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Disseminating START: Training Clinical Psychologists and Admiral Nurses as trainers in a psychosocial intervention for carers of people with dementia's depressive and anxiety symptoms.

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Complete List of Authors:	Lord, Kathryn; Universtiy of Bradford, School of Dementia Studies Rapaport, Penny; University College London, Division of Psychiatry Cooper, Claudia; University College London, Division of Psychiatry Livingston, Gill; UCL, Division of Psychiatry
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3 **Title: Disseminating START: Training Clinical Psychologists and Admiral Nurses as**
4 **trainers in a psychosocial intervention for carers of people with dementia's depressive**
5 **and anxiety symptoms.**
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11 **Corresponding author:**

12
13
14 Professor Gill Livingston

15
16 Professor of Older People's Mental Health, Head of Department *

17
18
19 Tel: 0207 679 9350

20
21
22 Email: g.livingston@ucl.ac.uk

23
24 **Authors**

25
26
27 Kathryn Lord (BSc, PhD), Penny Rapaport (Mphil DclinPsy), Claudia Cooper (PhD MRCPsych)
28 and Gill Livingston (MD FRCPsych).

29
30
31 KL** - Research Fellow

32
33
34 PR* - Clinical Psychologist

35
36
37 CC* - Clinical Reader

38
39
40 * UCL Department of Old Age Psychiatry, Division of Psychiatry, Wing A, Floor 6 Maple House,
41 149 Tottenham Court Rd, London, W1T 7NF, UK.

42
43
44 **School of Dementia Studies, Faculty of Health Studies, University of Bradford, Bradford, West
45 Yorkshire, BD7 1DP, UK.

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Abstract

Objectives: To put into practice and evaluate an initial dissemination programme for START (STrAtegies for RelaTives), a clinically and cost-effective manualised intervention for family carers of people with dementia.

Setting: We offered three hour 'Train-the-trainer' sessions through the British Psychological Society and Dementia UK.

Participants: Clinical Psychologists and Admiral Nurses across the United Kingdom (UK)

Primary and secondary outcome measures: After the training session, attendees completed an evaluation. Attendees were asked how they had implemented START 6 and 12 months later, and to participate in telephone interviews about their experiences of what helps or hinders implementation one year after training.

Results: We trained 134 clinical psychologists and 39 Admiral Nurses through 14 training sessions between October 2014 and September 2015 in nine UK locations and made materials available online. The 40 survey respondents had trained 75 other staff. By this time 136 carers had received START across 11 service areas. Findings from 13 qualitative interviews indicated that some clinical psychologists had begun to implement START, facilitated by buy-in from colleagues, existing skills in delivering this type of intervention, availability of other staff to deliver the intervention and support from the research team. Admiral Nurses did not supervise other staff and were unable to cascade the intervention. Where START has not been used, common barriers included lack of staff to deliver the intervention and family carer support not being a service priority. Participants wanted the training to be longer.

Conclusions: We trained clinical psychologists and Admiral Nurses to deliver and implement START locally. Results from survey respondents show that it was cascaded further and used in practice in some areas, but we do not know if START was implemented by non-respondents. Future dissemination requires management buy in, the availability of practitioners and supervisors and consideration of other ways of delivery.

Article summary

Strengths and limitations of this study

- This study adds to the evidence about how to disseminate effective interventions for people with dementia and their families into routine clinical practice
- The data provide insight into the challenges faced by healthcare professionals working within the National Health Service when trying to implement evidence based practice.
- We found that while there was enthusiasm to attend dissemination in the form of 'Train-the-trainer' for START and the attendees were positive about it, this did not necessarily translate into giving us information about whether other steps were taken, perhaps due to the fact that we were asking them to complete an email survey
- While fidelity to the intervention was emphasized, it was not measured after training.

Introduction

The overall economic impact of dementia in the United Kingdom (UK) alone is £26.3 billion per year; 44% of this total cost is contributed by the work of unpaid family carers (2). As the number of people with dementia increases, policy frameworks and service provision are predicated on the assumption that families will remain the main source of (unpaid) support (4). Family carers are, however at high risk of psychological morbidity, which increases the likelihood of care home admission of the person with dementia (1)(3), usually against the previous wishes of the person with dementia and with financial consequences for society (2).

Although in the UK the National Institute for Health and Care Excellence (NICE) guidelines and Memory Services National Accreditation Programme (MSNAP) quality standards recommend using effective psychosocial interventions for family carers, many carers do not receive them because of costs, lack of staffing or because interventions that do not have an evidence base are embedded in practice. STrategies for RelaTives (START) is the first manualised intervention for family carers of people living with dementia, delivered by supervised graduate psychologists, demonstrated to be clinically and cost-effective at reducing carer depressive symptoms and improving carer mood over 8 months and two years. (1,4,5). Nonetheless it is not currently widely available in UK clinical services. New interventions often take a long time to be transferred to clinical practice. It is important to find ways to maximise the transition from research evidence to routine care (7, 8).

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3 We developed and tested START in a randomised controlled trial and it fulfilled its primary aims
4 to be clinically effective at reducing dementia carer's anxiety and depressive symptoms in the
5 short term (over 8 months) and the long term (2 years) and to be cost effective. It also fulfilled
6 secondary aims of improving quality of life and reducing depression in the intervention group.
7 Carers in the treatment as usual group were seven times more likely to have clinically significant
8 depression than those receiving START at two years (1, 4, 5). It comprises eight manualised
9 sessions delivered to individual carers aimed at supporting them to develop adaptive coping
10 strategies (See Box 1 for content of sessions) (1). Carers were given a manual including space
11 where they created an individualised plan comprising strategies they intended to continue using
12 and an audio resource with the relaxation therapies. The Prime Minister's Challenge on
13 Dementia 2020 recommended that all family carers receive START or a similar intervention (6).
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23 Following completion of the START trial, we were funded by the Alzheimer's Society to
24 disseminate the START intervention by cascading it through regional 'Train the Trainers'
25 workshops. As in the original trial, we wanted START to be supervised by highly qualified
26 clinical practitioners but delivered by those with less qualifications and experience. We trained
27 a member of a clinical team. Interactive workshops were designed to provide the knowledge,
28 materials and motivation to equip attendees to initiate implementation of START into local
29 practice (11). This approach was based on evidence that effective interventions to disseminate
30 research findings into practice are usually multifaceted; comprising interactive teaching with
31 feedback on practice, and making plans to implement interventions (9). In contrast, passive
32 dissemination of information may be ineffective as even when people agree with the material
33 they often do not put it into practice (10). Although there are few evaluations of dissemination
34 specifically within multidisciplinary teams, having an intervention promoted by one professional
35 from the team, seems to lead to its increased use within the team (8). In the current study, we
36 aimed to evaluate the extent to which our dissemination within train the trainer workshops
37 enabled attendees to implement START in their clinical teams, and what helped or hindered this
38 over the year following course attendance.
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51 **Materials and methods**

52 **Participants and procedures**

53 The Faculty for the Psychology of Older People in the British Psychological Society and
54 Dementia UK for Admiral Nurses both advertised training opportunities through existing faculty
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3 and employee networks. They worked collaboratively with regional coordinators to maximize
4 reach and use local free training venues. We trained clinical psychologists and Admiral Nurses
5 to train graduate psychologists and other junior colleagues. Participants did not have to have
6 any prior knowledge or interest in the START intervention and were given the manual to read in
7 advance of the training session. Participants were given free training at 'Train-the-trainers'
8 workshops provided they committed to the evaluation.
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11 **Workshop content**

12 PR, a clinical psychologist, involved in the development and trial of the START intervention
13 facilitated three hour 'Train-the-trainer' workshops (see Box 2 for an overview of the training
14 session). This began with interactive discussion of START, its use in practice and potential
15 impact and how to train and supervise others to deliver the intervention. She summarized: the
16 evidence that individual, multi-component interventions work better; that START can be
17 delivered by supervised psychology graduates; the evidence for START in an individual therapy
18 format and that it has been effective both as a preventative and as a therapeutic intervention.
19 PR emphasised that START offered opportunities to improve existing care in a range of service
20 contexts. Attendees were asked to think about next steps and what support or training they
21 would need in order to take these steps in the feedback after the workshop. Attendees then
22 discussed plans to promote and implement the intervention locally. PR emphasised that there
23 was evidence based trial evidence that START worked, which many other interventions do not
24 have and thus fidelity to the START manual was essential. Attendees were encouraged to
25 implement START as it had been delivered in the original RCT for example as an individual
26 rather than a group based intervention.
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29 Members of the research team were available to answer any queries regarding START
30 throughout the project and we would respond to any questions with additional tailored advice,
31 extra support materials and encourage links between those who attended the training
32 experiencing similar challenges. We created a website providing free access to all study
33 materials including the START manuals, information sheets and necessary training materials to
34 deliver and supervise START (<http://www.ucl.ac.uk/psychiatry/start>).
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39 **Initial evaluation**

40 Attendees completed a short evaluation form on completion of the workshop regarding aspects
41 of the training they found most and least useful, next steps they intend to take on returning to
42 their service after completion of the workshop and what further training or support would they
43 need in order to be able to take these steps.
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Evaluation survey at six and 12 months

Attendees were emailed a short evaluation form on progress they had made with implementing START and what had helped or hindered this 6 and 12 months after the training. We asked how many family carers they had delivered START to personally, how many other professionals they had trained and their role, and how many family carers had received START in their service in total. We asked who had delivered it. If we received no response within a few weeks, we sent two additional reminder emails unless the participant had moved.

