

NHS England
Technology Enabled Care Services (TECS) Evidence Database

TELEMEDICINE 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.

1. **Telemedicine system for the care of patients with neuromuscular disease and chronic respiratory failure.** <http://www.ncbi.nlm.nih.gov/pubmed/25395959>
2. **Telemedicine in gastroenterohepatology.**
<http://www.ncbi.nlm.nih.gov/pubmed/25395732>
3. **Effectiveness of Telemedicine for Controlling Asthma Symptoms: A Systematic Review and Meta-analysis.** <http://www.ncbi.nlm.nih.gov/pubmed/25393915>
4. **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>
5. **A feasibility study of conducting the Montreal Cognitive Assessment remotely in individuals with movement disorders.** <http://www.ncbi.nlm.nih.gov/pubmed/25391849>
6. **Assessing the Quality of Teleconsultations in a Store-And-Forward Telemedicine Network - Long-Term Monitoring Taking into Account Differences between Cases.**
<http://www.ncbi.nlm.nih.gov/pubmed/25389525>
7. **Teleradiology usage and user satisfaction with the telemedicine system operated by médecins sans frontières.** <http://www.ncbi.nlm.nih.gov/pubmed/25389524>
8. **A Novel Interface for the Telementoring of Robotic Surgery.**
<http://www.ncbi.nlm.nih.gov/pubmed/25381917>
9. **The effectiveness of telemedicine for paediatric retrieval consultations: rationale and study design for a pragmatic multicentre randomised controlled trial.**
<http://www.ncbi.nlm.nih.gov/pubmed/25381774>

10. **Recent advances in TeleStroke: a systematic review on applications in prehospital management and Stroke Unit treatment or TeleStroke networking in developing countries.** <http://www.ncbi.nlm.nih.gov/pubmed/25381687>
11. **Choice of Rating Scale Labels: Implication for Minimizing Patient Satisfaction Response Ceiling Effect in Telemedicine Surveys.** <http://www.ncbi.nlm.nih.gov/pubmed/25379838>
12. **American Telemedicine Association clinical guidelines for telepathology.** <http://www.ncbi.nlm.nih.gov/pubmed/25379345>
13. **Effect of telemedicine follow-up care of leg and foot ulcers: a systematic review.** <http://www.ncbi.nlm.nih.gov/pubmed/25373875>
14. **Utilization of telemedicine in the u.s. Military in a deployed setting.** <http://www.ncbi.nlm.nih.gov/pubmed/25373065>
15. **Fundus imaging with a mobile phone: A review of techniques.** <http://www.ncbi.nlm.nih.gov/pubmed/25370404>
16. **The application of telemedicine in the follow-up of lung transplantation in a patient with cystic fibrosis.** <http://www.ncbi.nlm.nih.gov/pubmed/25366959>
17. **The spectrum of needed e-Health capacity building - towards a conceptual framework for e-Health 'training'.** <http://www.ncbi.nlm.nih.gov/pubmed/25365673>
18. **The utilization of mobile devices for telemedicine services in a South African public healthcare system.** <http://www.ncbi.nlm.nih.gov/pubmed/25365668>
19. **CPAP Treatment Supported by Telemedicine Does Not Improve Blood Pressure in High Cardiovascular Risk OSA Patients: A Randomized, Controlled Trial.** <http://www.ncbi.nlm.nih.gov/pubmed/25364081>
20. **Telemedicine Networks of EHAS Foundation in Latin America.** <http://www.ncbi.nlm.nih.gov/pubmed/25360436>
21. **Rapid grading of fundus photographs for diabetic retinopathy using crowdsourcing.** <http://www.ncbi.nlm.nih.gov/pubmed/25356929>
22. **Development of a communication protocol for telephone disclosure of genetic test results for cancer predisposition.** <http://www.ncbi.nlm.nih.gov/pubmed/25355401>
23. **Antenatal management of at-risk pregnancies from a distance.** <http://www.ncbi.nlm.nih.gov/pubmed/25355283>
24. **Electrocardiographic monitoring during marathon running: a proof of feasibility for a new telemedical approach.** <http://www.ncbi.nlm.nih.gov/pubmed/25354952>
25. **Effects of home-based training with telemonitoring guidance in low to moderate risk patients entering cardiac rehabilitation: short-term results of the FIT@Home study.** <http://www.ncbi.nlm.nih.gov/pubmed/25354951>
26. **Early Treatment Withdrawal from Evidence-Based Psychotherapy for PTSD: Telemedicine and In-Person Parameters.** <http://www.ncbi.nlm.nih.gov/pubmed/25354925>

