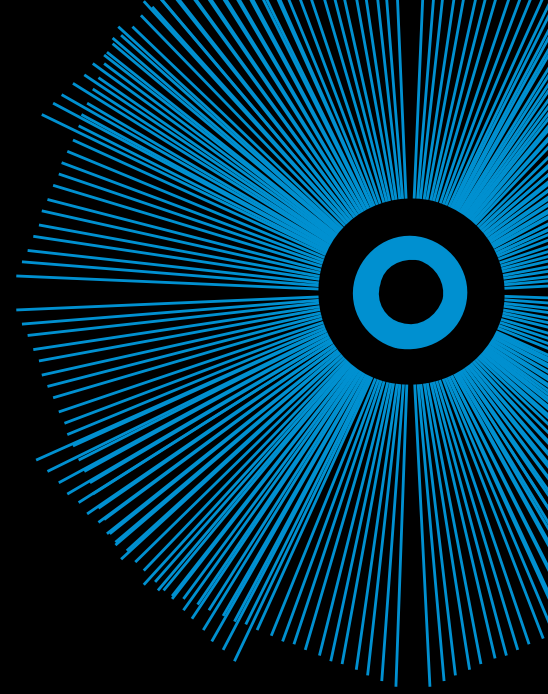




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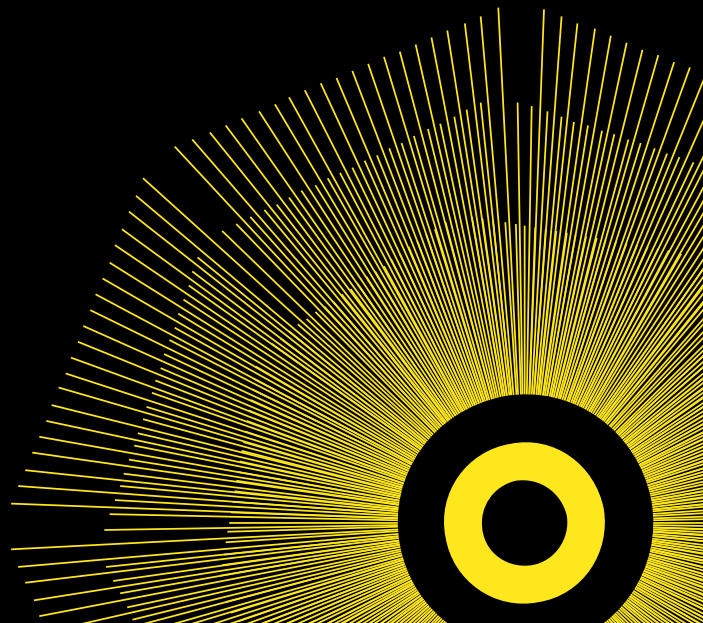
Shine 2014 final report

ACT Now!

NHS Grampian

September 2015

The Health Foundation
Tel 020 7257 8000
www.health.org.uk



Project title: ACT Now! Guided Self-Help to Improve Self-Management and Emotional Wellbeing in Adults with Type 2 Diabetes

Lead organisation: NHS Grampian

Partner organisation: University of Aberdeen

Lead Clinician: Dr Kirsty MacLennan, Project Manager

Abstract

Background and Aim

- About 45% of people with Type 2 diabetes do not achieve optimal diabetes control.
- Despite good quality education, many still do not change important health behaviours that influence blood glucose levels and health outcomes, e.g. their activity levels and diet.
- Two significant barriers to better diabetes control are anxiety and depression. Both are associated with poorer control. Simply treating anxiety and depression using standard methods is successful in improving emotional wellbeing but does not lead to better self-management.
- The aim of our innovation was to design and evaluate a brief guided self-help programme to promote self-management and treat mild to moderate anxiety and depression, if present, in adults with Type 2 diabetes who were struggling to effectively manage their condition.

Intervention

- ACT Now! is a brief, manualised psychological intervention based on the principles of acceptance and commitment therapy (ACT). The approach is to help people understand that health is intimately entangled with the most important aspects of their lives. In this way, the motivation to self-manage is no longer health itself, but rather the vital parts of peoples' lives.
- ACT Now! consists of between 5 to 8 appointments and a similar number of web-based modules. Weekly collaborative goals are set to promote changes in health behaviour and improve emotional wellbeing.

Results and Impact

- We recruited 35 people to ACT Now! and 27 have completed the programme. All participants last HbA1c value was within the top 40% of the Grampian Type 2 diabetes population (≥ 61 mmol/mol).
- There were no significant differences between our sample and the overall Type 2 diabetes population on age, sex, time since diagnosis, BMI, and deprivation.
- Fitbit readings indicated that participants walked significantly further ($p < 0.001$; $d = 0.45$) following the programme (on average 11, 213 steps/ week; ~ 5.6 miles).
- Post-ACT Now! participants had significantly lower levels of anxiety ($p = 0.004$; $d=0.53$), depression ($p = 0.003$; $d=0.53$) and diabetes-related distress ($p < 0.001$; $d=0.56$).
- Qualitative interviews indicated participants found ACT Now! engaging, acceptable, attractive and helpful.

Challenges

- The hosting of the website, administrative support and Fitbit costs had not been budgeted for and therefore we had to rely on goodwill and other funding.
- Our original IT providers were unable to offer their services and we had to engage two providers to develop the website which was time consuming.
- Delivering this innovation as a quality improvement approach constrained our communication with care providers, and this in turn limited their knowledge of the impact of ACT Now!