Interviews

We invited Individuals who responded at the one year follow-up to carry out a telephone or face-to-face individual interview or attend a local focus group, whichever was most convenient for them. As others had not responded to multiple emails, we judged it unlikely they would take part in a face to face survey. We used a semi-structured interview guide to explore: if and how START was being delivered; the experience of the healthcare professionals locally when trying to implement START and what they felt would help with future implementation.

Analysis

Qualitative data

We audio recorded all interviews and transcribed them verbatim, removing all identifying information from transcripts prior to analysis. Qualitative data received from the email surveys and telephone interviews was managed, coded and analysed using the qualitative research software Nvivo 9. All data was thematically coded, generating a coding frame from initial interviews using a thematic content analytic approach. Disagreements between the researchers were resolved through discussion and a consensus was reached.

Quantitative data

All quantitative survey data was stored and analysed in Excel and basic descriptives generated.

Results

134 clinical psychologists and 39 Admiral Nurses attended 14 training sessions between October 2014 and September 2015 in London, York, Doncaster, Cambridge, Edinburgh, Teeside, Port Talbot, Leicester and Birmingham.

Workshop feedback

All attendees completed a feedback evaluation immediately after completion of the training session. A summary of themes is presented in Table 1. Attendees were generally very positive about the format and content of the training and suggested that longer training sessions may be helpful in the future. Many individuals agreed that their next steps would be to discuss the intervention with their clinical teams and managers and felt that continued support and contact with the research team would assist in doing this.

<p>What aspects of the training did you find most useful?</p> <ul style="list-style-type: none"> • Discussing implementation / vignette in local groups • Discussing supervision dilemmas • Hearing about the background to START and individuals' experiences of using it in clinical practice
<p>What aspects of the training were least useful?</p> <ul style="list-style-type: none"> • Some of the local discussion about how to implement could have been done back amongst individuals' teams
<p>What specific aspects of the training could be improved?</p> <ul style="list-style-type: none"> • Increase the length of the training, three hours not sufficient • Hearing more from others who have implemented START • Maybe have someone who currently delivers START or a carer who has received START present
<p>What will be your next steps in taking forward the START intervention in your service?</p> <ul style="list-style-type: none"> • Discuss with clinical leads and management • Deliver START myself
<p>What further training/support would enable you to take these next steps?</p> <ul style="list-style-type: none"> • Support from and contact with the research team • Examples of successful bids for funding to support this work • Speak with other services using START

Table 1: Summary of workshop feedback

Survey results

In response to our initial email, 22 automatic responses were received saying that individuals no longer worked at that organisation. Of the remaining 151 original participants, 40/151 (26%) people responded to the request for data across the one year follow-up period; 6 (15%) were Admiral Nurses and 34 (25%) clinical psychologists.

16/ 40 healthcare professionals who completed the survey have trained a total of 75 other healthcare professionals in using START. Of those 40, 11 have personally delivered START to

22 carers. Following training of colleagues, a total of 136 carers had received START across 11 different service areas.

	Clinical psychologists	Admiral Nurses	Total
Number of people who attended the training who have personally delivered START to carers	9	2	11
Number of colleagues in the service attendees have trained	75	0	75
Number of carers who have received START	130	6	136

Table 2: Numbers of colleagues trained and carers who have received START

Interviews

13 healthcare professionals took part in semi-structured interviews/focus groups. We conducted 10 semi-structured telephone interviews with clinical psychologists (1 male, 9 female) and one focus group with three Admiral Nurses (1 female, 2 male). 7 of these healthcare professionals were currently delivering START in their services, the details of how are provided below.

Facilitators of implementation (See Table 3 for summary of themes)

In areas where attendees were able to use START, there were a number of key themes identified by healthcare professionals that aided its implementation. These were:

Team sign up to START

Raising awareness about the START intervention and its benefits amongst colleagues, including those who may not be directly involved in delivering it e.g. managers and referrers, was critical to the implementation process.

'We gave the team information and training, not training on how to do it but just information about what we were doing and why we were introducing this and the evidence base. And so, I think they were, they were fine with that as well' [Clinical psychologist]

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'Support from managers and other team members, referrers knowing what START involves, advocating for referrals in team meetings and feeding back 'success stories' to referrers all helped' [Clinical psychologist]

The motivation of the staff generally within the service to deliver START and awareness and recognition of the potential impact of START for carers encouraged implementation:

'And I think just willingness really; you know people want to be doing everything' [Clinical psychologists]

'I think within our service they've supported basically what we think is a good idea' [Clinical psychologist]

Familiarity with psychosocial interventions

Within the psychology services, many of the respondents referred to the existing skill set of their colleagues and their competency in delivering these types of psychological interventions as aiding the implementation of START:

'Certain parts of it [START] that are very kind of familiar to them in the work that we do...I we already had a group of people in our team who are quite skilled and quite used to going out to see people one on one and talking through sometimes quite emotive topics, building links and they didn't need that much support really, in terms of implementing it' [Psychologist]

National and local policy drivers

There were local policy drivers identified that aided the implementation of START locally. Providing support interventions for carers of people with dementia is on the national agenda across the UK, with START being a recommended intervention. Healthcare professionals spoke of the commissioning pressures to show how their psychology services were exploring how to provide such support:

'In terms of commissioning, you need to be seen to be doing these things. So I think it works in START's favour if you know, if it's got good evidence, then people are going to want to do it' [Clinical psychologist]

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6 *'I think there's huge focus now on supporting carers and I think that's probably*
7 *a reflection of me having more one-to-one referrals as well. And more*
8 *acknowledgment really of the emotional, psychological needs of carers rather*
9 *than just the information given. Yes, definitely within my service anyway,*
10 *there's a huge focus now for supporting carers' [Clinical psychologist]*

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16 With carers support on the agenda, in some areas, healthcare professionals spoke of increased
17 funding to provide this locally, with START being one of the ways of doing so:

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20 *'There is direct funding within the council from a dementia stream, for us to be involved in some*
21 *dementia work locally' [Psychologist]*

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25 In one site, having the support from policy makers working on the dementia agenda within the
26 local council fostering inter-agency working with the third sector, facilitated referral of suitable
27 carers for the delivery of START to carers:

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31 *'She [policy officer] already had links with [the third sector] so she had two*
32 *points of contact there, who were then able to drive referrals for her'*
33 *[Psychologist]*

34 35 36 Delivering a modified intervention

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38 Healthcare professionals were trained to deliver and supervise START in the format used in the
39 original trial. A number of services have made the decision to deliver a variant of START for
40 example, as a group intervention:

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44 *'I'm the only psychologist obviously covering quite a large area, I don't have*
45 *the resource to work one-to-one' [Clinical psychologist]*

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49 Despite the lack of evidence that START works this way, these sites felt this was the most
50 effective way to see as many carers as possible and they had support from their services to use
51 this approach. Similarly, in relation to the format of supervision necessary for colleagues
52 delivering START, individuals were adopting less formal arrangements in terms of frequency
53 and this was mentioned as helpful:

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'It has been relatively ad hoc... we're actually sitting next to each other all the time , it's really if they've come back, and anything particular that has been difficult, we talk about' [Psychologist]

Access to START resources

The free availability of the START resources both via the website and the research team was helpful to healthcare professionals and encouraged implementation. Additionally, email reminders and regular contact from the research team kept the START intervention in people's minds and on their agenda:

'I think just the fact it's been made very accessible, because I think often with interventions, there's lots and lots of hoops to jump through, and just the fact that all the materials are there, it's really handy really, so that's definitely been positive' [Clinical psychologist]

'Just knowing that there's a contact, so yourself or others that we can contact for information' [Clinical psychologist]

Key facilitators of implementation
Team sign-up to START <ul style="list-style-type: none"> • Raising awareness of the need for the intervention • Staff motivation and recognition of the potential impact of START
Familiarity of psychosocial interventions <ul style="list-style-type: none"> • Existing skill set of colleagues
National and local policy drivers <ul style="list-style-type: none"> • Carers support now on the national agenda • Support from policy makers
Delivering a modified intervention <ul style="list-style-type: none"> • Ability to tailor the intervention to their local arrangements
Access to START resources <ul style="list-style-type: none"> • Free availability of all the intervention resources
Barriers to implementing the START intervention
Lack of time and resources

<ul style="list-style-type: none"> • Times required to set-up the intervention locally • Lack of junior colleagues to deliver the intervention • Service cuts there struggle to provide 'extra' interventions
<p>Lack of buy in and support from colleagues and managers</p> <ul style="list-style-type: none"> • Lack of managerial support for a 'new' intervention • Colleagues not feeling they have the skills to
<p>Lack of fit with current service context or professional approach</p> <ul style="list-style-type: none"> • Complexity of clients on caseload • Lack of experience delivering such interventions

Table 3: Summary of qualitative themes

Barriers to implementing the START intervention

Based upon the responses received, in three of the geographical areas where individuals attended the train-the-trainers sessions and subsequently trained their colleagues, no carers had received START. Reasons for this were: a lack of appropriate referrals i.e. START was not thought by other professionals to be suitable for their current caseload; other demands on the service and START not being seen as a priority; lack of assistant psychologists to deliver START; the person who attended the START training went on maternity leave and the amount of time needed to set-up the intervention within the service.

