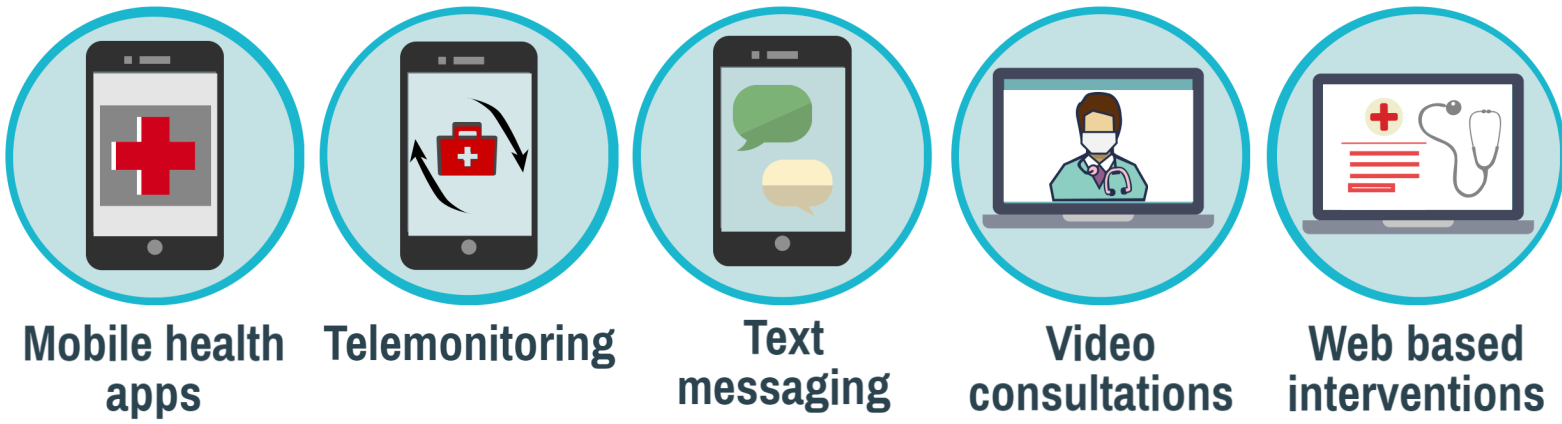


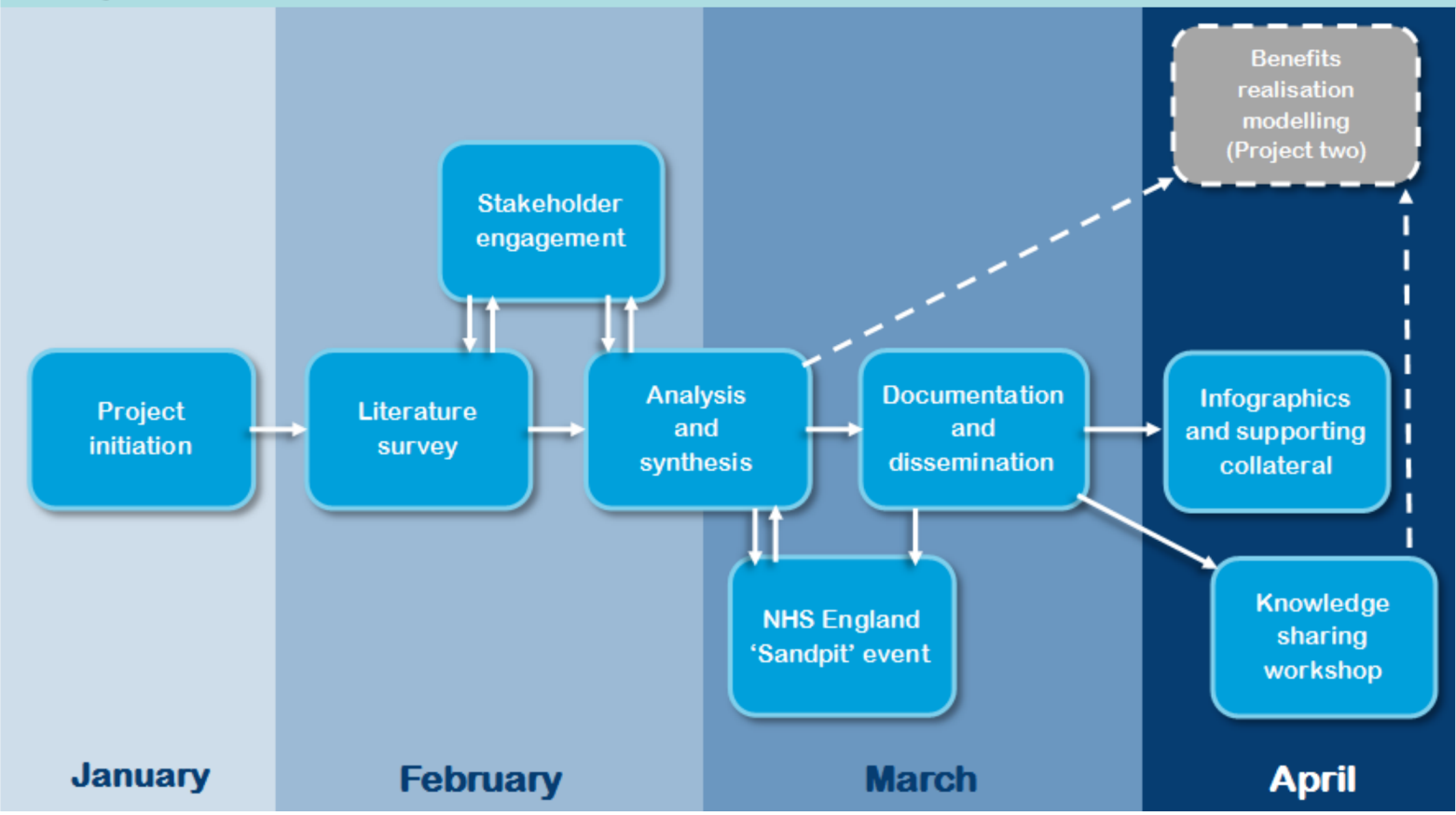
## TECS evidence base review aims

- Summarise findings from the evidence base
- Translate these into best practice recommendations for local areas to use when making the case for investment.
- Inform providers' and commissioners' planning and decision-making about TECS

## Technology modalities considered



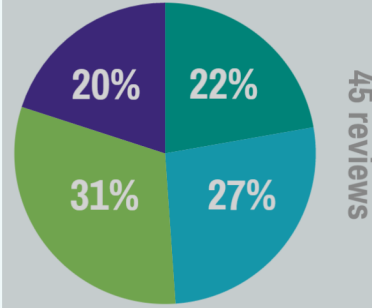
## Project overview



# Technology-enabled care services

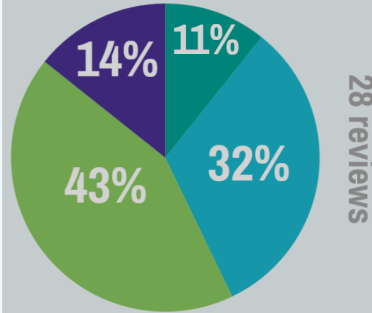
### Video consultations

- There is a significant critical mass of evidence for video calls to be effective in treating mental illness – to provide consultation, short term support and counselling.
- Chronic illness: Remote video technology found “no differences in the quality indicators of medication compliance, knowledge of disease, or self-care ability; patient satisfaction; or service use”, indicating that video calling is an acceptable substitute for face-to-face care in this instance.
- The publication date range of the articles reviewed is an important consideration as quality of video calls will have improved significantly in recent years and associated costs will have fallen.



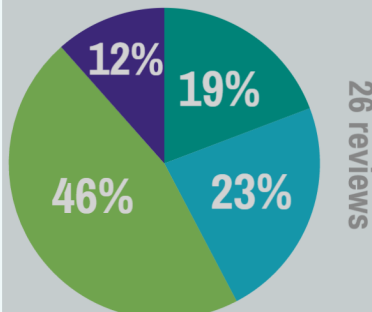
### Telemonitoring

- Telemonitoring is recommended for the care of diabetes patients where patients measure blood glucose levels and share reading with a healthcare professional. Patient education is essential for successful use of telemonitoring.
- Evidence supports the use of telemonitoring in the care of heart disease patients. Recommendations include patient recording and sharing blood pressure with cardiac nurses with physician oversight.
- The evidence shows that the use of telemonitoring in the care of COPD patients leads to a reduction in utilisation of healthcare services.
- Telemonitoring is shown to improve blood pressure control in patients living with hypertension.