Learning

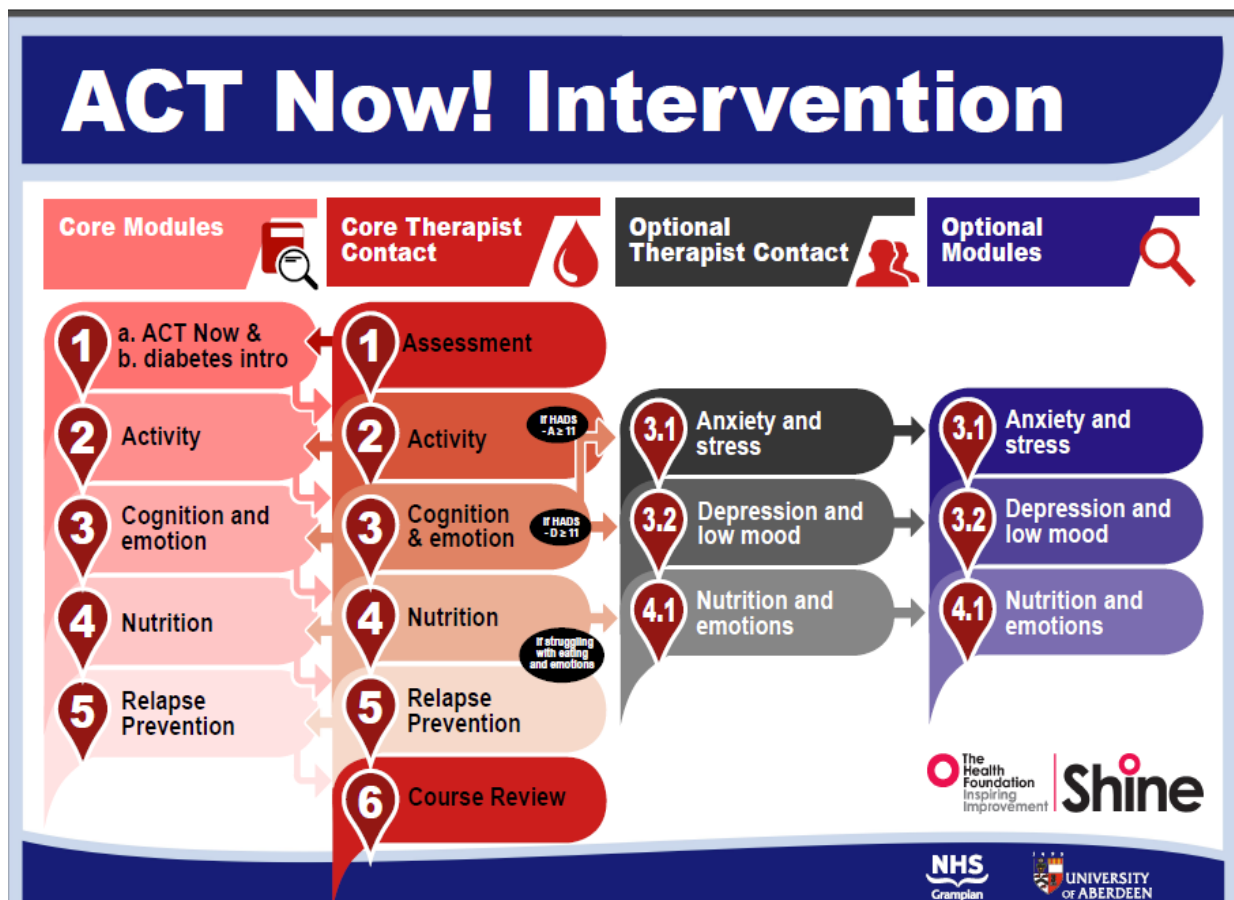
- Establishing a comprehensive multi-disciplinary project team with clear responsibilities was crucial to support progress.
- Successful engagement of primary care through effective communication and existing relationships was essential to facilitating recruitment.
- ACT Now! delivered an unmet need, so healthcare practitioners and participants were extremely grateful for access to help and support. There is potential to spread to other conditions.
- Fitbits were well received by participants and provided accurate daily step counts.

Part 2: Quality Impact: Outcomes

Intervention

ACT Now! consists of 5-8 face-to-face meetings. All meetings are complimented by web-based modules (see figure 1) modules recap and reinforce the weekly educational discussions at the 1:1 consultations using expert and service user video material, and extra educational resources. 5 modules focus on self-management and health-related behaviours and 3 on anxiety, depression, and emotional-eating and a user manual (see appendix 2A).

Figure 1. An overview of the core and optional 1:1 meetings, web-based modules.



All web-based modules are designed in a similar way and contain sections on:

1. Revisiting and reinforcing the educational material discussed during face-to-face meetings
2. Links to sources of further information for those who would like to find out more about educational themes and topics
3. Brief expert advice from experienced health professionals
4. Top Tips from health professionals and service users with Type 2 diabetes about changing health-related behaviours and improving emotional wellbeing

Two examples of the content of the web-based modules are illustrated in appendix 2B. Screenshots of the website are in appendix 2C.

Recruitment

We recruited adults with Type 2 diabetes from primary and secondary care, whose glycaemic control was among the poorest 40% of our local population (HbA1c \geq 61 mmol/mol). In total, 5 general practices participated in this project. GPs agreed to write to people in their practice who met our criteria, and they could then self-refer, via email or phone, if they wished to find out more. We also made available posters and leaflets in participating practices and in the secondary care diabetes clinic (see appendix 2D).