Lack of time and resources

Many respondents spoke of the amount of time required to set-up a new intervention within a service and six months after the training session, very few had made any progress with implementation. This was because of the time needed to plan and organise how START would be delivered within the service, including getting colleagues on board, setting up the referral process and agreeing who would be responsible for delivery:

'As this is a 'new' thing (manualised intervention) has taken a long time to get everyone on board, work through all the practical issues of delivery' [Clinical psychologist]

'It's just taken a few months to get everything up and running' [Clinical psychologist]

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'So this is a new thing really that we've had to, kind of, it's taken us months just to get people on board and share our ideas really and organise, even practical things, where it'll take place, so yes it has taken us a long time to get this far really' [Clinical psychologist]

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At the one year follow-up, this was beginning to change and START was being delivered in some of these areas:

'It was maybe about a year, a year and a half before it ever actually started to be delivered' [Psychologist]

'It took so long just to get it off the ground... over a year now' [Clinical psychologist]

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An initial consideration for those wishing to implement START locally was who was available within their service to deliver the intervention. Several psychologists, especially those outside of London, reported that there were too few psychologists, usually just one, covering a large geographical area with a very full caseload and so they could not supervise assistant psychologists. In addition, many individuals lacked psychology assistants or alternative junior colleagues within their service:

'No, in fact it's just one and a half psychologists for the whole service. We used to be seven' [Clinical psychologist]

'We need more staffing resource. At the moment staff are struggling to do the basics and the focus in on assessment and diagnosis, so there is a difficulty in introducing new interventions or even in being able to appoint, train and supervise volunteers' [Clinical psychologist]

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Due to current and planned resource cuts within services, a number of participants felt that there was a lack of financial resource available to deliver START and that other demand within the service were currently taking priority:

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'I don't know whether they [the service] would be supportive in terms of ring-fencing time to organise it which is what makes me slightly hesitant about doing this, if you see what I mean?' [Clinical psychologist]

'Not currently seen as a priority given service target pressures and service reorganisations' [Clinical psychologist]

Healthcare professionals spoke of the challenge of balancing this lack of resources with the demand for the START intervention in terms of numbers of carers needing to be seen and the time this would take:

'So I think it's difficult because that would mean extra time that I don't have at the moment' [Clinical psychologist]

'In the memory service, demand outstrips supply, engaging carer's takes a lot of time, as does managing risk issues which arise' [Clinical psychologist]

They also reported that they were struggling to cover all the content of a session within one hour and several felt that asking for eight sessions of their time to deliver the intervention was not going to be possible:

I think that's going to be the crux, you know is it... do people... can they justify eight contacts basically? [Clinical psychologist]

'My manager did think that was an idea... but when she realised it was eight week sessions, not one, she said, no... they're struggling to meet the demands of the assessments they have to make they've got payment by results, so they're struggling already. So to give them something else to do, although they recognise it is a good thing to do, unfortunately it comes down to time and resource' [Admiral Nurse]

Professionals also discussed the perceived limitations of delivering a one-to-one intervention and that other interventions delivered in a group were seen as more cost and time effective (even if lacking evidence of clinical or cost effectiveness):

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3 *'I am involved in interventions for carers and have found delivering these through groups more*
4 *time efficient' [Clinical psychologist]*
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9 *Lack of buy in and support from colleagues and managers*
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11 Many healthcare professionals talked about how they had to justify that the START intervention
12 comes within their role and is a worthwhile use of their time. In order to do so it required
13 someone to 'champion' the use of START. Absence of support from a managerial perspective
14 also hindered the implementation of START and priority was not being given to support this
15 process:
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20 *'I battled for it' [Clinical psychologists]*
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23 *I have also not been successful in finding a manager who is interested in taking this up or*
24 *exploring it further. I think that there is a lack of identified need in this area which doesn't help*
25 *[Clinical psychologist]*
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30 Some clinical psychologists who had tried to implement START in their local services felt other
31 team members and management were reluctant to adopt START. The potential reasons
32 included: a lack of interest from colleagues to deliver and provide psychological approaches to
33 support carers; colleagues not feeling skilled to deliver START; or the assumption that they did
34 not have the necessary time or resources to provide START:
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39 *'I didn't have a very good response from CPNs [Community Psychiatric*
40 *Nurses], unfortunately. Some of them don't feel as skilled in that. Some*
41 *people talked about having limited time, other people not really being*
42 *interested in psychological approaches. I think a lot of people probably don't*
43 *have the confidence, they have the skills I think but maybe not the confidence*
44 *to deliver it' [Clinical psychologist]*
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51 *Lack of fit with current service context or professional approach*
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53 Several healthcare professionals felt that they were supporting carers with very complex needs,
54 especially those based in Community Mental Health Teams (CMHTs), and that START was not
55 appropriate at that time or did not fit with their professional identity or the ethos of their clinical
56 services. Admiral Nurses also felt that they were very skilled in delivering carers support and
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3 were already providing much of the content of the START intervention without using its
4 structured approach:
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8 *'Admiral Nurse model responds to the highest expressed need of the carer*
9 *and then moves on to other areas, so this very structured programme may not*
10 *fit with that' [Admiral Nurse]*
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14 'For carers that would need this level of input as a team we provide the Educational programme
15 for 5 weeks for carers and a lot of the information is covered within the course... In relation to
16 the carers they tend to react to a situation as it occurs therefore even when we have covered
17 the educational side within our Positive Steps Course we are often back involved as a major
18 caring transition occurs within their role and the focus therefore will be on the emotional support
19 surrounding this particular identified need' [Admiral Nurse]
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25 When discussing staff skills, clinical psychologists felt they had the ability to supervise junior
26 members of staff and that this was a usual part of their role. In contrast, Admiral Nurse
27 participants felt that they have very little supervision experience and this was not part of their
28 current role and did not fit in with their service structure:
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33 *'Not all admiral nurses have got experience in giving supervision. I mean, some have come*
34 *through, and some have been ward managers and team leaders and are used to that*
35 *environment of giving supervision. But that's something that might need some skills*
36 *development if they're going to do that' [Admiral Nurse]*
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40 Discussion

