Autism Transition Planner
A Mobile Application

By

Kasey Marcum

Submitted to
the Faculty of the Department of Information Technology
in Partial Fulfillment of the Requirements for
the Degree of Bachelor of Science
in Information Technology

University of Cincinnati
College of Education, Criminal Justice, and Human Services

April 2013
Autism Transition Planner
A Mobile Application

By

Kasey Marcum

Submitted to
the Faculty of the Department of Information Technology
in Partial Fulfillment of the Requirements for
the Degree of Bachelor of Science
in Information Technology

© Copyright 2013 Kasey Marcum

The author grants to the Department of Information Technology permission
to reproduce and distribute copies of this document in whole or in part.

Kasey L Marcum

Kasey Marcum, Author/Developer

04/19/2013

Date

Anna Prabhakar

Annu Prabhakar, Faculty Advisor

04/19/2013

Date

©2013 Kasey Marcum
Table of Contents

List of Figures iv
Acknowledgements v
  Personal Support v
  Community Support vi
  Academic Support vi
Abstract 1
Problem Need 1
Solution Description 4
  Built-In Template 5
Audience Profiles 8
  Caregivers 8
  Individuals with an ASD 8
Design Protocols 9
  Use Case 9
  Data Storage 11
Deliverables 13
  Project Implementation 13
  Proof of Design 14
  Future Work 15
Testing 16
  Test Cases 16
Project Plan 18
  Budget 18
  Timeline 20
  Timeline Key 21
Conclusions and Recommendations 23
References 24
List of Figures

FIGURE 1 - SELF-HELP GUIDES 3
FIGURE 2 - EXAMPLE NOTE ENTRY WITH REFERENCE MATERIAL 6
FIGURE 3 - USE CASE DIAGRAM 10
FIGURE 4 - DATABASE DIAGRAM 12
FIGURE 5 - BUILT-IN TEMPLATE PLAN 14
FIGURE 6 - SUMMARIZED REFERENCE MATERIAL 14
FIGURE 7 - ADD NOTE OR CATEGORY 14
FIGURE 8 - ENTER NAME OF NOTE OR CATEGORY 14
FIGURE 9 - ADD OR EDIT NOTE 14
FIGURE 10 - LIST OF NOTE ENTRIES OR CATEGORIES 14
FIGURE 11 - BUDGET OUTLINE 20
Acknowledgements

I would like to thank the following people for providing support in many ways – some throughout my life and some during my academic career at the University of Cincinnati.

Personal Support

- **Abby Marcum**, my amazing mother who provides unconditional love, teaches me countless life lessons, and is always my biggest supporter in all aspects of life

- **Ken Glidewell**, my stepfather who pushed me to work as hard as possible, be a responsible citizen of the world, and taught me to remember to laugh. Rest in peace.

- **Daniel Cuppoletti**, my partner in life, the voice of reason who reminds me that I can achieve anything I set out to do, and who shows me every day how wonderful and interesting life truly is

- **John Cuppoletti**, for providing support, love, and helping me see the big picture

- **Danuta Malinowska**, for providing support, love, and demonstrating that women can be highly successful in predominantly male professions

- **Keri Root**, my fabulous friend who provides endless laughter and support

- **John Wallace**, my esteemed colleague, friend and mentor who challenges and encourages me in my daily work
Community Support

I must give special thanks to each mother for being so open and sharing their personal experiences as parents of children with autism spectrum disorders.

- Jenna E., Mother of children with an ASD
- Lisa R., Mother of child with an ASD
- Merope P., Mother of child with an ASD
- Tim Isted, Mac & iOS Developer
- Ziad Tamim, Independent iOS Developer

Academic Support

- Brandan Jones, Adjunct Assistant Professor, University of Cincinnati
- Mike Weiner, Adjunct Professor, University of Cincinnati
- Annu Prabhakar, Technical Project Advisor & Associate Professor, University of Cincinnati
- Hazem Said, Department Head, Department of Information Technology, University of Cincinnati
- Patrick Kumpf, Project Advisor & Associate Professor, University of Cincinnati
- Geoffrey Pinski, Licensing Associate, Office of Entrepreneurial Affairs & Technology Commercialization, University of Cincinnati
- Brett Rexroat, Adjunct Professor, University of Cincinnati
- Jason Schuster, Student, University of Cincinnati
Abstract

Industry and government studies have shown that 1 in 88 children in the United States have some form of an autism spectrum disorder (ASD) and 80% of individuals with an ASD between 17 and 30 years old live at home with a caregiver. Caregivers of youth with an ASD do not have an efficient way to understand transition planning, and maintain or organize plans for transitioning the individual into adulthood. Caregivers typically maintain physical documents associated with the transition plan, which is not an ideal organization method because the planning process spans multiple years and evolves as the needs of the individual change. Physical documents are cumbersome, easily misplaced, and lack the benefits of technology, such as spell checking and ease of portability.