Measures

We administered a range of validated inventories, collected routine data, and conducted qualitative interviews to evaluate our intervention (see figure 2 for flow diagram). We used postcodes to generate the Scottish Index of Multiple Deprivation (SIMD) quintiles, which is a measure of socioeconomic status.

Feasibility

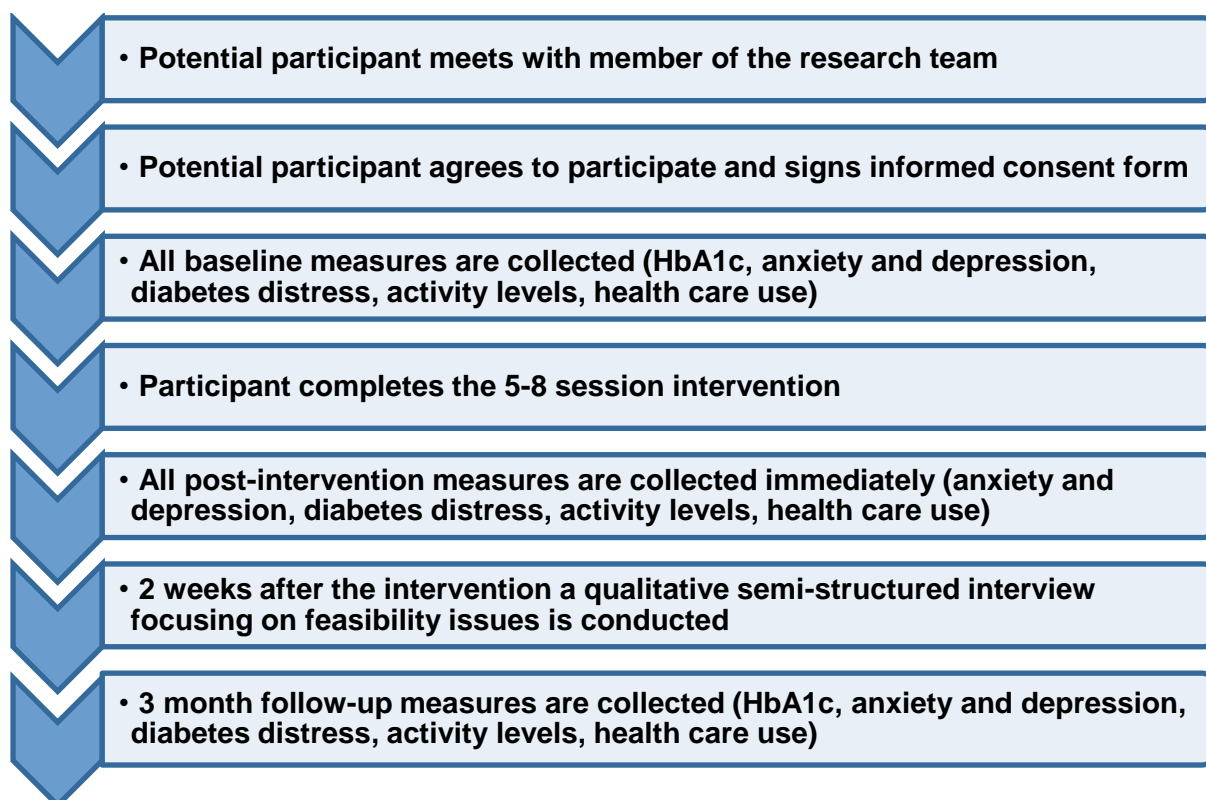
We were keen to establish the extent to which ACT Now! was deliverable, acceptable and attractive to people with Type 2 diabetes. To this end, we recorded simple counts of the numbers of letters sent and the number of people who finally participated, and the frequency with which participants completed the programme. We also conducted qualitative interviews using a Normalisation Process Theory (NPT) framework, an approach especially designed to establish real-life utility of innovations.

Effectiveness

The key measures we used to evaluate whether ACT Now! resulted in the improvements we anticipated were:

- Fitbit weekly step count
- Scottish Physical Activity Screening Question (Scot-PASQ) ¹
- Hospital Anxiety and Depression Scale (HADS) ²
- Problem Area in Diabetes (PAID) ³

Figure 2. Flow of consent, intervention and timing of measurements



Results

Participation, Emotional Wellbeing & Activity Levels

35 participants were recruited to ACT Now! Of these, 27 (77%) have completed the programme, and 5 (14%) are continuing to progress through ACT Now! 3 (9%) dropped out. Most participants were recruited from primary care (29, 83%). A total of 369 letters were sent by general practitioners, indicating a positive response rate of 8%. 80% percent of participants had co-morbid medical conditions. 57% of participants were male. Additional demographic data (age, HbA1c, BMI, years since diagnosis and SIMD) for the total sample (N=35) recruited and those with post-treatment data (N=27) are illustrated in table 1 and 2.

Table 1. Participant demographics

Parameter	Mean (SD) N=35	Mean (SD) N=27
Age in years (mean, SD)	64.0 (9.2)	63.7 (9.8)
HbA1c (mmol/mol),	85.0 (23.0)	84.4 (22.5)
BMI	32.4 (7.3)	33.4 (7.5)
Years since diagnosis	9.8 (5.1)	9.7 (5.4)

The pre- and post-treatment comparisons we report herein relate to the 27 participants who have completed the programme. We had post-treatment HbA1c data on 17 of these participants.

There were no significant differences between participants and the overall Type 2 population in Grampian (N=23 829) in terms of age; sex; time since diagnosis; BMI, and deprivation.

