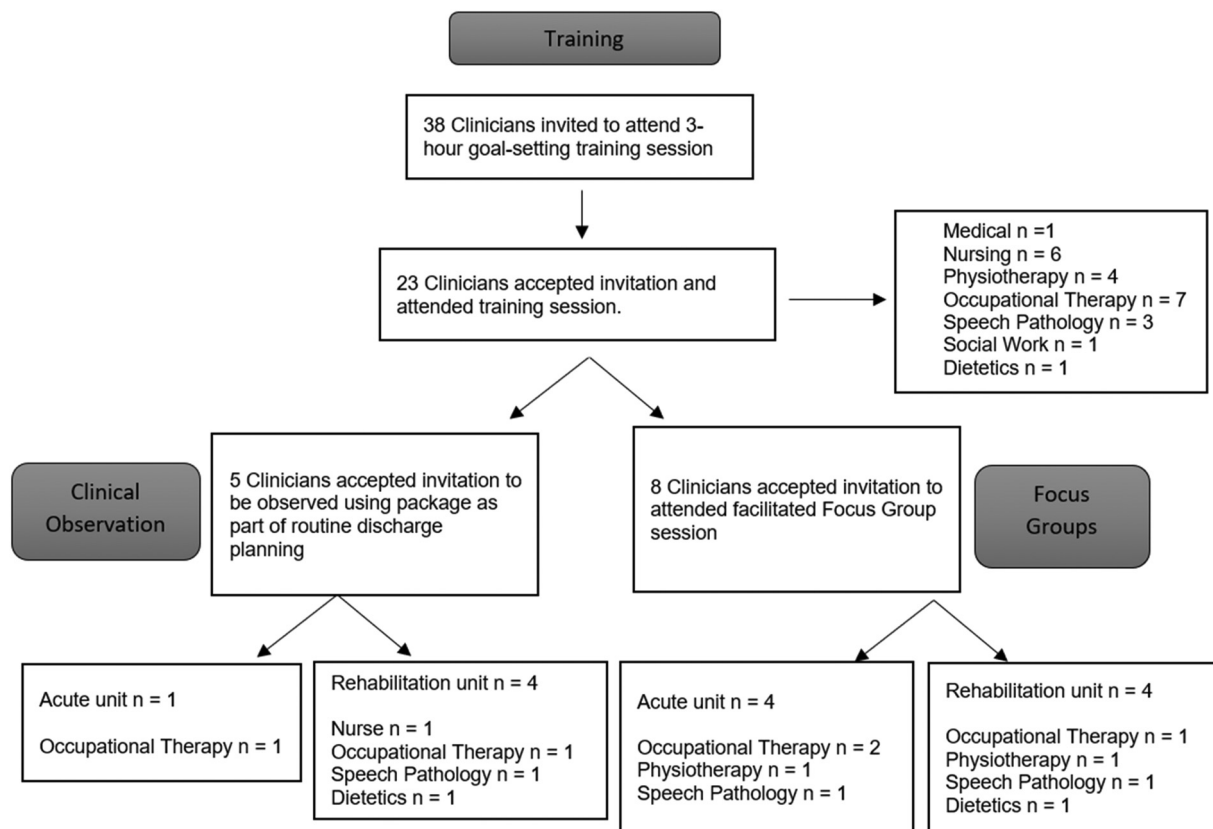


Fig. 3. Field testing of the goal-setting package with clinicians.

Another strength is that the package encourages clinicians to provide a written summary of the person-centred goals along with agreed strategies to work towards goal attainment as part of discharge processes (Supplemental Fig. 3). Our written goal summary sheet aimed to facilitate the transfer of important information from the perspective of the patient, providing both a summary for patients to refer to post discharge and a concise method of communicating patients' individualised post-discharge goals with their support people and health care providers.

There is a lack of guidance of how to apply collaborative goal-setting in stroke care, leading to inconsistent practice [17,19,22]. This package was designed to be a multidisciplinary resource that any member of the multidisciplinary stroke team could use to support the formulation of person-centred goals. Common barriers to person-centred goal-setting include limited time, mismatch of patient and clinician expectations and lack of experience, skill and engagement with person-centred goal-setting [21]. Early feedback suggests that our goal-setting package may address many of these barriers. Further work is required to consider how best to implement this package in a structured and sustainable way, and whether or not it is more effective than usual practice.