27. **Suicide risk management during clinical telepractice.**
<http://www.ncbi.nlm.nih.gov/pubmed/25354924>
28. **Meeting Veterans Where They're @: A VA Home-Based Telemental Health (HBTMH) Pilot Program.** <http://www.ncbi.nlm.nih.gov/pubmed/25354923>
29. **A telemedicine program for diagnosis and management of sleep-disordered breathing: the fast-track for sleep apnea tele-sleep program.**
<http://www.ncbi.nlm.nih.gov/pubmed/25353101>
30. **The pacific island health care project.** <http://www.ncbi.nlm.nih.gov/pubmed/25353012>
31. **How accurate is the diagnosis of diabetic retinopathy on telescreening? The Indian scenario.** <http://www.ncbi.nlm.nih.gov/pubmed/25349110>
32. **Telemedicine as an Innovative Model for Rebuilding Medical Systems in Developing Countries Through Multipartnership Collaboration: The Case of Albania.**
<http://www.ncbi.nlm.nih.gov/pubmed/25347524>
33. **Feasibility of AmbulanCe-Based Telemedicine (FACT) Study: Safety, Feasibility and Reliability of Third Generation In-Ambulance Telemedicine.**
<http://www.ncbi.nlm.nih.gov/pubmed/25343246>
34. **The RAFT Telemedicine Network: Lessons Learnt and Perspectives from a Decade of Educational and Clinical Services in Low- and Middle-Incomes Countries.**
<http://www.ncbi.nlm.nih.gov/pubmed/25340048>
35. **Telemedicine: the slow revolution** <http://www.ncbi.nlm.nih.gov/pubmed/25338434>
36. **Service innovation in glaucoma management: using a web-based electronic patient record to facilitate virtual specialist supervision of a shared care glaucoma programme.**
<http://www.ncbi.nlm.nih.gov/pubmed/25336582>
37. **Telerehabilitation and emerging virtual reality approaches to stroke rehabilitation.**
<http://www.ncbi.nlm.nih.gov/pubmed/25333603>
38. **ICU telemedicine: from theory to practice*.**
<http://www.ncbi.nlm.nih.gov/pubmed/25319914>
39. **Telemedicine and digital management in repair and regeneration after nerve injury and in nervous system diseases.** <http://www.ncbi.nlm.nih.gov/pubmed/25317175>
40. **Trial of telemedicine for patients on home ventilator support: feasibility, confidence in clinical management and use in medical decision-making.**
<http://www.ncbi.nlm.nih.gov/pubmed/25316042>
41. **Telemedicine as a tool to mitigate cardiometabolic risk associated with serious mental illness.** <http://www.ncbi.nlm.nih.gov/pubmed/25316040>
42. **A pilot study of telemedicine for post-operative urological care in children.**
<http://www.ncbi.nlm.nih.gov/pubmed/25316038>

