**NHS England**
**Technology Enabled Care Services (TECS) Evidence Database**

**DIABETES EVIDENCE**

The evidence base for using technology to enhance care is large, complex and continuing to grow rapidly. TECS is a complex intervention involving people, process and technology, therefore results are dependent on all these elements. The evidence is based on a range of methodologies and can – in some contexts – provide mixed messages on the clinical and cost-effectiveness of TECS. It would therefore be impractical and unhelpful to try and provide a definitive list of all studies on all TECS in all clinical areas.

This database provides a list of individual studies as well as a link to a single key paper for selected as selected clinical areas. The lists are limited to the most recent studies and may not be exhaustive. They are intended to help those considering TECS how these solutions might best address their needs. Some resources may need to be purchased and in many cases the link is to a summary of the paper rather than the full content.

**Key paper:**
**Home telehealth for diabetes management: a systematic review and meta-analysis**
**http://heart.bmj.com/content/early/2013/05/15/heartjnl-2013-303811.abstract**

Additional papers:

1. **Diabetes Eye Screening in Urban Settings Serving Minority Populations: Detection of Diabetic Retinopathy and Other Ocular Findings Using Telemedicine.**
   http://www.ncbi.nlm.nih.gov/pubmed/25393129

2. **Effect of telemedicine follow-up care of leg and foot ulcers: a systematic review.**
   http://www.ncbi.nlm.nih.gov/pubmed/25373875

3. **How accurate is the diagnosis of diabetic retinopathy on telescreening? The Indian scenario.** http://www.ncbi.nlm.nih.gov/pubmed/25349110

4. **Self-Management of Diabetes in Children and Young Adults Using Technology and Smartphone Applications.** http://www.ncbi.nlm.nih.gov/pubmed/25311195

5. **The emerging role of telemedicine in managing glycemic control and psychobehavioral aspects of pregnancy complicated by diabetes.**
   http://www.ncbi.nlm.nih.gov/pubmed/25295059

6. **Telemedicine for Reach, Education, Access, and Treatment (TREAT): Linking Telemedicine With Diabetes Self-management Education to Improve Care in Rural Communities.**
   http://www.ncbi.nlm.nih.gov/pubmed/25253624

7. **The Evaluation of Diabetic Patients' Use of a Telehealth Program.**
   http://www.ncbi.nlm.nih.gov/pubmed/25251861

8. **MANAGEMENT OF ENDOCRINE DISEASE: Effects of telecare intervention for glycemic control in Type 2 Diabetes: A systematic review and meta-analysis of randomized controlled trials.** http://www.ncbi.nlm.nih.gov/pubmed/25227131

9. **An ongoing struggle: a mixed-method systematic review of interventions, barriers and facilitators to achieving optimal self-care by children and young people with Type 1 Diabetes in educational settings.** http://www.ncbi.nlm.nih.gov/pubmed/25213220

10. **Developing an mHealth framework to improve diabetes self-management.** http://www.ncbi.nlm.nih.gov/pubmed/25160242

11. **Effect of telehealth on glycaemic control: analysis of patients with type 2 diabetes in the Whole Systems Demonstrator cluster randomised trial.** http://www.ncbi.nlm.nih.gov/pubmed/25100190

12. **Mobile Diabetes Intervention for Glycemic Control in 45- to 64-Year-Old Persons With Type 2 Diabetes.** http://www.ncbi.nlm.nih.gov/pubmed/25098253

13. **Sustained effects of a nurse coaching intervention via telehealth to improve health behavior change in diabetes.** http://www.ncbi.nlm.nih.gov/pubmed/25061688

14. **Telehealth for improved glycaemic control in patients with poorly controlled diabetes after acute hospitalization - a preliminary study in Singapore.** http://www.ncbi.nlm.nih.gov/pubmed/25052389

15. **Online social networking services in the management of patients with diabetes mellitus: Systematic review and meta-analysis of randomised controlled trials.** http://www.ncbi.nlm.nih.gov/pubmed/25043399

16. **Structuring clinical workflows for diabetes care: an overview of the OntoHealth approach.** http://www.ncbi.nlm.nih.gov/pubmed/25024765

17. **Mobile tele-medicine systems in the multidisciplinary approach of diabetes management : the remote prevention of diabetes complications.** http://www.ncbi.nlm.nih.gov/pubmed/25000078

18. **Smartphone-enabled health coach intervention for people with diabetes from a modest socioeconomic strata community: single-arm longitudinal feasibility study.** http://www.ncbi.nlm.nih.gov/pubmed/24907918

19. **Exploring the relationship among user satisfaction, compliance, and clinical outcomes of telemedicine services for glucose control.** http://www.ncbi.nlm.nih.gov/pubmed/24901576