Table 2. The percentage of people falling in the five deprivation quintiles

Group	SIMD (%)				
	1 Most Deprived	2	3	4	5 Least Deprived
All participants*	11.4	22.8	11.4	22.8	28.6
ACT Now! Completers	14.8	22.2	11.1	25.9	25.9
Local T2 population**	7.0	13.9	25.4	27.6	25.3

*n=34 **99% of local T2 population

The results of comparisons between pre- and post-intervention activity levels and emotional wellbeing are illustrated in table 3. Fitbit data indicated that participants walked on average 11,213 steps per week further post-ACT Now! which is equivalent to about 5.6 miles. Post-treatment HbA1c values fell by 6.8 mmol/mol or 0.6% compared to baseline.

Table 3. Analysis of pre- and post-intervention activity levels and emotional wellbeing

	<i>p</i>	<i>d</i>
Activity		
Fitbit Weekly Steps	<0.001	0.45
Scot-PASQ	0.003	0.64
Emotional Wellbeing		
HADS Anxiety	0.004	0.53
HADS Depression	0.003	0.53
PAID Diabetes-Related Distress	<0.001	0.56
Diabetes Control		
HbA1c	0.055	0.24

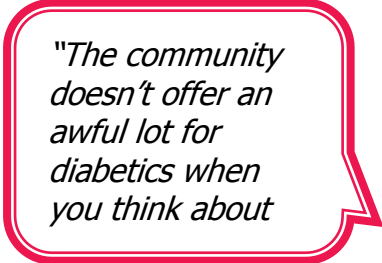
Participants' Views

Methods

We conducted 12 semi-structured interviews using a NPT framework with participants who had completed ACT Now! NPT provides a fairly sophisticated account of participants' views on research projects and novel innovations using a pre-determined framework. Questioning and analysis are framed under the themes Coherence, Collective Action, and Reflexive Appraisal. We present our findings in so far as we can using lay terms.

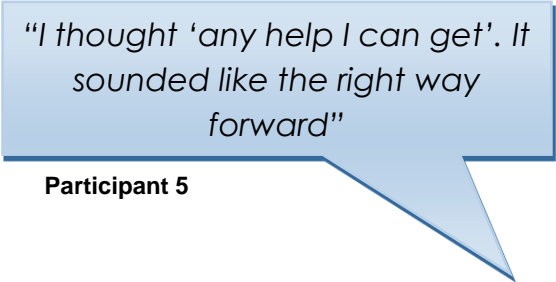
Understanding of the project

Overall, participants tended not to understand especially well what ACT Now! was about. They did have a sense however that they needed some help and moreover that there were limited if any options available to them. However, in hindsight participants had a sense that the programme built-up knowledge and skills, whilst encouraging people to take ownership of their lives.



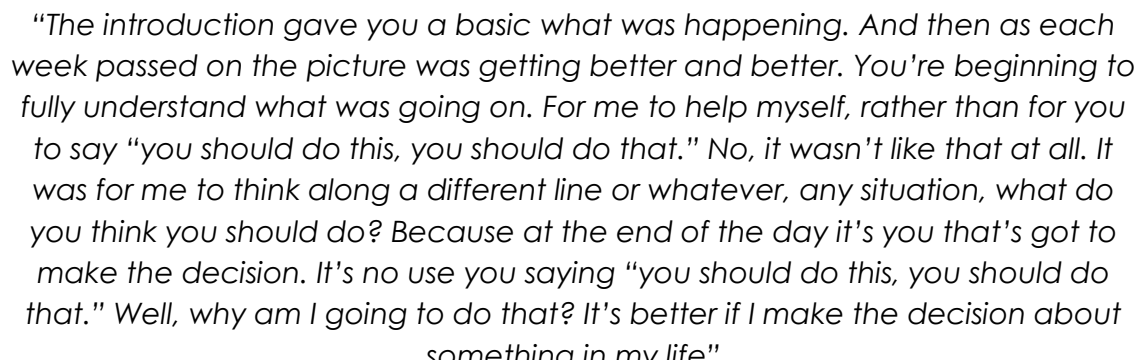
"The community doesn't offer an awful lot for diabetics when you think about

Participant 7



"I thought 'any help I can get'. It sounded like the right way forward"

Participant 5



"The introduction gave you a basic what was happening. And then as each week passed on the picture was getting better and better. You're beginning to fully understand what was going on. For me to help myself, rather than for you to say "you should do this, you should do that." No, it wasn't like that at all. It was for me to think along a different line or whatever, any situation, what do you think you should do? Because at the end of the day it's you that's got to make the decision. It's no use you saying "you should do this, you should do that." Well, why am I going to do that? It's better if I make the decision about something in my life"

Participant 3

Recruitment via GP

It was clear that participants highly valued the fact that ACT Now! was endorsed by their GP through the introductory letter, and they found access to the 1:1 sessions straightforward.

"Something coming from your GP, you know it's genuine. Whereas a leaflet, as you'd call it, coming in through the door, you would sort of just read it and it'd be for the bucket."

Participant 1

Change Their Life

Participants frequently commented that ACT Now! had encouraged them to change their life.

"Seeing how many steps I'd done was the incentive because you had to reach 10,000 for your day's goal. To start with my average was just about five, then it went up to the ten. Because I was including the evening as well. Just generally one day we went for a walk along the prom, and said just rather than sit with my grandson, because we were babysitting, it was quite a nice day, I thought "instead of sitting here and letting him play..." which I'm on the go with him the whole time in the house, but because it's just a step here and a step there I thought "I'm not going to build up any steps doing that" so we took him a nice long walk along the prom. And that was a conscious decision because I wanted to earn more steps."