The Autism Transition Planner is a mobile software application that has been developed for the Apple Inc. iOS platform. This mobile application enables individuals with an ASD or their caregivers to create a transition plan from a built-in template, categorize and track notes, and access summarized reference material. This software application simplifies getting started with the planning process, and serves as a modern, efficient organizer for transition planning. Further research is needed to determine the effects of better transition planning and which software features are most useful to the general community involved in transition planning for youth with autism spectrum disorders.

Problem Need

Autism is a developmental disability that causes problems with social interaction and communication [11]. Individuals are diagnosed with varying degrees of autism and demonstrate different symptoms, so autism is referred to as a spectrum disorder (ASD). According to the Centers for Disease Control and Prevention (CDC), approximately 1 in 88 children in the United States are diagnosed with autism spectrum disorder each year.
As this number grows, the number of adults with ASD is also increasing [7]. Easter Seals, a non-profit organization, estimates that more than 80 percent of young adults with ASD between 17 and 30 years old live at home with family or caregivers. These individuals also have very limited opportunities for employment and education [7]. A study published in the journal *Pediatrics* states, “Youth with an ASD have poor postsecondary employment and education outcomes, especially in the first 2 years after high school. Further research is needed to understand how transition planning before high school can facilitate a better connection to productive postsecondary activities,” [16]. Many people in the autism community speculate that effective transition planning can help autistic individuals to live a more independent life after high school graduation, but adolescents with an ASD and their caregivers need help planning the transition to adulthood before high school.

Youth with an ASD and their caregivers begin working with their local school district to begin creating a formal transition plan by the time the adolescent is 16 years old. Caregivers and children with an ASD will work with a group called a “transition committee,” which is comprised of trusted professionals such as doctors, teachers, counselors, and others who will provide input on the transition plan. Every state is legally obligated to provide transition-planning services, however the steps in transition planning are not standardized [20]. The lack of standardization often makes it difficult to understand how to create and maintain an organized transition plan. While transition plans vary across states, they typically contain the following topics of information [2]:

- A vision statement for the child’s future
- A list of skills and abilities the child will need to achieve the vision
- A list of activities, classes, experiences, or supports required for the child to build the skills and abilities needed to achieve the vision
The United States Department of Education has defined specific transition planning services that public school systems must provide to families connected to autism [20]. Further, organizations like Autism Speaks and Easter Seals provide research funding for autism spectrum disorders and, through this research, they have created self-help guides that attempt to further define the transition planning process. Figure 1 shows self-help guides that were created by various non-profit or state government organizations in an attempt to help caregivers understand transition planning.

![Figure 1 - Self-Help Guides](image)

Although these guides aim to provide caregivers a better understanding about what information to include in the transition plan, the guides are often very lengthy which makes it difficult to find relevant quickly, especially if users find them through search engine results on their mobile phones. Figure 1 demonstrates the length of each self-help guide being referenced.

These guides also strongly recommend that individuals with an ASD or their caregivers maintain a binder with all the documents associated to the transition plan. Some guides provide document templates to assist in organization of information relevant to the transition plan. If the individual with an ASD is higher functioning, they may have access to the transition plan and be actively involved in contributing to decisions about his or her life. Since the transition planning process spans multiple years, it is not ideal for the individual or caregiver to maintain physical documents that are easily lost and difficult to organize.
As smartphones have become more prevalent in the American population, the number of autistic individuals using smartphones has also increased. In 2012, Apple, Inc. gave a presentation on the growth progress of their iOS mobile platform. In the presentation, former Senior Vice President for iOS Software, Scott Forstall, noted that Apple had sold more than 365 million iOS devices at the time. Forstall announced the availability of a feature to improve accessibility for people with disabilities and said “Apple is particularly proud of how kids with autism have been benefiting from iOS,” [9]. Andy Shih, Ph.D., Vice President for Scientific Affairs at Autism Speaks reinforces smartphone benefits for individuals with an ASD in a blog post by stating, “Users and their families tell [Autism Speaks] that an [application's] strongly visual and graphic interface makes it easier for those with limited verbal abilities or reading comprehension to master their use. They tell us that the touch-screen allows for an almost intuitive interaction with the technology,” [3].

