



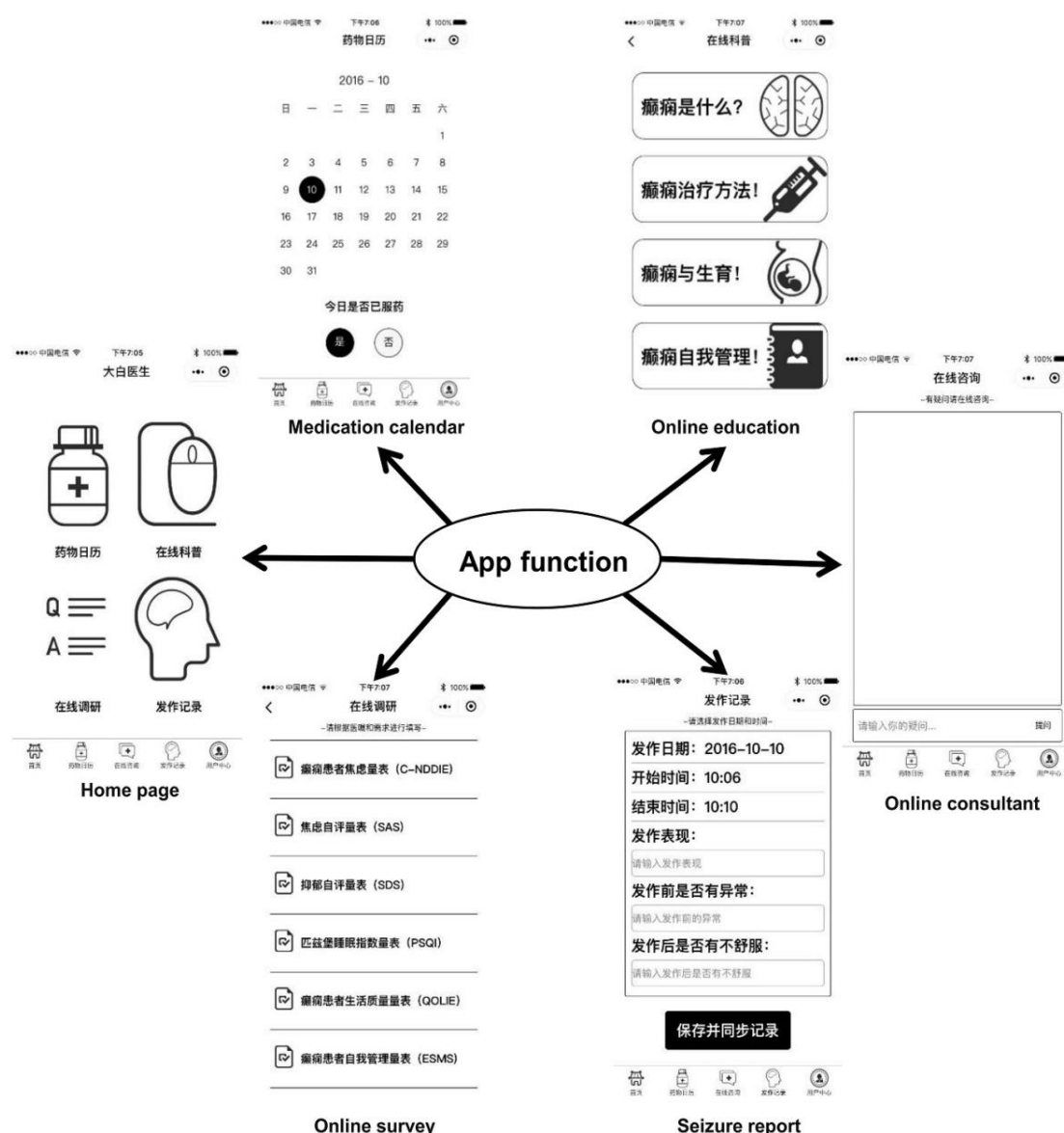
## **Supporting Information**

### **Supplementary information (methods)**

**This appendix was part of the submitted manuscript and has been peer reviewed.  
It is posted as supplied by the authors.**

Appendix to: Si Y, Xiaoqiang X, Xia C, et al. Optimising epilepsy management with a smartphone application: a randomised controlled trial. *Med J Aust* 2020; doi: 10.5694/mja2.50520.

**Figure. Functional components of the intervention mobile phone application (app)**



**Medication calendar:** daily medication reminder, remaining tablets warning, and clinic visit recommendation.

**Online education:** periodically updated forums and blogs; includes brief popular educational science articles about epilepsy with appended complementary discussion/comment zone.

**Prompt online reports of seizure attack and consultation:** for instance, message and face-to-face video call.

**Online survey questionnaires:** to deliberately and automatically collect data and feedback from patients for future improvement of management measures.