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42 We were able to attract clinical psychologists and Admiral Nurses professionals from across the
43 country to our workshops about the START intervention and they evaluated these positively. We
44 delivered 14 interactive training sessions, for each of which almost 10 family carers received the
45 intervention in the year after training. Despite the cheapness of our project the dissemination
46 may not have been good value. It was certainly not sufficient, as relatively few people received
47 the intervention and the immediate benefit was relatively low. We did not record delivery after
48 this but are aware that the services we worked with are continuing to deliver START and embed
49 it in their services as they frequently contact us in relation to their ongoing work. Developing
50 and evaluating new interventions is expensive but many evidence based interventions are either
51 not implemented in real world practice or implemented after a long time. This small, relatively
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3 inexpensive dissemination study began this process by providing the information, support and
4 materials to clinicians that are necessary, but not sufficient for implementation in local services.
5 We also considered what would help further implementation to inform future work.
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10 Those who attended workshops are likely to have been more open minded and amenable to
11 change. We found that even for those workshop attendees who were highly motivated, it took
12 considerable time to implement the intervention. Some clinical psychologists have said that they
13 wish to implement START by training others but are constrained by the resources available and
14 multiple competing demands on their time. While training assistant practitioners to deliver the
15 intervention could theoretically be a cost-effective way of bringing psychological treatments to
16 more family carers, in practice many clinical psychologists did not have more junior colleagues
17 they could train, so they were unable to change a situation where only a few family carers with
18 very high needs were seen by more expensive, fully trained psychologists. Staff interviewed
19 also reported feeling that the START intervention was more time and resource intensive than
20 usual service provision, for example, delivering a psycho-educational group course; despite
21 evidence suggesting these interventions are ineffective for carer mood (15, 16). In many cases
22 the lesser resource implications and possibly motivation needed to continue with interventions
23 currently being delivered appeared to mitigate against introduction of START, even though
24 these interventions had a lesser evidence base for reducing carer psychological morbidity. This
25 disconnect between research evidence and practice has been highlighted in other areas of
26 dementia research (12) and there is perhaps a need to evidence how START can be effective in
27 a diverse range of service settings to reflect the contexts where family carers are most likely to
28 access psychological support.
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43 It was interesting to reflect on the different experiences of Admiral Nurses compared with clinical
44 psychologists in implementing START. It was evident from our findings that the intervention
45 fitted less well with their ethos, current models of service delivery and professional identity.
46 Although START trials included an Admiral Nurse service there was a reluctance to accept that
47 the evidence base for it applied to the context of their work. Admiral Nurses often work
48 autonomously in senior roles, and do not usually supervise others. Family carers value the
49 service they give which is perhaps more defined by experience than the current evidence base;
50 we think all services would benefit from incorporating current best evidence into their work and
51 will continue to explore ways to encourage all services to implement it.
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3 We did not explicitly ask attendees if they had access to a pool of junior colleagues to train
4 when they signed up for the training, as we prioritised reach and dissemination of START over
5 targeted implementation. However, attendees were informed that the intervention was intended
6 to be delivered by junior colleagues and the attendees were expected to be in a position to train
7 and develop START locally. Those participants who worked in memory clinics and community
8 mental health teams had some junior colleagues but most Admiral Nurses did not.
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11 We experienced many difficulties in finding out what is happening at local sites, if they are using
12 START and how. Our low response rate means we have much less information than planned
13 and we think that it is likely that those who did not respond had not implemented the
14 intervention, although many had moved services and it is possible but likely to be relatively rare
15 that they took their knowledge and skills to their new services. This may be due to the fact that
16 we were asking them to complete an email survey. We invited attendees to get in touch with the
17 research team if they had any queries or issues regarding START, but many did not make any
18 contact following the training. We know from the 22 out of office responses to emails that there
19 is currently a high level of movement within services. Our qualitative evaluation was only from
20 those who had answered to begin with and therefore is likely to include those who were more
21 interested or successful. The complex landscape of service delivery reinforces the need for
22 multi-faceted, targeted, implementation strategies. One of the services which offered START to
23 the most carers was one where local commissioners had been approached and allocated
24 specific resource to set up and deliver the intervention across the borough.
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28 We have made all of our training materials and the START manuals freely available to widen
29 potential access to the intervention for family carers. This means that we have no control over
30 how the intervention is delivered and we had no way of monitoring fidelity although we
31 emphasized its importance. From the feedback we received, a number of sites are using a
32 different format and process to deliver the intervention than that tested in our RCT, for example,
33 delivering in groups or delivering to professional carers. We do not have data on the
34 effectiveness of the intervention when delivered in this way and we have no measure of fidelity
35 or adherence to the original intervention. This raises an interesting question about the
36 implications this may have on the effectiveness of the intervention if not delivered in the
37 intended way with a trade-off between flexibility and treatment fidelity which has been noted in
38 other areas of dementia care (13).
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3 Disseminating START in this 'Train-the-trainer' way is the beginning of the implementation
4 process but by itself we have found that it is not enough to ensure implementation into practice.
5 We disseminated START broadly and provided individuals with the materials they need to train
6 others and set up the intervention locally. This motivated a small group of individuals whom one
7 could characterize as "early adopters" to address barriers and implement START locally for at
8 least some patients. A range of top down and bottom up approaches are needed to implement
9 more broadly. As sites are deviating from the original study design as to how and by whom
10 START is delivered, exploring further who are the right people to be delivering START locally,
11 future implementation should evaluate fidelity or in its absence outcome. Our in-depth case
12 studies of 'real world' implementation in a variety of settings may help other areas implement
13 START. This work would also allow us to look further into the role of specialist professionals
14 such as Admiral Nurses as their model of delivery is very different from clinical psychology and
15 they tend not to work in a team structure with junior colleagues. Interventions are more likely to
16 be implemented when there are resources available, the staff see there is a benefit and they
17 feel it provides value (14). Our next step is to take a more tailored approach to START and to
18 lay the foundation to deliver it in other contexts, for example outside the health system or to
19 different ethnic groups.
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32 **Acknowledgements**

33 We would like to thank the professionals who took part in our interviews.
34

35 **Author's contribution**

36 GL was chief investigator for the grant. PR and CC were co-investigators. PR delivered all the
37 training and KL organized the training and completed the interviews. KL, PR and GL analyzed
38 the interviews. KL wrote the first draft of the paper. All authors revised the paper critically.
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45 **Data sharing statement** No additional data are available.
46

47 **Statement of funding**

48 This work was supported by the Alzheimer's Society, grant number 217 AS_DG_13_0002.
49

50 **Declaration of interest**

51 PR, GL and CC developed the original intervention and were co-applicants in the RCT.
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Structure of STrAtegies for RelaTives programme

Introduction

- Learning about dementia, stress in carers, and understanding behaviours of the recipient of care.

Discussion

- Discussion of behaviours or situations that carers found difficult, incorporating behavioural management techniques, skills to take better care of themselves (including changing unhelpful thoughts), relaxation, increasing and assertive communication, promoting acceptance, sources of emotional support, and positive reframing.

Future needs of the family member with dementia

- Information about care and legal planning, specifically adapted to the United Kingdom. We gave the carers information leaflets about making common decisions as appropriate at an individual level.

Planning pleasant activities

- This used the idea that it is possible, beneficial, and pleasurable to incorporate small pleasant activities into a caring day.

Maintaining skills learnt over time

- In the last session the carer identified which techniques they found helpful and made a plan about what to continue for the future. Carers were given homework tasks to complete between sessions, including relaxation, identifying triggers and reactions to challenging behaviours, and identifying and challenging negative thoughts. The therapist and the carer both had a manual and the carer filled in and kept their own manual. Relaxation exercises used in sessions were recorded on a CD and given to the carers. We defined adherence to therapy on clinical grounds as participating in five or more sessions.

Box 1: Structure of STrAtegies for RelaTives programmes

General overview	Specific content and process
<p>Introductions aims, objectives and attendees hopes for the session</p>	<p>Specific objectives:</p> <ul style="list-style-type: none"> • To provide brief overview of evidence base for psychological interventions with family carers • To outline the START intervention and the RCT • To summarise the training & supervision processes • To consider the challenges / dilemmas in training and supervising others to deliver START • To consider how the START could be developed in local service settings
<p>Overview of evidence base for psychological interventions with family carers and introduction to the START intervention</p>	<ul style="list-style-type: none"> • Clinical and policy context for interventions • Current evidence base • Overview of START intervention • Discussion of how START fits with work local and individual work context (Attendees asked to read intervention sessions in advance)
<p>Training and supervising others to deliver the START intervention</p>	<ul style="list-style-type: none"> • Overview of training processes in RCT (Attendees provided with all training materials to adapt for local use) • Large group exercise on the challenges and dilemmas in training others to deliver START. • Small group exercise using clinical vignettes on the supervising others to deliver START, focus on responsibilities of supervisors
<p>Considerations for implementing START in local services and initial action planning</p>	<ul style="list-style-type: none"> • Local service discussion of setting up the intervention in local services, including: <ul style="list-style-type: none"> • Resources available • Referral pathways - How? Who? When? • Assessment process • Training processes • Supervision arrangements • Risk management • Practical issues - When? Where? • Evaluation / measures • Identification of potential barriers and solutions • Identifying first steps in implementation
<p>Final questions and comments</p>	<ul style="list-style-type: none"> • Website / available materials and follow up support explained • Evaluation completed and future evaluation explained

Box 2: Overview of training sessions

	Item	Guide questions/description	Page
Domain 1: Research team and reflexivity			
Personal Characteristics			
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?	Not included
2.	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i>	Page 1
3.	Occupation	What was their occupation at the time of the study?	Page 1
4.	Gender	Was the researcher male or female?	Page 1
5.	Experience and training	What experience or training did the researcher have?	Not included
Relationship with participants			
6.	Relationship established	Was a relationship established prior to study commencement?	N/A
7.	Participant knowledge of the interviewer	What did the participants know about the researcher? <i>e.g. personal goals, reasons for doing the research</i>	Page 4/5
8.	Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? <i>e.g. Bias, assumptions, reasons and interests in the research topic</i>	N/A
Domain 2: study design			
Theoretical framework			
9.	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? <i>e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis</i>	Page 6
Participant selection			
10.	Sampling	How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i>	Page 4/5
11.	Method of approach	How were participants approached? <i>e.g. face-to-face, telephone, mail, email</i>	Page 4/5
12.	Sample size	How many participants were in the study?	Page 6/7
13.	Non-participation	How many people refused to participate or dropped out? Reasons?	Page 6/7

Setting			
14.	Setting of data collection	Where was the data collected? e.g. <i>home, clinic, workplace</i>	Page 5/6
15.	Presence of non-participants	Was anyone else present besides the participants and researchers?	N/A
16.	Description of sample	What are the important characteristics of the sample? e.g. <i>demographic data, date</i>	Page 6/7
Data collection			
17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Page 5/6
18.	Repeat interviews	Were repeat interviews carried out? If yes, how many?	N/A
19.	Audio/visual recording	Did the research use audio or visual recording to collect the data?	Page 6
20.	Field notes	Were field notes made during and/or after the interview or focus group?	N/A
21.	Duration	What was the duration of the interviews or focus group?	Not included
22.	Data saturation	Was data saturation discussed?	No
23.	Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No
Domain 3: analysis and findingsz			
Data analysis			
24.	Number of data coders	How many data coders coded the data?	Page 6
25.	Description of the coding tree	Did authors provide a description of the coding tree?	Page 11/12
26.	Derivation of themes	Were themes identified in advance or derived from the data?	Derived – Page 6
27.	Software	What software, if applicable, was used to manage the data?	Page 6
28.	Participant checking	Did participants provide feedback on the findings?	N/A
Reporting			
29.	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. <i>participant number</i>	Page 8-16
30.	Data and findings consistent	Was there consistency between the data presented and the findings?	Yes Page 6-16
31.	Clarity of major themes	Were major themes clearly presented in the findings?	Page 6 - 16

32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	N/A
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For peer review only

BMJ Open

Disseminating START: Training Clinical Psychologists and Admiral Nurses as trainers in a psychosocial intervention for carers of people with dementia's depressive and anxiety symptoms.