Jenna E., a parent with three autistic children, shared in personal correspondence that her children find mobile software applications to be “very easy to use and concentrate on,” and they are able to “easily learn how to use new features.” Jenna begins planning for new environmental situations for her children approximately six months to one year in advance, but noted that doctors and schools do not proactively send her planning information before children reach various age ranges, such as information about when to begin planning for the transition to high school or postsecondary education. Jenna does not currently use electronic tools to plan for major transitions in her children’s lives but believes it will become a necessity as the volume of information to maintain as her children get older will increase [Jenna E., personal communication, January 23, 2013].

At the time of idea conception and this writing, there was no software available that provided brief reference material or helped youth with an ASD or caregivers to document, maintain or organize their plan for life after high school.

**Solution Description**
This paper introduces the Autism Transition Planner, that enables individuals with an ASD, or their caregivers, to create a transition plan from a built-in template, customize the template by adding categories to meet specific needs, or access brief reference material containing links to industry or expert advice. The primary benefit of the Autism Transition Planner is that it decreases the research required to create a basic transition plan, simplifying the process, and serving as a modern, efficient organizer for transition planning.

Once the application is downloaded on an iOS device, the user can access the application and data in the application at any time. After downloading the application, the user does not need to be connected to the Internet to access the application or data saved in the application.

When users open the application for the first time, they will see a screen with a transition plan template. Users can select each category on the list screen to view any sub-categories or note entries within the template.

**Built-In Template**

When the application is installed and opened on an iOS device, it displays a numbered list of categories to indicate to the user which category should be read first. There is no functionality in place to stop the user from seeing any category or note in the order they choose; the purpose is to allow the user to get the information that is relevant to them as quickly as possible. Each category in the template contains sub-categories and individual note entries.

Each note entry contains brief information about a specific topic related to transition planning and a link to the source reference material. If the user wants to learn more about the topic, he or she can click the reference link and it will direct them to the original source of the material on the Internet. All material in the application is paraphrased from the original resource.
The user can edit the note entry to add relevant information about the individual with an ASD for which they are managing a transition plan. This meets the two target needs being addressed in the project, which are to eliminate hours of research to understand what should be in the transition plan and it allows the user to get started with their own transition plan quickly. For example, if the user chooses to read the “Writing Goals” note entry in the “Step 2: Goals” category they will see the content shown in Figure 2.

When writing goals for an individual with autism, it is important to incorporate both overarching goals and measurable goals. Overarching goals may come from the Vision Statement described in Step 1: Assessment.

Example:

- Overarching Goal: The individual should be able to manage his or her own work schedule.
- Measurable Goal: The individual will use a physical planner that outlines activities to do each hour of each day.

Source:

**Figure 2 - Example Note Entry with Reference Material**

The following entries are included in the transition plan template when users download and open the application on their mobile device for the first time:

**Step 1: Assessment**
- Interviews
- Learning Style
- Strengths
- Vision Statement
- Planning Team

- **Step 2: Goals**
  - Writing Goals

- **Step 3: Obstacles**

- **Step 4: Career**
  - Assistive Technology
  - Occupational Interests
  - Workplace & Environmental Needs

- **Step 5: Community**
  - Living Arrangements
  - Home Skills
  - Volunteer Activities

- **Step 6: Education**
  - Postsecondary Schools

The developer included these specific categories and note entries in the template because each was commonly found across various transition planning self-help guides created by Autism Speaks [4], Easter Seals [7], Ohio Center for Autism and Low Incidence [12], Organization for Autism Research Inc. [13], Transition Services Liaison Project [19], and Virginia Department of Education [21].
Audience Profiles

Caregivers

Caregivers of adolescents with an ASD are typically very involved in the transition planning process, and often manage the process completely. Caregivers need to attend meetings with the transition committee, doctors, teachers, and others involved in the individual’s academic or extracurricular activities. Caregivers may want to maintain the transition plan for the individual on their own mobile device so they will need to have access to a smartphone with the iOS platform and wireless Internet service to download the application and any future software updates released for the application.