Participant 2

"[Arranging appointments] was easy. Because I was asked when I wanted to come here, and then when I packed in my job any time was going to be suitable anyway so that didn't really matter. I stay in Cove, and I made the appointments part of my walking routine to make sure I got here in time for my appointment then finished off my walk then."

Participant 7

"I actually learned what I should do and what I shouldn't do. And it made me feel better, made me feel good, and made me aware of"

Participant 9

I took it on. If you're going to take something on, you've got to do one of two things, you've either got to say to yourself "right, I'm going to do it. It's eight weeks, what's eight weeks? Nothing." Or just say "forget about it, I don't want to do it." There's no ifs or buts. You either want to do it or you don't want to do it, end of story. I wanted to do it, I enjoyed it. To me it wasn't only helping things to progress in your way, it was fun to me and I enjoyed it."

Participant 1

"She's also made me more conscious of what I was eating, trying to reduce the portions. And she's also made me conscious of trying to keep up the wee bit of exercise I am doing. So in that respect it's helped. Just carrying on, keep up that goal. I think about it rather than sit back and watch the telly. That's my thing. I don't go out a lot, basically watch the TV, that's what I would term as a hobby. So while I'm watching the TV I can now do the steps as well."

Participant 2

Recommend to others

Most participants explicitly stated that they would recommend ACT Now! to others in similar situations. All indicated that the time and effort they had invested was worthwhile.

Suggestions for improvement

Participants offered few ideas on how we could improve ACT Now! when prompted.

However, we did have a few suggestions about possible ways of improving the website and other topics that could be included in the intervention.

"Oh, aye. If they were wanting to try to improve their way of dealing with diabetes it would help some people. It might not help others. It depends on

Participant 3

"The content was fine. I'm not a web-designer, as such, so it was fine. Maybe the menus could have been slightly better...maybe just a better way to navigate because you go all the way down, you know, you get lost and they close when they shouldn't, and that kind of thing. It's maybe a bit of a new structure. Just a better way to view it rather than anything else."

Participant 5

Part 3: Cost impact

Background

Although this is a quality improvement innovation, cost-effectiveness and cost-savings are an imperative aspect of NHS provision. This is especially important as diabetes accounts for about 5% of total NHS costs and about 10% of total inpatient costs.

Evaluating the cost-effectiveness of ACT Now! and making comparisons to alternative interventions broadly designed to do a similar job is challenging for a number of reasons, including because:

- Standard healthcare for people with Type 2 diabetes generally focuses on information provision
- Few if any routinely provided interventions designed to promote self-management, **and** decrease anxiety and/or depression
- Most participants were multimorbid and therefore a large number of professionals were involved in their care
- Economic analysis such as that for the Improving Access to Psychological Therapy (IAPT) programme generate overall (all-in) costs
- It was outside the scope of the project to employ a health economist to conduct sophisticated modelling

Intervention Costs and Example Comparators

The overall project budget was £71,766. Much of this was associated with the staff time required to ensure the development of the programme, and engaging with decision-makers, particularly in primary care, to maximise the chances of recruiting sufficient participants.

Table 4 illustrates the costs of using a trainee health psychologist and the direct staff costs of a wellbeing practitioner in the IAPT programme. Both could broadly be described as delivering a low intensity intervention, although the former had a broader range of responsibilities than would be allocated to the former.

Currently in Scotland, as part of a European Union funded project called Mastermind, 6 health board regions have access to the Beating the Blues CCBT programme. The overall cost per patient is about £50. This is almost certainly artificially low. Ultrasix, who own the programme, have temporarily massively reduced the cost of their licences. Previously, NHS Tayside alone paid £44,000 per annum for their licence whereas the current tariff across the 6 boards is £72,000. All concerned expect a steep rise following completion of the Mastermind project.

Our intervention compares fairly favourably then to low intensity mental health interventions. However, standard treatments for depression seem to be effective in raising mood in people with diabetes but do not improve self-management or physical health outcomes.^{4, 5} Furthermore, national clinical guidance recommends high intensity psychological therapy for people with mild to moderate depression where co-morbid physical health problems are present.⁶ The latter would incur greater costs than highlighted above for low intensity therapeutic interventions.

Any scaling-up in our region would incur no additional web-hosting costs, and there is the potential that a shared resource could be used nationally in Scotland. As healthcare is devolved in the UK, it is likely that any expansion beyond national level would require individual Trusts to arrange their own hosting and meet these costs.

Continuation costs are discussed in part 5.

Table 4: Cost of ACT Now! intervention delivery

	Intervention delivery practitioner	Hourly rate(inc. employer on costs)	Average number appointments/ participant	Cost/ participant assuming 60 minute appointment
Shine 2014 ACT Now!	Band 6 (Trainee Health Psychologist)	£16.64	5.7	£95.50
Spreading ACT Now! nationally	Band 5 (Psychological Wellbeing Practitioner in the Improving Access to Psychological Therapies (IAPT))	£14.32	5.7	£74.46

Part 4: Learning from your project

Overall, the project generally achieved what it set out to do and there were many factors which ensured its success. However, we have along the way become aware of important issues that would inform our ability to run successfully a similar project and to continue to facilitate the use of the ACT Now! programme.

Enablers

There were a number of key aspects of our proposal that proved essential to our successes. These mostly concerned the people we were lucky enough to attract on to our steering group, our existing network of relationships in our organisation, and recruiting a high calibre trainee health psychologist to deliver the 1:1 sessions.

