Usability & engagement with an online platform to support the self-management of symptoms & promote the well-being of people with cardiovascular disease (CVD)

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Introduction
Distress, chest pain/palpitations/breathlessness/fatigue are common in CVD. Self-management is key, but support is limited.
Online interventions are low cost, easy to access, non-stigmatising.
Current online interventions are not CVD specific & lack relevance.

Objectives
Determine the acceptability and usability of an online intervention for CVD

Methods
Focus Group Discussion (n = 10 men)
Think Aloud Usability Testing (n = 2, 1m/1f)
Participants were videoed talking through their intervention use
Cross-Sectional Study (ongoing, n = 10)
Use for 2 weeks of version incorporating suggested improvements

Participants with CHD (total n = 11):
• Recruited via the British Heart Foundation
• Stents n=4, CABG n=4 diabetes n=2, CKD n=1
• Female =1; male = 10; age range 50 – 89 years (mean 68 years)
• 5 retired, 1 long term sick leave, 4 employed

Findings
Focus Group
Participants agreed:
No existing resource meets all (physical/emotional/information) needs -
If I type how to avoid type 2 diabetes into Google I will get probably some millions of pieces of advice P8
You get conflicting advice from people P3
The intervention provides relevant, reliable & accessible CVD information -
It’s access and it’s finding that access…to the information, you’ve got to get it in the right place P4
The intervention is flexible and personalised -
The way you interpret it and manage your life varies absolutely as an individual P8

Participants wanted:
An option to choose how much information to read -
Some people are really interested in the full story and then there’s others like me that would be interested in broad guidance P3
More information about recognizing heart attacks, diabetes & support -
The difficulty is you do the expert course which just looks at your diabetes and you do the postoperative cardiac care which just looks at your cardiac care and there’s nobody ever puts the two together P8

Think Aloud Usability Testing
Both participants were able to navigate the intervention without difficulty and found the content appropriate:
Good information, very easy to understand P2
Rings significant bells P1
Suggested changes included: increased font size, reduced amount of text

Cross-Sectional Study - In Progress
• Participating: participants of earlier studies, friends/family members
• Data collection: usage data overall and for each module (number of sessions completed, time spent, average number and length of sessions).
• Participants will also be asked about their experience to inform improvements

Intervention
5 Modules (behavioural/cognitive behavioural approach):
Self-Management
Medication adherence, getting the most from appointments, lifestyle modification
Chest Pain / Palpitations: Symptom Management
Role of thoughts, feelings & behaviours
Fatigue: Symptom Management
Role of thoughts, feelings & behaviours
Breathlessness: Symptom Management
Role of thoughts, feelings & behaviours
Distress
CBT for Anxiety, Stress & Depression

Online Features:
Personalised flexible
Evidence-based
Platform
Interactive alerts quizzes homework activity tracker
Supporter Function to increase engagement/feedback

Conclusion
SilverCloud’s online solution for CVD has been developed and addresses CVD risk factors, symptoms & distress to improve self-management and well being.
Preliminary testing has led to user-informed improvements and indicates that people living with CVD can use it and find the content useful and relevant.
Future research will test the intervention’s effect on clinical outcomes and health service use.