Journal:	<i>BMJ Open</i>
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Primary Subject Heading:	Evidence based practice
Secondary Subject Heading:	Health services research
Keywords:	Dementia < NEUROLOGY, Family carers, Dissemination

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3 **Title: Disseminating START: Training Clinical Psychologists and Admiral Nurses as**
4 **trainers in a psychosocial intervention for carers of people with dementia's depressive**
5 **and anxiety symptoms.**
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11 **Corresponding author:**

12
13
14 Professor Gill Livingston

15
16 Professor of Older People's Mental Health, Head of Department *

17
18
19 Tel: 0207 679 9350

20
21
22 Email: g.livingston@ucl.ac.uk

23
24 **Authors**

25
26
27 Kathryn Lord (BSc, PhD), Penny Rapaport (Mphil DclinPsy), Claudia Cooper (PhD MRCPsych)
28 and Gill Livingston (MD FRCPsych).

29
30
31 KL** - Research Fellow

32
33
34 PR* - Clinical Psychologist

35
36
37 CC* - Clinical Reader

38
39
40 * UCL Department of Old Age Psychiatry, Division of Psychiatry, Wing A, Floor 6 Maple House,
41 149 Tottenham Court Rd, London, W1T 7NF, UK.

42
43
44 **School of Dementia Studies, Faculty of Health Studies, University of Bradford, Bradford, West
45 Yorkshire, BD7 1DP, UK.

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48 **Keywords:** Dementia, family caregivers, psychosocial interventions
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Abstract

Objectives: To put into practice and evaluate an initial dissemination programme for START (STrategies for RelaTives), a clinically and cost-effective manualised intervention for family carers of people with dementia.

Setting: We offered three hour 'Train-the-trainer' sessions through the British Psychological Society and Dementia UK.

Participants: Clinical Psychologists and Admiral Nurses across the United Kingdom (UK)

Primary and secondary outcome measures: After the training session, attendees completed an evaluation. Attendees were asked how they had implemented START 6 and 12 months later, and to participate in telephone interviews about their experiences of what helps or hinders implementation one year after training.

Results: We trained 134 clinical psychologists and 39 Admiral Nurses through 14 training sessions between October 2014 and September 2015 in nine UK locations and made materials available online. The 40 survey respondents had trained 75 other staff. By this time 136 carers had received START across 11 service areas. Findings from 13 qualitative interviews indicated that some clinical psychologists had begun to implement START, facilitated by buy-in from colleagues, existing skills in delivering this type of intervention, availability of other staff to deliver the intervention and support from the research team. Admiral Nurses did not supervise other staff and were unable to cascade the intervention. Where START has not been used, common barriers included lack of staff to deliver the intervention and family carer support not being a service priority. Participants wanted the training to be longer.

Conclusions: We trained clinical psychologists and Admiral Nurses to deliver and implement START locally. Results from survey respondents show that it was cascaded further and used in practice in some areas, but we do not know if START was implemented by non-respondents. Future dissemination requires management buy in, the availability of practitioners and supervisors and consideration of other ways of delivery.

Article summary

Strengths and limitations of this study

- This study adds to the evidence about how to disseminate effective interventions for people with dementia and their families into routine clinical practice
- The data provide insight into the challenges faced by healthcare professionals working within the National Health Service when trying to implement evidence based practice.
- We found that while there was enthusiasm to attend dissemination in the form of 'Train-the-trainer' for START and the attendees were positive about it, this did not necessarily translate into giving us information about whether other steps were taken, perhaps due to the fact that we were asking them to complete an email survey
- While fidelity to the intervention was emphasized, it was not measured after training.

Introduction

The overall economic impact of dementia in the United Kingdom (UK) alone is £26.3 billion per year; 44% of this total cost is contributed by the work of unpaid family carers (2). As the number of people with dementia increases, policy frameworks and service provision are predicated on the assumption that families will remain the main source of (unpaid) support (4). Family carers are, however at high risk of psychological morbidity, which increases the likelihood of care home admission of the person with dementia (1)(3), usually against the previous wishes of the person with dementia and with financial consequences for society (2).

Although in the UK the National Institute for Health and Care Excellence (NICE) guidelines and Memory Services National Accreditation Programme (MSNAP) quality standards recommend using effective psychosocial interventions for family carers, many carers do not receive them because of costs, lack of staffing or because interventions that do not have an evidence base are embedded in practice. STRategies for RelaTives (START) is the first manualised intervention for family carers of people living with dementia, delivered by supervised graduate psychologists, demonstrated to be clinically and cost-effective at reducing carer depressive symptoms and improving carer mood over 8 months and two years. (1,4,5). Nonetheless it is not currently widely available in UK clinical services. New interventions often take a long time to be transferred to clinical practice. It is important to find ways to maximise the transition from research evidence to routine care (7, 8).

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3 We developed and tested START in a randomised controlled trial and it fulfilled its primary aims
4 to be clinically effective at reducing dementia carer's anxiety and depressive symptoms in the
5 short term (over 8 months) and the long term (2 years) and to be cost effective. It also fulfilled
6 secondary aims of improving quality of life and reducing depression in the intervention group.
7 Carers in the treatment as usual group were seven times more likely to have clinically significant
8 depression than those receiving START at two years (1, 4, 5). It comprises eight manualised
9 sessions delivered to individual carers aimed at supporting them to develop adaptive coping
10 strategies (See Box 1 for content of sessions) (1). Carers were given a manual including space
11 where they created an individualised plan comprising strategies they intended to continue using
12 and an audio resource with the relaxation therapies. The Prime Minister's Challenge on
13 Dementia 2020 recommended that all family carers receive START or a similar intervention (6).
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23 Following completion of the START trial, we were funded by the Alzheimer's Society to
24 disseminate the START intervention by cascading it through regional 'Train the Trainers'
25 workshops. As in the original trial, we wanted START to be supervised by highly qualified
26 clinical practitioners but delivered by those with less qualifications and experience. We trained
27 a member of a clinical team. Interactive workshops were designed to provide the knowledge,
28 materials and motivation to equip attendees to initiate implementation of START into local
29 practice (11). This approach was based on evidence that effective interventions to disseminate
30 research findings into practice are usually multifaceted; comprising interactive teaching with
31 feedback on practice, and making plans to implement interventions (9). In contrast, passive
32 dissemination of information may be ineffective as even when people agree with the material
33 they often do not put it into practice (10). Although there are few evaluations of dissemination
34 specifically within multidisciplinary teams, having an intervention promoted by one professional
35 from the team, seems to lead to its increased use within the team (8). In the current study, we
36 aimed to evaluate the extent to which our dissemination within train the trainer workshops
37 enabled attendees to implement START in their clinical teams, and what helped or hindered this
38 over the year following course attendance.
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51 **Materials and methods**

52 **Participants and procedures**

53 The Faculty for the Psychology of Older People in the British Psychological Society and
54 Dementia UK for Admiral Nurses both advertised training opportunities through existing faculty
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3 and employee networks. They worked collaboratively with regional coordinators to maximize
4 reach and use local free training venues. We trained clinical psychologists and Admiral Nurses
5 to train graduate psychologists and other junior colleagues. Participants did not have to have
6 any prior knowledge or interest in the START intervention and were given the manual to read in
7 advance of the training session. Participants were given free training at 'Train-the-trainers'
8 workshops provided they committed to the evaluation.
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13 **Workshop content**

14 PR, a clinical psychologist, involved in the development and trial of the START intervention
15 facilitated three hour 'Train-the-trainer' workshops (see Box 2 for an overview of the training
16 session). This began with interactive discussion of START, its use in practice and potential
17 impact and how to train and supervise others to deliver the intervention. She summarized: the
18 evidence that individual, multi-component interventions work better; that START can be
19 delivered by supervised psychology graduates; the evidence for START in an individual therapy
20 format and that it has been effective both as a preventative and as a therapeutic intervention.
21 PR emphasised that START offered opportunities to improve existing care in a range of service
22 contexts. Attendees were asked to think about next steps and what support or training they
23 would need in order to take these steps in the feedback after the workshop. Attendees then
24 discussed plans to promote and implement the intervention locally. PR emphasised that there
25 was evidence based trial evidence that START worked, which many other interventions do not
26 have and thus fidelity to the START manual was essential. Attendees were encouraged to
27 implement START as it had been delivered in the original RCT for example as an individual
28 rather than a group based intervention.
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30 Members of the research team were available to answer any queries regarding START
31 throughout the project and we would respond to any questions with additional tailored advice,
32 extra support materials and encourage links between those who attended the training
33 experiencing similar challenges. We created a website providing free access to all study
34 materials including the START manuals, information sheets and necessary training materials to
35 deliver and supervise START (<http://www.ucl.ac.uk/psychiatry/start>).
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50 **Initial evaluation**

51 Attendees completed a short evaluation form on completion of the workshop regarding aspects
52 of the training they found most and least useful, next steps they intend to take on returning to
53 their service after completion of the workshop and what further training or support would they
54 need in order to be able to take these steps.
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Evaluation survey at six and 12 months

Attendees were emailed a short evaluation form on progress they had made with implementing START and what had helped or hindered this 6 and 12 months after the training. We asked how many family carers they had delivered START to personally, how many other professionals they had trained and their role, and how many family carers had received START in their service in total. We asked who had delivered it. If we received no response within a few weeks, we sent two additional reminder emails unless the participant had moved.