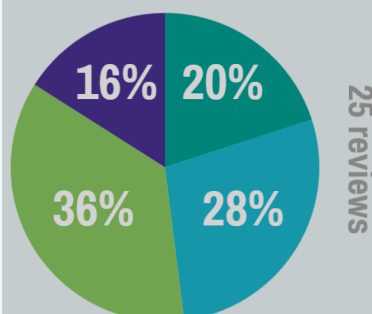
### Text messaging

- There is consistent evidence that text message interventions have beneficial effects on HbA1C and glycaemic control in diabetes care, and that patients are accepting of the technology.
- There is consistent evidence that text messages are effective in supporting short term smoking cessation.
- Text messaging increases the reach of, and access to, substance misuse interventions.
- Weekly text messages can enhance adherence to antiretroviral medicine for the treatment of HIV/AIDS and increase HIV viral load suppression.
- Evidence shows that text messages can improve medication adherence for the treatment of skin conditions such as acne.



### Web-based interventions

- Further research is needed involving control groups to enable the more precise identification of impact, and providing information on the ‘what’ and ‘how’ aspects of delivery.
- Although beneficial as a standalone intervention, to maximise effectiveness, web-based interventions should be delivered in conjunction with other measures—including face-to-face contact with healthcare professionals. This may help to promote adherence, and mitigate the phenomenon observed in a number of reviews in which there is a diminution of intervention impact over time.



### Mobile health apps

- The most positive evidence of effectiveness to date is in the areas of Type 2 Diabetes, Multiple Sclerosis, Cardiovascular Disease, and Obesity.
- Other, non-peer reviewed, sources of evidence indicate positive effect in the areas of nutrition, wellness, mental health, and perioperative care.
- Somewhat unhelpfully, evidence on digital health apps' effectiveness is often aggregated with that for other mobile phone-based interventions, e.g., telemedicine and SMS text messaging.



**KEY**

- Neutral Outcome
- Limited Positive Outcome
- Positive Outcome/Recommend
- Evidence Insufficient/Too Limited
- Harmful