

Space from Diabetes Descriptor

Space from Diabetes is an online intervention built in conjunction with leading clinical and subject matter experts in the U.S and U.K alongside our partners Wiley. Space from Diabetes is a purpose-built interactive and practical program that provides psychoeducation, tools and activities to promote the self-management of diabetes in the community.

Diabetes is a chronic, long-term illness that effects up to 9.3% of the population (Pillay et al., 2015). Diabetes related healthcare accounts for 11% of American healthcare expenditure annually and has a significant impact on individual's productivity and quality of life (Pillay et al., 2015). Diabetes is associated with a number of physical health complications including cardiovascular disease, blindness and amputation (Pillay et al., 2015). Diabetes also has a high co-morbidity with mental health difficulties with up to 41% of people with diabetes reporting poor emotional wellbeing (Lloyd, 2010). A diagnosis of diabetes requires a life-long commitment to managing a variety of physical, emotional and lifestyle factors. However, a significant proportion of individuals living with diabetes struggle to implement the health advice they are given with up to 45% not managing to maintain their target glycaemic index (Hoerger et al., 2008). Psychological wellbeing plays a crucial role in the ability of individuals to effectively cope with the demands of diabetes self-management, with poor mental health having an adverse impact on self-management (Peyrot et al., 2005).

Silvercloud health have therefore designed an online intervention that is tailored to the holistic, life-long needs of those diagnosed with Type 2 Diabetes that may have been struggling to self-manage their condition and are presenting with metabolic instability. Space from Diabetes has been specifically

designed to improve users' ability to self-manage their diabetes, improve user's physical and mental health outcomes and reduce healthcare costs associated with diabetes for services.

Based on current best practice guidelines, we have designed a specifically tailored diabetes program that addresses psychological concerns such as diabetes distress, encourages behaviour change and supports healthy diabetes behaviour through normalisation of difficulties, education and empowerment (Funnel et al., 2007; NICE, 2014). The Space from Diabetes program consists of 8 modules. Each module is structured in an identical way comprising of an introductory video and quiz, psychoeducational content with examples and personal stories, interactive activities, homework suggestions and summaries. The content and structure of the modules has been designed to place an emphasis on the 7 essential self-care behaviours that have been shown to predict good outcomes in diabetes: *healthy eating, physical activity, monitoring blood sugar, medication adherence, problem solving skills, healthy coping skills and behaviour that reduces risk* (Shrivastava, Saurabh & Ramasamy, 2013).

Therapeutic principles and concepts incorporated into the programme include Behavioural Change Theories, Social Learning Theory and Cognitive Behaviour Therapy (CBT). Behavioural Change theories refer to a group of theories that attempt to explain behaviour and offer insight into influencing behaviour change (Michie, West, Campbell, Brown & Gainforth, 2015). Within the program, users are empowered to make these behaviour changes through activities promoting the gradual application and integration into their lives. An emphasis is also placed throughout the program on normalising difficulties and overcoming obstacles that might hinder long-term behaviour change.

Social Learning Theory argues that we learn behaviour in a social context and pay attention to the consequences of our behaviour. Social Learning Theory also argues that behaviour change can be influenced through concepts such as

positive reinforcement, emotional coping and self-efficacy (Bandura, 1977). These elements of successful behaviour change are incorporated into the program through topics such as *your role in self-management* and *managing stress*.

Cognitive Behaviour Therapy is a therapeutic intervention based on Beck's (1967; 2011) cognitive model. This model highlights the role of unhelpful thinking styles and behaviour in exacerbating and maintaining poor diabetic self-management. CBT has been shown to be effective in treating the psychological impact of diabetes, (Safren et al., 2013). Psychoeducation is provided on the impact of diabetes on our thoughts, feelings, behaviour and physical symptoms and an emphasis is placed on the user's ability to make changes in each of these key areas to improve their self-management of diabetes.

Based on these guiding therapeutic concepts, specific interventions within the Space from Diabetes Program include:

Thought-Feelings-Behavior Cycles (TFB)

This thought, feelings and behavior (TFB) cycle is a modified version of Ellis' antecedent, behavior and consequence (ABC) model used in Rational Emotive Behavioral Therapy (REBT, Ellis, 1962, 2001). Monitoring emotions and learning about their function allows users to learn about the relationship between their mood and their diabetes and how this can impact on their physical health outcomes.

SMART Goals

SMART Goals were developed as a management tool for motivating and monitoring employees and was later adapted as a psychoeducational tool (Drucker, 2006). In the program service users are guided to operationalize their current goals as: specific, measurable, attainable, relevant and time- bound.

Problem Solving

Structured Problem-Solving approaches have been shown to enable users to identify the nature of the problem, generate solutions and evaluate each potential solution (D’Zurilla & Goldfried, 1971). Based on best practice guidelines, the Space from Diabetes program guides users to develop their own problem-solving skills in a clear, structured and easy to follow format.