20. **Telehealth Remote Monitoring Systematic Review: Structured Self-monitoring of Blood Glucose and Impact on A1C.** http://www.ncbi.nlm.nih.gov/pubmed/24876591

21. **Teleophthalmology in Diabetic Retinopathy.** http://www.ncbi.nlm.nih.gov/pubmed/24876576

22. **Tele-diabetology to Screen for Diabetes and Associated Complications in Rural India: The Chunampet Rural Diabetes Prevention Project Model** http://www.ncbi.nlm.nih.gov/pubmed/24876575

23. **Patient-oriented Computerized Clinical Guidelines for Mobile Decision Support in Gestational Diabetes.** http://www.ncbi.nlm.nih.gov/pubmed/24876573

24. **DialBetics: A Novel Smartphone-based Self-management Support System for Type 2 Diabetes Patients.** http://www.ncbi.nlm.nih.gov/pubmed/24876569

25. **A heads-up display for diabetic limb salvage surgery: a view through the google looking glass.** http://www.ncbi.nlm.nih.gov/pubmed/24876445

26. **Improving Type 1 Diabetes Management With Mobile Tools: A Systematic Review.** http://www.ncbi.nlm.nih.gov/pubmed/24876414

27. **Techniques of monitoring blood glucose during pregnancy for women with pre-existing diabetes.** http://www.ncbi.nlm.nih.gov/pubmed/24782359

28. **Mobile applications for diabetics: a systematic review and expert-based usability evaluation considering the special requirements of diabetes patients age 50 years or older.** http://www.ncbi.nlm.nih.gov/pubmed/24718852

29. **Internet protocol television for personalized home-based health information: design-based research on a diabetes education system.** http://www.ncbi.nlm.nih.gov/pubmed/24613862

30. **Impact of phone call intervention on glycemic control in diabetes patients: a systematic review and meta-analysis of randomized, controlled trials.** http://www.ncbi.nlm.nih.gov/pubmed/24586596

31. **Teleretinal screening for diabetic retinopathy in six Los Angeles urban safety-net clinics: final study results.** http://www.ncbi.nlm.nih.gov/pubmed/24551394

32. **Design of a randomized, non-inferiority trial to evaluate the reliability of videoconferencing for remote consultation of diabetes.** http://www.ncbi.nlm.nih.gov/pubmed/24528569

33. **The efficiency of telemedicine to optimize metabolic control in patients with type 1 diabetes mellitus: Telemed study.** http://www.ncbi.nlm.nih.gov/pubmed/24528195

34. **Nurse-led telecoaching of people with type 2 diabetes in primary care: rationale, design and baseline data of a randomized controlled trial.** http://www.ncbi.nlm.nih.gov/pubmed/24495633

35. **Impact of patient use of an online patient portal on diabetes outcomes.** **http://www.ncbi.nlm.nih.gov/pubmed/24485208**

36. **glUCModel: a monitoring and modeling system for chronic diseases applied to diabetes.** **http://www.ncbi.nlm.nih.gov/pubmed/24407050**

37. **A novel telemonitoring device for improving diabetes control: protocol and results from a randomized clinical trial.** **http://www.ncbi.nlm.nih.gov/pubmed/24404816**

38. **Use of a text message program to raise type 2 diabetes risk awareness and promote health behavior change (part II): assessment of participants' perceptions on efficacy.** **http://www.ncbi.nlm.nih.gov/pubmed/24356359**

39. **Text messaging intervention for teens and young adults with diabetes.**
    **http://www.ncbi.nlm.nih.gov/pubmed/25172879**

40. **Pilot Study Using Mobile Health to Coordinate the Diabetic Patient, Diabetologist, and Ophthalmologist. http://www.ncbi.nlm.nih.gov/pubmed/24876413**

41. **Perceptions of successful cues to action and opportunities to augment behavioral triggers in diabetes self-management: qualitative analysis of a mobile intervention for low-income Latinos with diabetes. http://www.ncbi.nlm.nih.gov/pubmed/24476784**

42. **Diabetes self-management support using mHealth and enhanced informal caregiving.**
    **http://www.ncbi.nlm.nih.gov/pubmed/24374137**

43. **Internet interventions to support lifestyle modification for diabetes management: a systematic review of the evidence.** http://www.ncbi.nlm.nih.gov/pubmed/24332469

44. **Trial to examine text message-based mHealth in emergency department patients with diabetes (TExT-MED): a randomized controlled trial.**
    http://www.ncbi.nlm.nih.gov/pubmed/24225332

45. **Behavioral health coaching for rural veterans with diabetes and depression: a patient randomized effectiveness implementation trial** http://www.biomedcentral.com/1472-6963/14/191