

TABLE 1. ADVANTAGES AND DISADVANTAGES OF ICT IN HEALTHCARE

Type of technology	Range of uses	Skills/technology needed	Advantages	Disadvantages
Telephone				
Landline and mobile phone	<ul style="list-style-type: none"> ● Person to person ● Centralised decision system, such as NHS Direct ● Direct contact for appointments ● Basic information ● Telephone counselling 	<ul style="list-style-type: none"> ● Good telephone manner ● Reading conversations without visual clues ● Clear, concise approach 	<ul style="list-style-type: none"> ● Universal access ● Quick and easy ● In some counselling situations, patients may prefer not to see the nurse ● Confidential ● Can be recorded for training purposes 	<ul style="list-style-type: none"> ● Others may have use of a patient's landline or mobile phone, compromising confidentiality ● No written account of conversation
SMS text messaging	<ul style="list-style-type: none"> ● Person to person ● Centralised decision system, such as NHS Direct ● Basic information ● Appointments ● Blood results ● Brief support message 	<ul style="list-style-type: none"> ● Mobile phone technology ● Text language 	<ul style="list-style-type: none"> ● Quick and easy ● Patients can access at any time ● Patients can refer back to the message ● Record of conversation can be stored 	<ul style="list-style-type: none"> ● Some patients may not be able to access and/or use SMS ● Not a formal core mode of communication in healthcare settings
Internet technologies				
Email	<ul style="list-style-type: none"> ● Person to person ● Information alerts ● Basic information ● Appointments ● Blood results ● Support messages ● Links to advice pages 	<ul style="list-style-type: none"> ● Keyboard skills ● Use of email ● Text based communication 	<ul style="list-style-type: none"> ● Quick and easy ● Patients can access at any time ● Patients can refer back to the message ● Record can be stored ● Can be asynchronous 	<ul style="list-style-type: none"> ● Many patients do not have access or skills to use email
Web pages	<ul style="list-style-type: none"> ● Information ● Announcements ● Information source ● Can provide substantive background information ● Can be interactive ● Can be used for self-assessment 	<ul style="list-style-type: none"> ● Advanced skills in information management ● Clarity about the purpose and scope of this source of information 	<ul style="list-style-type: none"> ● Easily accessible ● Can be found via a search engine 	<ul style="list-style-type: none"> ● A lot of information is available – the source needs to be credible ● Information needs to be clear – needs visual clues as well as text ● Navigation between pages needs to be clear ● Employer may not have a web output policy ● Needs technical support
Internet chat rooms	<ul style="list-style-type: none"> ● Support from peer group to other patients with long term conditions 	<ul style="list-style-type: none"> ● Skills in locating and/or designing purposeful online discussion groups ● Skills in facilitating online discussion 	<ul style="list-style-type: none"> ● Support from peers contributes to acceptance of long term conditions ● Easy to access for many young people 	<ul style="list-style-type: none"> ● Comments can be misinterpreted and if not monitored or moderated misinformation can be generated ● Usually peer led with limited professional input
Webcam	<ul style="list-style-type: none"> ● Visual and audio interface 	<ul style="list-style-type: none"> ● Access to equipment ● Skills in using visual and sound technologies 	<ul style="list-style-type: none"> ● Patients appreciate opportunity for remote consultation 	<ul style="list-style-type: none"> ● Some patients may not be able to access and/or use webcam ● Not a formal core mode of communication in healthcare settings ● Some people may feel uncomfortable with their image being on screen
Specialist diagnostic monitoring equipment				
Electronic monitoring system including remote diagnostic equipment	<ul style="list-style-type: none"> ● Monitoring and evaluation of patients' condition ● Information to aid clinical decision making 	<ul style="list-style-type: none"> ● Access to equipment ● Skills in using technologies 	<ul style="list-style-type: none"> ● Patients can take readings in their own time ● Since they are engaged, patients tend to have better understanding of the reasons for taking readings ● Can be used by technical experts such as paramedics to access remote assistance 	<ul style="list-style-type: none"> ● During an acute episode patients may not be able to take their own readings ● Potential for professionals to become over-reliant on technology and forget to interact directly with patients