

## System and Method for Automated Voice-Based Healthcare Planning Using a Supplemental Clinician User Interface

### Intellectual Property

Patent Pending

### Lead Inventor

Catherine Burch

### Licensing Contact

Catherine Burch  
[cburch@christianacare.org](mailto:cburch@christianacare.org)

### Desired Partnership(s)

Licensee  
Commercial Co-Development

### Categorized As

Accessibility  
Ambient Intelligence  
Communication System  
Health IT  
Natural Language Processing

### Unmet Need

Healthcare plans are personalized regimens created to meet the needs of patients. They can be complex and detailed, with varying medication schedules, exercise routines, and other time-sensitive medical activities. If a patient does not comprehend the clinical terms nor follow the prescribed healthcare plan, there is an increased risk of erroneous medication administration, improper therapy execution, low quality of life and safety for the patient, and superfluous utilization of healthcare resources. New patients navigating these novel regimens may experience feelings of being overwhelmed or frustrated as a result of an inability to remember, organize, and/or understand all the various activities, causing failure to follow the care plan.

### Solution/Technology

This voice-based personal digital assistant apparatus increases accessibility of a user's care plan via verbal query and audible response, reflecting the user's custom terminology. Computerized methods allow the creation/maintenance of a care plan, organize the clinical information, and notify the user of important information and activities relative to time in the user's preferred terminology.

### Advantages

- Ability of user to use both clinical and custom terminology increases accessibility of care plan information
- Automated notifications deliver important and time-sensitive information to users, promoting care plan compliance
- Recognition of partial-verbal queries promotes user interaction and trust
- Translation of clinical care plan information into user-friendly terms improves clinical and user experiences