Overall, clinicians using the package following training felt better equipped to collaboratively set well-structured person-centred goals across a variety of areas. This is likely to improve reliability with regard to the quality of goals set and the ability to apply GAS scoring for outcome monitoring and research purposes. It should also enable better assessment of goal attainment when patients are followed up clinically. Although the time taken to set goals was slightly longer than usual practice, clinicians felt that this was offset by better quality goals and the more person-centred approach.

Limitations of the current package are that the resources are only available in English and do not specifically cater for those with cognitive or communication impairments. An aphasia friendly supplement to the package has been recently developed to specifically meet the needs of patients with mild to moderate communication or cognitive impairments and

English as a second language [51]. Although feedback about the utility of the package was positive from a cross section of clinicians, we do not know if it improved patient goal attainment or other patient reported outcomes. Further work is needed to confirm this and the levels of utility in different contexts. A limited number of people living with stroke were involved in the development phase of this project and it was out of scope to obtain post testing feedback from patients with stroke and their support people. However, this will be assessed as part of a larger trial that is currently underway [5]. It was outside the scope of this project to develop resources to support the specific goals of caregivers. However, there may be opportunities to incorporate this into future work. Another limitation is that the researchers facilitating the focus group sessions were involved in the development of the goal-setting package and in the delivery of the training which may have resulted in some socially desirable responses being elicited.

The existing goal-setting package has been developed specifically for patients with stroke. It is unknown if this package could be used for other presentations for which goal-setting is recommended. Further work is required to test and potentially modify a menu-based goal-setting package for use in other clinical conditions and contexts to support the identification of consumers' needs and goals. The research utility of the package is currently being trialled in a large, multisite randomised controlled trial of discharge support known as ReCAPs [5].

4.2. Innovation

This innovation, informed by patients with stroke, their support people, and clinicians and researchers, has demonstrated initial clinician feasibility for clinical use in acute and rehabilitation settings, with potential for implementation across both clinical and research settings. It has also provided foundational work for ReCAPs a large Randomised Controlled Trial (RCT) [5]. Use of the goal-setting package will ensure all aspects of recovery are addressed through the iVERVE intervention being used in this

Table 1
Summary of themes from clinician focus group mapped to Theoretical Domains Framework [44].