This group’s primary goal for using the Autism Transition Planner application is to access summarized references, create, and update the transition plan. Caregivers of adolescents with ASD may work full time and be expected to be readily accessible to the individual with an ASD through a mobile device.

This user group’s range of skills using mobile devices may vary from novice to expert. Caregivers may only be familiar with using mobile devices to perform basic tasks such as making calls or checking e-mail; they may also have a better understanding of using the functions of a mobile device than an individual with an ASD does. If a caregiver chooses to manage the transition plan for the individual, enabling them to access the transition plan while on the go is expected to make the transition planning process much more convenient.

Individuals with an ASD

This group’s primary goal for using the Autism Transition Planner application is to record, maintain, and refer back to each category and note within their transition plan. Individuals with an ASD may need to access their transition plan before, during, and after meetings with people on their transition committee. Contributing and referring back to content within the transition plan may help individuals with ASD
remember and better understand the goals they define for their life. It will also assist them in keeping track of the steps they need to take to reach the goals they set with their transition committee since they will meet with their transition committee regularly between ages 15 and 22.

Adolescents with an ASD using this application need to own or have regular access to a smart phone running the iOS mobile platform. This group’s motor skills may range from limited to high functioning, but they may become familiar with touchscreen devices by using other mobile applications designed to help people with an ASD learn to use touchscreen technology. This user group will also need to access the Internet wirelessly to download the application and any future software updates released for the application. While youth with an ASD interact with other people differently than their peers without an ASD, they may still interact with friends and family through text messages or social media on smart phones just as often as any other adolescent.

Design Protocols

Use Case

When a user downloads the application, a template transition plan is available to guide him or her, but each note and category can be modified so the user can add relevant information for the individual with an ASD. Categories and notes can be added, edited, or deleted by the application user as needed.

For users who are more familiar with transition planning topics, a blank transition plan can be created with only their desired categories or note entries. The available activities for mobile users who download the application are visually outlined in Figure 3. The use case diagram in Figure 3 illustrates each action users can take and the point within the application’s workflow where each action exists.
The intention of the design is to allow the user to easily begin recording their specific needs without requiring research on the information that is typically included in a transition plan.

**Figure 3 - Use Case Diagram**

While viewing a list of items in the application, users are able to see the title of each category or note entry as shown in Figure 5. Users can select each item in the list to view sub-categories or individual note entries. When viewing a note entry in the built-in template, the user will see summarized reference text and links to further reference information on the Internet as shown in Figure 6. Users can delete existing categories or notes by swiping across an item on the list. Users can also add new categories or notes
by touching the + button, which will show a pop-up menu containing Add Note, Add Category, or Cancel buttons as shown in Figure 7.

While adding a new category or note entry, users can enter a title as shown in Figure 8. While editing a note entry, users can enter a title and plain text content within the note as shown in Figure 9. If the user saves a note entry, the application displays the note with the new data in “view” mode. If the user cancels their entry, the application directs the user back to the list of entries and any content that was entered is not saved.

**Data Storage**

The data storage methods shown in Figure 4 enables the simple and extendable design by allowing the user to add a dynamic level of categories as needed, or for note entries to be added at any level of within each category. The data storage methods also allowed the developer to populate the built-in template content, which is included in the application when the user installs it on an iOS device.

The AbstractItem table was created using polymorphism, which allows other tables in the data model to inherit common attributes, making future development easier and more extendable by enabling the developer to reuse database attributes and limiting code duplication. The AbstractItem table contains an attribute called itemName, which allows the user to enter a name for a Category in the Collection table, or a name for an entry in the Note table. The AbstractItem table also contains a relationship called superCollection, which allows the user to add any number of categories or sub-categories to the Collection table.

The Collection table inherits the itemName attribute from the AbstractItem table and contains a relationship called subItems. The subItems relationship allows users to create note entries in the Note that are related to specific Categories within the Collection table.
The Note table inherits the itemName attribute from the AbstractItem table and also contains an attribute called textContent, which allows the user to enter plain text content in the note entry.

![Database Diagram]

Figure 4 - Database Diagram

The Core Data framework is used to store all user data locally on the user’s mobile device. Storing the data through this method allowed for faster implementation because it is built into Xcode and Objective-C, the integrated development environment used for building iOS applications. Ray Wenderlich, an Objective-C programming expert notes, “It can reduce the memory overhead in your app, increase responsiveness, and save you from writing a lot of...code,” [23]. It is also cost effective because there is no additional cost to use the Core Data framework.