Cognitive Restructuring

The idea that negative or distorted thinking styles impact on our mood, physical symptoms and behaviour is a core assertion within the Cognitive Behaviour Therapy framework. Cognitive restructuring is a technique within CBT that encourages users to critically evaluate their own thought processes and has been shown to be effective as a stand-alone intervention (Alleva et al., 2015; Leahy, Holland & McGinn, 2012). Through the programme users are guided to notice their thoughts, identify any unhelpful thinking styles and challenge any negative or distorted thinking styles that are impacting on their ability to manage their diabetes.

Responsibility Pie

The responsibility pie is a tool used in Cognitive Behaviour Therapy which has been used in a variety of mental health difficulties including OCD (Veale, 1999) and trauma (Cohen, Mannarino & Deblinger, 2006). The aim of the responsibility pie is to tackle unhelpful beliefs about the individual’s level of responsibility that are currently causing the user to experience excessive and unhelpful feelings of guilt, shame and self-blame. Users are invited to use an interactive tool to allocate the level of responsibility they themselves hold for the situation, the responsibility of others and also allocate responsibility to external factors such as genetics. Users are then invited to use this responsibility pie to challenge any distorted beliefs they hold that might be contributing to feelings of guilt and self-blame.

Mindfulness

Based on Buddhist philosophy, mindfulness encourages individuals to become consciously aware of their thoughts and feelings taking a non-judgemental attitude (Teasdale et al., 2000). Mindfulness practices have been demonstrated to be effective in the treatment of anxiety, depression and chronic illness (Miller, Fletcher & Kabat-Zinn, 1995). Within the program, a variety of mindfulness exercises promote the intentional and voluntary direction of attention toward present inner experience with acceptance (Hayes, Follette & Linehan, 2004).

The 7 Essential Self-Care Strategies

Research has indicated that there are 7 key self-care strategies that lead to better outcomes in patients with diabetes. These include healthy eating, physical activity, monitoring blood sugars, medication adherence, good problem-solving skills, healthy coping and behaviour that reduces risk (Shrivastava, Saurabh & Ramasamy, 2013). An emphasis is placed on each of these key elements throughout the program to empower patients to manage their diabetes more effectively through the development of sustainable, life-long skills. All of the modules have a focus on developing healthy coping strategies and cultivating problem solving skills including healthy eating and physical exercise using evidenced based techniques. Special attention is also given to understanding medication and blood monitoring to improve user’s ability to adhere to their medication and monitoring regime.

Table: Modules, Goals, Topics and Activities in the programme

Modules	Goals	Topics	Activities
Getting Started with Diabetes	<ul style="list-style-type: none"> • Provide education regarding self-management: its importance, user’s role and key tasks 	<ul style="list-style-type: none"> • Debunking myths about diabetes • Reframe self-management as a challenge of fitting 	<ul style="list-style-type: none"> • Debunking Diabetes Myths Quiz • Goal Setting

	<ul style="list-style-type: none"> • Challenge common assumptions and beliefs regarding diabetes • Validate and reframe challenge of living with diabetes • Build confidence in relation to user's potential to succeed at self-management • Offer hope that user can live a normal and fulfilling life • Empower users to start taking action and assume control to better manage their diabetes • Facilitate users to set own goals regarding self-management 	<p>diabetes into one's life</p> <ul style="list-style-type: none"> • Overview of modules and topics • Psychoeducation on the importance of self-management, users' role and key tasks • Managing the key dimensions of self-management: body, mind, lifestyle and relationships • Importance of self-care • Importance of goals and setting SMART goals • Personal Stories • 	<ul style="list-style-type: none"> • Mindfulness Exercise (Mindfulness of Breath)
<p>Diabetes & You</p>	<ul style="list-style-type: none"> • Facilitate users to gain insight into personal challenges and strengths • Provide education about motivation and overcoming common motivation pitfalls 	<ul style="list-style-type: none"> • Self-assessment of obstacles • Tips to succeed in making changes • Learning from setbacks • Importance of motivation 	<ul style="list-style-type: none"> • Pinpoint Your Challenges Quiz • My Motivational Tips • My Enjoyable Activities • Learning from Experience

	<ul style="list-style-type: none"> • Facilitate users to manage and learn from setbacks • Empower users to implement change • Support users to successfully achieve their goals 	<ul style="list-style-type: none"> • Rewards and enjoyable activities • Overcoming common motivational obstacles • Dealing with setbacks, lapses and relapses • Making a change • Behavioural activation • Personal Stories 	<ul style="list-style-type: none"> • Mindfulness Exercise (Mindfulness of Sounds) • Goal Setting
<p>Staying Safe with Diabetes</p>	<ul style="list-style-type: none"> • Provide education regarding the tracking and monitoring of blood glucose, A1c, blood pressure, cholesterol and hypoglycaemia • Provide education regarding medical devices and utilising medical devices to improve self-management • Empower users to self-monitor their diabetic numbers • Facilitate users to problem solve when diabetic numbers are not 	<ul style="list-style-type: none"> • Education regarding monitoring blood glucose levels, A1c, blood pressure and cholesterol • How to read and understand diabetic numbers • Hypoglycaemia education and management • Education regarding doctors' checks • Staying safe in different situations: drinking alcohol, while exercising, at work, driving, medical fasting 	<ul style="list-style-type: none"> • Safety in Numbers Quiz • Problem Solving • Relaxation (Belly Breathing) • Goal Setting

