

Multimedia Appendix 2

Study & Method	Type of disease	Type of intervention	Delivering of tailored message	Participants, Sex (%); mean age Groups	Name of instrument adherence, moment of measuring adherence	Conclusions
Artinian [27] RCT	Patients with symptomatic left ventricular dysfunction	A web-based monitoring system	- Tailored content - Nature of expert/therapist contact	N=18 Mean age: 68 17 males Intervention group n=9 Control group n=9	- Pill counts - Baseline and 3 months	Medication compliance rate was 94% for the monitor group as measured by the monitor system
Jan [28] RCT	Paediatric asthma patients	Blue Angel for Asthma Kids variability	- Tailored content - Nature of expert/therapist contact	N = 164 Intervention group n= 88 Mean age 10.9 35 males Control group n=76 Mean age 9.9 28 males	- Self-reported use and test score for dry powder inhaler (DPI) or metered dose inhaler (MDI) with the spacer technique - Baseline and 12 weeks	The Blue Angel for Asthma Kids, has the potential for improving asthma outcome compared with conventional treatment over a period of 12 weeks
Chan [29] RCT	Paediatric asthma patients	A customized educational and monitoring Web site	- Tailored content - Nature of expert/therapist contact	N=120 Intervention group n=60 Mean age 10.2 37 males Control group n= 60 Mean age 9.0 38 males	Computerized prescription refill record - Baseline, 26 and 52 weeks	No difference in adherence between both groups

Chan [30] RCT	Paediatric asthma patients	A customized educational and monitoring Web site	- Tailored content - Nature of expert/therapist contact	N=10 Mean age: 7 5 males Intervention group n=5 Mean age 6.6 1 male Control group N=5 Mean age 8.7 4 males	- Self reported asthma diary and computerized prescription refill record - 90 days and 180 days	After the intervention, the use of β -agonist decreased, which is an indication of better adherence
Joseph [31] RCT	Patients with asthma	Web-based asthma management program	- Tailored content - User control	N=314 Mean age 15.3 36.6% male Intervention group: n= 162 Control group n= 152	- Self- reported - Baseline and 12 months	Positive changes in controller medication adherence
Ross [32] RCT	Patients with Heart Failure	The SPPARO (System Providing Access to Records Online)	- Tailored content - Nature of expert/therapist contact	N= 104 Intervention group n= 54 Mean age 57 80% male Control group n=50 Mean age 55 74% male	- Self- reported - Baseline, 6 months, 12 months	Providing patients access to an online medical record improved adherence
Cherry [33] Prospective design	Patients with diabetes	Telemedicine diabetes disease management program.	- Tailored content - Nature of expert/therapist contact	Intervention group n=169 Mean age 53 39 males Historical group (usual care)	- Self- reported - Baseline, 12 months	Outcomes offer encouraging evidence that telemedicine technology coupled with daily remote monitoring may improve appropriate utilization of healthcare services

Guendelman [34] RCT	Persistent asthma.	Health Buddy, an interactive device connected to a home telephone	- Tailored content - Nature of expert/therapist contact	N=134 Intervention group mean age 12.0 40 male Control group Mean age 12.2 37 male	- Self-reported - Baseline, 6 and 12 weeks	Patients were more likely to take their asthma medication without additional reminders
DeVito Dabbs [35] RCT	Patients who received a lung transplantation	Pocket Personal Assistant for Tracking Health	- Tailored content - Nature of expert/therapist contact	N = 30 Intervention group n=15 Mean age 55 60% male Control group n=15 Mean age 57 60% male	- Self reported - Baseline, 2 months	Patients who received the PATH were more likely to show high adherence to the medical regimen
Van der Meer [36] RCT	Patients with asthma	Internet-based self management programme	- Customized Health program - User control	N = 200 Intervention Group n= 101 Mean age 36 29% male Control Group n=99 Mean age 37 29% male	Adherence: self-reported. Baseline, 3 months and 6 months	In the first 3 months, many patients had uncontrolled asthma and were advised to increase their inhaled corticosteroid doses. The improvement in asthma control seen after 3 months allowed a decrease in inhaled corticosteroid medication over the next 9 months without loss of asthma control. This pattern suggests tailoring medication to patients' needs rather than increasing medication for the whole study sample
Van der Meer [37] RCT	Patients with mild to moderate persistent asthma	Internet-based self management programme	- Customized Health program - User control	N= 200 Intervention n=111 Mean age 36 28 males Group 1 (well controlled)	- Self-reported - Baseline and after 3 months and 1 year	Weekly self-monitoring and subsequent treatment adjustment leads to improved asthma control in patients with partly and uncontrolled asthma at baseline and

				<p>n=37 Group 2 (partly controlled) n=38 Group 3 (uncontrolled) n=36 Control group n = 89 Mean age 36.6 28 male Group 1 (well controlled) n=38 Group 2 (partly controlled) n=33 Group 3 (uncontrolled) n=28</p>		tailors asthma medication to individual patients' needs
Dilorio [38] Survey	Patients with Epilepsy	WebEase	<p>- Customized Health Program</p> <p>- User control</p>	<p>N = 35</p> <p>Mean age 37.5 40% male</p>	<p>- Self-reported</p> <p>- Baseline and 6 weeks</p>	Participants showed some improvement in adherence following the program
Dew [39] Prospective design	Heart recipients and their family caregivers	Website including skills workshops, discussion group, ask an expert, question and answer, health tips, recourses and references	<p>- Customized Health Program</p> <p>- Nature of expert/therapist contact.</p>	<p>N=64</p> <p>Intervention group n= 24</p> <p>Mean age 45.8 18 males Control group n= 40 Mean age = 57.5 30 males</p>	<p>- Self-reported</p> <p>- Baseline, 4 months</p>	The intervention appeared to be most weakly associated with medical compliance change