Particularly worth highlighting are the facts that:

- We had a senior GP on the steering committee who paved the way for us to engage successfully with multiple primary care practices
- Our project manager is embedded within the local diabetes team and therefore we had easy access to experts who provided input in to the ACT Now! programme
- The University of Aberdeen Medi-CAL Unit who helped develop our web programme have an international reputation for expertise in this area
- The structure of our NHS Grampian Diabetes Managed Clinical Network system meant that primary and secondary care collaboration was already fairly advanced before ACT Now! was initiated
- ACT Now! delivered to an unmet need, so healthcare practitioners and participants were extremely grateful for access to help and support
- The Scottish Mental Health Research Network adopted our project and among other benefits this meant we were provided with a researcher who could genuinely independently conduct all interviews with participants and staff
- Our decision to use and self-fund Fitbits proved wise as they were well received by participants and provided accurate daily step counts

Challenges

There were a number of challenges and a number of these relate to a degree of financial naïvety, and others to the fact that we had to run our project as a quality improvement approach research study to enable a reasonable level of evaluation.

There were a number of costs that were covered internally or we managed to get free as a one off. These included:

- Design of the ACT Now! website
- Fitbits
- Research assistant to independently conduct qualitative interviews with participants
- Administrative support especially in primary care to facilitate recruitment

Delivering our innovation as quality improvement approach constrained our project somewhat. For example, recruitment was more cumbersome than is typically the case in our routine practice, where people simply self-refer and phone to make appointment times to suit themselves.

Moreover, our research protocol meant that as per common practice, GPs and consultant diabetologists were only informed that their patients were participating in our study. This is in

marked contrast to our usual practice of writing an assessment and closing letter, with the latter detailing therapeutic outcome. The result of this was that frontline clinicians were not especially engaged with our work, nor were they aware of the excellent progress many of their patients had made. This in turn meant that our qualitative interviews with health professionals were less informative than we had hoped.

This situation was compounded by our method of recruiting in primary care. We chose the simplest administrative way of raising awareness of our project, which was to ask practices to search their databases for people who met our criteria. A GP then signed our standard letter before it was posted along with further information and our contact details. Ordinarily, frontline staff discuss face to face with patients the nature our service and how they think we may help.

In retrospect, we would have tried to gain consent from participants to write assessment and end of treatment letters to GPs and diabetologists. We would also like to have trialled embedding ACT Now! as a routine service especially in primary care, and experimented with how best health professionals could signpost to this service.

Part 5: Plans for sustainability and spread

Sustainability and Spread

It is an acknowledgement of the project success that we have received agreement from NHS Grampian to continue funding ACT Now! for at least another year.

Continuation Costs

Clearly, all organisations have running and other hidden costs that are difficult to estimate. In our calculations below, we put these aside, and assume no further development costs will be required, at least if it continues to be delivered only to adults with Type 2 diabetes.

To ensure future delivery of ACT Now! there are two direct recurring expenses. These costs are associated with the:

1. Salary of the ACT Now! practitioner to deliver the face-to-face sessions
2. Hosting of the web-based programme

In the 12 months following the discontinuation of Health Foundation funding, NHS Grampian will meet these costs. This amounts to a total of £43,320 (£42,320 for staff and £1,000 to Aberdeen University for hosting). Ongoing evaluation, supervision costs and any time dedicated by the steering group to facilitating successful implementation in to routine care will be absorbed by NHS Grampian. Finally, we have applied to NHS Grampian Endowment Fund to fund 100 Fitbits, worth approximately £5,000.

There are a variety of ways in which we plan to sustain and spread our innovation. These include:

- Embed signposting to ACT Now! in the 5 general practices already engaged with our project
- Facilitate engagement with 10 further general practices in our region
- Develop e-postcards consisting of brief clips of participants who have used ACT Now! and details how to self-refer
- Visits to primary care during Protected Learning Times to discuss ACT Now!

We plan to disseminate learning and knowledge of our innovation outside our region. For example, we are going to:

- Present at the Diabetes UK 2016 event and other national events
- Communicate our results with Scottish Diabetes Group, charged with overseeing the strategic delivery of care to people with diabetes in Scotland on behalf of the Scottish Government
- Strengthen relationships with the Scottish Mental Health Network to facilitate further collaboration and spread

The project team are eager to build on the early evidence of the benefits of ACT Now! by reviewing the programme to achieve further improvements. The options include:

- Further refining of ACT Now! to strengthen its use in the Type 2 diabetes population
- Further develop the programme to meet the needs of other LTCs many of which would benefit from similar self-management behaviours as Type 2 diabetes (particularly, changes in activity levels and diet)

Regardless of the applicability of ACT Now! to the Type 2 diabetes population or other LTCs, further funding will be required to sustain and spread our innovation. Recently, we have begun fruitful discussions with potentially interested stakeholders. These stakeholders have included the leaders and decision-makers in the Integrated Joint Partnerships (bodies charged with overseeing the integration of health and social care, and absorb responsibility for much of health care provision locally). We have also had preliminary discussions with NHS Education for Scotland.

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Appendix 2. Resources from the project

Appendix 2A. Examples of pages from the user manual.

SESSION 2: THOUGHTS AND EMOTIONS

Tasks for this week

- Identify one important value that isn't as present as you would like it to be in your life and make a plan to increase this and your activity levels using the ACT Now! Planning sheet (blank sheets are available at the back of this manual)
- Carry on using the pedometer
- Log in to the website to watch the online Thoughts and Emotion module
- If going on to session 2A:
 - Complete pleasant events thought record (see page 19)
- If going on to session 3:
 - Take photos of your main meals **or**
 - Record what you are eating on daily basis by completing a basic food diary (see page 20)

Thoughts, Emotions, Body Sensations & Behaviour

Thoughts, emotions, sensations in our body and the way we behave almost always go together. So, for example, we rarely have happy thoughts when we are feeling thoroughly miserable, and vice versa. We usually don't separate them as in figure 1, and for many people they are all part of the same experience.