The transition plan template information was manually entered into Core Data through another software tool called, “SQLite Database Browser 2.0 b1,” which was developed as an open source project by Mauricio Piacenti. SQLite Database Browser is freely available for anyone to download.
Deliverables

Project Implementation

The application was developed to include a core set of features to address the primary needs of anyone getting started with the transition planning process. Focusing on a core set of features allows time for the developer to collect additional feedback from the general autism community before investing further time and resources into more complex features (see Future Work).

The application has been developed in a way that makes it possible to expand the feature set and migrate the application to other platforms, such as the Web or Android mobile platform, at a later date. The Autism Transition Planner application contains the following set of features:

- iOS-based mobile application

- Built-in transition plan template containing example categories, notes, and summarized references for learning about the planning process

- Ability to add, edit, and delete categories at any level in the transition plan

- Ability to add, edit, and delete note entries in any category in the transition plan

- Ability to input text content within each note entry

- Data stored locally on the user’s device
Proof of Design

Figures 5 through 10 demonstrate the user interface and features described in both the Use Case and Project Implementation descriptions.
**Future Work**

The developer may proceed with creating new features for the application in the future. Subsequent phases of development may include the following functionality:

- Ability to log in to mobile or Web-based application and authenticate against a remote server and database environment to access synchronized data

- Ability to share the transition plan through e-mail or other social networking tools

- Ability to print each transition plan or specific categories or note entries within the transition plan

- Ability to sync user data to a remote server and database environment for automated backup

- Ability for the developer to update the built-in transition plan template from a remote server to all application users

- Location-based resource finder to provide a list of doctors, support groups, or other resources based on their location

- Alerts/reminders/notifications to the user when a step in the transition planning process is due or needs to be completed soon

- Goal and/or date-based task lists

- Android-based version of the mobile application

- Publication in the iTunes App Store and Android Marketplace for free or for a fee
Testing

The developer completed initial testing manually throughout the length of the project using the Xcode iOS Simulator application. The iOS Simulator allowed the developer to test basic user actions, as outlined in the use case diagram shown in Figure 1 and verify success. Once all user actions were verified as functioning successfully, the Autism Transition Planner application was installed onto an iPhone 5 for testing on a physical iOS device with a touch screen.

In order to test the application on the iPhone 5, it was necessary to authorize the application to run on the specific iOS device in the Apple Developer Member Center [1]. Apple requires developers to create a Provisioning Profile that allows distribution of applications to physical iOS devices. It was also necessary to generate a certificate, which contains information about the application’s permission to be distributed (installed) on physical iOS devices. The iPhone 5 that was used for testing had to be registered and authorized in the developer’s Member Center to install the application. Once the Autism Transition Planner was successfully installed on the iPhone 5, the developer completed testing by manually reviewing each screen and available action in the application using the touch screen.

Test Cases

The following Test Cases were used to verify that the application’s features function successfully and without error. These Test Cases were followed in the Xcode iOS Simulator and when the Autism Transition Planner was installed on the iPhone 5.

1. Open Application
   a. Verify that list screen appears
   b. Verify that data from the database has been loaded into the application by comparing categories and note entries that exist in the database appear throughout the application
2. Add Item (Category or Note)
   a. Click + button
      i. Click *Add Category* button
      ii. “New Category” should be added to the list screen
   b. Click *Cancel* button
      i. Show list screen and verify no new data was saved
3. Add Sub-Item (Category)
   a. From the list screen, select a *Category* that contains no sub-categories
      i. Verify that there are no sub-categories in the category selected
      ii. Click the + button
      iii. Click the *Add Category* button
         1. Verify that the sub-category is the only item on the list in the Category
4. Edit Category
   a. Click the “detail” button that is a blue circle with an arrow in it to edit the item. This button only appears on Category entries.
      i. Type a name into the *Category Name* text field
         1. Validation Type: none
      ii. Click *Done*
         1. Verify that the category name is updated on the list screen with the new text entered
5. Edit Note
   a. Click on a Note entry
      i. Click the *Edit* button
         1. Type a name in the *Name* text field
2. Validation Type: none