Interviews

We invited Individuals who responded at the one year follow-up to carry out a telephone or face-to-face individual interview or attend a local focus group, whichever was most convenient for them. As others had not responded to multiple emails, we judged it unlikely they would take part in a face to face survey. We used a semi-structured interview guide to explore: if and how START was being delivered; the experience of the healthcare professionals locally when trying to implement START and what they felt would help with future implementation.

Analysis

Qualitative data

We audio recorded all interviews and transcribed them verbatim, removing all identifying information from transcripts prior to analysis. Qualitative data received from the email surveys and telephone interviews was managed, coded and analysed using the qualitative research software Nvivo 9. All data was thematically coded, generating a coding frame from initial interviews using a thematic content analytic approach. Disagreements between the researchers were resolved through discussion and a consensus was reached.

Quantitative data

All quantitative survey data was stored and analysed in Excel and basic descriptives generated.

Results

134 clinical psychologists and 39 Admiral Nurses attended 14 training sessions between October 2014 and September 2015 in London, York, Doncaster, Cambridge, Edinburgh, Teeside, Port Talbot, Leicester and Birmingham.

Workshop feedback

All attendees completed a feedback evaluation immediately after completion of the training session. A summary of themes is presented in Table 1. Attendees were generally very positive about the format and content of the training and suggested that longer training sessions may be helpful in the future. Many individuals agreed that their next steps would be to discuss the intervention with their clinical teams and managers and felt that continued support and contact with the research team would assist in doing this.

<p>What aspects of the training did you find most useful?</p> <ul style="list-style-type: none"> • Discussing implementation / vignette in local groups • Discussing supervision dilemmas • Hearing about the background to START and individuals' experiences of using it in clinical practice
<p>What aspects of the training were least useful?</p> <ul style="list-style-type: none"> • Some of the local discussion about how to implement could have been done back amongst individuals' teams
<p>What specific aspects of the training could be improved?</p> <ul style="list-style-type: none"> • Increase the length of the training, three hours not sufficient • Hearing more from others who have implemented START • Maybe have someone who currently delivers START or a carer who has received START present
<p>What will be your next steps in taking forward the START intervention in your service?</p> <ul style="list-style-type: none"> • Discuss with clinical leads and management • Deliver START myself
<p>What further training/support would enable you to take these next steps?</p> <ul style="list-style-type: none"> • Support from and contact with the research team • Examples of successful bids for funding to support this work • Speak with other services using START

Table 1: Summary of workshop feedback

Survey results

In response to our initial email, 22 automatic responses were received saying that individuals no longer worked at that organisation. Of the remaining 151 original participants, 40/151 (26%) people responded to the request for data across the one year follow-up period; 6 (15%) were Admiral Nurses and 34 (85%) clinical psychologists.

16/ 40 **responding** healthcare professionals who completed the survey have trained a total of 75 other healthcare professionals in using START. Of those 40, 11 have personally delivered

START to 22 carers. Following training of colleagues, a total of 136 carers had received START across 11 different service areas.

	Clinical psychologists	Admiral Nurses	Total
Number of people who attended the training who have personally delivered START to carers	9	2	11
Number of colleagues in the service attendees have trained	75	0	75
Number of carers who have received START	130	6	136

Table 2: Numbers of colleagues trained and carers who have received START

Interviews

13 healthcare professionals took part in semi-structured interviews/focus groups. We conducted 10 semi-structured telephone interviews with clinical psychologists (1 male, 9 female) and one focus group with three Admiral Nurses (1 female, 2 male). 7 of these healthcare professionals were currently delivering START in their services, the details of how are provided below.

Facilitators of implementation (See Table 3 for summary of themes)

In areas where attendees were able to use START, there were a number of key themes identified by healthcare professionals that aided its implementation. These were:

Team sign up to START

Raising awareness about the START intervention and its benefits amongst colleagues, including those who may not be directly involved in delivering it e.g. managers and referrers, was critical to the implementation process.

'We gave the team information and training, not training on how to do it but just information about what we were doing and why we were introducing this and the evidence base. And so, I think they were, they were fine with that as well' [Clinical psychologist]

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'Support from managers and other team members, referrers knowing what START involves, advocating for referrals in team meetings and feeding back 'success stories' to referrers all helped' [Clinical psychologist]

The motivation of the staff generally within the service to deliver START and awareness and recognition of the potential impact of START for carers encouraged implementation:

'And I think just willingness really; you know people want to be doing everything' [Clinical psychologists]

'I think within our service they've supported basically what we think is a good idea' [Clinical psychologist]

Familiarity with psychosocial interventions

Within the psychology services, many of the respondents referred to the existing skill set of their colleagues and their competency in delivering these types of psychological interventions as aiding the implementation of START:

'Certain parts of it [START] that are very kind of familiar to them in the work that we do...I we already had a group of people in our team who are quite skilled and quite used to going out to see people one on one and talking through sometimes quite emotive topics, building links and they didn't need that much support really, in terms of implementing it' [Psychologist]

National and local policy drivers

There were local policy drivers identified that aided the implementation of START locally. Providing support interventions for carers of people with dementia is on the national agenda across the UK, with START being a recommended intervention. Healthcare professionals spoke of the commissioning pressures to show how their psychology services were exploring how to provide such support:

'In terms of commissioning, you need to be seen to be doing these things. So I think it works in START's favour if you know, if it's got good evidence, then people are going to want to do it' [Clinical psychologist]

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6 *'I think there's huge focus now on supporting carers and I think that's probably*
7 *a reflection of me having more one-to-one referrals as well. And more*
8 *acknowledgment really of the emotional, psychological needs of carers rather*
9 *than just the information given. Yes, definitely within my service anyway,*
10 *there's a huge focus now for supporting carers' [Clinical psychologist]*

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16 With carers support on the agenda, in some areas, healthcare professionals spoke of increased
17 funding to provide this locally, with START being one of the ways of doing so:

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20 *'There is direct funding within the council from a dementia stream, for us to be involved in some*
21 *dementia work locally' [Psychologist]*

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25 In one site, having the support from policy makers working on the dementia agenda within the
26 local council fostering inter-agency working with the third sector, facilitated referral of suitable
27 carers for the delivery of START to carers:

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31 *'She [policy officer] already had links with [the third sector] so she had two*
32 *points of contact there, who were then able to drive referrals for her'*
33 *[Psychologist]*

34 35 36 Delivering a modified intervention

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38 Healthcare professionals were trained to deliver and supervise START in the format used in the
39 original trial. A number of services have made the decision to deliver a variant of START for
40 example, as a group intervention:

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44 *'I'm the only psychologist obviously covering quite a large area, I don't have*
45 *the resource to work one-to-one' [Clinical psychologist]*

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49 Despite the lack of evidence that START works this way, these sites felt this was the most
50 effective way to see as many carers as possible and they had support from their services to use
51 this approach. Similarly, in relation to the format of supervision necessary for colleagues
52 delivering START, individuals were adopting less formal arrangements in terms of frequency
53 and this was mentioned as helpful:

'It has been relatively ad hoc... we're actually sitting next to each other all the time , it's really if they've come back, and anything particular that has been difficult, we talk about' [Psychologist]

Access to START resources

The free availability of the START resources both via the website and the research team was helpful to healthcare professionals and encouraged implementation. Additionally, email reminders and regular contact from the research team kept the START intervention in people's minds and on their agenda:

'I think just the fact it's been made very accessible, because I think often with interventions, there's lots and lots of hoops to jump through, and just the fact that all the materials are there, it's really handy really, so that's definitely been positive' [Clinical psychologist]

'Just knowing that there's a contact, so yourself or others that we can contact for information' [Clinical psychologist]

Key facilitators of implementation
Team sign-up to START <ul style="list-style-type: none"> • Raising awareness of the need for the intervention • Staff motivation and recognition of the potential impact of START
Familiarity of psychosocial interventions <ul style="list-style-type: none"> • Existing skill set of colleagues
National and local policy drivers <ul style="list-style-type: none"> • Carers support now on the national agenda • Support from policy makers
Delivering a modified intervention <ul style="list-style-type: none"> • Ability to tailor the intervention to their local arrangements
Access to START resources <ul style="list-style-type: none"> • Free availability of all the intervention resources
Barriers to implementing the START intervention
Lack of time and resources

<ul style="list-style-type: none"> • Times required to set-up the intervention locally • Lack of junior colleagues to deliver the intervention • Service cuts there struggle to provide 'extra' interventions
<p>Lack of buy in and support from colleagues and managers</p> <ul style="list-style-type: none"> • Lack of managerial support for a 'new' intervention • Colleagues not feeling they have the skills to deliver or supervise this type of intervention
<p>Lack of fit with current service context or professional approach</p> <ul style="list-style-type: none"> • Complexity of clients on caseload • Lack of experience delivering such interventions

Table 3: Summary of qualitative themes

Barriers to implementing the START intervention

Based upon the responses received, in three of the geographical areas where individuals attended the train-the-trainers sessions and subsequently trained their colleagues, no carers had received START. Reasons for this were: a lack of appropriate referrals i.e. START was not thought by other professionals to be suitable for their current caseload; other demands on the service and START not being seen as a priority; lack of assistant psychologists to deliver START; the person who attended the START training went on maternity leave and the amount of time needed to set-up the intervention within the service.