**Chinese version of Epilepsy Self-Management Scale (C-ESMS) (translated)**

**Instructions:** The following statements describe what people do to manage their epilepsy. Please circle one number for each statement to show how often you do the following. As you answer the questions, please think about your activities in the past year.

		Never	Rarely	Sometimes	Most of the time	Always
<b>IM1</b>	I write down how often I have seizures and when they occur.	1	2	3	4	5
<b>LM2</b>	I do things such as relaxation, guided imagery, and self-hypnosis to manage stress.	1	2	3	4	5
<b>IM3</b>	I call my doctor when I think I am having side effects from my seizure medication.	1	2	3	4	5
<b>*MM4</b>	When my seizure medication is running out, I spread out the time between doses.	1	2	3	4	5
<b>IM5</b>	I keep a record of the types of seizures I have.	1	2	3	4	5
<b>*SM 6</b>	I stay out late at night.	1	2	3	4	5
<b>IM 7</b>	I keep track of the side effects of my seizure medication.	1	2	3	4	5
<b>*MM 8</b>	When my seizure medication is running out, I take less medication at each time.	1	2	3	4	5
<b>MM 9</b>	I take my seizure medication the way my doctor orders it.	1	2	3	4	5
<b>SeM 10</b>	I stay out of situations that might cause a seizure.	1	2	3	4	5
<b>SeM 11</b>	If I am going away from home, I take my seizure medication with me	1	2	3	4	5
<b>SeM 12</b>	I call my doctor if I am having more seizures than usual.	1	2	3	4	5
<b>LM 13</b>	I make sure I get enough sleep.	1	2	3	4	5
<b>LM 14</b>	I do things that I enjoy to help manage stress.	1	2	3	4	5
<b>SeM 15</b>	I have a way to remind myself to take my seizure medication.	1	2	3	4	5
<b>MM 16</b>	I take my seizure medication at the same time each day.	1	2	3	4	5
<b>*SM 17</b>	<u>I would play by the side of the lake, river, pool, swimming pool or water park.</u>	1	2	3	4	5
<b>LM 18</b>	I do things such as relaxation, guided imagery, and self-hypnosis to keep myself from having a seizure.	1	2	3	4	5
<b>SeM 19</b>	When the doctor orders blood tests, I have them done.	1	2	3	4	5
<b>IM-20</b>	<del>I wear or carry information stating that I have epilepsy</del>	1	2	3	4	5
<b>*MM 21</b>	I have to put off having my seizure medication refilled because it costs too much money.	1	2	3	4	5

		Never	Rarely	Sometimes	Most of the time	Always
<b>LM 22</b>	I get enough exercise.	1	2	3	4	5
<b>*SM 23</b>	<u>I use power tools such as electric knife, electric drill, or electric blanket without an automatic shutoff</u>	1	2	3	4	5
<b>*MM 24</b>	I miss doctor or clinic appointments.	1	2	3	4	5
<b>*MM 25</b>	If I had side effects from the seizure medications, I would skip a dose without asking my doctor.	1	2	3	4	5
<b>SM 26</b>	I take showers instead of baths.	1	2	3	4	5
<b>MM 27</b>	I plan ahead and have my seizure medication refilled before I run out.	1	2	3	4	5
<b>*MM 28</b>	I miss doses of my seizure medication because I do not remember to take it.	1	2	3	4	5
<b>SM 29</b>	I keep the temperature of the water in my home low enough so I do not get burned.	1	2	3	4	5
<b>*MM 30</b>	I skip doses of seizure medication	1	2	3	4	5
<b>SM 31</b>	I check with my doctor before taking other medicines	1	2	3	4	5
<b>SeM 32</b>	I stay away from things that make me have seizures.	1	2	3	4	5
<b>LM 33</b>	I eat regular meals.	1	2	3	4	5
<b>*SM 34</b>	I climb objects such as high stools, chairs, or ladders.	1	2	3	4	5
<b>IM 35</b>	I talk with other people who have epilepsy.	1	2	3	4	5
<b>*SM 36</b>	<u>I drink a lot of alcoholic beverages such as beer, wine, white wine, barley wine, medicinal wine, fruit wine and rice wine, etc.</u>	1	2	3	4	5
<b>IM 37</b>	I participate in a support group for persons with epilepsy.	1	2	3	4	5
<b>IM 38</b>	I practice what to do during a seizure with my family and friends	1	2	3	4	5

IM = information management; LM = lifestyle management; MM = medication management; SeM = seizure management; SM = safety management.

\* Reverse code.

Items 20, 26, 35, 37: deleted items; items 17, 23, 36: modified items.