Theoretical domain	Acute Setting	Inpatient rehabilitation setting
1. Knowledge	<ul style="list-style-type: none"> • Clinicians familiar with clinical goal-setting. • Most had trialled the package. 	<ul style="list-style-type: none"> • Goal-setting already embedded within the unit. • Most had trialled the package.
2. Skills	<ul style="list-style-type: none"> • The training was essential. • Manual was definitely required. Challenging to do goal-setting without manual. 	<ul style="list-style-type: none"> • Found manual helpful, particularly for setting goals in areas outside their discipline. • Complementary to existing skills. • Easier to use with practice.
3. Social professional role and identity	<ul style="list-style-type: none"> • Provided a more holistic approach “Goals were things that I had not considered”. • Supports person-centred care. 	<ul style="list-style-type: none"> • Holistic approach. • Encouraged interdisciplinary collaboration.
4. Beliefs about capability	<ul style="list-style-type: none"> • Need to use more often to become familiar. • Additional time required was a challenge. 	<ul style="list-style-type: none"> • Assisted with process of formulating more useful SMART goals. • Clinicians less confident creating timeframes for some goals.
5. Optimism	<ul style="list-style-type: none"> • Good use of time. “Worth additional time to set better quality goals”. • Definitely beneficial. 	<ul style="list-style-type: none"> • Process was worthwhile and important. • Likely to get more engagement if shorter (30 min) training session.
6. Beliefs about consequences	<ul style="list-style-type: none"> • Facilitated considering community goals during inpatient admission. • Merit in making goals more person-centred. • May help with communication with General Practitioner. 	<ul style="list-style-type: none"> • Additional time required, however resulted in better quality goals. • Opened up discussions that may not have otherwise been brought up. • Facilitated better discharge planning. • Summary sheet was really useful. • Positive feedback from the family.
7. Reinforcement	<ul style="list-style-type: none"> • If evidence-based, more likely to be done. • If it is going to benefit patients and followed up in community seen as a good use of time. • Would be good if patients are using post discharge. • Ongoing training for staff would be needed. 	<ul style="list-style-type: none"> • It would be good to get feedback from patients to see if they find it useful.
8. Intentions	<ul style="list-style-type: none"> • Clinicians would like to implement into usual practice. 	<ul style="list-style-type: none"> • Already starting to think about this as part of usual practice.
9. Goals	<ul style="list-style-type: none"> • Used when time is available. 	<ul style="list-style-type: none"> • Gave patient room to explain what they what to achieve.
10. Memory attention and decision processes	<ul style="list-style-type: none"> • Goal-setting is completed with most patients on the unit. 	<ul style="list-style-type: none"> • Goal-setting is an established part of usual practice. • Good to engrain SMART goal-setting as a team process.
11. Environmental context and resources	<ul style="list-style-type: none"> • High work load and limited time. • Often short length of stay and short notice to discharge. • Would be good to have a quiet area for goal-setting and designated area to store resources. 	<ul style="list-style-type: none"> • Finding time to discuss goals can be difficult. • Having manuals that are easy to find. • Good to have a quiet space to complete goal-setting. • Was good to discuss with other staff.
12. Social influences	<ul style="list-style-type: none"> • Challenging when patients perceive they are at pre-morbid level. • Takes a lot of time with patients with impairments, (particularly cognitive and communication). • Supportive senior staff. 	<ul style="list-style-type: none"> • Challenge is encouraging staff other than allied health to be involved in process.
13. Emotion	<ul style="list-style-type: none"> • Challenging in a good way. • Increased empathy by highlighting how stroke had impacted person's life. • Challenging discussing things outside discipline. • Frustration as limited time available. 	<ul style="list-style-type: none"> • Overwhelming (for patients) to discuss long term goals early in admission. • Positive response when enough time is allocated.
14. Behavioural regulation	<ul style="list-style-type: none"> • If goal-setting menu was in the stroke pathway, clinicians would do it. • Integrate into existing digital medical record. • Include goal summary with discharge summary. 	<ul style="list-style-type: none"> • Timetabling into therapy timetable would assist. • Translate into team meetings. • Attach goals to discharge care plan. • Merge patient and therapy goals.

SMART: Commonly used acronym with variations in the literature such as Specific, Measurable, Action based, Realistic and Time specific or Specified, Motivating, Attainable, Rational and Timed.

trial to enable better support of people living with stroke [5]. More generally, this work advances the field of outcome assessment by standardizing methods for goal setting, which has been shown to improve the reliability of GAS as an outcome measure.

4.3. Conclusion

The goal-setting package developed and tested in this project has potential to provide a much-needed standardised approach specific to the needs of patients with stroke. The package will also be valuable to researchers and may have the potential to reduce subjectivity, improve reliability and measurability between users and ensure that goals set for life after discharge are meaningful to patients. Additional testing of the reliability and quality of goals set using the package has recently been completed.

4.4. Practice implications

The standardized package developed in this study was perceived by clinicians to facilitate a more person-centred approach and the development of goals based on the patients' identified priorities. Manualising person-

centred goal-setting reduced perceived clinician barriers to integrating goal-setting into discharge planning. This approach has potential to facilitate more active consumer participation in decisions regarding care and discharge planning.

Author contributions

NA initiated and led this study. NA, DC, NL and IK were involved in the study design, protocol development and drafting of the manuscript. RB was the project coordinator for this study and was responsible for recruitment, data collection, data analysis and producing the initial draft of the manuscript. All authors were involved in the expert working group, provided feedback on the development of the package and contributed to the writing and editing of this manuscript.

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Declaration of competing interest

The authors declare that there is no conflict of interest.

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Appendix A. Supplementary data

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