Lack of time and resources

Many respondents spoke of the amount of time required to set-up a new intervention within a service and six months after the training session, very few had made any progress with implementation. This was because of the time needed to plan and organise how START would be delivered within the service, including getting colleagues on board, setting up the referral process and agreeing who would be responsible for delivery:

'As this is a 'new' thing (manualised intervention) has taken a long time to get everyone on board, work through all the practical issues of delivery' [Clinical psychologist]

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3 *'It's just taken a few months to get everything up and running' [Clinical*
4 *psychologist]*
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9 *'So this is a new thing really that we've had to, kind of, it's taken us months*
10 *just to get people on board and share our ideas really and organise, even*
11 *practical things, where it'll take place, so yes it has taken us a long time to get*
12 *this far really' [Clinical psychologist]*
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17 At the one year follow-up, this was beginning to change and START was being delivered in
18 some of these areas:
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21 *'It was maybe about a year, a year and a half before it ever actually started to*
22 *be delivered' [Psychologist]*
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26 *'It took so long just to get it off the ground... over a year now' [Clinical*
27 *psychologist]*
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30 An initial consideration for those wishing to implement START locally was who was available
31 within their service to deliver the intervention. Several psychologists, especially those outside of
32 London, reported that there were too few psychologists, usually just one, covering a large
33 geographical area with a very full caseload and so they could not supervise assistant
34 psychologists. In addition, many individuals lacked psychology assistants or alternative junior
35 colleagues within their service:
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41 *'No, in fact it's just one and a half psychologists for the whole service. We*
42 *used to be seven' [Clinical psychologist]*
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45 *'We need more staffing resource. At the moment staff are struggling to do the basics and the*
46 *focus in on assessment and diagnosis, so there is a difficulty in introducing new interventions or*
47 *even in being able to appoint, train and supervise volunteers' [Clinical psychologist]*
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52 Due to current and planned resource cuts within services, a number of participants felt that
53 there was a lack of financial resource available to deliver START and that other demand within
54 the service were currently taking priority:
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'I don't know whether they [the service] would be supportive in terms of ring-fencing time to organise it which is what makes me slightly hesitant about doing this, if you see what I mean?' [Clinical psychologist]

'Not currently seen as a priority given service target pressures and service reorganisations' [Clinical psychologist]

Healthcare professionals spoke of the challenge of balancing this lack of resources with the demand for the START intervention in terms of numbers of carers needing to be seen and the time this would take:

'So I think it's difficult because that would mean extra time that I don't have at the moment' [Clinical psychologist]

'In the memory service, demand outstrips supply, engaging carer's takes a lot of time, as does managing risk issues which arise' [Clinical psychologist]

They also reported that they were struggling to cover all the content of a session within one hour and several felt that asking for eight sessions of their time to deliver the intervention was not going to be possible:

I think that's going to be the crux, you know is it... do people... can they justify eight contacts basically? [Clinical psychologist]

'My manager did think that was an idea... but when she realised it was eight week sessions, not one, she said, no... they're struggling to meet the demands of the assessments they have to make they've got payment by results, so they're struggling already. So to give them something else to do, although they recognise it is a good thing to do, unfortunately it comes down to time and resource' [Admiral Nurse]

Professionals also discussed the perceived limitations of delivering a one-to-one intervention and that other interventions delivered in a group were seen as more cost and time effective (even if lacking evidence of clinical or cost effectiveness):

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3 *'I am involved in interventions for carers and have found delivering these through groups more*
4 *time efficient' [Clinical psychologist]*
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9 *Lack of buy in and support from colleagues and managers*

10 Many healthcare professionals talked about how they had to justify that the START intervention
11 comes within their role and is a worthwhile use of their time. In order to do so it required
12 someone to 'champion' the use of START. Absence of support from a managerial perspective
13 also hindered the implementation of START and priority was not being given to support this
14 process:
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20 *'I battled for it' [Clinical psychologists]*
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23 *I have also not been successful in finding a manager who is interested in taking this up or*
24 *exploring it further. I think that there is a lack of identified need in this area which doesn't help*
25 *[Clinical psychologist]*
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30 Some clinical psychologists who had tried to implement START in their local services felt other
31 team members and management were reluctant to adopt START. The potential reasons
32 included: a lack of interest from colleagues to deliver and provide psychological approaches to
33 support carers; colleagues not feeling skilled to deliver START; or the assumption that they did
34 not have the necessary time or resources to provide START:
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39 *'I didn't have a very good response from CPNs [Community Psychiatric*
40 *Nurses], unfortunately. Some of them don't feel as skilled in that. Some*
41 *people talked about having limited time, other people not really being*
42 *interested in psychological approaches. I think a lot of people probably don't*
43 *have the confidence, they have the skills I think but maybe not the confidence*
44 *to deliver it' [Clinical psychologist]*
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51 *Lack of fit with current service context or professional approach*

52 Several healthcare professionals felt that they were supporting carers with very complex needs,
53 especially those based in Community Mental Health Teams (CMHTs), and that START was not
54 appropriate at that time or did not fit with their professional identity or the ethos of their clinical
55 services. Admiral Nurses also felt that they were very skilled in delivering carers support and
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3 were already providing much of the content of the START intervention without using its
4 structured approach:
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8 *'Admiral Nurse model responds to the highest expressed need of the carer*
9 *and then moves on to other areas, so this very structured programme may not*
10 *fit with that' [Admiral Nurse]*
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14 'For carers that would need this level of input as a team we provide the Educational programme
15 for 5 weeks for carers and a lot of the information is covered within the course... In relation to
16 the carers they tend to react to a situation as it occurs therefore even when we have covered
17 the educational side within our Positive Steps Course we are often back involved as a major
18 caring transition occurs within their role and the focus therefore will be on the emotional support
19 surrounding this particular identified need' [Admiral Nurse]
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25 When discussing staff skills, clinical psychologists felt they had the ability to supervise junior
26 members of staff and that this was a usual part of their role. In contrast, Admiral Nurse
27 participants felt that they have very little supervision experience and this was not part of their
28 current role and did not fit in with their service structure:
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33 *'Not all admiral nurses have got experience in giving supervision. I mean, some have come*
34 *through, and some have been ward managers and team leaders and are used to that*
35 *environment of giving supervision. But that's something that might need some skills*
36 *development if they're going to do that' [Admiral Nurse]*
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40 Discussion

