Design guideline checklist

☐ **PATIENT CAPABILITY**
- Identify patients' knowledge and skill levels by understanding their technology, language, and health literacy;
- consider their previous experience and current confidence level in using digital health;
- improve their actual literacy and correct their perceived inability;
- tailor design to their ability.

☐ **PATIENT OPPORTUNITY**
- Profile patients' identity (eg, age, gender, economic status, and daily routines) and health status (eg, illness complexity, severity, and stability);
- consider patients' accessibility and affordance to digital health;
- tailor design to their individual opportunity.

☐ **PATIENT MOTIVATION**
- Recognize patients' mindset and perceived advantages and disadvantages;
- inform them of the potential benefits of using digital health;
- address their concerns and worries;
- understand their expectations and needs;
- tailor design to their preferences to trigger their motivation.

☐ **INTERVENTION TECHNOLOGY**
- Increase technical usability;
- ensure ease of use, ready to use, and timely feedback on digital health;
- select technical features (eg, data accessibility) and delivery media or devices (eg, device ownership) to meet patients' preferences and needs.

☐ **INTERVENTION FUNCTIONALITY**
- Strengthen theory-based interventions (eg, behavior change techniques and evidence-based interventions);
- improve intervention quality, considering privacy, security, and accuracy issues;
- provide regular and continuous social support combining both remote communication and real human contact;
- tailor health promotion and intervention structure to patients' needs and preferences.

☐ **INTERVENTION INTERACTION DESIGN**
- Provide personalized and consistent information, clear tutorials or technical support, and visualized data;
- allow patients to choose personalized interactive elements;
- follow human or user-centered design, co-design, and inclusive design methods;
- involve multi-stakeholders and multi-disciplines in the design process.

☐ **ORGANIZATIONAL ENVIRONMENT**
- Reduce equipment or service cost and time;
- improve health care providers' professional ability, communication skills, and service attitudes across the use of digital health;
- increase workflow transparency and clarify accountability;
- improve system integration and compatibility.

☐ **PHYSICAL ENVIRONMENT**
- Provide a familiar, warm, and comfortable environment rather than cold and unfamiliar settings;
- reduce environmental distractions (eg, background noise or lighting).

☐ **SOCIAL ENVIRONMENT**
- Provide adequate support policies and legislation;
- develop plausible business cases.

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| Name | Date |