	<p>within their target range</p> <ul style="list-style-type: none"> • Support users to stay safe and implement management strategies in different situations 	<ul style="list-style-type: none"> • Problem solving • Personal Stories 	
<p>Diabetes & Your Mood</p>	<ul style="list-style-type: none"> • Provide education regarding the link between diabetes and emotional health • Facilitate users to gain insight into and normalise emotional difficulties commonly experienced by individuals living with diabetes • Facilitate users to distinguish between diabetes burnout and depression • Encourage users to seek support for clinical presentations of depression, anxiety and/or eating disorders • Support users to overcome common fears or 	<ul style="list-style-type: none"> • Psychoeducation regarding diabetes, mood and the function of emotions • Common emotions experienced by people with diabetes: diabetes distress, burnout, fears, low mood and anxiety • Common fears and phobias in diabetes • Low mood, burnout and depression • Emotions and food • Coping strategies to manage stress and emotions • Personal Stories 	<ul style="list-style-type: none"> • Emotions and Your Body Quiz • Tune into Your Emotions • Responsibility Pie • Relaxation (3-Stage Mini Meditation) • My Coping Strategies • Mood Monitor • Goal Setting

	<p>phobias in diabetes</p> <ul style="list-style-type: none"> • Empower users to develop effective coping strategies to manage low mood, burnout and depression 		
<p>Diabetes & Relationships</p>	<ul style="list-style-type: none"> • Provide psychoeducation regarding the impact of diabetes on relationships and the role that communication plays • Support users to develop effective communication skills to improve relationships with friends, family and healthcare professionals • Empower users to make the most of the support provided by friends, family and the members of their healthcare team • Facilitate users to integrate diabetes into their work and social life 	<ul style="list-style-type: none"> • Integrating diabetes management into daily life: work and social • Diabetes and relationships with friends, family and healthcare professionals • Communication and relationship tips • The roles of the diabetes healthcare team • Making the most of available support • Personal Stories 	<ul style="list-style-type: none"> • Challenges in Relationships Quiz • Backup & Support Network • Relaxation (Loving Kindness Meditation) • Goal Setting

<p>Diabetes & Your Mind</p>	<ul style="list-style-type: none"> • Provide education regarding the Thoughts, Feelings and Behaviours cycle • Facilitate understanding about negative automatic thoughts and their relationship to mood and behaviour • Support users to recognise distorted thinking and thinking errors • Facilitate users to recognise the impact that distorted thinking can have on diabetes care and management • Empower users to challenge thoughts and develop more balanced ways of thinking 	<ul style="list-style-type: none"> • The TFB Cycle and its role in diabetes care and management • Unhelpful thinking styles • Challenging unhelpful thoughts • Balanced ways of thinking • Coping with difficult situations • Personal Stories 	<ul style="list-style-type: none"> • What's Your Thinking Style/What's Your Lens Quiz • Understanding my Situation • TFB Cycle • My Helpful Thoughts • Mindfulness Exercise (Mindfulness of Thoughts and Feelings) • Goal Setting
<p>Diabetes & Your Body</p>	<ul style="list-style-type: none"> • Provide accurate and simple information regarding the types and causes of diabetes • Provide education on physical 	<ul style="list-style-type: none"> • Psychoeducation on lifestyle, diabetes and its symptoms • How to find more information about diabetes 	<ul style="list-style-type: none"> • Diabetes & Your Body Quiz • Mapping Lifestyle Choices

	<p>aspects of self-management: blood glucose levels, diet, physical activity and medication</p> <ul style="list-style-type: none"> • Support users to find further information about diabetes • Empower users to implement lifestyle changes and overcome common obstacles to change • Facilitate users to increase physical activity levels safely 	<ul style="list-style-type: none"> • Monitoring blood glucose levels • Taking medication • Healthy eating • Physical Activity • Personal Stories 	<ul style="list-style-type: none"> • Mindfulness Exercise (A Walking Meditation) • Goal Setting
<p>Moving Forward</p>	<ul style="list-style-type: none"> • Consolidate learning on techniques and strategies to manage diabetes • Encourage users to engage in lifelong learning about diabetes • Empower users to recognise progress and plan to stay well • Support users to set goals for the future 	<ul style="list-style-type: none"> • Finishing up and taking stock • Planning to stay well • Moving forward • Lifelong learning and sourcing reliable information online • Personal Stories 	<ul style="list-style-type: none"> • My Staying Well Plan • Mindfulness Exercise (Mindfulness of Breath and Body) • Goal Setting

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