

Supplementary 1

Table 1. Semi-structured interview guide for patients

COM-B construct	Interview guide for patients
Behavior	<ul style="list-style-type: none"> ● What strategies have you used to manage your diabetes in daily life?
Capability	<ul style="list-style-type: none"> ● What facilitators and barriers to diabetes knowledge have you encountered in the trajectory of diabetes self-management? (<i>Physical exercise, diet management, self-monitoring of blood glucose, medication adherence, etc.</i>) ● What facilitators and barriers to diabetes skills have you encountered in the trajectory of diabetes self-management? (<i>Physical exercise, diet management, self-monitoring of blood glucose, drug management, etc.</i>) ● What do you conceive of using mHealth technologies (such as diabetes apps) to manage diabetes? Please clarify your opinions. ● What factors can you conceive that might promote you to manage your diabetes using mHealth technologies? ● What are any issues you can conceive that might stop you from being able to manage your diabetes using mHealth technologies? ● What are your preferences for the function, format, interface, and design of diabetes apps?
Motivation	<ul style="list-style-type: none"> ● What would motivate you to manage your diabetes using mHealth technologies? (<i>Emotion, confidence, intention, etc.</i>)
Opportunity	<ul style="list-style-type: none"> ● If you were to use mHealth technologies (such as diabetes apps), what type of information would you seek in the app? ● If you were to use mHealth technologies (such as diabetes apps), which kind of support would you seek from nurses and doctors? ● Do you have the resources to manage your diabetes using mHealth technologies?
<ul style="list-style-type: none"> ● Is there anything else you would like to add? 	

Table 2. Semi-structured interview guide for nurses and doctors

COM-B construct	Interview guide for nurses and doctors
Capability	<ul style="list-style-type: none"> ● What facilitators and barriers to diabetes knowledge do you think diabetic patients encounter in the trajectory of diabetes self-management? (<i>Physical exercise, diet management, self-monitoring of blood glucose, drug management, etc.</i>) ● What facilitators and barriers to diabetes skills do you think diabetic patients encounter in the trajectory of diabetes self-management? (<i>Physical exercise, diet management, self-monitoring of blood glucose, drug management, etc.</i>) ● What do you conceive of using mHealth technologies (such as diabetes apps) to help people with diabetes to manage their diabetes? Please clarify your opinions. ● What are your suggestions on the function, format, interface, and design of diabetes apps?
Motivation	<ul style="list-style-type: none"> ● Do you think what would motivate patients to manage their diabetes? (<i>Emotion, confidence, intention, etc.</i>)
Opportunity	<ul style="list-style-type: none"> ● If you were to use mHealth technologies (such as diabetes apps), do you think what type of information would provide for diabetes patients in the app? ● If you were to use mHealth technologies (such as diabetes apps), what kind of support would you provide for diabetes patients?
<ul style="list-style-type: none"> ● Is there anything else you would like to add? 	