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42 We were able to attract clinical psychologists and Admiral Nurses professionals from across the
43 country to our workshops about the START intervention and they evaluated these positively. We
44 delivered 14 interactive training sessions, for each of which almost 10 family carers received the
45 intervention in the year after training. Despite the cheapness of our project the dissemination
46 may not have been good value. It was certainly not sufficient, as relatively few people received
47 the intervention and the immediate benefit was relatively low. We did not record delivery after
48 this but are aware that the services we worked with are continuing to deliver START and embed
49 it in their services as they frequently contact us in relation to their ongoing work. Developing
50 and evaluating new interventions is expensive but many evidence based interventions are either
51 not implemented in real world practice or implemented after a long time. This small, relatively
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3 inexpensive dissemination study began this process by providing the information, support and
4 materials to clinicians that are necessary, but not sufficient for implementation in local services.
5 We also considered what would help further implementation to inform future work.
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10 Those who attended workshops are likely to have been more open minded and amenable to
11 change. We found that even for those workshop attendees who were highly motivated, it took
12 considerable time to implement the intervention. Some clinical psychologists have said that they
13 wish to implement START by training others but are constrained by the resources available and
14 multiple competing demands on their time. While training assistant practitioners to deliver the
15 intervention could theoretically be a cost-effective way of bringing psychological treatments to
16 more family carers, in practice many clinical psychologists did not have more junior colleagues
17 they could train, so they were unable to change a situation where only a few family carers with
18 very high needs were seen by more expensive, fully trained psychologists. Staff interviewed
19 also reported feeling that the START intervention was more time and resource intensive than
20 usual service provision, for example, delivering a psycho-educational group course; despite
21 evidence suggesting these interventions are ineffective for carer mood (15, 16). In many cases
22 the lesser resource implications and possibly motivation needed to continue with interventions
23 currently being delivered appeared to mitigate against introduction of START, even though
24 these interventions had a lesser evidence base for reducing carer psychological morbidity. This
25 disconnect between research evidence and practice has been highlighted in other areas of
26 dementia research (12) and there is perhaps a need to evidence how START can be effective in
27 a diverse range of service settings to reflect the contexts where family carers are most likely to
28 access psychological support.
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43 It was interesting to reflect on the different experiences of Admiral Nurses compared with clinical
44 psychologists in implementing START. It was evident from our findings that the intervention
45 fitted less well with their ethos, current models of service delivery and professional identity.
46 Although START trials included an Admiral Nurse service there was a reluctance to accept that
47 the evidence base for it applied to the context of their work. Admiral Nurses often work
48 autonomously in senior roles, and do not usually supervise others. Family carers value the
49 service they give which is perhaps more defined by experience than the current evidence base;
50 we think all services would benefit from incorporating current best evidence into their work and
51 will continue to explore ways to encourage all services to implement it.
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3 We did not explicitly ask attendees if they had access to a pool of junior colleagues to train
4 when they signed up for the training, as we prioritised reach and dissemination of START over
5 targeted implementation. However, attendees were informed that the intervention was intended
6 to be delivered by junior colleagues and the attendees were expected to be in a position to train
7 and develop START locally. Those participants who worked in memory clinics and community
8 mental health teams had some junior colleagues but most Admiral Nurses did not.
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11 We experienced many difficulties in finding out what is happening at local sites, if they are using
12 START and how. Our low response rate means we have much less information than planned
13 and we think that it is likely that those who did not respond had not implemented the
14 intervention, although many had moved services and it is possible but likely to be relatively rare
15 that they took their knowledge and skills to their new services. This may be due to the fact that
16 we were asking them to complete an email survey. We invited attendees to get in touch with the
17 research team if they had any queries or issues regarding START, but many did not make any
18 contact following the training. We know from the 22 out of office responses to emails that there
19 is currently a high level of movement within services. Our qualitative evaluation was only from
20 those who had answered to begin with and therefore is likely to include those who were more
21 interested or successful. The complex landscape of service delivery reinforces the need for
22 multi-faceted, targeted, implementation strategies. One of the services which offered START to
23 the most carers was one where local commissioners had been approached and allocated
24 specific resource to set up and deliver the intervention across the borough.
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28 We have made all of our training materials and the START manuals freely available to widen
29 potential access to the intervention for family carers. This means that we have no control over
30 how the intervention is delivered and we had no way of monitoring fidelity although we
31 emphasized its importance. From the feedback we received, a number of sites are using a
32 different format and process to deliver the intervention than that tested in our RCT, for example,
33 delivering in groups or delivering to professional carers. We do not have data on the
34 effectiveness of the intervention when delivered in this way and we have no measure of fidelity
35 or adherence to the original intervention. This raises an interesting question about the
36 implications this may have on the effectiveness of the intervention if not delivered in the
37 intended way with a trade-off between flexibility and treatment fidelity which has been noted in
38 other areas of dementia care (13).
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3 Disseminating START in this 'Train-the-trainer' way is the beginning of the implementation
4 process but by itself we have found that it is not enough to ensure implementation into practice.
5 We disseminated START broadly and provided individuals with the materials they need to train
6 others and set up the intervention locally. This motivated a small group of individuals whom one
7 could characterize as "early adopters" to address barriers and implement START locally for at
8 least some patients. A range of top down and bottom up approaches are needed to implement
9 more broadly. As sites are deviating from the original study design as to how and by whom
10 START is delivered, exploring further who are the right people to be delivering START locally,
11 future implementation should evaluate fidelity or in its absence outcome. Our in-depth case
12 studies of 'real world' implementation in a variety of settings may help other areas implement
13 START. This work would also allow us to look further into the role of specialist professionals
14 such as Admiral Nurses as their model of delivery is very different from clinical psychology and
15 they tend not to work in a team structure with junior colleagues. Interventions are more likely to
16 be implemented when there are resources available, the staff see there is a benefit and they
17 feel it provides value (14). Our next step is to take a more tailored approach to START and to
18 lay the foundation to deliver it in other contexts, for example outside the health system or to
19 different ethnic groups.
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36

37 **Author's contribution**

38
39 Gill Livingston (GL) was chief investigator for the project grant. Penny Rapaport (PR) and
40 Claudia Cooper (CC) were grant co-investigators. PR delivered all the START training to
41 healthcare professionals and Kathryn Lord (KL) organized the training sessions and completed
42 the qualitative interviews and data collection. KL, PR and GL analyzed the qualitative interview
43 data. KL wrote the first draft of the paper. All authors (GL, PR, CC and KL) revised the paper
44 critically.
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50 **Data sharing statement** No additional data are available.
51

52 **Statement of funding**

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56

57 **Declaration of interest**

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PR, GL and CC developed the original intervention and were co-applicants in the RCT.

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Structure of STRategies for Relatives programme

Introduction

- Learning about dementia, stress in carers, and understanding behaviours of the recipient of care.

Discussion

- Discussion of behaviours or situations that carers found difficult, incorporating behavioural management techniques, skills to take better care of themselves (including changing unhelpful thoughts), relaxation, increasing and assertive communication, promoting acceptance, sources of emotional support, and positive reframing.

Future needs of the family member with dementia

- Information about care and legal planning, specifically adapted to the United Kingdom. We gave the carers information leaflets about making common decisions as appropriate at an individual level.

Planning pleasant activities

- This used the idea that it is possible, beneficial, and pleasurable to incorporate small pleasant activities into a caring day.

Maintaining skills learnt over time

- In the last session the carer identified which techniques they found helpful and made a plan about what to continue for the future. Carers were given homework tasks to complete between sessions, including relaxation, identifying triggers and reactions to challenging behaviours, and identifying and challenging negative thoughts. The therapist and the carer both had a manual and the carer filled in and kept their own manual. Relaxation exercises used in sessions were recorded on a CD and given to the carers. We defined adherence to therapy on clinical grounds as participating in five or more sessions.

Box 1: Structure of STRategies for Relatives programmes

General overview	Specific content and process
Introductions aims, objectives and attendees hopes for the session	<p>Specific objectives:</p> <ul style="list-style-type: none"> • To provide brief overview of evidence base for psychological interventions with family carers • To outline the START intervention and the RCT • To summarise the training & supervision processes • To consider the challenges / dilemmas in training and supervising others to deliver START • To consider how the START could be developed in local service settings
Overview of evidence base for psychological interventions with family carers and introduction to the START intervention	<ul style="list-style-type: none"> • Clinical and policy context for interventions • Current evidence base • Overview of START intervention • Discussion of how START fits with work local and individual work context (Attendees asked to read intervention sessions in advance)
Training and supervising others to deliver the START intervention	<ul style="list-style-type: none"> • Overview of training processes in RCT (Attendees provided with all training materials to adapt for local use) • Large group exercise on the challenges and dilemmas in training others to deliver START. • Small group exercise using clinical vignettes on the supervising others to deliver START, focus on responsibilities of supervisors
Considerations for implementing START in local services and initial action planning	<ul style="list-style-type: none"> • Local service discussion of setting up the intervention in local services, including: <ul style="list-style-type: none"> • Resources available • Referral pathways - How? Who? When? • Assessment process • Training processes • Supervision arrangements • Risk management • Practical issues - When? Where? • Evaluation / measures • Identification of potential barriers and solutions • Identifying first steps in implementation
Final questions and comments	<ul style="list-style-type: none"> • Website / available materials and follow up support explained • Evaluation completed and future evaluation explained

Box 2: Overview of training sessions

	Item	Guide questions/description	Page
Domain 1: Research team and reflexivity			
Personal Characteristics			
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?	Not included
2.	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i>	Page 1
3.	Occupation	What was their occupation at the time of the study?	Page 1
4.	Gender	Was the researcher male or female?	Page 1
5.	Experience and training	What experience or training did the researcher have?	Not included
Relationship with participants			
6.	Relationship established	Was a relationship established prior to study commencement?	N/A
7.	Participant knowledge of the interviewer	What did the participants know about the researcher? <i>e.g. personal goals, reasons for doing the research</i>	Page 4/5
8.	Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? <i>e.g. Bias, assumptions, reasons and interests in the research topic</i>	N/A
Domain 2: study design			
Theoretical framework			
9.	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? <i>e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis</i>	Page 6
Participant selection			
10.	Sampling	How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i>	Page 4/5
11.	Method of approach	How were participants approached? <i>e.g. face-to-face, telephone, mail, email</i>	Page 4/5
12.	Sample size	How many participants were in the study?	Page 6/7
13.	Non-participation	How many people refused to participate or dropped out? Reasons?	Page 6/7

Setting			
14.	Setting of data collection	Where was the data collected? e.g. <i>home, clinic, workplace</i>	Page 5/6
15.	Presence of non-participants	Was anyone else present besides the participants and researchers?	N/A
16.	Description of sample	What are the important characteristics of the sample? e.g. <i>demographic data, date</i>	Page 6/7
Data collection			
17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Page 5/6
18.	Repeat interviews	Were repeat interviews carried out? If yes, how many?	N/A
19.	Audio/visual recording	Did the research use audio or visual recording to collect the data?	Page 6
20.	Field notes	Were field notes made during and/or after the interview or focus group?	N/A
21.	Duration	What was the duration of the interviews or focus group?	Not included
22.	Data saturation	Was data saturation discussed?	No
23.	Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No
Domain 3: analysis and findingsz			
Data analysis			
24.	Number of data coders	How many data coders coded the data?	Page 6
25.	Description of the coding tree	Did authors provide a description of the coding tree?	Page 11/12
26.	Derivation of themes	Were themes identified in advance or derived from the data?	Derived – Page 6
27.	Software	What software, if applicable, was used to manage the data?	Page 6
28.	Participant checking	Did participants provide feedback on the findings?	N/A
Reporting			
29.	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. <i>participant number</i>	Page 8-16
30.	Data and findings consistent	Was there consistency between the data presented and the findings?	Yes Page 6-16
31.	Clarity of major themes	Were major themes clearly presented in the findings?	Page 6 - 16

32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	N/A
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For peer review only