3. Click *Done*
   
   a. Verify that the note name is updated on the list screen with the new text entered
   
   b. Type text into the *Content* text area
      
      i. Validation Type: none
      
      ii. Click *Done*
      
      iii. Click the Note to verify that the note Content text area contains the text entered

6. **Delete Item (Category or Note)**

   a. Swipe across any item in the list to reveal the *Delete* button

   b. Click the *Delete* button
      
      i. Verify that the item no longer appears on the list screen

---

**Project Plan**

**Budget**

The majority of the technology chosen used to create the Autism Transition Planner is free to download and use as shown in Figure 11. Mobile applications created for the iOS platform must be developed using Apple’s integrated software development environment, Xcode, and their software development kit, iOS SDK. Both technologies are free to download and use to build mobile applications.

Apple allows developers to test applications on a software simulator for free but developers are required to pay $99.00 annually to test applications on physical mobile devices running iOS [1]. This annual cost also includes the ability to publish applications in the App Store for any iOS user to download. There are no fees associated to the
number of users that download applications or if developers choose to sell an application in the App Store, however Apple collects 30 percent of any profit should the developer choose the sell their application for a fee [1].

Core Data is used to store all data within the application, including the template transition plan and any data saved in the application by the user. Core Data “is a framework Apple provides to developers that is described as a schema-driven object graph management and persistence framework,” that is built in to the iOS SDK, which is free to use [1]. Core Data has the ability to store and manipulate data in SQLite. SQLite is “a software library that implements a self-contained, server-less, transactional SQL database engine.” It has been “dedicated to the public domain by the authors,” [18]. SQLite is “free for use for any purpose, commercial or private,” [17].

The hardware technology used to develop the application consists of an Apple MacBook Pro laptop for developing and testing the application. An Apple iPhone 5 was also used to test the application. All hardware was acquired prior to beginning application development and there were no hardware costs required for the project.

The developer covered all costs associated to developing the Autism Transition Planner application. All costs associated to software and hardware requirements are outlined in Figure 11.
### Timeline

The Autism Transition Planner application was developed from an initial conceptual idea to a working mobile application between August 2012 and April 2013 at the University of Cincinnati. The Gantt chart in Figure 12 outlines each task completed during the project lifecycle. The project schedule is categorized with several task types:

- **Research:** Any task involving researching professional journals on autism spectrum disorder or mobile application information, researching potential project ideas and areas of need for the target audience.
- **User Interview**: Any task involving personal communication about autism spectrum disorder or the project idea.

- **Assignment**: Any task required for the Information Technology Senior Design course, including project presentations.

- **Status Update**: Any tasks involving status reports or meetings with University of Cincinnati faculty providing guidance on the project.

- **Report Feedback**: Any tasks involving incorporating University of Cincinnati faculty feedback.

- **Development**: Any task involving programming and continuous testing various features for the project.

- **Testing**: Any task involving software testing on various platforms (iOS simulator and physical iPhone 5 hardware). Note that testing was completed continuously throughout each Development task.

**Timeline Key**

- Each dark blue item with a diamond symbol represents a major milestone in the overall project timeline.

- Each light blue item represents a general task within the overall project timeline.
Figure 12 - Project Timeline
Conclusions and Recommendations

At the time of idea conception and this writing, there was no software available that provided brief reference material or helped youth with an ASD or caregivers to document, maintain or organize their plan for life after high school.

Subsequently, the Autism Transition Planner was developed as a mobile application to enable caregivers or individuals with an ASD to eliminate hours of research to better understand what type of information should be in the transition plan; the application enables them to get started with their own transition plan quickly. This mobile application does not attempt to address all complexities involved with transition planning, but the application addresses the specific problem need by significantly decreasing the research required for caregivers or individuals with an ASD to understand what is typically in a transition plan and get started with transition planning. This application simplifies getting started with the planning process, and serves as a more modern, efficient organizer for transition planning than extensive self-help guides or printed documents.

Further research is needed to determine which features are most useful to the community supporting autism spectrum disorders. The personal interviews that were conducted with mothers of children with an ASD during the course of this project were invaluable to better understand transition planning from the perspective of caregivers. The developer recommends distributing the application to a select group of caregivers to use the core features over a brief amount of time, perhaps one to three months, and provide feedback throughout the study.

Further research is needed to determine if the application has a direct effect on users’ ability to better understand transition planning.
References