43. Using off-the-shelf medical devices for biomedical signal monitoring in a telemedicine system for emergency medical services. <http://www.ncbi.nlm.nih.gov/pubmed/25312967>
44. ECHO-AGE: An Innovative Model of Geriatric Care for Long-Term Care Residents With Dementia and Behavioral Issues. <http://www.ncbi.nlm.nih.gov/pubmed/25306294>
45. A Novel Application of Teleneurology: Robotic Telepresence in Supervision of Neurology Trainees. <http://www.ncbi.nlm.nih.gov/pubmed/25299842>
46. Enrollment of research subjects through telemedicine networks in a multicenter acute intracerebral hemorrhage clinical trial: design and methods. <http://www.ncbi.nlm.nih.gov/pubmed/25298858>
47. The impact of adherence on costs and effectiveness of telemedical patient management in heart failure: a systematic review. <http://www.ncbi.nlm.nih.gov/pubmed/25298802>
48. Secure privacy-preserving biometric authentication scheme for telecare medicine information systems. <http://www.ncbi.nlm.nih.gov/pubmed/25298362>
49. 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>
50. Drivers of telemedicine use: comparative evidence from samples of Spanish, Colombian and Bolivian physicians. <http://www.ncbi.nlm.nih.gov/pubmed/25293651>
51. Expert Advice Provided through Telemedicine Improves Healing of Chronic Wounds: Prospective Cluster Controlled Study. <http://www.ncbi.nlm.nih.gov/pubmed/25290685>
52. Patient Evaluation of an Acute Care Pediatric Telemedicine Service in Urban Neighborhoods. <http://www.ncbi.nlm.nih.gov/pubmed/25290233>
53. Are teleoncology models merely about avoiding long distance travel for patients? <http://www.ncbi.nlm.nih.gov/pubmed/25287049>
54. Delivering kidney cancer care in rural Central and Southern Illinois: a telemedicine approach. <http://www.ncbi.nlm.nih.gov/pubmed/25286964>
55. Acute medical review by mobile telemedicine for children in hospital-in-the-home: an innovation. <http://www.ncbi.nlm.nih.gov/pubmed/25281735>
56. [Evaluation of satisfaction with telemedicine devices and with the results of the care received among chronic patients. The ValCrònic program]. <http://www.ncbi.nlm.nih.gov/pubmed/25262307>
57. Plastic Surgery Trauma - Setting up a Telemedicine Service at a Major London Trauma Centre. <http://www.ncbi.nlm.nih.gov/pubmed/25254740>
58. 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>

59. **Increased satisfaction of maternity hospital staff involved in fetal telediagnosis.**
<http://www.ncbi.nlm.nih.gov/pubmed/25252060>
60. **A low-cost tele-imaging platform for developing countries.**
<http://www.ncbi.nlm.nih.gov/pubmed/25250306>
61. **Remote monitoring of patients with implantable cardioverter-defibrillators: Can results from large clinical trials be transposed to clinical practice?**
<http://www.ncbi.nlm.nih.gov/pubmed/25241223>
62. **Barriers and facilitators to pediatric emergency telemedicine in the United States.**
<http://www.ncbi.nlm.nih.gov/pubmed/25238565>
63. **Telemedicine: What Framework, What Levels of Proof, Implementation Rules.**
<http://www.ncbi.nlm.nih.gov/pubmed/25230356>
64. **Centralized Monitoring and Virtual Consultant Models of Tele-ICU Care: A Systematic Review.** <http://www.ncbi.nlm.nih.gov/pubmed/25226571>
65. **Centralized Monitoring and Virtual Consultant Models of Tele-ICU Care: A Side-by-Side Review.** <http://www.ncbi.nlm.nih.gov/pubmed/25225795>
66. **[Telemedicine in Bolivia: RAFT-Altiplano project, experiences, future prospects, and recommendations].** <http://www.ncbi.nlm.nih.gov/pubmed/25211562>
67. **Exploring routine use of telemedicine through a case study in rehabilitation.**
<http://www.ncbi.nlm.nih.gov/pubmed/25211559>
68. **Ultrasound in telemedicine: its impact in high-risk obstetric health care delivery.**
<http://www.ncbi.nlm.nih.gov/pubmed/25148484>
69. **TeleStroke units serving as a model of care in rural areas: 10-year experience of the TeleMedical project for integrative stroke care.**
<http://www.ncbi.nlm.nih.gov/pubmed/25147327>
70. **A randomized trial comparing live and telemedicine deliveries of an imagery-based behavioral intervention for breast cancer survivors: reducing symptoms and barriers to care.** <http://www.ncbi.nlm.nih.gov/pubmed/25146413>
71. **Implant-based multiparameter telemonitoring of patients with heart failure (IN-TIME): a randomised controlled trial.** <http://www.ncbi.nlm.nih.gov/pubmed/25131977>
72. **The promise of telemedicine.** <http://www.ncbi.nlm.nih.gov/pubmed/25130894>
73. **Teles-operated echocardiography using a robotic arm and an internet connection.**
<http://www.ncbi.nlm.nih.gov/pubmed/25130450>
74. **Epidemiology of a large telestroke cohort in the Delaware valley.**
<http://www.ncbi.nlm.nih.gov/pubmed/25128655>
75. **YOUng Football Italian amateur players Remote electrocardiogram Screening with Telemedicine (YOU FIRST) study: Preliminary results.**
<http://www.ncbi.nlm.nih.gov/pubmed/25124997>