Top Tips

There are some simple things that we can all do that often help us eat the amount of food we want, and make unplanned, mindless eating less likely.

- **Try to clear away any food from sight as soon as you can after eating.** People who have food such as leftovers lying about in their kitchen, end-up eating almost twice as much compared to when they clear food away.
- **Think about the portion size.** People over estimate how hungry they are and how much food they need to feel full-up. Try serving a smaller portion on a smaller plate and see how you get on. Lots of research has shown people feel satisfied and manage very well with smaller portions.



- o Even adding only 100 calories per plate per day could result in weight gain of 10lbs in a year. 100 calories is equivalent to about 2 small sausages, one medium boiled potato, and 1/2 cup of peas! To use up 100 calories it takes about 34 minutes of walking, 29 minutes of hovering, and 16 minutes of swimming.

Planning for the Future

Difficult times are inevitable for all of us, especially if we do our best to engage with life. Also, for most of us there will be times when we take a step backward because none of us are perfect all of the time. At these times, we can easily revert to old habits that are often unhelpful (see figure 3).

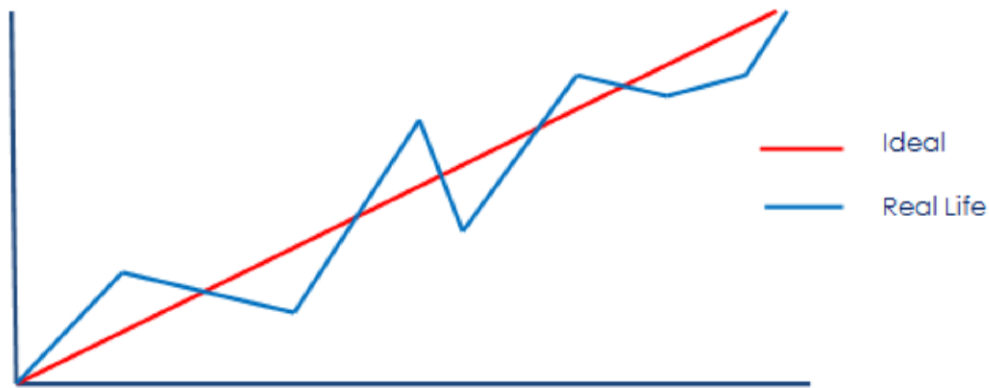


Figure 3 Changing our behaviour is rarely steady progress week after week, rather more often a number of steps forward and a few back

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2. What are the things that I do in my life that relate to my values (up activities)? These things bring meaning and happiness to our lives. When we go through difficult times, we often struggle to carry on doing these activities. The thing is they protect and nurture us. It is never more important to keep up these activities than at tough times, hard as that may be.

You might want to think about asking family members or close friends to be part of your early warning system. It is often people closest to us who are best at spotting when things aren't going so well.

It might be helpful to remind yourself of the **metaphor about flying a small plane** which highlights the fact that especially in the longer-term small changes can make a big difference.

Imagine that you were captain of a small plane. It's December, and you love the sun but you are heading out of Aberdeen on a course of 280°. That means you are heading for Newfoundland, Canada in the winter and a daily average temperature of -6°.

A small shift of only 10° so that you were heading on a course of 270° would mean that you hit land in Cuba. If you managed to make this small change that may initially seem meaningless, then you will be met with an average daily temperature of 23°, rather than -6°!

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Planning for the Future

Difficult times are inevitable for all of us, especially if we do our best to engage with life. Also, for most of us there will be times when we take a step backward because none of us are perfect all of the time. At these times, we can easily revert to old habits that are often unhelpful (see figure 3).

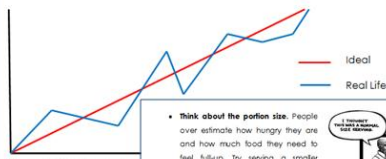


Figure 3 Changing our behaviour rather more often a number

- Think about the portion size. People over estimate how hungry they are and how much food they need to feel full-up. Try serving a smaller portion on a smaller plate and see how you get on. Lots of research has shown people feel satisfied and well with smaller



As is generally the case in psychological interventions, when helping people manage stress and anxiety, we move people toward whatever makes them feel uncomfortable and help them develop confidence in their ability to deal with difficulties.



Figure 6 The imbalance that lies at the heart of stress and anxiety

Adding only 100 calories per plate per day could result in a gain of 10lbs in a year. 100 calories is equivalent to about 1 sausage, one medium boiled potato, and 1/2 cup of to use up 100 calories it takes about 34 minutes of walking, 15 minutes of jogging, and 14 minutes of swimming.



SESSION 2
AIMS
 1. Provide a foundation for understanding the relationships among thoughts, emotions, body sensations, and health-related behaviour
 2. Appropriately increasing value-based activity levels
 3. Strive to enhance health behaviours and values

task is to review the previous meeting and address any questions or concerns. The previous meeting consisted of:
 providing a foundation for understanding ACT and values-based action
 agreeing a SMART, values-based activity goal to achieve between sessions
 an invitation to watch and listen to the Activity modules
 the task of this session is to help people understand the four discrete elements of experience (cognitions, emotions, body sensations, and actions), and how they relate to one another. It is also important that the previous knowledge is applied to values-based living.

The way we begin to raise awareness of the components of experience is by a fairly simple exercise called "walking down the street". Draw on the whiteboard four columns headed: 1) Thoughts; 2) Emotions; 3) Body symptoms, and 4) Behaviour.

SESSION 28: LOW MOOD AND DEPRESSION

Tasks for this week

- Identify one important value that isn't as present as you would like in your life and make a plan to increase this and your activity level. Use the ACT Now! Planning sheet (blank sheets are available at the back of the manual)
- Carry on using the pedometer
- Watch the Low Mood and Depression Module
- Either do a 10 minute mindfulness activity or complete the self-directed tasks
- Take a walk

Imagine that you were captain of a small plane. If it December, and you love the sun but you are heading out of Aberdeen on a course of 280°, that means you are heading for Newfoundland. Consider in the winter cold a daily average temperature of -1°.

A small shift of only 10° so that you were heading on a course of 270° would mean that you hit land in Cuba. If you managed to make this small change that may initially seem meaningless, then you will be met with an average daily temperature of 23°, rather than -1°

Another useful strategy can be coming up with some **I-then** statements. For example, "If I feel (difficult feelings) appear, then I take a mindful breath, the feelings come and go like the weather and choose my value consistent action."

Be more dog!
 This metaphor highlights the way in which we commonly layer one problem on top of another. Often this means that we are left with the original problem that we can sometimes do little about, and whole heap of other difficulties that we made all by ourselves.

Imagine you get home from work and take your dog out for a walk. You don't take your keys or mobile phone so your partner is in the house. When you ring the doorbell and no one answers. You ring again and again, then look through the windows, knock on the windows and the doors, but still no one comes to the door. Two hours later your partner opens the door and lets you in, apologising profusely they'd fallen asleep after a busy day. The dog runs to greet your partner, then goes to get a drink and snuggles up in front of the warm fire. Meanwhile you spend the rest of the evening musing about what happened: complaining about what an awful experience it was, and dreading the times your partner has let you down. You end up feeling physically exhausted and very upset.

This is a good example of layering problems on top of one another, and how our minds can pull our attention away from the present moment. Instead of being somewhat wet and tired for a short period then getting out and warm, we have ended up with a thoroughly miserable evening. Animals have an ability to stay in the present and in this example the dog is able to enjoy the warmth of the house, be more dog!

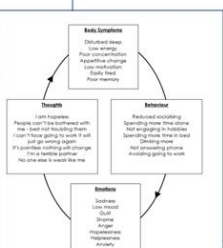


Figure 7 An example of a 3-axis model for low mood and depression

The aim of the work between sessions this week is to:

- Consolidate understanding about the ways that some of our eating behaviours can be counterproductive
- Begin to use values as motivation for changing eating habits by using SMART goals
- Continue to embed values-based, increased activity levels in peoples' lives

The home practice this week consists of:

- A SMART, values-based activity goal set collaboratively with their therapist. These should be done using the form in figure 2.
- A SMART, values-based dietary goal set collaboratively with their therapist. These should be done using the form in figure 2.
- An invitation to watch the Eating Behaviour module

Matching the Problem and Intervention

- If people have a simple behavioural or habit-related difficulty then use a straightforward values-based goal
- If people are tending to eat mindlessly then encourage slow or mindful eating, and practice in session
- If there is a strong influence of thoughts or beliefs on eating behaviour consider encouraging the use of ACT cognitive strategies, and practice



ACT Now!
Participant Manual

Appendix 2B. Examples of a core and optional web-based module content



Appendix 2C. Screenshots of the ACT Now! website

The collage displays several key components of the ACT Now! website:

- Logos:** The South Foundation (Improving Employment), NHS Grampian, and the University of Aberdeen.
- TOP TIPS:** A section with four tips:
 - Stress and anxiety are a natural part of life.
 - Think about how balanced your life is - you may need to make changes.
 - Make regular 'me' time.
 - Use mindfulness skills to manage worrying thoughts.
- Activity: Further Information:** Includes a video titled 'OBESITY + NO EXERCISE' and a text snippet: 'The Secret to Being Fit in 80 Years'.
- BILL'S STORY:** A personal narrative from a man with Type 2 Diabetes, detailing his journey from diagnosis to achieving a 'diabetic diet level' of control.
- Activity Goals:** A section for home practice with SMART goal tips and a '60/30/10' goal setting tool.
- Library of Thoughts and Emotions:** A resource explaining how thoughts, feelings, and behavior interact, and offering strategies like 'ignoring them' and 'using imagery' to manage unhelpful thoughts.
- Healthcare Professionals:** Portraits and names of several experts:
 - Andy Keen (Consultant Health Psychologist)
 - Kirsty MacLennan (Clinical Psychologist)
 - Leah McCauley (Specialist Dietician)
 - Ann Gold (Consultant in Diabetes and General Medicine)
 - Holly Martin-Smith (Trainee Health Psychologist)
 - Mary McCallum (Health Psychologist and Public Health Specialist)

Appendix 2D. ACT Now! poster and leaflet



The poster features a blue background with white and dark blue text. At the top left, there is a logo for 'The Health Foundation Inspiring Improvement' next to the word 'Shine'. At the top right is the 'NHS Grampian' logo. The main title 'ACT NOW!' is in large, bold, blue letters with a white outline. Below this, a light blue rounded rectangle contains text about a research study. At the bottom, a dark blue rounded rectangle contains contact information for Holly Martin-Smith.

The Health Foundation
Inspiring Improvement

Shine

NHS
Grampian

ACT NOW!

A research study exploring a **short supported self-help** intervention to help people with **Type 2 diabetes** become more **active** and eat more **healthily**.

If you would like further information then please contact
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