76. **Robot-assisted remote echocardiographic examination and teleconsultation: a randomized comparison of time to diagnosis with standard of care referral approach.**
<http://www.ncbi.nlm.nih.gov/pubmed/25124011>
77. **Timely access to specialist medical oncology services closer to home for rural patients: experience from the Townsville Teleoncology Model.**
<http://www.ncbi.nlm.nih.gov/pubmed/25123618>
78. **Timely access to specialist medical oncology services closer to home for rural patients: experience from the Townsville Teleoncology Model.**
<http://www.ncbi.nlm.nih.gov/pubmed/25123618>
79. **Non-adherence to telemedicine interventions for drug users: systematic review.**
<http://www.ncbi.nlm.nih.gov/pubmed/25119947>
80. **Effect of tele-emergency services on recruitment and retention of US rural physicians.**
<http://www.ncbi.nlm.nih.gov/pubmed/25115747>
81. **Reliability of Circulatory and Neurologic Examination by Telemedicine in a Pediatric Intensive Care Unit.** <http://www.ncbi.nlm.nih.gov/pubmed/25112695>
82. **Telementoring: the surgical tool of the future.**
<http://www.ncbi.nlm.nih.gov/pubmed/25111278>
83. **What is "telemedicine" and what does it mean for a pediatric surgeon?**
<http://www.ncbi.nlm.nih.gov/pubmed/25111277>
84. **The application of telemedicine in orthopedic surgery in singapore: a pilot study on a secure, mobile telehealth application and messaging platform.**
<http://www.ncbi.nlm.nih.gov/pubmed/25100283>
85. **Feasibility of certified quality management in a comprehensive stroke care network using telemedicine: STENO project.** <http://www.ncbi.nlm.nih.gov/pubmed/25088571>
86. **Teleneurology in stroke management: costs of service in different organizational models.**
<http://www.ncbi.nlm.nih.gov/pubmed/25082628>
87. **Critical care telemedicine: evolution and state of the art*.**
<http://www.ncbi.nlm.nih.gov/pubmed/25080052>
88. **Role of telemedicine technology in endocrine surgery knowledge sharing.**
<http://www.ncbi.nlm.nih.gov/pubmed/25078673>
89. **Assessing the quality of teleconsultations in a store-and-forward telemedicine network.**
<http://www.ncbi.nlm.nih.gov/pubmed/25077138>
90. **REHAL[®], a telemedicine platform for home cardiac rehabilitation.**
<http://www.ncbi.nlm.nih.gov/pubmed/25069785>
91. **Telemedicine--a bibliometric and content analysis of 17,932 publication records.**
<http://www.ncbi.nlm.nih.gov/pubmed/25066950>

92. **Connected Health: A Review Of Technologies And Strategies To Improve Patient Care With Telemedicine And Telehealth** <http://content.healthaffairs.org/content/33/2/194.short>
93. **Telemedicine in pre-hospital care: a review of telemedicine applications in the pre-hospital environment** <http://www.intjem.com/content/7/1/29>